CHAPTER IV
RESEARCH FINDINGS AND DISCUSSION

A. Research Findings

Data from current samples (n=55) have been collected. The samples could participate conveniently during the data collection process. They did not face significative barriers. All samples (100%) have involved in the the close-ended online questionnaire, but only 46 students (84%) delivered their responses in the open-ended part.

Related to language used, the majority (64%) answered the open-ended questionnaire in English and only the minority (16%) responded in Bahasa. While, in interview sections, the interviewees and the interviewer talked in mix bilingual languages, namely Bahasa and English. The researcher described thorougly the result of data analysis below.

1. Students' Overall Online Dictionary Use Strategies

Descriptive statistics were used to reveal the overall level of IKIP PGRI Pontianak students' dictionary use strategies. The research found that the students utilized 37 strategies of online dictionary use which covered in five categories. From Figure 4.1, it can be seen that dictionary selection strategies (72%) ranked top, higher than the online dictionary use strategy average (63%). Dictionary selection strategies was at usually scale. Most of students realized to download online dictionaries on their smart phone because of easy accessibility such as the devices, internet availability and usability.

Dictionary use awareness skills (70%) ranked second, practically it was usually used. The students were familiar with online dictionaries to find the meaning and translation of word.
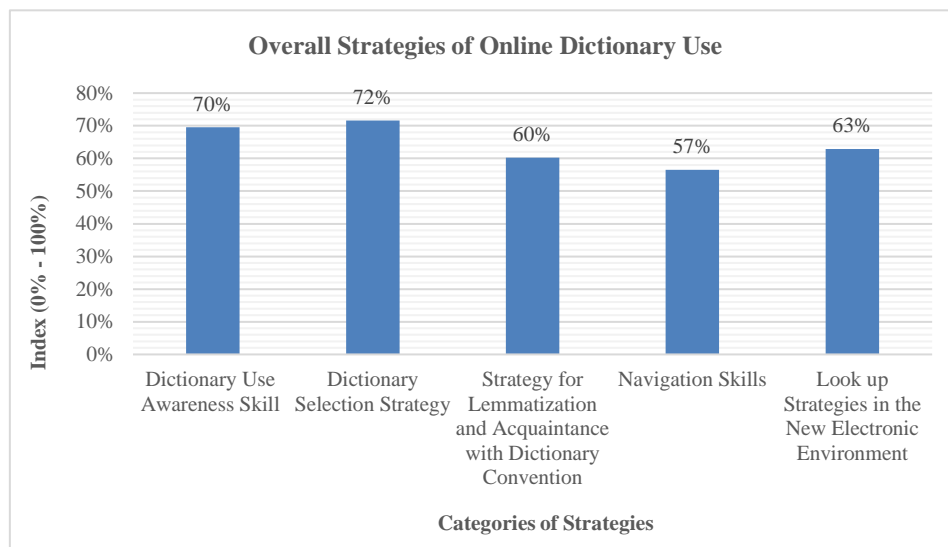
Overall Strategies of Online Dictionary Use

Figure 4.1 Overall Percentages of 5 Substrategies of Online Dictionary Use

Look-up strategies (63%) ranked third, it indicated usually application. The students tended to search words in online dictionary and check them to confirm that the words match to the context. The students were eager to conduct a quick writing balanced with searching word fast by typing the keyword and certainly choose more relevant word to data research.

Compared with lemmatisation and acquaintance with dictionary conventions (60%), the percentage of navigation skill was at the bottom (57%). Both strategies were at sometimes usage. The lemmatisation skill solved barriers to find revelant information about proper spelling. While, the navigation skill tended to help the students to navigate various lexicographical data. In order to explore the specific strategies and to summarise the effective strategies for writing the thesis, the present research undertook an analysis of responses to all items of the strategy inventory for electronic dictionary use (SIEDU).

The more specific discussion on 37 strategies which covered in five categories were explained thoroughly below:

a. Dictionary Awareness Skill

From the Figure 4.2, it is shown the online dictionary was most used to find the meaning of a word (77%), for translation of a word (76%), when a book, journal or previous study (76%) and do exercise (73%). The online dictionary was most applied in workplace namely university (77%).
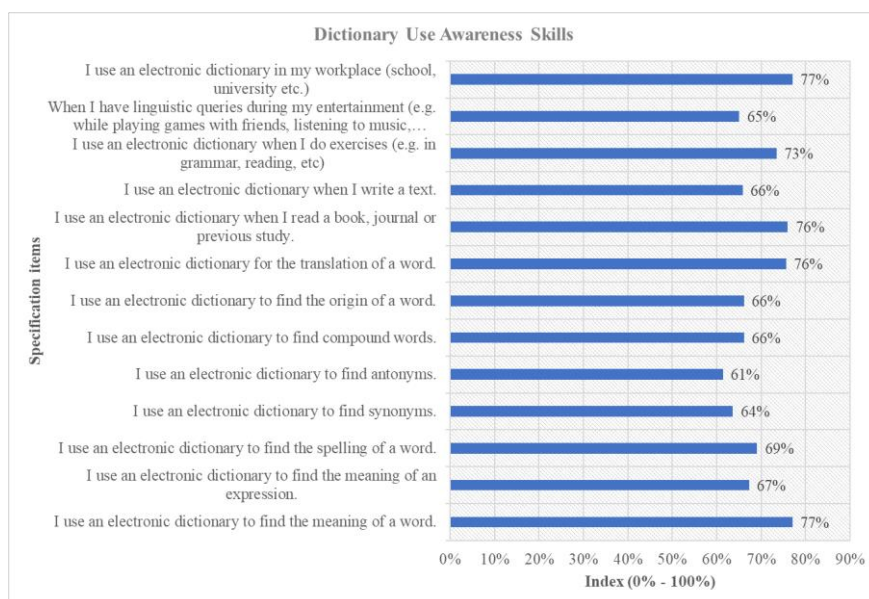

Figure 4.2 Percentages of Dictionary Use Awareness Skills

Finding the meaning of a word (77%) and translation of a word (76%) were reported as the most strategy implemented by students. In later interview and observation, the students was noticed having steady awareness to exact and proper meaning of word in written English. When encountering the unknown or uncertain words in the writing proces, they turned to dictionaries to find or translate the words. The students also confirmed using bilingual dictionaries to translate English into Indonesia and its contrary helped them determine appropriateness of word in writing texts.

Another fact that found online dictionary strategies was implemented most in the university (77%) by students. In the follow-up interview and observations, besides using online dictionaries

inside the class, the students also operated them outside the class, for example, at the cafe, boarding house and etc, which encouraged their autonomous learning.

The students also applied online dictionary to read journal or previous study (76%) and to do research exercise (73%). Based on interviewes and observations, it was considered by students that online dictionaries were effective and credible. It is effective because dictionary was beneficial to speed time usage in reading and translating the texts. It was credible because it helped students to become aware of their writing errors. Most importantly, it meant alternative words related to the topic which enriched vocabularies and ideas in writing. To sum up, the strategies were not only beneficial to correct the contexts and to improve students' awareness in their errors, but also to prevent from repeating words in writing.

b. Dictionary Selection Strategies

Figure 4.3 conveys that students had clear mind about the function and micro-structure of the selected online dictionary, because items of dictionary selection strategies average 72% were at usually scale.
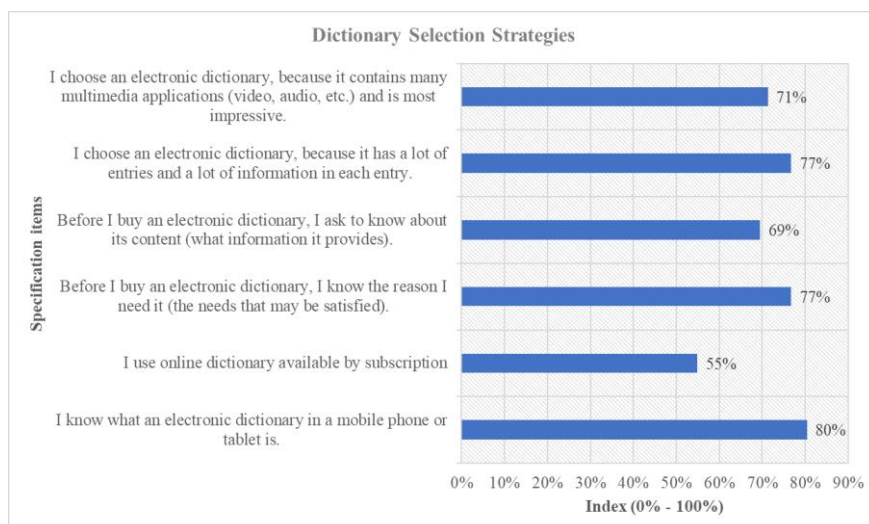

Figure 4.3 Percentages of Dictionary Selection Strategies

This strategy of recognizing what an online dictionary in a mobile phone reach 80%. That indicated if the students could consider a high-quality dictionary, precious information and which better serve the users' need. In later interviews and observations, the students informed they were aware of device to access online dictionaries. The dictionaries were installed on mobile phone or accessed them on laptop. Based on their need, it was confirmed that the students used bilingual dictionaries. Kamusku and Google Translate were really popular among the students of IKIP PGRI Pontianak.

Besides, having a knowledge of reasons why they needed online dictionary (77%), being familiar with information of dictionary entries (77%), being friendly with multimedia application (71%) and knowing what contents information (69%) achieved usually scale.

In line with interviews and observations, the students reasoned that online dictionaries offered various alternative translations with proper spelling in order that enrich their vocabularies and ideas. While, containing of audio application, online dictionaries multimedia was popular with practicing pronunciation. Practicing proper pronunciation of words was useful when the students prepared presentation.

Comparatively, using online dictionary available by subscription just attained 55% which assigned at sometimes scale. In later interviews and open-ended questionnaire, the students argued that online dictionaries were only installed from "play store". It was costless. Instead, another student told that installing online dictionary spent much internet package.

c. Lemmatization and acquaintance with dictinary conventions

The average percentages of lemmatization and acquaintance with conventions strategies touched second lowest rank after navigation strategies. From the Figure 4.4, it was found that the students usually took two most strategies:
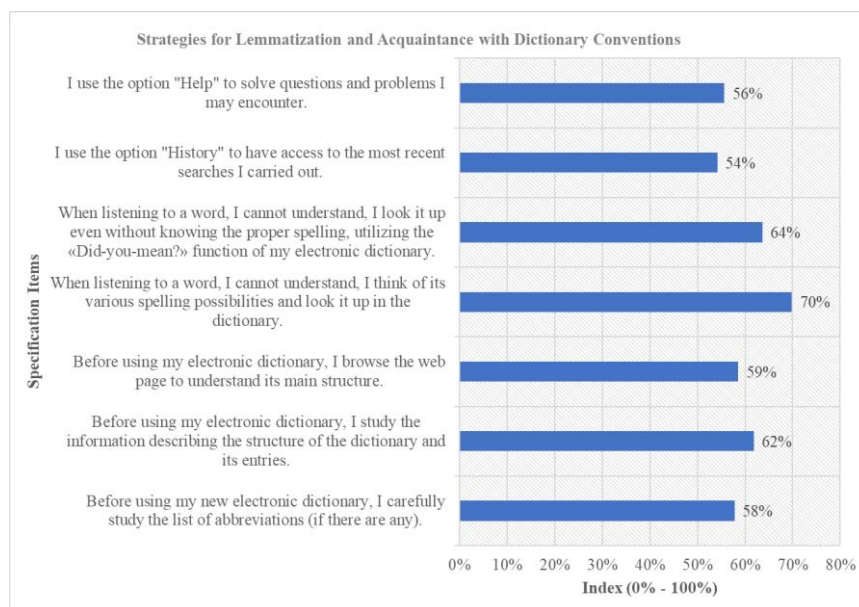

Figure 4.4 Percentages of Lemmatization and Acquaintance with Dictionary Conventions

First, the students looked up words that they did not know in the dictionary by guessing various spelling possibilities (70%). Second, they opened online dictionaries when listening to a word but did not understand the meaning and the proper spelling by utilizing <<Did-you-mean?>> function. The value even touched 64%.

In addition, based on interviews and observations result, the students confirmed to always repeat and recheck video and audio for obtaining correct spelling and meaning of words. However, other students prefered to guess the meaning rather than searched on online dictionaries.

On the other hand, using option "History" to have access to the most recent searches (54%) were at the last rank of strategies. Eventhough

it still achieved sometimes scale. It was proved by students' statement about using "History" to recheck previous vocabularies in interviews part.

d. Navigation Skills

From the Figure 4.5, it can be seen that items 27 and 28 aimed to navigate a certain online dictionary in the search engine. Both strategies were allocated at sometimes scales with result 58% for trivial navigating/browsing various parts of dictionaries data and 55% for using links to consult word entries or more information about it.
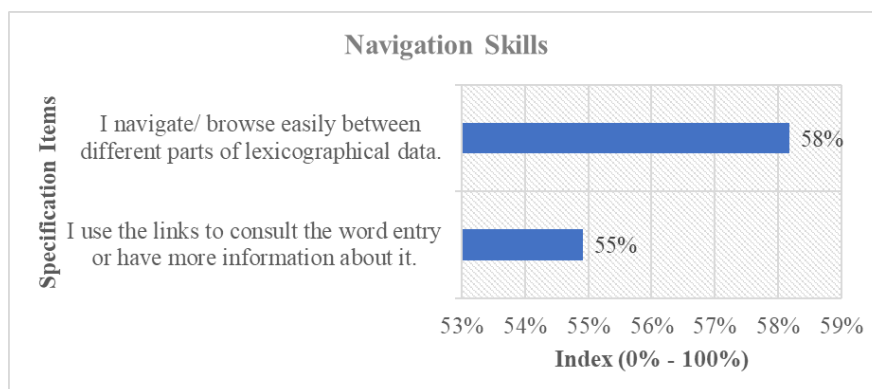

Figure 4.5 Percentages of Navigation Skills

During the observations, the researcher found that students could operate online dictionaries softly by recognizing specification of dictionaries. For instance, when they translated a word, after seeing the result of translation, they checked alternative translations and definitions by scrolling down the dictionaries page. The students were aware to click on an alternative word to get more information, such as its part of speech, synonyms, antonyms and etc. Another example was using triple lines ($\equiv$) at the corner dictionary page to find other options such as history, bookmarks and notes.

e. Look-up strategies

Figure 4.6 presents data contains of 9 items assessed English learners' familiarity with the structure of dictionary by measuring their reference speed in consulting with online dictionaries. As far as the present research was concerned, the majority reported their proper consultation with online dictionaries. Their activities indicated look-up with average score 63%.
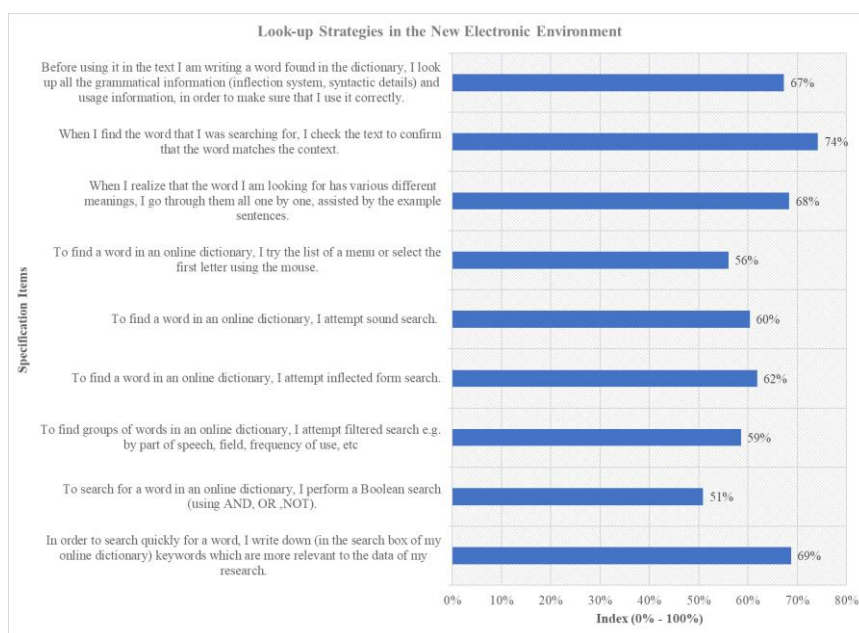

Figure 4.6 Percentages of Look-up Strategies

Figure 4.6 shows that the strategies of finding the word and checking the text to confirm that word fits the context reached 74%, and finding grammatical information and usage information so that ensure that the word used correctly before using it in the text touched 67%. In current interviews, it was discovered both items supported the purpose of each other. After searching the word, the students verified the grammatical or usage information to determine that word matched with the contexts. The students really realized about these strategies and accustomed to do usually. Otherwise, the students stated that it was confusing to change irregular tenses on online dictionaries, for example, "bare infinitive" to be "past

participle" or to converse stem "verb" into "noun". So that another solution was asking to a peer friend who knows better. It was agreed that online dictionary could help them learn independently.

The figure 4.6 also conveys that strategy of writing down (in the online dictionry search box) keywords were relevant to the data of research scored 69% and looking many different meaning by going through them one by one accomplished 68%. Both stratefies were in line with each others. When online dictionaries were important to find more applicable word for being used in the research data, the students also delighted to click on every meaning of word in order to find the more relevant words.

2.   The Most Frequent Online Dictionary Use Strategies

The result at discussion above mentioned that the strategies of online dictionary use were implemented in sometimes, usually and always or almost always usage. The figure 4.7 shows the frequency of use of strategies in five specific categories.
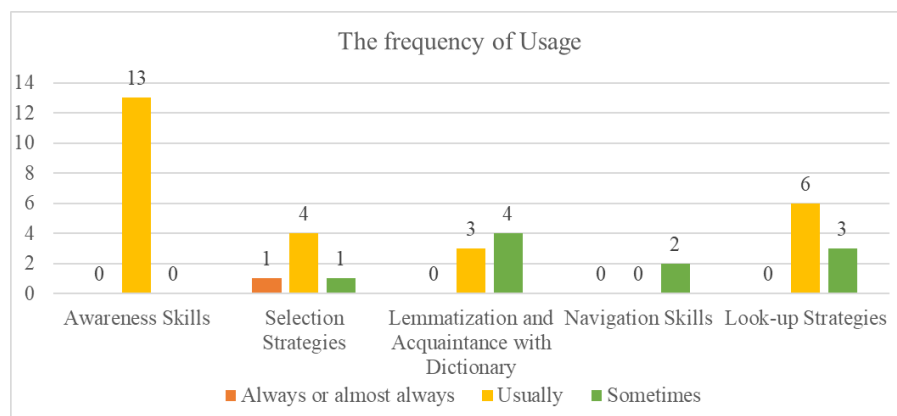

Figure 4.7 Usage Frequency of Strategies

Suprisingly, from 37 items, it was found that only one statement reached always and almost always scale. This item was item 14 which stated "I know what an electronic dictionary in a mobile phone or tablet is" which belonged to dictionary selection strategies. This finding was supported by observation result that confirmed that the students well know which online dictionary application can be installed either on their smart phone or laptop. It seemed that they recognized wisely which online dictionary was convenient to be used on the devices. It was also discovered on interview results, however, the students mentioned "I use online dictionary to find the meaning of word" as the most frequent strategy that they utilized. The different confirmation might lead to unconsciousness of usage that indicated the students really well remember one strategy but applied another strategy unconsciously.

Speaking about usually usage, the findings found 26 items were assigned in this level. The Figure 4.7 presents that 13 items (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13) of dictionary awareness strategies identified in usually use, followed by 4 items (16, 17, 18, 19) of dictionary selection strategies, and 3 items (21, 23, 24) of strategies of lemmatization and acquaintance with dictionary, and 6 items (29, 32, 33, 35, 36, 37) of dictionary look-up strategies. As shown above, none of items classified into usually scale in the category of navigation skills.

There were 4 most dominant statements in this scale, it was stated equally frequent because these items reached same high percentages namely 77%. Thoroughly, two items in dictionary use awareness skills, item 1 "I use an electronic dictionary to find the meaning of a word" and item 13 "I use an electronic dictionary in my workplace (school, university etc.)". While two most prevalent items classified into dictionary selection strategies were item 16 "Before I buy an electronic dictionary, I know the reason I need it (the needs that

may be satisfied)" and item 18 "I choose an electronic dictionary, because it has a lot of entries and a lot of information in each entry".

Regarding the frequency of sometimes usage, 10 items were classified into this level. The Figure 4.7 conveys that 1 item (15) referred into dictionary selection strategies, 4 items (20, 22, 25, 26) of strategy of lemmatization and acquaintace with dictionary, 2 items (27,28) of navigation skills and 3 items (30, 31, 34) of dictionary look-up strategies. The most prominent item in this level was item 22 which notified "Before using my electronic dictionary, I browse the web page to understand its main structure". This item was a specification item of strategy of lemmatization and acquaintace with dictionary.

3.   **Impact of Online Dictionary Use Strategies**

Practically, the researcher assigned three basic categories of impact of online dictionary strategy use, such as text production, text reception, and translation. Moreover, the researcher included "other" to predict different categories which not covered in three basic categories. As a result, after analyzing the students' responses of open-ended questionnaire, two types of "other" were emerged based on statements were often mentioned by students namely accessibility usage and operational cost.

Table 4.1 presents overview of the distribution of the different types of impacts. It was obtained that 35% of responses were related to text production impacts (N = 19, 35%), followed by accessibility usage (N = 8, 15%), and with a very wide range score, translation (N = 2, 4%). It was showed that none of response specially assigned to text production (N = 0, 0%) and operational cost (N = 0, 0%). Otherwise, some parts were not attributable (N = 4, 7%) to any five categories, because the statements were too general. Other facts were usually founded that some participants (N = 9, 16%) dropped out of the questionnaire.

Table 4.1 Distribution of Impact of Online Dictionary Strategies Use

Extracts assigned to:	Frequency	Percentage
Text Production	19	35%
Text Reception	0	0%
Translation	2	4%
Accesibility Usage	8	15%
Operational Cost	0	0%
Text Production & Translation	3	5%
Text Production & Accesibility Usage	5	9%
Text Production, Translation & Accesibility Usage	2	4%
Text Production, Accesibility Usage & Operational Cost	1	2%
Accesibility Usage & Operational Cost	2	4%
None Category	4	7%
Not Answered	9	16%
TOTAL	**55**	**100%**

For further analysis, the extract responses overlapped, because the statements from 13 respondents contained descriptions which classified to more than one category. This is certainly connected to the fact that some participants wrote in detail. The Figure 4.7 shows the distribution of overall impact classification in more detail. There were 3 students (5%) assigned responses classified into text production and translation; 5 students (9%) stated responses belonged to text production and accessibility usage; 2 other students (4%) mentioned impacts in text production, translation and accessibility usage; 1 of them answered impacts concerned in text production, accessibility usage and operational cost; and 2 answers contained of accessibility usage and operational cost.
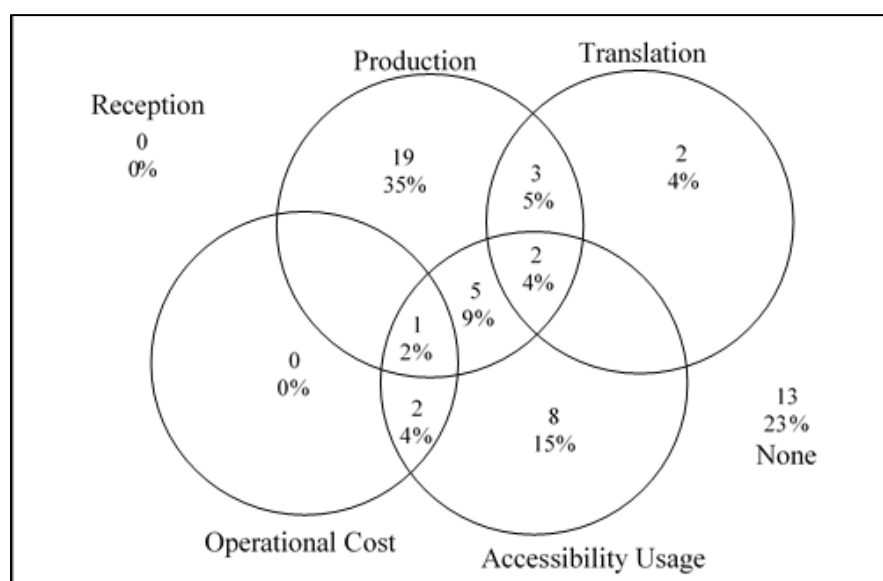
Figure 4.8 Venn Diagram of Overall Impacts of Online Dictionary Strategies Use

Based on the data above, the researcher discovered four impacts that students obtained during using online dictionary strategies, namely, text production, translation, accessibility usage and operational cost. Thereby, the research analyzed more about the closer contexts of impact which could be found in the responses. The researcher illustrated the range of responses which are assigned to four categories:

a. Responses contend with text production

Here are some responses obtained from open-ended questionnaire:

1) Sometimes it help me to check grammar error, It also help me to check the spelling of words, It help me to find out the meaning of words in simple way [ID:S17]

2) The online dictionary really helps me in writing a thesis. When there are words that don't know we can find them easily [ID:S19]

3) I got more new words, their other meaning and functions, the synonyms and the appropriate words for academic writing and the words' pronunciation [ID:S21]

4) Can helped more clearly. Maked my thesis faster to wrote. When, write thesis is so easy [ID:S38]

5) Sometimes using an online dictionary for thesis that are often experienced is a mistake in grammar, but its so easy to find the word that I want as all I have to do is type it in the search box and press search to get the meaning of words within seconds and the option of audio helps to listen and learn the pronunciation of any difficult word which are not able to spell out properly [ID:S41]

In later interviews, the researcher discovered some informations related to statements above. By compiling both data, the researcher could sump up five different situations regarded impacts in text production. First, the students stated that awareness to check grammar, spelling and meaning has improved their writing. Second, the students realized to apply alternative translations in order to prevent repeating words in the texts, online dictionary strategies has enriched their vocabularies. Alternative translation was famously mentioned as synonym by the students.

Third, the students delighted go through word options one by one to look-up which word matches to the sentence. Fourth, the online dictionary strategies was useful to check correctness of words in the text, as a result, the students have been aware of indicating error, especially in grammar and solving the problem properly. Finally, it was found that students learnt and practiced pronunciation of words through audio application of online dictionaries.

b. Responses came to terms with translation

Here are the responses found in the open-ended questionnaire:

1) To help me translate the words faster [ID:S31]

2) Dalam menterjemahkan buku/jurnal asing juga sangat membantu [ID:S33]

3) Online dictionary really helps me a lot in conducting my thesis, especially for translating some words that i don't understand in journals [ID:S39]

4) Help to translate a lexical meaning [ID:S51]

These data was also supported by interviewee's statements. The interviewees agreed that online dictionary strategy helped them up to interprete texts. Moreover, the strategy has shorten the time consumption so that students could write quickly.

This situation has occured since they started from chapter I to another chapter in thesis and followed by revision. Translation of words from Indonesia to English usually utilized during writing. However, the students did not rely on the result of translation. They had high awareness to check and recheck the texts because online dictionary translation was not usually perfect so that it was needed to improve by students' own word.

In contrary, interpretation in English to Indonesia was applied during reading. Some students confirmed seldomly implement the strategy for reading a text, they tended to simply conclude the main points of the contexts. Otherwise, other students argued if online dictionary was useful to understand the texts simpler, thus online dictionary was usually used.

c. Responses which deal with accessibility usage

Role of online dictionary strategy has facilitated students in various situation, here are some statements relevant with the accessibility usage:

1) Easy to use. Easy to bring everywhere [ID:S16]

2) Easy to use and flexible [ID:S31]

3) *Dapat diakses dengan mudah tanpa harus menggunakan kamus manual yg membutuhkan waktu lama, sehingga dapat mempersingkat waktu dalam pengerjaan skripsi* [ID:S33]

4) I think the electronic dictionary is really help me because thats apps have very fast responses [ID:S42]

The relevant facts was occured in the following interview. To sum up both data, the researcher noticed the online dictionary served convenient usage toward the users, such as flexibility of usage for being used whenever and wherever, useful applications, options and information (e.g. multimedia, history, help, etc) and application of time

d. **Responses which consider as operational cost**

Suprisingly, some students mentioned about funding in the open-ended questionnaire and interview responses. The statements in the questionnaire as follows:

1) Gratis [ID:S69]

2) *… dan murah meriah. tinggal download di playstore dan udah bisa dipake segera setelah di instal* [ID:S70]

However, one student stated that online dictionary spended much internet package,

"Terlalu memakan Banyak paket data (boros brooh)" [ID:S22].

In conclusion, the online dictionary did not burden any funding to the students. Installing the application through 'play store' did not spend much cost, eventhough it needed amounts of internet packages.

B. Discussion

The results conveyed that the students covered the implementation of 37 strategies aimed to write the thesis effectively. The strategies were classified to 5 categories such as dictionary selection strategies, dictionary use awareness skills, look up strategies in the new electronic environment, strategy for lemmatization and acquaintance with dictionary convention and navigation skills. The strategies were previuosly assigned and constructed by Gavriilidou and Mavrommatidou (2016). However, the findings were not consistent with previuos study of Luo et al (2017) that revealed 36 strategies of dictionary use assigned to 4 categories which navigation skills were not included.

Suprisingly, the most frequent strategy was item 14 stated "I know what an electronic dictionary in a mobile phone or tablet is". The findings assumed that students seemed really acquainted with online dictionary on their smart phones. This result was not consistent with previous research (Luo et al 2017) who concluded that subjects tended to take into consideration on checking the text to confim that word matches with the context. The result was also slightly different with previous study of Gavriilidou (2014) which mentioned that students tended to make use semantic, syntatic, or other cues to be guided in appropriate meaning selection of a polysemous word. This difference might be explained by the fact that the sample of this present research know well and chose wisely dictionary application by installing on play store.

The results discovered four circumstances of impact, such as text production, translation, accessibility usage and operational cost. Based on the analyzing of responses, text production was placed as the most common impact to the students. The text production took important role to improve students' writing, enrich vocabularies, realize to check correct words and repair the error words, and practice better pronunciation. The sight of Takahashi (2012) provided same statement on increasing writing skill that certain application of a dictionary might be more helpful for improving students' writing (p. 128). He concerned that adaptation of comprehensive set of strategies impacted students to make use grammatical information found in the dictionaries for

writing in the sentence correctly (p.126). In the East's research (2006, citied in Takahashi, 2012) noted that "participants' ability influenced the using of look-up word correctly in writing (p.119). According to that statement, Jacob's (1989, citied in Takahashi, 2012) study supported that "many errors could be avoided if a dictionary were used while writing a draft" (p.123).

Finally, the online dictionary use strategies were utilized actively and frequently by the students and the strategies have impacted sufficiently to the students, probably assisted them to write the thesis more effective.