STRATEGIES EMPLOYED BY EFL LEARNERS TO LEARN GRAMMAR THROUGH CONCORDANCES: A CLOSER LOOK

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ABSTRACT

There have been increasing numbers of studies conducted on the use of electronic corpora in English language teaching and learning. In particular, these studies have focused on their direct application to constructivist activities for learners, pattern induction, and error-correction. Some scholars have posited that advanced learners benefit from using concordances more than learners at a lower level of language proficiency do. This study, however, investigates whether concordances would benefit learners with a lower level of English language proficiency. The study focuses on the strategies that a group of 37 Thai EFL lower-intermediate learners employed when they used concordances to correct grammatical errors in error-correction tasks. Teacher’s observation took place while the learners were working with the concordances, and stimulated recall interviews were used to obtain in-depth information as to what strategies the learners adopted to inductively discover grammatical patterns in order to correct the errors. Three factors that affect the learners’ concordancer processes and strategies are (1) their prior knowledge, (2) their concordancer skills, and (3) the complexity of the concordance lines. It was found that to make the best use of concordances with lower proficiency students, extensive training of learners is essential for success in using concordances for error-correction. Such training involving concordance printouts would be more effective than simply bombarding learners with a large amount of information from the online concordancer. This paper printouts technique would also help avoid some technical problems that might occur during training, thus increasing the amount of time learners spend effectively working with the corpus. The concordances chosen should contain possible linguistic problems, as well as obvious language patterns to be induced. Apart from providing students with such methodological instruction in the use of the concordances, teachers should also prepare them psychologically by persuading them that they can gain some benefits from concordances and encouraging them that they possess the ability to learn independently.

Key word: Concordances, Concordancer, Corpora, Constructivist activities, Data Driven Learning, Inductive Learning, Lower-intermediate
INTRODUCTION

Over the past of decades, computer corpora and concordances have become one of the most promising modes in computer-assisted language learning, and a great number of corpus-based studies have become well-known in the field of applied linguistics and language teaching (Johns & King, 1991; Hanson-Smith, 1993; Cobb, 2005; Boulton, 2008). There are several reasons why there is increasing popularity of corpora and concordance use for language learners. (O’Sullivan & Chamber, 2006). Firstly, corpora and concordances are acceptable tools in constructivist methodology because they allow learners to interact with a huge number of authentic, sorted language examples. This has caused a shift from the learner as a passive recipient of language forms to an active and creative language user who works with concordances in an effort to construct his or her own knowledge of the target language (Murphy, 2000; Skrinda, 2004).

Secondly, as O’Sullivan & Chamber (2006) pointed out, the corpus consultation is well suited to methods emphasizing process-oriented instruction. Learners can use corpora and concordances as resources and instruments to construct their own knowledge while developing their cognitive and metacognitive processes. According to O’Malley and Chamot (1990), cognitive processes in autonomous learning are the strategies to operate directly on the information to be learned and handle it in ways that enhance learning whereas metacognitive processes refer to strategies that make use of knowledge, which are not directly related to the language, to regulate the learning process. Thirdly, corpora and concordances support the development of learner autonomy by giving learners the opportunity to gain control over the learning process as they independently discover the forms and patterns of language. In this way, concordances are linked to discovery learning (Robinson, 1994) and improve language awareness among students (Wichmann, 1995). Finally, corpora contain authentic language and constitute an important source of actual examples of grammar, and language information found in dictionaries and course book compilations from which learners can learn from real instances of language (Sinclair, 1991); Using corpora may assist a student’s study of grammar, vocabulary, and discourse, and help the learner to inductively acquire large amounts of language.

Johns (1991) termed this process “Data-Driven Learning” (DDL), a learning process in which learners are assisted by the authentic language information delivered to them by the search engine in the form of concordance lines. DDL changes the traditional roles played by teachers and students in the classroom. The teacher is no longer a resource of knowledge, but
a facilitator, a guide or a supervisor. In turn, the students become more active, autonomous, and responsible, since they take on the role of researchers, capable of asking themselves questions, analyzing data, and drawing conclusions from language data presented in concordance lines.

Due to its wide range of applications, to date there have been several studies exploring approaches to integrating concordances into language learning and teaching (Sun, 2003). Important developments began in the 1990s, starting with publications advocating the use of corpora and concordances in language teaching (Tribble & Jones, 1990). These studies first focused on learners directly using corpus consultation (Cobb, 2005), followed by the use of corpora for error-correction, and most recently learners’ actual use of corpora in L2 writing (Jaihow, 2005; Gaskell & Cobb, 2004; Yoon & Hirvela, 2004, Todd, 2001). Furthermore, several studies were conducted to investigate the efficacy of concordances in EFL classroom (Sripicharn, 2003; Boulton, 2008).

The majority of published studies in the use of corpora and concordances focus on either the applications and the effects of using corpora and concordances or the efficiency of corpora. However, few studies, if any, have aimed to investigate the processes and strategies that learners adopt when dealing with concordancer and concordance lines as a learning tool (Sun, 2003). Therefore, the objective of this study is to identify and report the processes and general trends, patterns, and strategies used by Thai EFL learners, and recommend ways for them to use concordances more effectively.

OBJECTIVES OF THE STUDY

This study was done with the goal of discovering what similarities and differences existed among the concordancer and concordance strategies employed by lower-intermediate level EFL learners, and also their reactions to this learning process. This study, thus, sought to answer the following questions:

1. What are the general strategy trends and patterns used by EFL learners when dealing with the concordancer and concordances?
2. What are the factors that impact learner behaviour when working with the concordancer and concordances?
3. What are the learners’ attitudes towards using concordances for error-correction?

DEFINITION OF TERMS

1. **Corpus** (the plural is *corpora*): A collection or body of texts in electronic form, or a database of language.
2. **A concordancer**: A search engine for searching a corpus or corpora. The free online concordancer, www.lextutor.ca, was used in this study.

3. **Concordances**: The results from a concordancer search which are presented in lines of text illustrating the search word.

**FRAMEWORK OF THE STUDY**

The conceptual framework of the study was based on the pedagogical principle that learners construct new understandings by using what they already know and knowledge from given activities and materials. In this study, this construction process included language exploration and learner autonomy. Moreover, learners were responsible for their own learning, as they had to induce grammatical patterns through concordances. This led to the use of a learning approach called ‘Data-driven Learning’ (DDL), in which learners were assigned to work inductively using raw information taken directly from corpora.

**METHODOLOGY**

**Participants**

For the purpose of convenience, one class of 37 Thai EFL students studying in grade 11 at a private high school in southern Thailand was chosen to participate in this study. They had studied English for the past ten years. Their English proficiency was in the lower-intermediate level, as their mean English score from the final test (semester 2, 2008) administered by the school was 59.32%. All of the students had sufficient computer literacy; most of them used the Internet for e-mailing, chatting online, or consulting online dictionaries.

**Research instruments**

1. *Teacher’s observation notes* aimed to record the learners’ processes and attitudes while working with the concordances during the error-correction tasks. The overall observation included detailed notes and observation checklist form used by the teacher. The key observation points were made into a checklist, and included learners’ feelings, their participation, their ability to deal with the concordancer and concordance lines, and their difficulties and problems. The duration of the observation was three weeks.

2. *The stimulated recall interviews* were carried out individually with the learners one week after the observation phase of the study. A group of questions was set up as the interview framework and these questions were aimed at eliciting students’ information in the following areas: computer concordancing skills used, observed concordance skills, reflection on learners’ prior knowledge, and attitudes and opinions.
3. **Three error-correction tasks** given to the learners contained a total of 5 types of grammatical errors; nouns, verbs, prepositions, articles, and subject-verb agreement. Learners had to work with the concordance lines to discover the correct grammatical rules, which they then applied to the error-correction tasks.

**Data Collection**

The study was carried out over 16 weeks. It began with a tutorial for the learners on how to use the concordancer and time for them to practice working with concordances. The tutorial was conducted over 13 periods of 50 minutes each using the following sequence: (1) parts of speech review (2) instruction on how to work with the concordancer (3) instruction on how to induce grammatical rules from concordances, and (4) instruction on how to use concordances for error-correction. Then, during weeks 14-16, the learners were given three tasks, each containing five types of grammatical errors. The errors were underlined without any grammar rules or codes. Learners were required to use the underlined word errors to search for the overall grammatical rules, and induce the patterns by using concordances. They were asked to correct the errors using the induced rules from the concordance lines. The teacher observed the learning process and took notes. One week after the completion of the experiment, the researcher carried out an in-depth interview with each student.

**Table 1: Summary of the Data Collection Procedure**

<table>
<thead>
<tr>
<th>Data Collection</th>
<th>Purposes</th>
<th>Time (50 minutes-period)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Introductory Phase</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Lesson 1: Revision of parts of speech</td>
<td>To review the parts of speech in the English language, and their functions.</td>
<td>Week 1 (1 period)</td>
</tr>
<tr>
<td>- Lesson 2: Get to know concordancer &amp; Instruction on how to use concordancer</td>
<td>To teach and demonstrate learners how to use the concordancer and how to select the concordance lines to learn the grammatical rules.</td>
<td>Weeks 2-4 (3 periods)</td>
</tr>
<tr>
<td>- Lesson 3: How to induce grammatical rules from concordances</td>
<td>To practice using the concordancer and teach learners how to induce grammatical rules from the search results.</td>
<td>Weeks 5-8 (4 periods)</td>
</tr>
<tr>
<td>- Lesson 4: Using concordances for error-correction</td>
<td>To teach learners how to induce rules from concordances to correct errors in the given sentences.</td>
<td>Weeks 9-13 (5 periods)</td>
</tr>
<tr>
<td><strong>2. The experimental process</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Three tasks of error-correction</td>
<td>Each task contained five types of grammatical errors. Learners used concordances to do the error correction, one task per period.</td>
<td>Weeks 14-16 (3 periods)</td>
</tr>
</tbody>
</table>
Data Analysis

Data from the teacher’s observation notes and the interviews were grouped together according to themes which emerged, and were then summarized in percentages according to the performance of students in dealing with the computer concordancer and concordance information.

FINDINGS

1. Learners’ strategies in dealing with the concordancer

The data obtained from the stimulated recall interviews revealed the learners’ strategies in working with the concordancer to use the corpora assist their learning. The results are shown in Table 2 below.

Table 2: Learners’ strategies in dealing with the concordancer

<table>
<thead>
<tr>
<th>Type</th>
<th>Strategies in dealing with the concordancer</th>
<th>N=37</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Using prior grammar knowledge to guess the correct answer and then checking with the concordancer.</td>
<td>26</td>
<td>70</td>
</tr>
<tr>
<td>1.2</td>
<td>Using the underlined words and then checking with the concordancer.</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>1.3</td>
<td>Relying on their intuition based on their linguistic background and then searching the concordancer.</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>2.1</td>
<td>Brown+BNC Written+BNC Spoken (3 million words)</td>
<td>30</td>
<td>81</td>
</tr>
<tr>
<td>2.2</td>
<td>Brown (1 million words)</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>2.3</td>
<td>Others (less than 1 million words)</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>3.1</td>
<td>Many examples and ease of searching the concordances</td>
<td>27</td>
<td>72</td>
</tr>
<tr>
<td>3.2</td>
<td>The first corpus from the list</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>3.3</td>
<td>Few examples</td>
<td>5</td>
<td>14</td>
</tr>
</tbody>
</table>

Concerning learners’ strategies in choosing search words, the results in Table 2 show that most of the subjects (70%) used their prior grammar knowledge to guess the correct rules before using the underlined words to search the concordance lines which matched the grammatical rules. It can also be seen that 19% of the students used the underlined words to search for concordances and then tried to infer the rules from the concordance lines. Only 11% (4 students) used their intuition or linguistic background to guess the correct rules before searching the concordance lines.

Regarding the corpora the learners preferred, about 81% reported that they always used the Brown+BNC Written+BNC Spoken (3 million words) which are the largest corpora
of the Lextutor concordancer. Only 3% chose other corpora; for example, the 2000 list corpus (240,000 words), the Univ. Word List (550,000 words), the 2k Graded Corpus (920,000 words), the Focus on Vocab (82,300 words). All of them contain fewer than one million words.

As for the reasons why the learners chose their preferred corpora, interestingly, quite a large number of respondents (72%) pointed out that they chose the corpora which provided large numbers of examples for them to observe, whereas only 14% of the participants reported that they chose the first corpus in the concordancer (the Brown corpus). This was because of convenience. About 14% chose corpora that did not make them feel overwhelmed and was easy for them to handle.

2. Learners’ strategies in dealing with concordance lines

To further explore the learners’ strategies in dealing with concordance lines, the data from the teacher’s observation notes were used to analyze the processes and strategies used. Table 3 shows the learners’ strategies in dealing with the concordance output.

<table>
<thead>
<tr>
<th>Type</th>
<th>Strategies in dealing with concordance lines</th>
<th>N=37</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Learners’ strategies when working with large amounts of concordance lines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Asking their peers or teacher for guidance</td>
<td>14</td>
<td>38</td>
</tr>
<tr>
<td>1.2</td>
<td>Ignoring the concordances and asking friends for the answers</td>
<td>11</td>
<td>30</td>
</tr>
<tr>
<td>1.3</td>
<td>Looking only at relevant information</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>1.4</td>
<td>Searching a smaller corpus</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>Learners’ strategies in observing the concordances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Looking at only the key words and observing the context to the left and right of them.</td>
<td>25</td>
<td>68</td>
</tr>
<tr>
<td>2.2</td>
<td>Reading only the short, easy lines</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>2.3</td>
<td>Reading all the lines word-by-word</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>2.4</td>
<td>Reading the full sentences</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Learners’ strategies in choosing the concordance lines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Choosing the lines that matched the rules in their minds.</td>
<td>14</td>
<td>38</td>
</tr>
<tr>
<td>3.2</td>
<td>Choosing the most frequent lines</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>3.3</td>
<td>Choosing only the lines that facilitated pattern induction</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>3.4</td>
<td>Choosing the lines that had similar contexts to their sentences</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>3.5</td>
<td>Choosing the first five lines</td>
<td>5</td>
<td>14</td>
</tr>
</tbody>
</table>

Based on the data from the observation of the learners’ strategies in working with large amounts of concordance lines, it was found that 38% of learners asked their peers or
teacher how to cope with the concordances. Obviously, this 30% ignored the concordancer. Next 19% of them tried to solve the problems on their own by looking at the relevant information only while only 13% tried to search for concordances in smaller corpora.

Table 3 clearly summarizes the learners’ strategies in the step-by-step observation of the concordance lines. When the concordance lines were presented on the screen, about 68% observed the text to the right and left of the keywords. However, 13% of them chose to read only the short, easy concordance lines, while 11% made an effort to read all the concordance lines presented. Only a small number of 8% indicated that they sometimes clicked the underlined keywords to read the full sentences.

With regard to the learners’ strategies in choosing concordance lines, 38% chose lines which matched the rules that they had thought of before searching the concordancer, while 18% of them chose the most frequent lines. Interestingly, 16% picked only the lines that facilitated pattern induction, and about 14% selected lines that had a similar context to their tasks. Another 14% reported that they chose the first five lines of the concordance outcomes.

3. Learners’ problems in dealing with the concordancer and concordances

Even though the learners were trained to use the concordancer and concordances, the results from the stimulated recall interviews revealed that most of the learners still experienced some problems during the process of working with the concordances. Table 4 shows the problems and difficulties the learners in this study experienced.

<table>
<thead>
<tr>
<th>Type</th>
<th>Problems and difficulties encountered during the process of working with the concordancer and concordances</th>
<th>N=37</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Problems and difficulties in dealing with the functions of the concordancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Forgetting to change the function of the concordancer to search to the left, the right or both sides of the key word.</td>
<td>28</td>
<td>76</td>
</tr>
<tr>
<td>1.2</td>
<td>Forgetting to choose the corpus.</td>
<td>23</td>
<td>62</td>
</tr>
<tr>
<td>1.3</td>
<td>No problems</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Problems and difficulties in dealing with the concordance lines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Not being able to find the concordance lines from the word search.</td>
<td>32</td>
<td>86</td>
</tr>
<tr>
<td>2.2</td>
<td>Not knowing how to choose appropriate concordance lines from the list.</td>
<td>20</td>
<td>54</td>
</tr>
<tr>
<td>2.3</td>
<td>Not knowing how to induce the rules from the concordance lines</td>
<td>17</td>
<td>46</td>
</tr>
</tbody>
</table>
As shown in Table 4, the majority of the learners (76%) reported that the most difficult problem in dealing with the functions of the concordancer was forgetting to change the function of the concordancer to search to the left, the right, or both sides of the key word. About 62% of learners forgot to choose the corpus, thus causing them to return to the main page, where they again had to choose the corpus. Only a few students (5%) did not have any problems in dealing with the options of the concordancer.

Regarding the problems and difficulties in dealing with the concordance lines, it was interestingly that 86% of the learners reported that their main problem was that they could not find the concordance lines from the word search. About 54% of them did not know how to choose appropriate concordance lines from the list and 46% did not know how to induce the rules from the selected concordance lines.

4. Learners’ opinions on the usefulness of working with the concordances

More findings on learners’ opinions in terms of the usefulness of the concordances in studying English were collected. The responses from the stimulated recall interviews were transcribed and grouped for the positive and negative responses concerning how they used concordances. The results are shown in Table 5.

Table 5: Learners’ opinions on the usefulness of concordances

<table>
<thead>
<tr>
<th>Type</th>
<th>Learners’ opinions on the usefulness of concordances and their preferences on using them</th>
<th>N=37</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive reaction</td>
<td>1. Concordances helped but only with teacher’s guidance</td>
<td>20</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>2. Concordances provided a lot of examples, thus making it easy to remember</td>
<td>9</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>3. Concordances helped them recall the grammatical rules they learnt in class.</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>4. Concordances helped them learn grammar inductively</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>5. Discovering the rules by themselves helped them remember the rules.</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Negative reaction</td>
<td>1. Not useful. Preferred teacher</td>
<td>14</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>2. Did not like using the concordances. Selecting the concordance lines was difficult.</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>3. Did not like using the concordances. Inducing patterns was difficult.</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>4. Not useful. Concordances confused them.</td>
<td>4</td>
<td>11</td>
</tr>
</tbody>
</table>
As is apparent from Table 5, there was a positive reaction from the learners on the usefulness of concordances. Interestingly, half the learners believed that the concordances were useful for them in their English study. About 54% of learners reported that concordances helped them, but only with a teacher’s guidance during the learning process. Twenty-four percent of the respondents revealed that because concordances provided a lot of examples, remembering the grammatical rules was easier. It was found that nineteen percent of learners reported that concordances helped them recall the grammatical rules they had learnt in class, whereas 13% of them thought that concordances helped them learn grammar inductively. Only 8% reported that discovering the rules by themselves helped them remember the rules better than by traditional classroom learning.

Regarding the negative aspect of learners’ opinions on using concordances, 38% of the learners revealed that they preferred the traditional way of learning with the teacher more than using concordances. Nineteen percent of the respondents reported that they did not like using the concordances because selecting the concordance lines was difficult for them, whereas 14% of them did not like using the concordances because inducing patterns was difficult for them. Eleven percent reported that concordances were not useful because they confused them.

CONCLUSIONS AND DISCUSSIONS

From the findings, it was consistently found that this group of students, who were considered language users of low proficiency, relied heavily on their prior grammatical knowledge while working with the concordances. Most of them (70%) employed grammatical patterns that they believed were correct, but which were in fact incorrect. Hence, when they used the concordancer, the results did not help them. As a result, the students became discouraged and bored because they could not find the expected grammatical patterns. Some of them lost motivated and stopped doing the tasks, while others copied answers from their peers. It can be seen that the results of this study were incongruent with those of studies conducted using more advanced students, such as the study by Sun (2003). Sun discovered that learners in his study tried to use word search skills many times in order to discover the concordances, and they then observed the concordance lines by using cognitive skills. These skills include identifying the different structures of each line, and analyzing the parts of speech. Thus, Sun’s participants effectively explored grammatical rules by using concordances.

With reference to the corpora used, the learners always chose the biggest-sized corpora (3 million words) because these provided a greater number of examples for learners.
to observe. The difficulties found were the technical problems in dealing with the concordancer and problems with the concordance lines. Most of the learners reported that they could not search for the concordance lines and they always forgot to choose the corpora from the list in the concordancer when working with concordances. However, most of them (54%) reported that they liked this method of learning because it helped them remember the grammatical rules by observing a lot of examples. They preferred using concordances but they needed some guidance from teachers. The results of this study were also incongruent with the results found by Yoon & Hirvela (2004), who discovered that the participants in their study preferred using concordances independently without guidance. These students could use them effectively without any serious problems.

The conclusions that can be drawn from this study as to what influenced the learners’ strategies cover four areas: prior grammatical knowledge, corpora size and corpora selection, unfamiliarity with inductive learning, and motivation. Concerning the first area, prior grammatical knowledge, the fact that the students used their grammatical knowledge to initially define the rules they thought were correct, and then verify those rules from the concordance output, may be due to their deductive learning approach. The students explained how they initially dealt with concordance texts in the following quotes:

**Student 7**

“Firstly, I looked at the errors and tried to think of the correct grammatical rules. Then, I searched for the concordance lines which matched these rules.”

**Student 26**

“I thought of the rules and then checked them with the concordancer.”

This finding was in agreement with that of Sun (2003), who discovered that this strategy occurred when learners had prior grammatical knowledge and used deductive thinking skills to search for supporting examples from the concordance lines. In cases where the students’ prior knowledge was insufficient, they often became confused and quit working with the concordances. To accommodate this limitation, a teacher’s intervention and appropriate concordance tasks with suitable guidances would be helpful.

The second area, corpora selection and corpora size, was found to affect the process of dealing with the concordances. According to Tribble and Jones (1990), a corpus of 50,000 words should be very useful for classroom purposes. Working with a large corpora may make the students feel overwhelmed, and as a result, the many irrelevant concordance outputs
make analysis difficult and frustrating. However, if the number of concordance lines is too few, learners can became confused, as reported by Student 33:

**Student 33**

“My big problem was when I chose a big corpora, it was difficult for me to search the large amounts of concordance lines. When searching small corpora though, there were only two or three examples, which did not help me enough to induce the patterns.”

This supports Gavioli’s (2001) suggestion that the processes of observation and generalization can pose many difficulties to learners because concordances do not provide enough information and complexity for a particular analysis, and that EFL learners cannot rely on their intuition to guide and back up their observations and to suggest and reinforce explanatory generalizations.

The third area is the unfamiliarity with inductive strategies. This seemed to be one reason why the students struggled when exploring the grammatical rules. Data from the teacher’s observation revealed that at the beginning of the training periods, the learners’ capacity to deal with the concordances was quite low. The reason might be that they were not familiar with a large amount of information presented in concordance lines. After they were trained to better work with the large outputs, their performance developed gradually. However, at the end of the experiment, they had to cope with the concordances output by themselves in order to correct the errors presented in the three tasks. It was found that most of them lacked confidence in working with the information alone. Student 9 reported the following:

**Student 9**

“Obtaining a lot of examples confused me and it was thus hard to induce the rules by myself. I preferred teacher’s explanation in class than using the concordances.”

According to Sun (2003), for EFL learners who have learnt English grammar through deductive teaching methods, it is more difficult for them to alter to inductive learning methods. Thus, extensive guidance in using inductive learning strategies is recommended for the future. Teachers should give learners both methodological and psychological preparation by training them to learn independently step-by-step in order to prevent them from being overwhelmed by large amount of information. Moreover, teachers should tell learners the benefits of learning inductively and stimulate them so that they have the ability to take responsibility to learn independently. In addition, timely training and guidance from teachers is important for learners.
The last area, motivation, was identified from the data of the teacher’s observation notes. The students were motivated only when they felt a sense of achievement in dealing with the concordances. When they saw no chance of development, they soon lost interest in studying. Two respondents reported the following:

**Student 12**

“I liked the initial stage when the teacher guided me on how to use the concordancer and induce the rules from the given concordances. It was easy to deal with the concordances then, but when I used them by myself, I found that it was too difficult and I didn’t want to use them.”

**Student 32**

“I think it was boring when I could not discover the grammatical rules by myself. I think that the teacher should specify the searched words for the concordancer and choose the concordance lines for us. I think then it would be more interesting and easier to learn the grammatical rules.”

According Hadley (2001) and Aston (2001), learning motivation cannot be fostered without a teacher’s intervention, as exposure to a vast number of authentic texts may cause confusion and discouragement. Thus, it is important for a teacher to choose and organize texts in such a way that they are manageable for students. The amount of language input should be controlled and the inputs which might pose problems for the students should be screened out. In many cases, these authentic texts might have to be slightly modified and only short concordances with simple language structures might have to be presented to the students so they can practice dealing with the corpus information (Sripicharn, 2003; Aston, 2001).

**PEDAGOGICAL IMPLICATIONS**

The results of this study may be helpful in designing the tasks using concordances for the learners at a low level of proficiency. Teachers should simplify data by controlling the amount of language inputs and should present concordance lines with simple language structures to learners in the form of printouts. Then, learners should be trained in how to deal with the functions of the concordancer. Importantly, during the training, teachers should give guidance and observe learners closely in order to help them when they face problems. Furthermore, giving learners psychological preparation would be worthwhile. Teachers should tell learners the advantages that they will receive from independent learning and
motivate them by telling them that everyone has the ability to take responsibility for their own learning.

RECOMMENDATIONS FOR FURTHER STUDY

Some issues were not examined in this study due to certain limitations. Thus, some of recommendations for further study are given below.

1. In a future study, think-aloud protocol should be another instrument to use for collecting data in order to get more information.

2. A future case study should have a small number of participants, for example five or six, for better observation results.

3. As the aim of this study was to discover general trends used by learners, the question of which strategies are most useful in dealing with concordances was not covered. Thus, a future study may also investigate this topic.
REFERENCES


Boulton, A. (2008). DDL: Reaching the parts other teaching can’t reach?, Proceedings of the 8th Teaching and Language Corpora Conference. Libston, Portugal


