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## Word Knowledge Expansion Using Different Types of Target Words in Guided Data-Driven Learning\*

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This study evaluates a pilot implementation of guided data-driven learning (DDL) to expand their word knowledge of university students. As a multicase study, it investigates how students expand their word knowledge through DDL and examines the process of their learning using paper-based DDL materials. Each of eight participants undertook different sequential DDL activities using diverse types of target words— single words; synonymous pairs; and combinations of a single word and synonymous pairs. DDL reports from each student were observed to analyze how the different learning targets affected students' word knowledge expansion and what their learning process was during the three activities. Results reveal that students improved word knowledge in several ways: 1) shifting recognition concerning form or meaning to application knowledge and 2) recognizing more and more types of the knowledge through assigned activities, regardless of types of sequential activities. Most students, however, displayed improvement in the last activity. The results demonstrate that students' language experience is a more important factor for determining learning outcomes in DDL, than target types.

[data-driven learning/vocabulary learning/corpus-based language education/  
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### I. INTRODUCTION

Over the decades, corpora have been widely used in language education (Xiao &

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\* The literature review of this study is based on the author's unpublished doctoral dissertation (2011).

McEnery, 2005). Amongst those methods, data-driven learning (DDL) has been shown to be an effective in language education. DDL is a teaching method whereby language learners access textual resources and use them to infer language rules (Johns, 1991). It has been considered an effective method of inductive language learning for decades. By referencing concordances from a corpus, learners can infer language rules of the target words or word chunks, and also obtain in-depth word knowledge. The process of “knowing words” (Nation, 1990, p. 30) using concordances is also tightly related to development of inductive learning. When observing corpus data, students use inductive thinking skills to recognize diverse types of word knowledge and infer language rules. This process also helps learners acquire sophisticated knowledge of a word such as syntactic and semantic restrictions, collocations, and semantic prosody. Many studies (Cobb, 1999; Flowerdew, 1993, 1996; Gardner & Mark, 2007; Johns, 1991, 1994; H. Kim & S. Chun, 2008; Koosha, & Jafarpour, 2006; O’Keeffe, McCarthy, & Carter, 2007; O’Sullivan, 2007; O’Sullivan & Chambers, 2006; Thurstun & Candlin, 1998) also emphasize the extensive types of vocabulary knowledge that are learned from corpus consultation in multiple contexts. However, whereas many previous studies primarily examined discrete vocabulary knowledge (or vocabulary improvement) after using corpus data, fewer have examined in depth what types of word knowledge students can learn using concordancing and how they expand this knowledge. Moreover, there were fewer studies that examined these both issues within a framework of word knowledge.

Regarding techniques to conduct DDL, two different approaches are suggested. One is inductive DDL based on hands-on concordancing, and the other is deductive/indirect DDL using ready-made learning materials and, when necessary, teacher intervention. The latter technique has recently become focused, while the former has a longer history of intense focus. Only a few studies (Boulton, 2008, 2009a, 2009b, 2010a, 2010b, 2012) specifically focus on indirect/deductive DDL for low-proficiency language learners.

Given this gap, the present study focuses on effective use of paper-based DDL materials for corpus beginner university students when they learn diverse vocabulary knowledge of targeted word(s). It is based on the previous research (S. Chun, 2011) in which 27 university students participated in a study using hands-on concordancing to investigate how learners expand their word knowledge through DDL. These earlier results indicated that students learning vocabulary via DDL tasks had developed a learning process with knowable patterns. They expanded the word knowledge in some directions: from form to meaning to application knowledge. However, the study was limited to learning targets, which were pairs of synonymous words. The current study extends this line of enquiry by examining whether similar learning processes occur in different DDL conditions, specifically guided (deductive) learning using paper based materials. A multicase design (Stake, 2006), with eight participants, each using different types of targets was used. The

study addresses two issues:

- 1) What types of word knowledge students recognized during the activities?
- 2) How students expand their word knowledge in different target word conditions?

## II. LITERATURE REVIEW

### 1. Progression of Word Knowledge

Although how language learners can acquire word knowledge are viewed in different ways, the knowledge should commonly be measured in depth and breadth. The development of vocabulary knowledge can be viewed as a progressive movement within a continuum, or through discrete stages. Regarding this issue, some researchers (Meara, 1996; Melka, 1997; Wesche & Paribakht, 1996) take a stronger position but each takes a different stance. The stances also dictate how to evaluate learners' progress in word knowledge.

Melka (1997) views vocabulary acquisition within a continuum of receptive and productive knowledge at each end. She states that the learning process is a movement from receptive to productive knowledge, or from passive to active, and notes that how well a learner knows a word locates him/her within the continuum. Alternatively, Wesche and Paribakht (1996) suggest five developmental stages of vocabulary acquisition. They view them within a progression and then scale them as five progressive stages. However, Meara (1996) claims this developmental model is too simple to account for detailed knowledge of a word or to measure a stage of lexicon. He indicates another problem is that the five stages cannot be considered in succession; each stage might not be followed by the next one. Meara (1996) consequently suggests a multistate model of vocabulary acquisition as an alternative. In his model, unknown words start off in State 0, and known words can be in a number of different states. Hence, it is possible for a word to move directly from State 0, in which a learner doesn't know the word at all, to State 5, whereby he/she can use the word, in a single transition. It is also possible that if a learner forgets the words they know, they can regress from any higher state(s) into State 0 or any other state. He further mentions that "the transition from passive to active is definitely not a continuum but is a clear candidate for a threshold effect", and "words pass through a number of discrete stages" (1996, p. 5) until they are acquired. Additionally, Zimmerman (1997) also suggests four steps of learners' vocabulary familiarity.

Accordingly, we can examine learners' development in word knowledge in terms of progressive stages or steps. This study examines types of word knowledge students can

explore using paper-based DDL materials, and whether progressive movement can be observed through the sequential activities.

## 2. Types of Word Knowledge and Their Difficulty in Acquisition

What is more difficult to learn in vocabulary knowledge? Is it an important issue for language teachers to find out if there is an optimum order in which lexis can be acquired. It is still debatable among researchers. There are a number of studies that examine these difficulties. Some research (Morgan & Bonham, 1944; Nation, 1990; Rogers, 1969) has studied the importance of Parts Of Speech (POS) in vocabulary learning and the order of the acquisition. According to them, it is known that nouns are the easiest word class to learn and adverbs the most difficult. Rodgers (1969) found that nouns were the easiest to learn, followed by adjectives, whereas verbs and adverbs were the most difficult to learn. Nation (1990) insists that when learners guess words from context, nouns and verbs are usually easier to guess than adjectives and adverbs. Alternatively, some researchers (Bauer & Nation, 1993; Laufer, 1997, 1998; Sandra, 1993) consider morphology a more significant aspect of vocabulary learning. In this regard, Bauer and Nation (1993) made a new approach to these morpheme studies. They considered linguistic criteria instead of acquisition, and created a hierarchy of affixes in seven levels. They focus on the difficulty of understanding affixed words when learners encountered them in written texts. The researchers emphasized the importance of morphology as the affix is related to comprehension of meaning and grammar. They insist that an understanding of affixes helps learners guess the meaning and word class of the acquired words.

Referring to the frameworks by Nation (2001) and by Schmitt (2000), semantic knowledge includes meanings, registers, and associations. Different types of word meaning have been mentioned by various terminologies. Examples include core meaning and encyclopedic knowledge (Katz & Fodor, 1963); extension meaning and intension meaning (Lyons, 1977); denotation and connotation (Hammerly, 1979); definitional information and contextual information (Stahl, 1983), etc (as cited in Schmitt, 2000, pp. 26-27). The distinction between definitions of former meanings and latter ones in each stance is whether it is a basic, fundamental meaning of a word, or a meaning including other personal and cultural background knowledge. The latter meanings of a word (encyclopedic, extensive, connotational, or contextual) require broader and deeper knowledge than the basic, definitional meaning. These meanings are beyond the definitions of a word provided in dictionaries, and are context-related knowledge. Learners might try to reach to the former knowledge and then the latter, or both concurrently.

An important aspect of context-related knowledge is that of register, which herein is related to the culture and situation of a language. Schmitt (2000) explains register variation

in detail, citing Chui's (1972) and Halliday's (1978) classifications (pp. 31-33). Chui (1972) suggests six areas in register variation: temporal variation, geographical variation, social variation, social role variation, field of discourse variation, and mode of discourse variation. Halliday (1978) developed the description of types of register variation and divided them into three components: field, tenor, and mode. Since register is context-related knowledge, the register information of a word allows language learners to select the best word for the situation.

Word association is another important component in vocabulary learning. L2 learners' behaviors related to word association are different from that of native-speakers (Meara, 1997, 2009; Nation, 1990, 2001; Schmitt, 1998). The studies state that word associations are less sophisticated than native speakers', and unstable. Accordingly, the word associations can be classified into broad knowledge of meaning and seem to require more efforts to be learned. Collocation is separately mentioned from other categories of word knowledge. In Nation's classification (2001), it is categorized independently in 'Use' because of its idiosyncratic nature. Collocation is viewed as a lexical chunk including both forms and grammatical behaviors. Therefore, it is also called lexico-grammatical chunks. Some studies (Ellis, 1997; Lewis, 1993, 1997, 2000; Nation, 1990, 2001; Nattinger & DeCarrico, 1992; Schmitt, 2000; Sinclair, 1991) focus on its importance as one type of vocabulary knowledge, as collocation requires combined knowledge. To know collocation, learners need to have diverse knowledge related to word classes, meaning, frequency, and culture of the target language, particularly to idioms. Therefore, it can be seen as sophisticated knowledge than other forms and might be learned later.

Difficulty levels of vocabulary knowledge, which knowledge is easier or learned first, are not easy to define. Previous researchers attempted not only to prove their ideas but also to show different opinions or exceptions. This study also examines whether students show any directional, progressive movement in word knowledge acquisition through DDL.

### 3. Benefits of Paper-based DDL Materials<sup>1</sup>

DDL is technically inductive learning in which learners can interact directly with corpora. To effectively fulfill this goal, it should be considered how to lessen some constraints on DDL, such as learning time and potential learning fatigue, when DDL is undertaken in the classroom. In this sense, what methods should be used for effective DDL is an essential issue for both language learners and teachers. This study focuses on paper-based materials rather than hands-on concordancing, in order to ease difficulties of corpus beginners and to guide their vocabulary learning.

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<sup>1</sup> This literature review is partly excerpted and reproduced from the author's study (2016).

DDL can be used in two different approaches: “inductive and deductive” (Cresswell, 2007, p. 270). Deductive DDL, which can be also discussed as an indirect approach to DDL, means that a teacher mediates learners’ concordancing using paper-based materials. In contrast, hands-on concordancing is conducted using the learner’s direct use of concordance software, and can be viewed as inductive DDL (Boulton, 2009b, 2010b; Cresswell, 2007; Johns & King, 1991). Inductive DDL focuses on voluntary activities which learners, in the role of language researchers, identify language rules by directly observing the concordance output. Some studies (Breyer, 2006; Flowerdew, 2012; Granger & Meunier, 2008; Krishnamurthy & Kosem, 2007; Osborne, 2004) focus on the fundamental difficulties of the DDL, and discuss the necessity of ready-made and user-friendly tools for teachers and language learners. In keeping with their notions, Boulton (2008, 2009a, 2009b, 2010a, 2010b) suggests paper-based DDL materials for the low-proficiency language learners. It is necessary that these notions be discussed together with “a guided approach or a combination of an inductive and deductive approach where the elements of explanation and corpus use are tailored to the needs of the student” (Johansson, 2009, p.41).

For successful deductive, paper-based DDL activities, appropriate materials take a key role. There have been some previous studies (S. Chun, 2014, 2015, 2016) that discuss how these materials should be designed and developed. S. Chun suggests some guidelines to develop appropriate materials, by presenting the overall procedures. The guidelines include which corpus or tool should be used and then what citations should comprise the material. She insists that appropriate materials should contain citations from diverse genre in order to help novice learners to learn general language rules, by displaying different forms and meanings of the target words. She also suggests that they keep similar frequency ratios from each genre in order to retain the “representiveness” (Biber, 1993, p. 243) of the source corpus. This study developed DDL materials based on these suggestions.

### III. METHOD

#### 1. Subjects

Six female and two male undergraduate students from a university in Chungcheongnam-do in Korea volunteered for the case study. They were five sophomore and three junior students majoring in either English or social science (Table 1). Their proficiency levels were intermediate with official scores for TOEIC Reading Comprehension between 290 and 330. The participants were not specifically selected by gender or age, and had no prior data-driven learning experience. They were randomly grouped in order to conduct different

types of sequential activities assigned by the researcher. The first group included three students who used the material sets for single target words; the second, with three students, did the sets for synonymous pairs; the last, with two students, did the sets for mixed targets. Each student within a case used different materials sets by different activity order (Table 1). These grouping arrangements were purposed to observe whether students' learning process had been affected by different targets. Alternatively, each student's work was observed as a single case in order to examine whether it had been influenced by the order of the targets.

**TABLE 1**  
Backgrounds of Participants

Type	Participant	Gender	Grade	Majors
Group 1	Case 1 (Student 1)	Female	Junior	Social science
	Case 2 (Student 2)	Female	Sophomore	Social science
	Case 3 (Student 3)	Female	Sophomore	English
Group 2	Case 4 (Student 4)	Female	Sophomore	English
	Case 5 (Student 5)	Female	Sophomore	English
	Case 6 (Student 6)	Male	Sophomore	English
Group 3	Case 7 (Student 7)	Male	Junior	Social science
	Case 8 (Student 8)	Female	Junior	English

## 2. Procedure

Each participant conducted three sets of sequential data-driven learning activities individually as a homework assignment for three weeks, one set for each week. They wrote reports in the worksheets that were provided beforehand as their learning materials, one report before each activity. They wrote their findings they learned from the concordances in the reports as an example in Appendix 1. The researcher observed their work but no feedback was given until they had completed all three activities and submitted their reports. They then submitted the reports in person or by e-mail. Each set of activities the participants undertook consisted of three different targets, which were sequentially set by type of target words as shown in Table 2.

The participants undertook the learning activities using paper-based materials. This study employed both the same targets from the previous studies (S. Chun, 2014, 2015, 2016) and three additional ones some participants chose for their own learning. According to her, target words in her studies were chosen by a group of teachers as teachable words. Other words included the participants' own choices, but they were checked by the researcher, regarding their frequency and diversity in language use. The headwords of the target words were in the frequency range between 1000 and 3000 levels in COCA (Corpus of Contemporary American English), and they comprise diverse types of form and meaning. These words were later combined in order to develop different sets of materials

for sequential activities as shown in Table 2.

**TABLE 2**  
Types of DDL Activities for Each Case

Type	Cases		Target words for DDL		
			Activity 1	Activity 2	Activity 3
Group 1	Case 1	Single words	<i>count</i>	<i>beat</i>	<i>fair</i>
	Case 2	Single words	<i>fair</i>	<i>count</i>	<i>beat</i>
	Case 3	Single words	<i>beat</i>	<i>fair</i>	<i>count</i>
Group 2	Case 4	Synonymous words	<i>choose/select</i>	<i>fit/suit</i>	<i>beat/defeat</i>
	Case 5	Synonymous words	<i>beat/defeat</i>	<i>choose/select</i>	<i>fit/suit</i>
	Case 6	Synonymous words	<i>fit/suit</i>	<i>beat/defeat</i>	<i>choose/select</i>
Group 3	Case 7	Single & synonymous words	<i>count</i>	<i>choose/select</i>	<i>fit/suit</i>
	Case 8	Single & synonymous words	<i>fit/suit</i>	<i>choose/select</i>	<i>count</i>

### 3. DDL Materials

For this study, each material set contains 17 citations for a single target word, 34 for a synonymous pair, all of which were sampled from COCA. The texts from COCA were simplified later based on Nation's suggestion regarding "how to simplify the language" (1990, p.182), in order to help learners infer general language rules of the target. The materials for three additional target words were newly developed based on the same procedures in S. Chun (2014).

Expected findings from students' reports are possibly dependent on the target word(s) and the developed materials that were based on COCA. As an example for *count*, the material contains 17 citations as evidence so that learners can infer its noun and verb forms, plural and present participle forms, each definitional meaning for different POS and mode, and *count on* as collocation and frequency. This composition was based on information on *count* obtained from COCA so that the students can infer general rules of the word.

### 4. Data Collection and Analysis

Data from students' written reports and interview transcripts were examined qualitatively to investigate individual learning. Analysis included different types of vocabulary knowledge they recognized during DDL and the process of expanding their word knowledge. Interviews after every activity were also examined for reference, along with students' written reports. The interview questions had been focused on verification of descriptions as cited in the reports, i.e., whether students had inferred the language rules from the concordances in the materials provided. The questions had also been so on having



attained a better understanding regarding students' learning process. Analysis examined the types of word knowledge recognized by students during the activities, using the coding system in the previous studies (S. Chun, 2011, 2013, 2015). Students' descriptions were coded using the framework of word knowledge (Table 3), which the author developed based on Nation's (2001) and Schmitt's (2000) classification. Types of word knowledge students recognized were initially classified into nine criteria: word class (part of speech), affix, definitional meaning, connotation, register, association, grammatical behavior, collocation, and frequency. However, since students' descriptions were generally reduced in complexity, the above categories were re-classified into Form, Meaning, and Application knowledge. That is to say, they were categorized: Word class and affix as Form; Definitional meaning, connotation, register, and association as Meaning; grammatical behavior, collocation and frequency as Application knowledge.

Some language elements were included in each type (category). For example, tense variation (verbs), singular or plural (nouns), and countable/non-countable (nouns) were classified under 2) Affix. Word position or other grammatical characteristics were classified under 7) Grammatical behavior. Genre, spoken or written mode, and formal or informal style were classified under 5) Register, and collocational expressions, related prepositional phrases, and idioms were classified under 8) Collocation. Examples 1, 2 and 3 from students' reports show how to code their descriptions.

**TABLE 3**  
Framework of Word Knowledge

Form knowledge	Meaning knowledge	Application knowledge
1) Word class (Part of speech)	3) Definitional meaning	7) Grammatical behavior (word order/position in the sentence)
2) Affix (inflections/ derivatives)	4) Connotation	8) Collocation
	5) Register (genre/ mode/ style)	9) Frequency
	6) Association (synonyms/ antonyms/ homonyms/ hyponyms/related words)	

Example 1:

...The word, *count*, can be used as a 1) noun and verb. It is generally 2) non-countable noun, and there is the plural form of it. The meaning of the word is 'seda(to count down)', 'sutja(number)'. It follows a preposition, 'on'. 8) 'Count on' means 'believe something'...

Example 2:

*Fair* was used as a noun, adjective, and verb...I knew 6) it can be used in that many ways . they have the same pronunciation but the meanings are different...it seems to be used more 5) in spoken mode....

Example 3:

I knew *beat* is also used as verb and noun...but the noun form seems to be 9) rarely used. There were only two examples in the material...

Once the texts were coded, the recognized elements were counted and classified into relevant categories. It was not considered whether their findings were correct or not. Last, the results from this coding work were re-checked by two other educationists who have conducted similar research on DDL. Interview transcripts were also analyzed to obtain supportive data. After submitting the report, each student was interviewed for 10 to 15 minutes about their work. In the interviews, they were asked the questions: 1) Whether they had understood the activity and the example sentences; 2) how they had inferred the rules (checking the relevant citations); 3) how long it had taken them to complete the activity; 4) what difficulties they had faced during the activities.

#### IV. RESULTS

##### 1. Overview of Types of Word Knowledge Recognized

Viewing overall cases, the types of word knowledge students recognized most were forms, regardless of different types of target words and activity sequences. In particular, students recognized POS the most, and affixes the second. They described definitional meanings of the targets most in their findings, but register the least. They recognized diverse elements of Application knowledge, but mainly in the last activity. They recognized collocations or idiomatic expressions the most, but frequency of the target word the least. Only one mentioned about frequency. Considered by group, there were slight differences in their learning improvement, due primarily to differences in the order of target words. Regardless, patterns among them were similar, including activity sequence.

Headwords of the targets in Group 1 were within the 3k level frequency range. Not like *count*, *fair* and *beat* have homonym and synonym. Students recognized these types of knowledge later. The comments on those appeared only on the second and third reports, not on the first one. The target words in Group 2 were three pairs of synonymous words in diverse ranges of frequency, within 5k level. Technically, these targets were for learning differences in meaning between the synonymous words. Not all the students in Group 2, however, recognized the differences. One focused mainly on forms: POS and collocation. Two students in Group 3, using a mixed set of a single word and two synonymous pairs, had recognized diverse types of word knowledge in Form, Meaning and Application since the first activity, but only one showed the incremental movement. She recognized more

types of word knowledge in Activity 1 than in Activities 2 and 3, regardless of types of targets. Overall, students' recognition increased and was moved from form or meaning to application knowledge. However, sophisticated vocabulary knowledge such as register and frequency, was recognized the least, and the last among three activities. In sum, six students increasingly showed improvement in recognizing word knowledge. They expanded the knowledge, deeper and wider.

## 2. The Process of Expanding Word Knowledge

When examining overall data from each case, it was observed that students progressed unequally. In the last activity, however, there were some positive changes in their recognition areas (categories) of knowledge. Knowledge recognition shifted from easy to sophisticated, and narrow to broad, albeit unequally to all the students. Students' word knowledge expanded most in Activity 3, regardless of types of the learning targets and orders of activities. Five cases from three groups showed these meaningful progressive changes. Further detail is below.

### 1) Group 1 for Single Words

Case 1 (Student 1) conducted consecutive activities using *count*, *beat*, and *fair* respectively. Expected findings from these three activities are considered to be dependent on each target, since *count* and *beat* have two different POS-both noun and verb, *fair* has three-noun, verb, and adjective. However, her recognition toward types of word knowledge improved in an increasing pattern. In Activity 1, she briefly described four elements: noun and verb form of *count*, and definitional meanings of each. However, in Activities 2 and 3, she mentioned extended areas of the knowledge. She recognized nouns as objects that the verbs-*beat* and *fair*-take, and prepositions following the verbs. She recognized even the most elements in each type of word knowledge in Activity 3. The excerpts below show those changes in her recognition toward types of word knowledge. She tried to explain more types of the knowledge and more elements in each type. Not only the numbers of recognized elements but also her descriptions were elaborate in the last activity report.

Excerpt 1 from Case 1's Activity 1 for *count*:

A verb, *count*, means...the noun means...*counts* is a plural.

Excerpt 2 from Case 1's Activity 2 for *beat*:

*beat* is used as verb and noun. The verb means 'chi-da' and... the meaning of noun is ....Its present participle form is... Past participle form is .... I knew the plural is *beats* in No. 16....

Excerpt 3 from Case 1's Activity 3 for *fair*:

*fair* seems to have various forms. It can be used as noun and adjective. In No.17, I think it is a verb. I think it means ...I found it has various meanings. I think it is used as an adjective the most, in about ten sentences in the materials.....

Case 2 (Students 2) undertook the activities using the sequence of *fair*, *count*, and *beat*. In the first activity using *fair*, she described four elements: noun and verb forms and definitional meanings for each. In the second using *count*, she recognized another element of Application knowledge, that is, the phrasal verb: *count on*. In the last using *beat*, she also focused on collocational expression. She mentioned not only nouns as objectives the verb *beat* takes, but also its extensive meaning. The numbers of total elements she recognized were the same as in Case 1, but her knowledge areas expanded incrementally.

For Case 3 (Student 3) using the sequence of *beat*, *fair*, and *count*, no progressive movement was found in the last activity. Her descriptions of findings in overall reports were very rudimentary. Regardless of the texts, the numbers of elements and types she recognized did not increase, even in the last activity.

Individual case results were summarized into the graphs in Figure 1, as images of recognition maps. They indicated the areas (categories) of word knowledge and elements in each area the students recognized while doing the activities.

In the follow-up interviews, Case 1 stated that she had not known what to do in the first activity, but had understood the following activities using the concordances. She explained that she had done her best to find as many rules from the citations as possible after the first activity. Cases 2 and 3 stated that they had already been familiar with the given target words, so they had not focused on the example sentences. Case 3, who made no improvement, said that she was not interested in this way of learning since it took too much time.

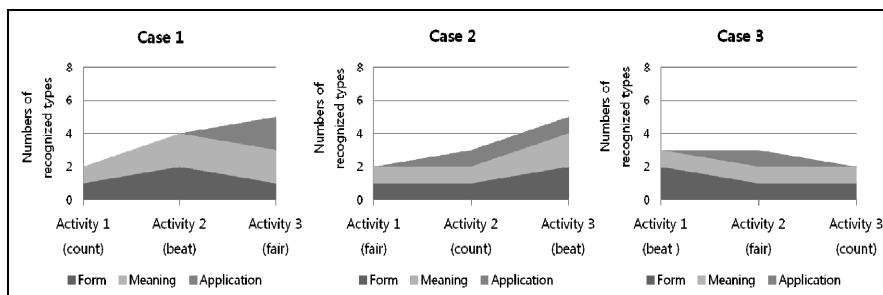


FIGURE 1 The Progressive Movements of Cases 1, 2 and 3

2) Group 2 for Synonymous Words

When Case 4 (Student 4) described the findings from the activities using *choose-select*, *fit-suit*, and *beat-defeat* briefly in overall reports, she had expanded her recognition from narrow to broad. In the first two activities, she had focused only on definitional meanings of each headword and difference in meaning between the synonymous pairs. In the last activity, however, she described more types even in both Form and Application knowledges—POS and the infinitive of *beat*. Compared with her descriptions in the first and the second reports, those in the last were elaborate, especially with regard to grammatical behaviors. Excerpts 4-6 show her progression.

Excerpt 4 from Case 4's Activity 1 for *choose/select*:

Both *choose* and *select* have the same meaning...but reading all the example sentences, they seem to be a little different. I guess *choose* means....

Excerpt 5 from Case 4's Activity 2 for *fit/suit*:

*fit* and *suit* are similar in meaning. They mean.... However, I think *fit* is for size, while *suit* is... When they are used as 'Jal reo-ul-li-da', I think *suit* is appropriate to be used in ....

Excerpt 6 from Case 4's Activity 3 for *beat/defeat*:

Both *beat* and *defeat* have noun and verb.... *beat* means... *defeat* seems to be similar in meaning, but the difference between them is...I wonder how different it is from *overcome* or *conquer* in use. How are they different in meaning?...In the sentences given, I *defeat* was used with *to* a lot as infinitive...

During the sequential activities using *beat-defeat*, *choose-select*, and *fit/suit*, Case 5 (Student 5) described extensive findings about the overall target words. Her explanations were descriptive and lengthy, regardless of the amounts of elements recognized. She remarked on the number of citations, and explained how she had inferred appropriate rules (see the example in Appendix 1). In the first activity with *beat/defeat*, she mentioned POS and affix, that is, participle and plural forms of the words, and then definitional meanings for each word, including differences in meaning. In the second activity with *choose/select*, she also described extensive types of word knowledge with regard to form and meaning, and also more elements in each type. She explained the past forms and participles in Form knowledge, definitional meanings in Meaning, infinitive, the mode of the verb, the sentence structure, the phrasal verb, and the use of article in Application. In the last activity,

she recognized the similar areas of word knowledge as in the second, but somewhat less elements in Form and Application knowledges. She focused relatively more on forms and grammatical behaviors. In general, Case 5 expanded her recognition on Form and Application knowledges, as shown in Figure 2.

Case 6 (Student 6) rudimentarily described his findings and focused mainly on meaning knowledge from the three activities. He also used strategies to verify his findings by describing the numbers of the relevant concordance. In the first activity using *fit/suit*, he mainly described on definitional meanings of the verb and the noun, including difference in meaning between the synonymous words. In the second activity using *beat/defeat*, he recognized the similar types to ones in the first activity. In the last activity, however, he described more elements in Form and Application—past forms and participles of the verbs, and usage of the infinitive. Excerpt 7 from his report shows those findings. The total number of elements recognized was greater than those from other activities; his improvement of Form and Application knowledge was greater than of Meaning, as shown in Figure 2.

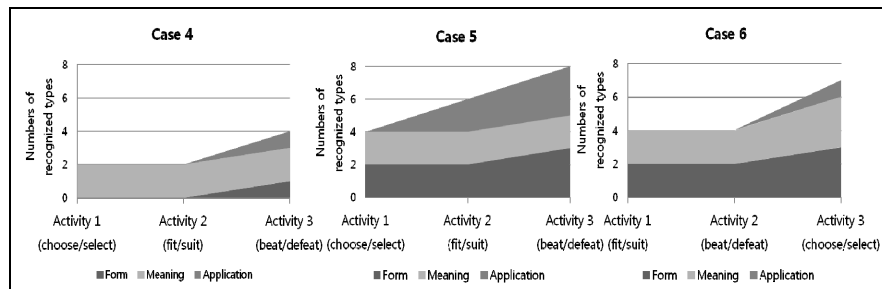


FIGURE 2 The Progressive Movements of Cases 4, 5 and 6

Excerpt 7 from Activity 3 for *choose/select*:

The past form and the past participle form of *select* are the same each other. Those of *choose*, however, are different each other...Both *choose* and *select* mean 'go-reu-da' or 'gyeol-jeong-ha-da'....but I think it sounds better in Examples 3, 8, and 10 when it is used as 'go-reu-da'...*to+choose* is used in Examples 3, 4, 6, and 10, ...

During the follow-up interviews, Case 4 stated that she had thought the activities was for finding out differences in meaning between the synonymous words at the beginning of this task. She later said she realized what to search from the concordances and tried to focus on forms of the targets also. Interestingly, Case 6 spoke similarly. He said he had guessed the goals of the activities from the target pairs and tried to focus mainly on the difference in

meaning. On the other hand, Case 5 described intensively on forms and grammatical behaviors of the target words. She stated that she had already known the words, so she instead tried to infer as many rules on forms and usages from the concordances as possible.

### 3) Group 3 for a Mixture of a Single Word and Synonymous Pairs

Despite rudimentary descriptions on Case 7's (Student 7) findings, he recognized diverse types in all three areas: Form, Meaning, and Application, during three activities using a mixed set of targets: *count*, *choose/select*, and *fit/suit*. He described on some different types of word knowledge in each activity. In the first activity, he mentioned POS, definitional meaning, and collocation of *count*. In the second activity, he described on POS of each word, difference in meaning between the words, the infinitive of *choose*, and interestingly connotation of each word as shown in Excerpt 8. In the last activity using *fit/suit*, he recognized POS and affix of each word, definitional meaning, difference in meaning between the words, verbal phrases, and grammatical behaviors. He expanded the word knowledge by recognizing more elements in Form and Application. He increased his recognition of types of word knowledge the most in the last activity.

Excerpt 8 from Case 7's Activity 2 for *choose/select*:

Both *choose* and *select* were used the most as the meaning of 'go-reu-ha-da' or 'gyeol-jeong-ha-da'...I had thought their meanings would be close to 'go-reu-ha-da'. However, when translating the example sentences, the meaning of *select* seemed to be different from *choose*. It sounds heavier than *choose*? I'm not sure how to say about this, but they seem somewhat different each other.

Case 8 (Student 8), using *choose/select*, *fit/suit*, and *count*, also recognized diverse elements in all three areas: Form, Meaning, and Application. She minutely explained her findings, without using any strategies, i.e., displaying the number of relevant example and highlighting or marking the examples. She was knowledgeable about types of vocabulary knowledge. In the first activity, she described on types of verbs, that is, transitive and intransitive, past forms and participles of the verbs, their definitional meanings, verbal phrases, and tense and mode of the verbs. In the second activity, she recognized more elements in Form and Application, adding suffix in Form: the third-person singular verb, and verbal phrases and grammatical behaviors in Application. In the last activity using a single word, *count*, she described the findings less than ones in the two previous activities. The types of word knowledge recognized, however, were greater than the ones in other cases. She recognized diverse elements and types in all the three areas: POS, verb types, definitional meanings, collocational expressions, grammatical behaviors, as shown below

in Excerpt 9.

Excerpt 9 from Case 8's Activity 2 for choose/select:

As an intransitive verb, *count* follows a preposition *on*. The basic form of verb was used after *and*. Since *and* is a coordinate conjunction, it follows the basic form... 'count on somebody' means 'mit-da'...*too~to* was used in the example sentences and it means.... 'count as' means 'gan-ju-ha-da'....*Count* is used as noun and the meaning is.....

All cases in Group 3, using the mixed targets of a single word and two synonymous pairs, showed no pattern of incremental movement in the learning. The numbers of their findings were different from each other, but the areas recognized were similar. Both recognized diverse types of word knowledge. Case 7 expanded their recognition to sophisticated knowledge in the last activity. Figure 3 shows their improvement process.

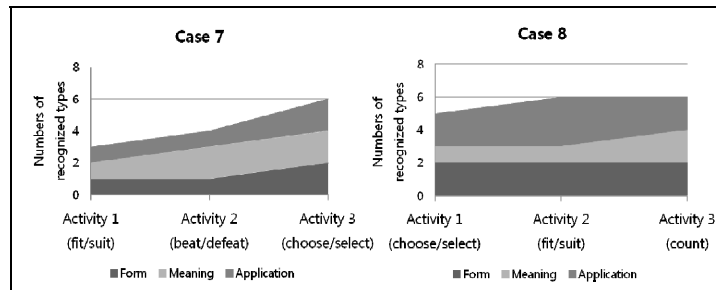


FIGURE 3 The Progressive Movements of Cases 7 and 8

In the follow-up interviews, Case 7 answered that he made more efforts to find out as many rules as possible in the later activities after the first one. He explained that there had been more words to think about and more example sentences to read in the materials for the synonymous pairs. He stated that he had focused on differences in meanings between those words, and then said he had understood how to use the concordances for those activities later. On the other hand, Case 8 stated that the target words were not appropriate for her learning: they were too easy. She expressed that she already known what to search for during the activities, consequently describing as many findings as possible.

## V. DISCUSSION

This analysis of the process by which students use DDL materials was based on an



earlier study undertaken by the author, which was conducted using hands-on concordancing. The purpose of each was similar, but the techniques used were different. The current study has employed a deductive, guided approach to DDL usage, has limited learning targets, and a small number of participants. Accordingly, results between the two studies are not readily comparable, and yet each has found that learners can expand their word knowledge using DDL, and within a relatively short time frame.

Some commonalities were found between the previous and current studies. First, there was no definitive relationship between the amounts of students' descriptions (explanations) and their findings. Eight students in this study identified their findings differently, with some brief and some elaborate descriptions. Even after text coding was undertaken, no direct relation was found. One conclusion, then, is that individual learning characteristics and not learning ability is the driving factor. Second, most students improved progressively. A majority showed gradual progress, although the greatest leap occurred when doing the third activity. For those students who progressed, both data and follow-up interviews indicate their exposure to and experience with DDL positively affected their learning outcomes.

For the two students who did not visibly progress when doing the three activities, one must consider their motivation. In follow-up interviews, they indicated they had lacked motivation for two major reasons: 1) The learning method was not interesting; 2) the target words were too easy. These problems are related to time-consumption, which was noted by other researchers (Farr, 2008) as one of the difficulties that learners face during DDL. Regarding target words, the notion of *learnability* is relevant. According to Hiebert and Kamil (2005), "importance and utility are clearly factors that should guide the selection of words to be taught" (p. 12). This implies the importance of appropriate targets for effective DDL. The current study used the same limited words that had been used in past studies (S. Chun, 2014, 2015, 2016) in order to compare data. Some of the words might not have been appropriate to meet their learning needs. Thus, some or all of the non-motivated students may have found that the activities were not challenging. At minimum, the need for appropriate targets has been shown, itself a subject for future research.

When results from each group are compared, it is evident that what to teach is a critical and essential factor for effective DDL. Group 1 did not improve substantially using single words, and their descriptions were limited. In contrast, Group 2 experienced considerable progress via usage of synonymous pairs. Student descriptions in Group 2 were elaborate and logical, which involved more cognitive skills, while the synonymous pairs chosen were intended to impart extensive meaning. However, the students' recognition focused differently with regard to meaning and form, depending upon individual learning characteristics. In addition, as their work progressed, their focus shifted from a narrow to a broader one. The conclusion drawn is that types of targets affect learning abilities, but

ongoing and effective usage of DDL involves greater usage of cognitive skills.

It was not expected that students would develop diverse and advanced word knowledge skills within the short testing period of three weeks, or to show evidence of such acquired skills in their reports. Nonetheless, the test period clearly shows that six of the eight students showed progress, and are likely to build upon these advances in the future.

## VI. CONCLUSION

This research studied types of target words and conditions for expansion of word knowledge using DDL techniques, including different target sets and paper-based DDL materials. It was observed that for successful DDL, students' experiences in DDL are more essential than learning target types. It was shown that students require a period of time to understand and use concordances to learn the words. It means learners need some time to develop cognitive skills to infer the rules. Compared with the previous study, this study is also encouraging that paper-based materials can be as effective as hands-on concordancing.

Generalization of findings is, however, limited in part due to a small study sample of eight students evaluating only a small number of target words. Moreover, other potentially confounding factors, such as other types of targets, other participant groups from different backgrounds, different learning times and so on, were not accounted for. Yet within its narrow parameters, it has shown that using varied target words can be helpful in the application of DDL and that paper-based materials can produce positive learning outcomes.

An important implication of this study is that how the targets (sets of single words, sets of synonymous pairs, and the mixture of them) are framed is important for sequential learning of DDL. It can be a model in terms of how to determine the target words for effective learning in classrooms. Another implication is that usage of paper-based materials can also produce positive learning outcomes. This study indicates the possibility of using guided DDL for university students, instead of hands-on concordancing, which has been used extensively with tertiary students. Despite the effectiveness of hands-on concordancing for the learners, it is known to have difficulties in use. This multicase study further suggests a new perspective on diverse arrangement of target words for effective DDL, based on these eight different cases. It is expected that other extensive studies will build upon this base in the future.

## REFERENCES

Bauer, L., & Nation, P. (1993). Word families. *International Journal of Lexicography*, 6(4),

253-279.

- Biber, D. (1993). Representativeness in corpus design. *Literary and Linguistic Computing*, 8(4), 243-257.
- Boulton, A. (2008). Looking for empirical evidence of data-driven learning at lower levels. In B. Lewandowska-Tomaszczyk (Ed.), *Corpus linguistics, computer tools, and applications: State of the art* (pp. 581-598). Frankfurt: Peter Lang.
- Boulton, A. (2009a). Testing the limits of data-driven learning: Language proficiency and training. *ReCALL*, 21(1), 37-51.
- Boulton, A. (2009b). Data-driven learning: Reasonable fears and rational reassurance. *Indian Journal of Applied Linguistics*, 35(1), 1-28.
- Boulton, A. (2010a). Data-driven learning: Taking the computer out of the equation. *Language Learning*, 60(3), 534-572.
- Boulton, A. (2010b). Data-driven learning: On paper, in practice. In T. Harris & M. Moreno Jaén (Eds.), *Corpus linguistics in language teaching* (pp. 17-52). Bern: Peter Lang. Retrieved from the World Wide Web: [https://www.researchgate.net/publication/29598964\\_Data-driven\\_learning\\_on\\_paper\\_in\\_practice](https://www.researchgate.net/publication/29598964_Data-driven_learning_on_paper_in_practice).
- Boulton, A. (2012). Language awareness and medium-term benefits of corpus consultation. In A. G. Sanz (Ed.), *New-trends in computer-assisted language learning: Working together* (pp. 39-46). Madrid: Macmillan ELT.
- Breyer, Y. (2006). My concordance: Tailor-made software for language learners and teachers. In L. Flowerdew (Ed.), *Corpora and language education* (pp. 157-176). Basingstoke, UK: Palgrave MacMillan.
- Chui, R. K. (1972). Measuring register characteristics: A prerequisite for preparing advanced level TESOL programs. *TESOL Quarterly*, 6(2), 129-141.
- Chun, Sooin. (2011). *Learners as language researchers: The process of developing inductive vocabulary learning through hands-on concordancing*. Unpublished doctoral dissertation, Chung-Ang University, Seoul.
- Chun, Sooin. (2013). High school students' inductive vocabulary learning by using concordances: A study on the use of inductive thinking skills. *English Language & Literature Teaching*, 19(4), 353-374.
- Chun, Sooin. (2014). How to develop effective paper-based concordance materials for DDL. *Studies in English Education*, 19(1), 127-156.
- Chun, Sooin. (2015). Appropriate numbers of citations for Korean high school students' Data-Driven Learning. *Modern English Education*, 16(4), 65-90.
- Chun, Sooin. (2016). High school teachers' needs for DDL materials: Appropriate amount of concordance input. *Multimedia-Assisted Language Learning*, 19(1), 32-57.
- Cobb, T. (1999). Breadth and depth of lexical acquisition with hands-on concordancing.

*Computer Assisted Language Learning*, 12(4), 345-360.

- Cresswell, A. (2007). Getting to 'know' connectors? Evaluating data-driven learning in a writing skills course. In E. Hidalgo, L. Quereda & Santana (Eds.), *Corpora in the foreign language classroom* (pp. 267-287). Amsterdam: Rodopi.
- Ellis, N. C. (1997). Vocabulary acquisition: Word structure, collocation, word-class, and meaning. In N. Schmitt & M. MacCarthy (Eds.), *Vocabulary: Description, acquisition and pedagogy* (pp. 122-139). Cambridge: Cambridge University Press.
- Farr, F. (2008). Evaluating the use of corpus-based instruction in a language teacher education context: Perspectives from the users. *Language Awareness*, 17(1), 25-43.
- Flowerdew, L. (1993). Concordancing as a tool in course design. *System*, 21(2), 231-244.
- Flowerdew, L. (1996). Concordancing in language learning. In M. Pennington (Ed.), *The power of CALL* (pp. 97-113). Houston, TX: Athelstan.
- Flowerdew, L. (2012). *Corpora and language education*. Basingstoke, UK: Palgrave MacMillan.
- Gardner, D., & Mark, D. (2007). Pointing out frequent phrasal verbs: A corpus-based analysis. *TESOL Quarterly*, 41(2), 339-359.
- Granger, S., & Meunier, F. (2008). Phraseology in language learning and teaching: Where to from here. In F. Meunier & S. Granger (Eds.), *Phraseology in foreign language learning and teaching* (pp. 247-251). Amsterdam: John Benjamins.
- Halliday, M. A. K. (1978). *Language as social semiotic*. London: Edward Arnold.
- Hammerly, H. (1979). Conveying lexical meanings in second-language teaching. *Canadian Modern Languages Review*, 35, 567-580.
- Heibert, E. H., & Kamil, M. L. (2005). *Teaching and learning vocabulary: Bringing research to practice*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Johansson, S. (2009). Some thoughts on corpora and second-language acquisition. In K. Aijmer (Ed.), *Corpora and language teaching* (pp. 33-44). Amsterdam: John Benjamins.
- Johns, T. (1991). From printout to handout: Grammar and vocabulary teaching in the context of data-driven learning. *English Language Research Journal*, 4, 27-45.
- Johns, T. (1994). From printout to handout: Grammar and vocabulary teaching in the context of data-driven learning. In T. Odlin (Ed.), *Perspectives on pedagogical grammar* (pp. 293-313). Cambridge: Cambridge University Press.
- Johns, T., & King, P. (1991). *Classroom concordancing: English language research journal 4*. Birmingham, England: Centre for English Language Studies, University of Birmingham.
- Katz, J. J., & Fodor, J. A. (1963). The structure of a semantic theory. *Language*, 39(2), 170-210.
- Kim, Heyoung, & Chun, Sooin. (2008). Fostering lexis awareness and autonomy by

- corpus-based Data-Driven Learning. *English Teaching*, 63(2), 213-236.
- Koosha, M., & Jafarpour, A. A. (2006). Data-driven Learning and teaching collocation of prepositions: The case of Iranian EFL adult learners. *Asian EFL Journal Quarterly*, 8(4), 192-209.
- Krishnamurthy, R., & Kosem, I. (2007). Issues in creating a corpus for EAP pedagogy and research. *Journal of English for Academic Purposes*, 6(4), 356-373.
- Laufer, B. (1997). The lexical plight in second language reading. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition* (pp. 20-34). Cambridge: Cambridge University Press.
- Laufer, B. (1998). The development of passive and active vocabulary in a second language: Same or different? *Applied Linguistics*, 19(2), 255-271.
- Lewis, M. (1993). *The lexical approach*. Hove, UK: Language Teaching Publication.
- Lewis, M. (1997). *Implementing lexical approach: Putting theory into practice*. Hove, UK: Language Teaching Publication.
- Lewis, M. (2000). *Teaching collocations: Further developments in the lexical approach*. Hove, UK: Language Teaching Publication.
- Lyons, J. (1977). *Semantics*. New York: Cambridge University Press.
- Meara, P. (1996). The vocabulary knowledge framework. *The lognostics virtual library*. Retrieved from the World Wide Web: <http://www.lognostics.co.uk/vlibrary/meara1996c.pdf>.
- Meara, P. (1997). Towards a new approach to modelling vocabulary acquisition. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description, acquisition and pedagogy* (pp. 109-121). Cambridge: Cambridge University Press.
- Meara, P. (2009). *Connected words: Word associations and second language vocabulary acquisition*. Amsterdam: John Benjamins Publishing.
- Melka, F. (1997). Receptive vs. productive aspects of vocabulary. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description, acquisition and pedagogy* (pp. 84-102). Cambridge: Cambridge University Press.
- Morgan, C. C., & Bonhm, D. N. (1944). Difficulty of vocabulary learning as affected by parts of speech. *Journal of Educational Psychology*, 35(5), 369-377.
- Nation, I. S. P. (1990). *Teaching & learning vocabulary*. Boston, MA: Newbury House.
- Nation, I. S. P. (1993). Vocabulary size, growth and use. In R. Schreuder & B. Weltens (Eds.), *The bilingual lexicon* (pp. 115-134). Amsterdam: John Benjamins.
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.
- Nattinger, J. R., & DeCarrico, J. S. (1992). *Lexical phrases and language teaching*. New York: Oxford University Press.
- O’Keeffe, A., McCarthy, M., & Carter, R. (2007). *From corpus to classroom: Language*

- use and language teaching*. Cambridge: Cambridge University Press.
- Osborne, J. (2004). Top-down and bottom-up approaches to corpora in language teaching. In U. Cornnor & T. Upton (Eds.), *Applied corpus linguistics: A multidimensional perspective* (pp. 251-265). Amsterdam: Rodopi.
- O'Sullivan, Í. (2007). Enhancing a process-oriented approach to literacy and language learning: The role of corpus consultation literacy. *ReCALL*, 19(3), 269-286.
- O'Sullivan, Í., & Chambers, A. (2006). Learners writing skills in French: Corpus consultation and learner evaluation. *Journal of Second Language Writing*, 15(1), 49-68.
- Roger, T. S. (1969). On measuring vocabulary difficulty: An analysis of item variables in learning Russian-English vocabulary pairs. *International Review of Applied Linguistics*, 7, 327-343.
- Sandra, D. (1993). The use of lexical morphology as a natural aid in learning foreign language vocabulary. In J. Chapele & M. T. Claes (Eds.), *Memory and memorization in acquiring and learning languages* (pp. 265-294). Brussels: Centre de Langues à Louvain-la-neuve et an Woluwe.
- Schmitt, N. (1998). Tracking the incremental acquisition of second language vocabulary: A longitudinal study. *Language Learning*, 48(2), 218-317.
- Schmitt, N. (2000). *Vocabulary in language teaching*. Cambridge: Cambridge University Press.
- Sinclair, J. (1991). *Corpus, concordance, collocation*. Oxford: Oxford University Press.
- Stahl, S. A. (1983). Differential word knowledge and reading comprehension. *Journal of Reading Behavior*, 15(4), 33-50.
- Stake, R. E. (2006). *Multiple case study analysis*. New York: The Guilford Press.
- Thurstun, J., & Candlin, N. C. (1998). Concordancing and the teaching of the vocabulary of academic English. *English for Specific Purposes*, 17(3), 267-280.
- Wesche, M., & Paribakht, S. (1996). Assessing vocabulary knowledge: Depth versus breadth. *Canadian Modern Language Review*, 53(1), 13-40.
- Xiao, Z., & McEnery, T. (2005). Corpora and language education. In B. Lewandowska-Tomaszczyk (Ed.), *PLC 2001: Practical applications in language corpora* (pp. 479-492). Frankfurt: Peter Lang.
- Zimmerman, C. (1997). Do reading and interactive vocabulary instruction make a difference?: An empirical study. *TESOL Quarterly*, 31(1), 121-140.

APPENDIX 1  
Sample 1 for Student's Report

학년 [ ] 전공 [ ] 이름 [ ]

다음 예문을 살펴 보고, 두 단어의 쓰임에 관하여 발견한 내용을 결론(conclusions)에 자유롭게 기술하여 주십시오.

choose/select/			
1	2번	She said, "Well, I	choose her." <i>선택하다, 정하다</i>
2	2번	"I was concerned when he was	chosen as a president." <i>선택된</i>
3	2번	"They have the right to	choose their own doctor." <i>right to 다음엔 무조건 (C)이다</i>
4	2번	She tried to	choose his words very carefully. <i>선택함/가르침 + 보물사 시키기</i>
5	2번	It's one of the reasons he	chose the hospital. <i>선택함. We in house. rooming</i>
6	2번	If you have to	choose just one, pick an alarm system. <i>have to 동원</i>
7	2번	The respectable popular singers	chose to sing. <i>선택함/가르침 + 보물사 X</i>
8	2번	I think carefully before	choosing what to eat next. <i>선택사 + 명사 (Choosing ~ next)</i>
9	2번	Those issues were	chosen by the students in the survey. <i>선택사</i>
10	2번	the students were free to	choose what to write about and how.
11	2번	It reveals how Reagan	chose to handle the situation.
12	2번	We	chose a hybrid car with the new technology.
13	2번	The buyer can't pick and	choose options. <i>선택 선택함 A X</i>
14	2번	He and his delegation had	chosen to stay in a Hotelin.
15	2번	"You can't	choose to buy a tree this Christmas." <i>결정했다</i>
16	2번	I almost	chose to read the articles.
17	2번	They didn't understand	why she chose to do it.
1	2번	"You'll have to	select one of Elvis' songs."
2	2번	"George Bush has	selected Dick Cheney as his running mate."
3	2번	The museum	selected about fifty pictures for the exhibition.
4	2번	Go to you're the menu and	select the Playback tab.
5	2번	Airlines can	select any flights departing between 6 p.m. and 10 p.m.
6	2번	31 students had been	selected for this summer's workshop.
7	2번	The city began	selecting one team at random.
8	2번	No specific location has been	selected for the event.
9	2번	When students	select a college, they are influenced by parents.
10	2번	The supermarkets were	selected as the venues for the research.
11	2번	Teachers may	select materials to develop students' abilities.
12	2번	The researchers randomly	selected 250 schools for data collection.
13	2번	At this conference, a	selected number of people will present some overview.
14	2번	The organization sent a	selected number of well-known artists and musicians.
15	2번	the special rice grows on the	selected regions.

Conclusions:  
Choose  
1. 17개 예문에서 정동사는 ① ②밖에 없다. 그러는 정동사이다. *→ 2개 포함.*  
2. to 부정사인 쓰인 것은 ②, ④, ⑥, ⑩ 이다.  
3. 동명사로 쓰인 것은 ⑧ 이다. '선택사 + 명사 형태'로 동명사를 쓰였다.  
4. 수동태로 쓰인 것은 ③, ⑨ 이다. = (before) + (Choosing what to eat next.)  
5. 과거완료 (had p.p)는 ⑭ 이다.  
6. ② 번은 '가르침 + 보물사'로 해석 가능한데, 아닌 right to 이기 때문에 '선택사 권리'라 해석된다.  
7. ⑥ 은 have to 동원이고 '선택해야 한다'고 해석.  
8. ⑭ Chose는 '결정했다'라 해석하는게 맞으니 좋다.  
9. ⑬ 은 '나'는 기사로 거의 읽지 않았다'로 해석된다. Chose가 어떤 의미로 쓰였는지 모르겠음.  
10. 양태동명: Choose는 2형식. 1형식 ① 둘 다 가능.  
11. ⑬ ⑭ 문장이 보자면 쓰였다. Chose + to ~  
Select  
1. ⑬ ⑭ ⑮ a / the 다음 명사이면, 그 앞까지 꾸며주는 것.  
P.P 형태. a/the, P.P + ⑮  
2. ⑮ '들었다'는 해석.

## APPENDIX 2

### Sample 2 for Students' Reports

Conclusions:  
 select 의 과거형은 selected 이고 choose 의 과거형은 chose 라고 쓰인다. select 는 과거분사의 과거형 형태가 selected 로 같지만 choose 는 과거형 chose 와 과거분사 chosen 으로부터 다르다.  
 chose 는 select 와 선택된다는 의미로 같지만 고분이라고 해석할 때 here 이 더 자연스럽게 되는 경우가 있다. (1, 10)  
 selected 은 chose 과 다르게 경사가 선택되었다 라는 의미에서 많이 사용된다. (3, 10, 8)  
 chose 는 밑에 수를 붙여서 쓰는 경우가 많다. (3, 4, 6)  
 choose

**Examples in: English**  
**Applicable Languages: English**  
**Applicable Levels: Tertiary**

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