Postsecondary EFL students' evaluations of corpora with regard to English writing*

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Abstract

Recently, as a corpus, which has been mainly used for linguistic analysis, is emerging as an innovative tool in language learning, a growing body of research has paid attention to the efficacy of corpus use from educational perspectives. Given that corpus use for pedagogical purposes entails autonomous and independent learning of language learners, it is important to uncover how corpus users evaluate it based on their own experience. While most of the previous studies were conducted in the ESL settings, the present study sets out to examine postsecondary Korean students' opinions of general and specialized corpora with regard to their own English study and writing in the EFL setting. The questionnaires which twenty-eight students of two corpus workshops submitted were analyzed in terms of their evaluations of corpora as well as their prior writing experience, reference use, and attitudes towards English study and writing. The results show that the respondents, being dissatisfied with their English skills, were eager to increase their overall English skills and English writing skills. During English writing, they usually used two to three language references including bilingual dictionaries followed by monolingual dictionaries and Internet search engines. The results also prove that the respondents regarded corpora as helpful language references and that they would use them and recommend them to other students. The respondents, however, expressed disparate attitudes towards specialized corpora. In general, corpora were considered more appropriate to the intermediate and advanced levels of students in terms of language proficiency and academic experience. Using corpora for pedagogical purposes merits further research to validate its efficacy and investigate the possibility of its application in Korea.

Key words: corpus linguistics, general corpora, specialized corpora, corpus literacy, data-driven learning, corpus-based activities, corpus-driven activities, autonomous learning, English language references, English writing

Ⅰ. INTRODUCTION

A corpus is not a new invention of the twentieth century. It had existed for a long time before the computer appeared. For example, the first edition of the *Oxford English Dictionary* (*OED*), published in 1928, can be said to be corpus-based, although its corpus did not consist of computerized text files (Kennedy, 1998). In fact, a corpus does not need to be computer-based. It merely refers to a collection of texts compiled according to a certain principle (Reppen & Simpson, 2002). It is different from an archive or a database in that it is usually built for research purposes (Kennedy, 1998; Leech, 1991). The advent of a modern corpus was possible by the development of computer technology which enables an unimaginably large body of text files to be gathered for analysis of certain linguistic features in focus (McEnery & Wilson, 1996). Nowadays, dictionaries of major publishers like Longman, Oxford, and Collins Cobuild clearly indicate that their data are derived from corpora.

Despite its relatively long history, corpus research had to undergo a period of neglect in the latter half of the twentieth century, when research priority was placed on language competence rather than language performance. This was attributed to the prevalent belief by Chomsky and his followers that a corpus provides inappropriate data for linguistic analysis (Leech, 1991; McEnery & Wilson, 1996). However, corpus linguists have disputed this idea by comparing corpus analysis to social science research (McEnery & Wilson, 1996). For example, like quantitative research, corpus analysis can offer reliable results to reveal the overall language patterns if the corpus is properly constructed. Furthermore, the development of computer technology makes it possible to enlarge the corpus size and to undergo strict sampling procedures, thereby increasing the reliability of a corpus as a research tool. Corpus supporters also argue that corpus data are less biased than the intuition of a single native speaker (Biber & Conrad, 2001; Stubbs, 1995; Swales, 2002). Gradually, their methodology has gained momentum in language research and started to impact on

language education as well.

Several institutions in the US (D. Lee & Swales, 2006; Hyunsook Yoon & Hirvela, 2004), Canada (Gaskell & Cobb, 2004), Hong Kong (Fan & Xunfeng, 2002; Hafner & Candlin, 2007), and Japan (Anthony, 2006), to name a few, have provided experimental English classes based on corpora. In particular, the Hong Kong Polytechnic University compiled their own corpora* for academic, legal, and other purposes, and enables the public, not to mention English students, to access them. These corpora are designed for education as well as research. Corpus-based or corpus-driven courses are delivered not only to English language learners (Liu & Jiang, 2009) but also to students of other languages (Chambers & O'Sullivan, 2004; O'Sullivan & Chambers, 2006) and students of legal English (Fan & Xunfeng, 2002; Hafner & Candlin, 2007). Corpora are also exploited in English language classes for academic purposes (Charles, 2007; D. Lee & Swales, 2006; Hyunsook Yoon & Hirvela, 2004), where students not only investigate linguistic features of academic English at micro levels but also familiarize themselves with discursive features at macro levels by using corpora.

Since corpus-based language learning is still in its infancy, a larger body of existing literature is devoted to sample activities and guidelines on corpus use in the classroom setting of language learning (Aston, 1997; Conrad, 2000; Dodd, 1997; Flowerdew, 2001; Foucou & Kübler, 2000; Fox, 1998; Gavioli, 1997; Y.-k. Kim, 2001; D. Lee & Swales, 2006; Papp, 2007; Renouf, 1997; Stevens, 1991; Thurston & Candlin, 1998; Tribble, 2001; Tribble & Jones, 1997; Willis, 1998). There are, however, some studies emerging to validate to what extent corpora are effective or in what ways they are conducive from an educational perspective. For example, the use of corpora is examined with regard to vocabulary acquisition (Cobb, 1997) and error correction in English writing (Gaskell & Cobb, 2004). The

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* The PolyU Language Bank (http://langbank.engl.polyu.edu.hk/indexl.html) not only includes monolingual corpora but also a bilingual or parallel corpus of legal documents. The homepage provides a web concordancer to search and analyze its corpora, and thus users do not need to download or install any computer application program.

use of connectors is compared between experimental and control groups (Cresswell, 2007). Unfortunately, previous research has not gained sufficient results yet to confirm the efficacy of corpus use in language learning.

Some researchers employed different approaches to understand the use of corpora from students' own perspectives. As for corpus use for pedagogical purposes, it is especially noteworthy to examine students' attitudes since corpus-based or corpus-driven language learning is based on autonomous or independent learning, where language learners perform the main roles (Bernardini, 2004), while teachers are "resource managers" (Sheerin, 1997), "facilitators," "counselors," "resources" (Voller, 1997), "helpers," "knowers," "mentors," "advisers," or "consultants" (Riley, 1997). Johns (2002) compared a language learner who consults a corpus to a detective in that both of them need to find clues to reach a conclusion. The responses of ESL students were thus collected with regard to benefits and drawbacks in using corpora and showed that they positively evaluated the use of corpora in English language learning and writing (Koo, 2006; Hyunsook Yoon & Hirvela, 2004). The data of EFL students in a Chinese university were also assembled in combination with those of ESL students in American universities, of which results confirmed that they had favorable attitudes towards corpus use and proved that the introduction of corpora in the class had positive influences on their language skills (Liu & Jiang, 2009). Mukherjee (2004) surveyed English language teachers of German secondary schools who participated in corpus workshops and found that they regarded a corpus as a beneficial tool only for language teachers. Based on the survey results, he further emphasized that it was urgently needed to instruct more teachers on corpus-based teaching methods, thereby equipping them with updated linguistic knowledge.

Corpus research has been steadily increasing in Korea as well for the last ten years (이은주, 2008). A large body of earlier research focused on the interlanguage of Korean students (M.-H. Kim, 2002; E.-J. Lee, 2004; S. Lee, 2006; Oh, 2007, 2009a, 2009b) such as the use of the verb "make" (M.-H. Kim, 2002), amplifier

collocations (S. Lee, 2006), conjunctive adverbials (E.-J. Lee, 2004), epistemic modality (Oh, 2007), markers for causality (Oh, 2009a), and demonstratives in English writing (Oh, 2009b). Furthermore, there were several attempts to confirm the effectiveness of corpus-based or corpus-driven lexicogrammatical activities in Korean classrooms with middle-school students (Heejin Yoon, 2009), high-school students (김향신 & 안병규, 2004; 홍선이, 2006), and undergraduate students (H. Kim & Chun, 2008). English essays written by English teachers in training were also compared, and there was a significant increase in vocabulary scores between the essays composed before and after the corpus workshops (M. Lee, Shin, & Chon, 2009).

Despite the rising number of corpus studies for educational applications, more research is still required to properly evaluate the efficacy of using corpora in the EFL settings, especially in the Korean environment, where language input is scarce but with English fever. Although a corpus is often praised as a revolutionary tool to facilitate language learning, it still serves researchers more for linguistic analysis in Korea. Furthermore, more research is in need which makes the voices heard of a variety of language learners. Since corpus-based language learning entails autonomous or independent learning, the attitudes of corpus users is of paramount importance in deciding the success of language learning. However, previous studies have mainly dealt with the improvement of secondary school students' scores with fewer interests in undergraduate and graduate students, who have to study the English language on their own with more chances to write in English. Therefore, in order for comprehensive research on corpus use for language learning, it is urgent to collect the opinions of independent corpus users at undergraduate and graduate levels with the consideration of their habits and needs regarding English study and writing. The research questions of the present study are thus grouped into two categories. The first set of three research questions addresses the workshop participants' prior English writing experiences, use of language references, and attitudes towards English writing as follows:

A1. How many times have the respondents written in English so far? What types of writing have the respondents written so far?

A2. What references do the respondents usually consult in English writing? How many references do the respondents usually consult in English writing?

A3. To what extent are the respondents satisfied with their overall English skills and English writing skills? To what extent do the respondents want to improve their overall English skills and English writing skills?

The second set of research questions focuses on the workshop participants' views of general and specialized corpora, including the following questions:

B1. How do the respondents evaluate general and specialized corpora, respectively?

B2. Is there any change in the respondents' perceptions of corpora?

B3. Do the respondents recommend the use of general and specialized corpora to other students? To whom do they recommend it?

II. METHODOLOGY

A. The Setting of the Study

Two workshops were provided in a Korean university on February 18th and 24th of the year 2010, respectively. Each one lasted two hours including the time for a brief lecture and for the participants' own corpus use, based on the handouts provided. Two workshops dealt with the same contents based on the same materials. They were held upon the request of the author of the present study and sponsored by the English

writing center of the college English program (henceforth, CEP). The author was the instructor of both workshops. She attempted to deliver instructions in the same manner, thereby eliminating the variable of an instructor. The workshops were video-recorded and their CDs are preserved at the CEP lab office.

The workshops started with a brief introduction of a corpus and several representative corpus sites. The instructor then moved on to the demonstration as to how corpora can be exploited as language references in English study and writing. With the assistance of the instructor, the workshop participants engaged themselves in several corpus activities like finding lexicogrammatical patterns, comparing contextual and generic information, and correcting errors in sentences, and they searched a general corpus to solve the given problems. The general corpus which the participants used was the Corpus of Contemporary American English (COCA). The corpus is available online: http://corpus.byu.edu/ or http://www.americancorpus.org/.

The instructor also introduced how to construct a specialized corpus according to individual needs. To familiarize the participants with this hand-made corpus, the participants and the instructor searched a couple of legal terms together in a small specialized corpus of legal English for practice. The concordancer used was AntConc, a freeware program which can be downloaded at its developer's homepage (http://www.antlab.sci.waseda.ac.jp/software.html). The workshop materials were prepared based on the previous literature which presented model corpus-based classroom activities (Altenberg & Granger, 2001; Anthony, 2006; Flowerdew, 2001; Fox, 1998; Liu & Jiang, 2009).

B. The Participants of the Study

There were thirteen and thirty attendants in the two workshops, respectively. The author limited the number of attendants to thirty, since the workshops were provided in a computer lab with limited space and also she wanted to have more active communication with the participants. The much

lower number of the participants in the first workshop was due in part to unexpected bad weather, which led to a considerable number of cancellations. The author notified the workshop attendants, in advance, that they were encouraged to bring their own laptops. Every computer in the lab was connected to the Internet, thereby enabling the Internet corpus search.

Of forty three participants, twenty-eight people submitted questionnaires, resulting in the total response rate of 65.1%. Thirteen and fifteen respondents for the first and the second workshops returned the questionnaires, respectively. Among the respondents, 46.4% (13 participants) were male and 53.6% (15 participants) were female. Master's students accounted for 39.3% of the overall respondents (11 participants), followed by undergraduate students (32.1%, 9 participants) and doctoral students (25.0%, 7 participants). One participant was a graduate holding a master's degree. Their majors were diversified to the degree that they came from twenty different departments ranging from education, business, and art theory to forestry, biology, and electronic engineering. It can be safely assumed that the participants' various backgrounds reflect the increased importance of the English language in these fields, based on the fact that they were willing to spend their valuable time in the workshops even under adverse weather conditions.

The information on the participants' English language proficiency was also collected. The TEPS* scores were chosen as a means to compare their proficiency levels since most of the students are required to submit the scores for admission and graduation. The author's original intention was to examine whether or not the participants' attitudes towards English writing and corpus use are correlated with other factors including academic degrees, disciplines, and language proficiency levels. Due to the very limited number of responses, however, further advanced statistics was not conducted in the present study. Instead, the participants' TEPS scores are provided below for a better understanding of the workshop attendants' English language competence.

* TEPS stands for the Test of English Proficiency developed by Seoul National University.

Table 1. The distribution of the respondents' TEPS scores

TEPS Scores		Frequency	Percent
Valid	The Beginner's Level (TEPS 10-400)	1	3.6
	The Intermediate Level (TEPS 401-700)	14	50.0
	The Advanced Level (TEPS 701-990)	12	42.9
	Total	27	96.4
Missing		1	3.6
Total		28	100.0

As shown in Table 1, 14 participants (50.0%) possessed the English scores at the intermediate level while 12 participants (42.9%) had the advanced level scores. Instead of asking the respondents to write down their scores, the author let them mark the column of the proficiency level where they belonged. The reasons are twofold: (1) some students tend to forget their exact scores; (2) students are less likely to submit their scores if requested to write down their exact scores. In order to do better analysis and to gather more responses, therefore, the categories of TEPS scores were provided in advance in the questionnaires. More detailed explanation about each TEPS proficiency level is available at the official TEPS homepage (http://www.teps.or.kr).

As for the questions regarding a corpus and a concordancer, 20 respondents (71.4%) had not heard about a corpus before, and 22 respondents (78.6%) had not heard about a concordancer before. There was only one participant who knew of both. That participant explained that he/she participated in the author's previous corpus workshop held in 2009.

C. Data collection and analysis

The questionnaires were administered at the end of each workshop. They consist of questions regarding the workshop participants' prior writing experience, use of references, attitudes towards English overall skills and writing, and evaluations of general and specialized corpora. The Likert-based questions were mainly adopted to examine the participants' attitudes and evaluations, with six scales ranging from "Strongly Disagree,"

"Disagree," and "Slightly Disagree" to "Partly Agree," "Agree," and "Strongly Agree." The questions with regard to the use of references and the recommendation of corpora allowed the respondents to choose multiple responses. Since merely 28 participants completed the questionnaires, no advanced statistics was done for the present study. Instead, every discussion which the workshop participants and the instructor had during the workshops is included as primary data to reveal their ideas on each corpus. The comments which the participants left in the registration homepage before the workshops were also collected to complement the questionnaire data.

III. RESULTS

A. The survey results on the workshop participants' English writing

1. The workshop participants' prior experience of English writing

Table 2 demonstrates how many times the respondents have written in English so far. More than half of the participants (16 participants, 57.1%) replied that they had written more than ten times and 6 participants (21.4%) marked five to ten times of English writing. There was only one participant who had not written in English at all and was proven to be an undergraduate student. This result implies that English writing has permeated their academic life to some extent that they are required to acquire English writing skills even in the EFL setting.

Table 2. The respondents' prior experience of English writing

English Writing Experiences	Frequency	Percent
None	1	3.6
1-5 times	5	17.9
5-10 times	6	21.4
More than 10 times	16	57.1
Total	28	100.0

Table 3. The types of writing which the respondents have written in English

Writing Types	Responses		Percent of Cases
	N	Percent	
None	1	2.0%	3.6%
TOEFL Writing	13	26.0%	46.4%
College English Assignments	11	22.0%	39.3%
Term Papers	12	24.0%	42.9%
Dissertations/Theses/ Conference Papers/Journal Articles	7	14.0%	25.0%
Other Types of English Writing	6	12.0%	21.4%
Total	50	100.0%	178.6%

As shown in Table 3, the respondents with experiences of English writing expressed that they had written various pieces of English writing. 13 participants had practiced TOEFL English writing essays while 12 and 11 participants had submitted term papers in English and CEP assignments, respectively. 7 participants had an experience of composing academic papers in English such as dissertations, theses, journal articles and conference papers. 6 participants responded that they had written other types of English writing, which includes personal essays, E-mails, translations, GRE essays, job offers, and business documents. Therefore, in addition to writing assignments for English language courses, the participants had to practice English writing in order to get good scores from English tests like TOEFL or GRE, or to succeed in their education or career.

2. The workshop participants' use of language references in English writing

Table 4. The respondents' use of language references in English writing

English Language References	Responses		Percent of Cases
	N	Percent	
English-Korean/Korean-English Dictionaries	24	31.6%	85.7%
English-English Dictionaries	19	25.0%	67.9%
Thesauri	9	11.8%	32.1%
Collocation Dictionaries	5	6.6%	17.9%
Internet Search Engines	19	25.0%	67.9%
Total	76	100.0%	271.4%

Table 4 shows that the language references most consulted by the workshop attendants were bilingual dictionaries, i.e., English-Korean/Korean-English dictionaries, which account for 31.6% (24 respondents). The second most used are monolingual dictionaries, i.e., English-English dictionaries, (25.0%, 19 respondents) and Internet search engines such as Google or Yahoo (25.0%, 19 respondents). Thesauri were consulted by 9 users (11.8%), followed by collocation dictionaries which were selected only by 5 users (6.6%).

On average, the workshop attendants consulted 2.71 references during English writing. However, the number of references consulted in English writing is varied depending on writers. For example, two attendants replied that they consulted five different types of references during English writing including bilingual and monolingual dictionaries, thesauri, collocation dictionaries, and Internet search engines whereas six students used only one reference. Among those six participants, four only relied on bilingual dictionaries while two students exploited Google or Yahoo as a single reference tool for English writing.

3. The workshop participants' attitudes towards English writing

Table 5. The respondents' attitudes towards overall English skills and English writing skills, where 1 = "Strongly Disagree," 2 = "Disagree," 3 = "Slightly Disagree," 4= "Partly Agree," 5 = "Agree," and 6 = "Strongly Agree."

Questions	N	MIN	MAX	Mean	SD
I am satisfied with my overall English skills	28	1	5	2.57	1.168
I am satisfied with my English writing skills	27	1	5	2.00	.961
I want to improve my overall English skills.	28	5	6	5.71	.460
I want to improve my English writing skills	28	5	6	5.79	.418

Table 5 illustrates that the respondents' degree of satisfaction about their overall English skills and English writing skills are relatively low with the means 2.57 and 2.00, respectively, whereas their desire to improve overall English skills and English writing skills is strong with high values 5.71 and 5.79,

respectively. In addition, the standard deviation of the respondents' eagerness to improve English is much lower than the current satisfaction degree about their English skills, reflecting smaller individual disparities.

These results also reveal that the degree of satisfaction with English writing skills is relatively lower than that with overall English skills, along with a slightly higher degree of the desire for the improvement of English writing skills. In other words, the respondents tended to be more dissatisfied with their English writing skills than their overall English skills, and they were more eager to improve their writing skills than their overall English skills. Because of the small sample size, the significance of the difference is not calculated.

Although the workshop participants were not called upon to record any difficulties which they had undergone in English writing or certain English language features which they had wanted to improve, some of them wrote down what they expected from the workshops on the registration board, which hints at the participants' problems regarding English study and writing. For example, three students hoped that they wanted help on writing academic papers while one student directly asked "legal English tips." Meanwhile, three other students' needs are related to English expressions as follows:

I can write according to English grammar to some extent, but I'm afraid I would have a lot of awkward expressions in my English writing from native speakers' viewpoints! Please let me know how to write in English with their eyes.

To translate typical Korean expressions into English

In English writing, I'd like to go beyond the level of just listing simple vocabulary. I'd like to learn how to use chunks of English expressions well.

The first two comments above reveal that these two different participants wanted to improve their writing in terms of the choice of appropriate expressions. The third participant seems to be well aware of the importance of collocations in English

writing.

B. The survey results on the workshop participants' views of corpora

1. The workshop participants' respective evaluations of general and specialized corpora

Table 6. The respondents' attitudes towards general and specialized corpora, where 1 = "Strongly Disagree," 2 = "Disagree," 3 = "Slightly Disagree," 4= "Partly Agree," 5 = "Agree," and 6 = "Strongly Agree."

Questions	N	MIN	MAX	Mean	SD
I think general corpora are helpful in English study.	28	4	6	5.07	.604
I think general corpora are helpful in English writing.	28	4	6	5.11	.629
I will use general corpora in English study.	27	4	6	5.15	.662
I will use general corpora in English writing.	28	3	6	5.21	.787

The results of the workshop participants' evaluations of general and specialized corpora are illustrated in Table 6 and Table 7, respectively. As for general corpora, the respondents concurred that the corpora provide help for English study (M = 5.07) and English writing (M = 5.11), and they expressed the intention to use the corpora for English study (M = 5.15) and English writing (M = 5.21). As for specialized corpora, the participants opined that the corpora are of help to English study (M = 4.50) and English writing (M = 5.04), while they less strongly agreed that they would use the corpora for English study (M = 4.54) and English writing (M = 4.89).

Table 7. The respondents' attitudes towards general and specialized corpora, where 1 = "Strongly Disagree," 2 = "Disagree," 3 = "Slightly Disagree," 4= "Partly Agree," 5 = "Agree," and 6 = "Strongly Agree."

Questions	N	MIN	MAX	Mean	SD
I think specialized corpora are helpful in English study.	28	2	6	4.50	.962
I think specialized corpora are helpful in English writing.	28	2	6	5.04	.838
I will use specialized corpora in English study.	28	2	6	4.54	1.105
I will use specialized corpora in English writing.	28	2	6	4.89	1.133

There are small differences between the attitudes towards general and specialized corpora. The participants' evaluations of specialized corpora feature lower means and higher standard deviations. One workshop attendant even asked the instructor the following question in the middle of the workshop:

Why do I need specialized corpora? As far as I'm concerned, general corpora would be enough.

However, this opinion was instantly rejected by another student who had academic interests in law. He strongly argued that specialized corpora would be of a great help in acquiring legal English.

There are two further questions related to specialized corpora in the questionnaire. Although specialized corpora received less positive feedback than their counterparts, i.e., general corpora, 22 participants (78.6%) responded that they needed specialized corpora for their own purposes and 23 participants (82.1%) were willing to build their own corpora. As for the open-ended question regarding what types of corpora they want to have, the participants provided a wide variety of answers including not only specialized corpora for individual academic disciplines, such as law, art history, religion, psychology, education, economy, finance, business administration, marketing, statistics, biology, medicine, atmospheric science, environmental science, and astrophysics, but also specialized spoken corpora of lectures, speeches or TV shows, the corpora to show Korean writers' English errors, and the corpora of the everyday English language.

2. The change in the workshop participants' perceptions of corpora

As described in Section Ⅱ-B, 20 respondents (71.4%) and 22 respondents (78.6%) did not know about a corpus and a concordancer, respectively, before the workshops began. To them, these workshops were the first experience to learn how to exploit corpora for educational purposes, i.e., corpus consultation

for autonomous English study and English writing. Although the workshop participants were allowed to have less than two hours for practice, they expressed a relatively high degree of satisfaction with both general and specialized corpora as shown in the previous section, Section Ⅲ-B-1. Their positive attitudes are further verified by the comments which the participants left in the questionnaires.

> *I learned a very valuable tool. It would give much help to my future academic career.*

One master's student from the business school suggested that the university should construct corpora according to disciplines, which would be very beneficial to students:

> *If the university constructs DB according to disciplines, it would be very useful. Please start it at the English writing center.*

Two other respondents pointed out the advantage of corpora in comparison with Google as follows:

> *When I wrote in English, the hardest part was that I did not know the appropriate usage of a word, but it took a lot of time to search the web for examples and it was also difficult to pick up and find the information I had wanted. As I came to know a corpus this time, I can usefully use it from now on.*

> *I always relied on Google, but I could not get much help from it. That is why I signed up for the workshop. I will use corpora from now.*

Interestingly, the above written comments seem to be related to the needs which the participants expressed for the workshops on the registration board. As described in Section Ⅲ-A-3, the students wanted help for writing academic papers and for choosing appropriate English expressions, although they did not have any information about a corpus or a concordancer. Now they were thankful that they obtained a tool to satisfy their needs for English writing for both general and academic

purposes.

3. The workshop participants' recommendation of using corpora

According to the questionnaire results in Table 8, the workshop participants were willing to recommend both general and specialized corpora to other people. Like the attitudes towards corpora in Section Ⅲ-B-1, the recommendation of specialized corpora also features a lower mean and a higher standard deviation than that of general corpora.

Table 8. The respondents' recommendation of the use of general and specialized corpora, where 1 = "Strongly Disagree," 2 = "Disagree," 3 = "Slightly Disagree," 4= "Partly Agree," 5 = "Agree," and 6 = "Strongly Agree."

Questions	N	MIN	MAX	Mean	SD
I recommend general corpora to other people.	28	2	6	5.25	.887
I recommend specialized corpora to other people.	27	2	6	4.85	1.231

There was only one respondent who denied recommending both types of corpora to other people. This participant left the following comment in the questionnaire: "*corpora would be helpful to those with considerable English skills.*" In fact, she was not the only one who thought so. As for the proficiency levels of language learners in Table 9, the respondents opined that the use of corpora would be more recommendable to the intermediate and advanced levels. In other words, they considered that using corpora for the purpose of language learning is more appropriate to students above the intermediate level. For example, while 21 and 20 participants recommended the use of corpora to language learners at the intermediate and advanced levels, respectively, only 4 participants marked corpus use for beginners of English language.

Table 9. The respondents' recommendation of the use of corpora depending on the English language proficiency levels of language learners

Proficiency Levels	Responses		Percent of Cases
	N	Percent	
The beginner's level	4	8.9%	14.3%
The intermediate level	21	46.7%	75.0%
The advanced level	20	44.4%	71.4%
Total	45	100.0%	160.7%

Table 10. The respondents' recommendation of the use of corpora depending on the academic levels of language learners

Academic Levels	Responses		Percent of Cases
	N	Percent	
Elementary school students	2	4.3%	7.1%
Secondary school students	6	12.8%	21.4%
Undergraduate students	19	40.4%	67.9%
Graduate students	20	42.6%	71.4%
Total	47	100.0%	167.9%

Table 10 illustrates to whom the respondents recommended corpus use depending on academic levels. Only 2 respondents (4.3%) recommended corpora to elementary school students and 6 respondents to secondary school students including middle and high schoolers. On the other hand, 19 respondents (40.4%) and 20 respondents (42.6%) suggested that using corpora for educational purposes is more appropriate to undergraduate and graduate students, respectively.

Ⅳ. DISCUSSION

According to the survey results, more than half of the workshop attendants had written in English more than ten times, and the types of writing which they had written are not limited to CEP assignments. They were required to produce various pieces of writing in English to survive in the academy and career, although they study in an EFL setting with fewer

language resources available. In that sense, it seems quite natural that the respondents felt dissatisfied with their current English proficiency with the strong desire to develop their overall English skills and English writing skills.

The results also point out the participants' heavy reliance on bilingual dictionaries to the exclusion of thesauri and collocation dictionaries, which are considered necessary to enrich English writing. It is still questionable whether they did not use them or could not use them, but what is certain is that students need instructions on available resources which could improve their English writing on their own. An interesting finding with regard to the participants' use of language references is that some of the participants exploited Internet search engines like Google and Yahoo as language reference tools for English writing, of which use has been relatively neglected in research, however. Nowadays, it is common that English language writers compose on computers rather than with pen and paper. This shift to electronic writing has brought change in not only the writing process (Park & Kinginger, 2010) but also the writer's choice of language references (Koo, 2006). Therefore, the influence of corpora as well as online dictionaries and Internet search engines as electronic tools needs to be investigated with the consideration of the environment of writing on computers. For example, Koo (2006) collected data on the reference use by several Korean students via screen recording and stimulated recall and found that the students were likely to combine diverse tools to complement or confirm the information which they gained. This study, however, targeted Korean students who studied at an American university and thus had been exposed to ample input already. Furthermore, the study was based on the assumption that the students were well aware of how to wield a variety of tools effectively.

Like previous studies (H. Kim & Chun, 2008; Koo, 2006; Liu & Jiang, 2009; Hyunsook Yoon & Hirvela, 2004), a corpus received favorable feedback from the respondents as well in the current research, regardless of being general or specialized. The use of corpora was greatly appreciated by the respondents for

language learning purposes. The respondents agreed that corpora are helpful in English language learning and writing and that they would use them and recommend them to other people. In comparison with general corpora, however, specialized corpora received disparate responses including both negative and positive opinions. A brief discussion between the participants showed the possibility that the value of a specialized corpus might differ depending on disciplines. For example, as one participant indicated, a specialized corpus of legal English can perform an essential role in law education, by serving diverse learning purposes (Hafner & Candlin, 2007). Or the construction of a specialized corpus could be a waste of time and money in some fields. In fact, there has been relatively little research into the efficacy of specialized corpora to date since students in academic English courses usually come from a variety of departments (Hyunsook Yoon, 2005; Hyunsook Yoon & Hirvela, 2004). However, as suggested by earlier studies (Bernardini, 2002; Hafner & Candlin, 2007; D. Lee & Swales, 2006), it cannot be denied that some language learners would greatly benefit from a specialized corpus as well as a general one, and thus further research should be encouraged to identify their needs according to disciplines.

Although the respondents agreed that they would recommend using corpora to others, they considered corpora more appropriate to mature students in terms of English language proficiency and academic experience. To be more specific, they judged that the use of corpora is recommendable to language learners at the intermediate and advanced levels and to students in undergraduate and graduate programs. This result is concurrent with the views of German teachers of English language that secondary school students are less likely to benefit from corpus use (Mukherjee, 2004). However, their evaluations seem to be based on other considerations as well like students' unfamiliarity with data-driven learning, distractions created in the classroom, or the likelihood of losing authority as a teacher. In an experiment done in a Korean high school, it was high-school students with the advanced English language proficiency who

benefited more from corpus-based instructions and showed more positive attitudes towards data-driven learning (홍선이, 2006). On the other hand, in Yoon and Hirvela's (2004) study with ESL undergraduate and graduate students, the students in the intermediate class appreciated the benefits of corpora more than those in the advanced class. It is also worthy to mention in this research that, with regard to the questions as to the recommendation of corpus consultation to ESL and EFL students, the intermediate class recommended it more to ESL students whereas the advanced class to EFL students. In conclusion, the possibility of corpora for pedagogical purposes has not been fully explored yet and merits further research with a wide variety of groups of language learners to validate their efficacy.

There was one attendant in the workshops who knew both about a corpus and a concordancer. That attendant was the person who also participated in the author's previous corpus workshop in 2009. The author delivered the workshops with similar activity materials. The only difference between the workshops of the years 2009 and 2010 was that the 2009 workshop was delivered in the classroom without computers since the building which had a computer classroom available to the CEP workshops was under construction at that time. Therefore, the participants mainly observed how the instructor exploited corpora to solve exemplary problems and read concordance lines printed in separate handouts instead. In the 2010 workshop, the attendant left the following comments in the questionnaire:

> *After I attended last year's workshop, I tried to use corpora, but found myself not knowing how to use them. So I came here again. Now that I have practiced with a computer, I can remember better, and I like it.*

What the participant meant is that he/she did not know how to exploit corpora on her own and decided to attend the workshop again provided in a computer room. This example clearly shows that students need enough practice time to familiarize themselves with these new reference tools, and

subsequent observations are also needed to keep track of the process of acquiring "corpus literacy" (Mukherjee, 2002, p. 127). In fact, in order for language learners to benefit from corpus consultation, they are required to obtain appropriate corpus search skills and to increase the language ability to interpret and apply corpus search results as well. That is why students need not only to receive instructions about corpora but also to learn how to utilize corpus data (Fligelstone, 1993), along with a sufficient amount of practice (Gaskell & Cobb, 2004; O'Sullivan & Chambers, 2006; Vannestål & Lindquist, 2007; Hyunsook Yoon & Hirvela, 2004). Yet, as shown in the case of Korean in-service teachers of the English language (M. Lee, et al., 2009), even one-time workshops could contribute to a significant increase in vocabulary scores. Therefore, the longer period of training during which language learners come to know how to exploit corpora not only for lexical information but also for grammatical information is expected to bring significant changes in other areas as well including the overall writing scores. With regard to this, it would be another interesting research topic to examine the relationship between the use of vocabulary or collocations and the quality of academic writing (Cowie & Howarth, 1996).

V. CONCLUDING REMARKS

This research was done at the outset of the corpus introduction to English language education in Korea. More follow-up research is thus needed with a larger sample size, in-depth interviews, and longitudinal approaches. The purpose of the present study seems clear because it is rooted in the growing belief that corpus use would help ESL/EFL students write better in English with increased confidence, by overcoming linguistic difficulties they encounter in English writing as well as the lack of appropriate language references and native-speaking English language tutors. Another stream of research would be also insightful which examines who would benefit most from using general or specialized corpora, depending on disciplines,

language proficiency, and academic experience. As proven in the case of Hong Kong (Hafner & Candlin, 2007), corpus users are likely to exploit corpora in their own way for their own purposes. Based on these corpus studies, future practitioners can choose appropriate corpora and corpus materials, and then provide more customized instructions according to their students' academic and linguistic needs, thereby preparing the students better for English writing on their own.

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