Impact of Dictionary Use Skills Instruction on Second Language Writing

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INTRODUCTION

The dictionary is one of the common learning tools for second and foreign language learners. Various types of dictionaries are used to help learners work on their language development. A bilingual dictionary is often the first dictionary that a foreign language learner encounters. A study conducted on dictionary usage in seven European countries, including over 1,100 learners of English (Atkins & Knowles, 1990), showed that the majority of the language learners (75%) who identified themselves as dictionary users utilized bilingual dictionaries. Another choice for second/foreign language learners is a monolingual dictionary. Several studies (e.g., Atkins & Varantola, 1997; Baxter, 1980) reported that a monolingual dictionary was found to be effective in helping learners find relevant information. Recently gaining popularity among language learners and teachers is the bilingualized dictionary which has features of the learners' monolingual dictionary and a translation of each entry. A study which investigated the effectiveness of bilingualized dictionaries showed that they were the most effective of the three types (Laufer & Hadar, 1997).

Different types of dictionaries have helped language learners find the meanings of

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unknown words, guided them to form accurate sentences, and provided them with tips on word usage in the appropriate context. However, there have been mixed views among language teachers on whether or not dictionaries actually aid learning (e.g., Barnes, Hunt, & Powell, 1999; Carduner, 2003). Some feel that a dictionary can be detrimental, causing learners to be excessively dependent on them and to misuse them because of their lack of knowledge about dictionary conventions (Carduner, 2003). It is not surprising to hear language teachers complaining about their students' misuses of dictionaries. Many studies that aimed to describe dictionary users' behavior reported failed look-ups in dictionary consultation (e.g., Chan, 2011; Laufer, 2010); Nesi, 2002; Nesi & Meara, 1994). Learners sometimes had difficulty finding the most relevant information in the entry. Other times, they chose definitions that did not fit in the given context. Researchers have explored the possible causes of look-up errors made during dictionary consultation. One cause of the errors seemed to be that the dictionary user paid attention to only certain parts of the definition (Nesi & Meara, 1994). In other cases, learners misidentified the grammatical categories of the word, which led them to choose an incorrect definition.

In a study of international students' dictionary-using habits, Nesi (2002) concluded that some errors were caused by the learners' lack of dictionary-using skills. Other researchers who described dictionary users' behaviors also emphasized the need to teach language learners dictionary-use skills (e.g., Atkins & Varantola, 1997; Bishop, 1998; Nesi, 2002). It is easy to assume that language learners have the necessary skills to use dictionaries if they own one as we tend to assume a person who owns a book has all the skills needed to extract information from that book. Thus, among many other language learning skills, dictionary-use skills have often been neglected in language classrooms. Although dictionaries available for language learners

have been revised and developed to meet their needs, the most recent studies still report that average language learners are not equipped with effective dictionary-use skills (e.g., Chan, 2011).

Reflecting the need to discuss such issues, there has been an increasing number of studies conducted on the dictionary and the required skills for its effective use. Many studies, however, have been done on receptive language skills such as reading and vocabulary retention (e.g., Knight, 1994; Laufer, 2010; Scholfield, 1982; Wingate, 2004). Studies that were conducted on the effectiveness of dictionary-use skills on productive language skills such as writing are scarce. Although reading is an activity during which a language learner may most frequently utilize a dictionary, it is not the only occasion in which a dictionary can be helpful for a learner.

Dictionaries are also popularly used to improve students' productive second/foreign language skills such as writing and speaking. Whether the dictionary is monolingual, bilingual, or bilingualized, it helps a learner decide which words are appropriate for particular contexts and how to use them. However, information on the use of words and phrases is often difficult for novice dictionary users to locate. Dictionary-use skills should be effective for writing, given the fact that language users need to understand the structural patterns in which a new word is used. The efficacy of dictionary-skills instruction should be examined in studies so that language teachers can help learners improve their writing skills through dictionary-use skills training. Nevertheless, there has not been much research done on the effectiveness of such skills training on second or foreign language writing. The purpose of this paper is to investigate the efficacy of dictionary-use skills training on writing. Because of the limited number of studies that have been conducted on this issue, this paper explores studies covering both dictionary-use skills training and the relationship between dictionary use and productive second or foreign language skills in

order to observe the potential effect of dictionary-use skills training on second/foreign language writing.

In this paper, I will first review studies on dictionary-use skills to explore possible strategies involved in successful dictionary consultations. The second part of the paper will discuss the effectiveness of dictionary skills training on writing. In the following discussion section, findings of the reviewed research will be summarized along with pedagogical implications and limitations in order to deduce conclusions on whether or not dictionary-use skill training will be effective for improving second/foreign language writing.

STUDIES ON DICTIONARY-USE SKILLS

While the complex skills necessary for successful dictionary consultation have been recognized by researchers, it is not clear what is involved in dictionary-use skills. One of the reasons for the lack of research on dictionary-use skills instruction and its effectiveness is that the actual skills and strategies involved in successful dictionary consultation are not well known. However, various researchers have attempted to describe some of the strategies involved in learners' dictionary usage (Lew & Galas, 2008).

Scholfield (1982) determined the dictionary look-up to be a process involving seven steps, each requiring different strategies. The first step is to locate the new word(s) or phrase(s), which might involve several complex strategies. For example, learners might have difficulty comprehending an idiomatic phrase even though they understand all of the individual words that comprise the phrase. Thus, it may be necessary for them to search for the correct meaning under different headwords. The second step is to find the base of the inflected forms if the word to be searched is inflected. This requires a certain level of morphological awareness, since learners are

required to remove the inflections. The learners also need to be familiar with the method the

dictionary uses to list irregular forms. The third step is to search for the unknown word from the

alphabetically organized list in the dictionary. This third step sounds simple to people whose first

language works with the same alphabetic system as the target language. However, if the learners'

first language has a different alphabetic system, the organization style in the dictionary may need

to be taught.

In the case that learners cannot find at least one main entry for the unknown word, they

may have to consider one of the following steps: a) to look up each main element if the unknown

item is a compound or a phrase; b) to search for the stem of the unknown word if it has a suffix;

c) to browse nearby entries in case the unknown word is of an irregularly inflected form or is a

spelling variant of another word; d) to search in the addendum. When the learners find the new

word they wished to search for, but encounter multiple definitions, the next step would be to

eliminate the unsuitable meanings listed in the entry. In order to do so, the learners have to read

all the definitions listed under the entry to choose the most appropriate one for the context where

the word was found. The sixth step is to understand the definition and to integrate it into the

context where the word was used. For monolingual dictionaries, understanding the definition

might involve further steps since the learners might encounter another unfamiliar word in the

entry. Finally, if none of the definitions listed under the entry seems to fit, the learners have to

attempt to infer the meaning of the word from the information they gather from the given

definitions. This strategy is often required during a dictionary consultation since no dictionary

can provide enough information to capture all possible meanings a word can convey (Wingate,

2004).

The above steps describe possible strategies involved in dictionary consultation and how

complex it can be for a learner to be able to conduct a successful dictionary look-up. However, Wingate (2004) speculated that those steps described by Scholfield (1982) do not offer a comprehensive list of strategies required for a dictionary look-up, since these steps are the ones involved in reading. He maintained that the list of strategies would be much longer if the purpose of dictionary use is for writing.

In order to provide empirical evidence of the extent to which language learners actually utilize the strategies described by Scholfield (1982), Wingate (2004) conducted an introspective study on dictionary use for reading comprehension. The study investigated the strategies used by intermediate learners of German when looking up unknown words using bilingual and monolingual dictionaries. It also aimed to find out whether the type of dictionary determined the type of strategies required and which strategies were needed to be taught to the learners. The subjects of the study were 17 Chinese intermediate learners of German who were studying at a university in Hong Kong. They were asked to think aloud while identifying unknown words in two articles from authentic German news magazines and looking up the words in the dictionary. The results showed that partial reading of dictionary entries was the most frequent behavior, which led the participants to an unsuccessful use of dictionaries. Oftentimes, the learners were not able to find the entry for the unknown word because they did not conduct a sufficiently thorough search. It was found that many of the strategies described by Scholfield were not utilized by the participants, leading to unsuccessful dictionary consultations. Thus, Wingate concluded that "...learners do not just know the necessary strategies by themselves but need instruction and repeated practice to acquire them..." (p. 11).

Upon observing the results of her study and incorporating Scholfield's steps, Wingate (2004) divided the necessary dictionary-use strategies into three areas: 1) *dictionary-specific*

strategies, which relate to the knowledge of dictionary conventions; 2) *language-specific strategies*, which morphologically and syntactically analyzes the unknown word; and 3) *meaning-specific strategies*, which involves skills such as identifying the most appropriate meaning of a polysemous word. As Wingate mentioned, while the research results described the importance of dictionary-use skills instruction, they cannot be generalized to learners of other languages since they are based on qualitative research. Moreover, her study was only concerned with dictionary look-ups involved in reading. Therefore, she emphasized the need for further studies that focus on other language activities such as writing.

The most comprehensive and well known set of dictionary-use strategies was presented in Nesi's (1999) taxonomy of reference skills, consisting of 40 strategies divided into six stages. The first two stages involve techniques that are used before dictionary consultation, which include strategies such as knowing the types of dictionaries in order to determine which one to buy, and deciding on the necessity of dictionary consultation. Stage three is concerned with finding the entry information for the unknown word. Two skills included in this stage are 1) knowing dictionary structures, and 2) understanding how information is presented. Fourteen strategies for interpreting entry information are described in the fourth stage. Some of the strategies involve identifying relevant information and interpreting phonetic symbols. Stage five refers to recording information from the entry. During this stage, strategies such as choosing a recording method and creating a vocabulary notebook can be used. The last stage addresses understanding issues that are concerned with dictionary consultations and involves strategies such as knowing the purpose of using dictionaries and their various styles. All of the strategies presented in Nesi's paper were constructed based on a survey that was conducted with language teaching professionals.

Using Nesi's (1999) taxonomy and previous research, Bishop (2000) compiled guidelines for using bilingual dictionaries as a study aid for language learning. The guidelines were created to be used as the basis for a dictionary-use skills course and were primarily meant to be used by learners to improve their dictionary usage during written exams and personal language learning. There are 10 steps: 1) familiarize yourself with a dictionary you buy and become aware that various types of information are contained in a dictionary; 2) know the part of speech (e.g., verb, noun) of the word you are looking for in the entry and the symbols that are used to refer to verbs, nouns etc.; 3) use the dictionary to search for synonyms in order to enrich your vocabulary; 4) use the dictionary to accumulate specialized vocabulary prior to writing on a given subject; 5) make sure you understand how to use the grammatical information included in the dictionary; 6) learn how to read phonetic symbols listed in the dictionary; 7) make sure you know how to check the preferred register of a word in the dictionary (e.g., formal vs. casual, written vs. spoken); 8) cross-check the meaning in the other half of the bilingual dictionary to make sure it is the one you are looking for. For example, when you check an English word in the English-to-Spanish section of a bilingual dictionary to see what it means in your first language, look up the meaning you chose again in the Spanish-to-English section to see if it is the correct meaning.; 9) make sure to proofread your written work after you write; and 10) remember that a dictionary cannot be a substitute for a solid grasp of vocabulary. This set of guidelines is profoundly different from the strategies suggested by Scholfield (1982) and Wingate (2004), since it is mainly concerned with the dictionary-use skills that could help learners' writing. Moreover, as the above guidelines were developed to aid in bilingual dictionary usage, they might not function when instructions are given for generalized use with monolingual or bilingualized dictionaries.

In reality, a learner chooses to use either a monolingual, bilingual, bilingualized dictionary, or a combination. A dictionary's intended usage might be for receptive activities such as reading or listening, or productive activities such as writing or speaking. There has not been a collection of dictionary-use strategies covering all the possible purposes of dictionary use and dictionary types. However, compiling such strategies may not even be necessary. In a study that examined dictionary look-ups by 51 Japanese students while writing, Christianson (1997) found that the students employed various strategies depending on the words they needed to look up and the purpose of the dictionary consultation. In addition, strategies that worked well with some participants did not work as effectively for others. Observing the result, he noted, "While teachers might be able to suggest a number of strategies that students may find helpful, the students themselves ultimately must choose based on the writing context and the given word or phrase being looked up" (p. 38). Indeed, if more general dictionary skills training can cover basic strategies involved in successful dictionary usage, language learners might be able to discover the most effective strategies for themselves with dictionary-use skills instruction and practice.

Instead of focusing on each strategy that is used by the learners for a successful dictionary consultation, Carduner (2003) designed a dictionary-use skills course that covered certain objectives. It was designed for a third-year college-level Spanish grammar and composition course at an American university. The dictionary skill course had the following six objectives: 1) make students aware that translating verbatim does not always work; 2) show students how reference skills are related to writing, revising, and editing; 3) show students how to look up linguistic information using grammar labels; 4) familiarize students with the advantages and disadvantages of the way information is organized in language reference books; 5) provide students with strategies such as skimming and scanning dictionary entries; 6) show students that

a dictionary also contains grammatical information. Since the dictionary-use skills instruction was integrated into a grammar and composition course, the objectives were more in line with Bishop's (2000) guidelines.

In order to evaluate the overall efficacy of the dictionary-use skills instruction, the subjects in Carduner's (2003) study were asked to rate their own bilingual dictionary skills before and after taking the course. Each lesson was also assessed by students using a feedback form. More than 80% of the students who were given a general questionnaire on dictionary usage reported that they had learned a lot about the dictionary from the instruction, and about 70% of the students who were given a more specific questionnaire also indicated that they had learned a lot. Carduner concluded from these results that dictionary-use training is beneficial for foreign language students, but she warned that more strategies might need to be taught if dictionaries are to be used for other purposes.

The results showed the students' perceptions on the effectiveness of a dictionary-use skills course. However, they did not demonstrate how the skills course actually helped the learners to look-up a word correctly and more efficiently. Indeed, the learners' positive viewa of dictionary use and their confidence in having good dictionary-use skills might enhance their dictionary use in their language learning and facilitate more dictionary practice. This practice might be necessary for learners to achieve a certain level of comfort with recommended strategies and thereby enhance their dictionary-use skills. Nevertheless, it is difficult to determine if the dictionary-use skills instruction had positive effect on actual language performance in this study since the effectiveness was measured using surveys from the learners themselves.

Acknowledging the importance of research on the effect of dictionary-use skills training, and the limitations of previous studies such as Carduner's (2003), Lew and Galas (2008) attempted to verify the effectiveness of direct and explicit dictionary-use skills instruction. They were aware of the need for specifying what strategies and skills are involved in dictionary consultation and the fact that researchers have not reached a consensus on the general constituents of such skills. In this study, however, Lew and Galas (2008) focused on investigating the effectiveness of a specially designed dictionary-use skills course, prioritizing the need to assess the usefulness of skills training rather than investigating actual strategies involved in successful dictionary consultation.

Using a set of dictionary-use skills that was designed partially based on Nesi's (1999) six-stage taxonomy of reference skills, Lew and Galas (2008) designed a 12 session dictionary-use skills course. Fifty-seven Polish primary-school students learning English participated in this study. Their dictionary-use skills were measured prior to and after the instructions. The skills assessed in these tests were *reference*, *inference*, *understanding dictionary conventions*, and *acquiring extra information*. The results revealed that while both the experimental and control groups improved their scores on the post-test, the experimental group showed significant improvement compared to the control group (9.5% improvement for the control group and 61.9% for the experimental group). The questionnaire administered prior to the skill training revealed the subjects' high confidence with regard to dictionary skills despite the fact that the majority of the subjects had never received formal training. Interestingly, however, the pre-test results did not conform to their confidence level in their skills, since the subjects performed rather poorly on the test. It suggests that subjective evaluation of the skill level of the learners might not be reliable.

The dictionary-use studies described above confirm that complex skills and steps are involved in dictionary consultation. Moreover, the required skills and strategies might depend on the dictionary type and the language activities for which the dictionary is used for. However, the above studies indicate the importance and potential effect of dictionary-use skills training on language learning. Since studies that analyze the effect of dictionary-use skills training are scarce, especially ones regarding productive language use, the following section will explore the issue by investigating both the effect of dictionary use and the efficacy of dictionary skills training on writing.

THE EFFECT OF DICTIONARY-USE SKILLS TRAINING ON WRITING

The main purpose of dictionary use for language learners is to help them write better, using appropriate words to express themselves in correct grammatical structures. However, dictionary misuse in writing is often spotted by second/foreign language teachers and researchers. Nesi and Meara (1994) explored some non-native speakers' errors in writing English when the learners were required to use dictionaries to help them write using unfamiliar words. A total of 70 non-native adult speakers of English were asked to compose sentences after consulting dictionaries. They were presented with pairs of words and asked to use both of these words in a single sentence. One of the words was a high-frequency word that all the participants were expected to know, while the other was a word that was thought to be new for them. The learners were required to use the high-frequency words in order to prevent the participants from merely repeating the example sentences found in the dictionary definition; thus, these high-frequency words in the sentences were not assessed in terms of correct usage.

Approximately 56% of the sentences contained errors involving the target words. The most important finding in this study was that almost 50% of the errors seemed to be influenced by "kidrule," which is a type of strategy that involves four separate steps (Nesi and Meara, 1994) in which the dictionary users: 1) read the definition; 2) select a short familiar segment; 3) construct a sentence containing that familiar segment; and 4) replace the target word with the selected segment. Another common source of error was collocational restrictions. The participants sometimes failed to make use of collocational information found in the dictionary. If the learners knew the detrimental aspect and outcome of using kidrules, it is highly probable that they would stop using such strategies. Thus, instruction on dictionary use should help learners avoid utilizing such strategies and reinforce the use of more effective ones.

One of the limitations described by the researchers was that the study was designed to elicit learner errors in writing caused by unsuccessful dictionary consultations, rather than reflecting their regular writing behaviors. This somewhat artificial research environment might have affected the results. However, it is common for learners to attempt to use unfamiliar words in writing in order to improve their writing skills. Therefore, the study does provide useful information on how learners extract language resources from dictionary entries for writing.

Similarly, Christianson (1997) reported that 42% of the words that his study participants looked up in a dictionary were incorrectly used in their writing composition. He collected data from 51 Japanese students studying English as a foreign language. A significant number of writing errors were identified in student compositions. In order to investigate the types of English usage with which the students had problems, he categorized all of the errors caused by unsuccessful dictionary consultation. Additionally, Christianson interviewed four successful and four unsuccessful dictionary users in order to further examine their dictionary-use behaviors and

strategies. In this study, the students were asked to use the words they looked up in a dictionary to complete their in-class writing assignments. The labels used to categorize learner errors were: *wrong word*, *prepositions*, *article*, *plural*, *spelling*, *word form*, *tense*, and *other*. This categorization system was developed primarily for pedagogical purposes; therefore, some of the labels did not necessarily correspond to the dictionary-use strategies described in other studies. For instance, the errors that were categorized under "tense" might have been caused by the learners' lack of dictionary-use skills or their grammatical knowledge.

The interviews with the successful and unsuccessful dictionary users demonstrated the various strategies employed when consulting dictionaries. A student who did not commit any dictionary-use errors utilized two types of bilingual dictionaries, English to Japanese and Japanese to English, for different purposes. She was also careful to read all of the example sentences provided in the dictionaries. Christianson suggested that having successful dictionary users describe their step-by-step look-up processes in class can contribute to an effective dictionary skills training. The study results also indicated that the success rate did not depend on the type of dictionary the participants used, but was instead influenced by how sophisticated the users' skills were. Although he acknowledged the need for dictionary strategy training, he argues that some skills might not be suitable for some learners and task types. This is because certain tasks might call for particular strategies, and some students might not be ready to acquire certain skills.

Another way to investigate the relationship between dictionary usage and writing is to assess whether a dictionary enhances good writing in tests. Among several studies that focus on the effect of allowing dictionary use during writing tests, East's (2006) study examined the efficacy of using bilingual dictionaries in timed writing tests with regard to lexical sophistication

and accuracy. The theoretical justification of whether or not a language resource such as a dictionary should be allowed in writing tests is often discussed among researchers and language teachers (e.g., Asher,Chambers, & Hall, 1999; Barnes et al., 1999). However, it is not within the scope of this paper; therefore, the details of such discussion are not explored here. Nevertheless, East states that knowledge gained from dictionary consultation might lead learners to better vocabulary use, which would be important in developing their writing skills.

Forty-seven teenage students in New Zealand learning German participated in East's (2006) study. For each test, they were asked to complete two writing tests within 50 minutes. The participants took one of the tests with a bilingual dictionary and worked without it during the other test. A separate multiple-choice placement test was administered to measure the participants' language ability.

The results revealed an increase in the participants' lexical sophistication in the texts that were written with the dictionary regardless of their language ability. A further analysis to examine the relationship between the participants' language ability and successful dictionary use revealed that the higher ability participants utilized the dictionary more successfully than the lower ability group. It might be because the higher ability learners had more experience using dictionaries, and thus they were more skillful than the lower ability learners. The most interesting finding from the study was that dictionary consultation seemed to aid the lower ability participants' lexical sophistication more, which helped diminish the gap between the lower and the upper ability learners' lexical richness. East (2006) claims that "access to a dictionary in a writing test may be of particular benefit to lower ability participants in terms of helping them to increase their lexical range" (p. 193).

In terms of lexical accuracy, errors were observed in 50% of the dictionary look-ups. One of the main causes of the errors was the inappropriate use of words in the given context. Observing the high rate of inaccurate dictionary use, East (2006) concluded that the dictionary was not contributing positively to the learners' accuracy in writing. However, he also noted that the participants' ability influenced the extent to which they could use the looked-up word correctly in writing. What can be inferred from this study is that the learners' ability might influence the accurate use of the looked-up words more than the range of sophisticated lexis. The fact that the lower ability participants were not able to utilize the information found in the dictionary to help the accuracy of their writing indicates the need for dictionary-use skills training, especially for lower ability learners who might not have had much experience using dictionaries. East also suggested the potential role a dictionary-use skills training can play. He claimed that such training may lead to an increase in learners' lexical sophistication and accuracy, which would contribute to an overall development in their writing quality.

In some other studies, researchers focused on assessing the effectiveness of the different types of dictionaries in writing. One study that investigates the differences in effectiveness among dictionary types is Laufer and Hadar's (1997). They examined the three types of dictionaries, monolingual, bilingual, and bilingualized in both comprehension and production of new words. The purpose of the study was to see which type of dictionary would be the best aid for learners' comprehension and production of the new words. One hundred and twenty-three high-school and university students learning English participated in this study. The participants were provided with 15 low-frequency words and their dictionary entries: five of them were provided with entries from a monolingual dictionary, another five from a bilingual dictionary, and the remainder from a bilingualized dictionary. The word comprehension was measured using

a multiple-choice test that was given simultaneously with the target words and their entries from the dictionaries. In order to assess production of the new words, the participants were asked to write original sentences with the target words. A requirement was that they could not replicate example sentences provided in the dictionaries. It is important to note that the correctness of dictionary usage was measured in terms of semantic criteria only, since it was difficult to determine whether incorrect use of the grammar stemmed from unsuccessful usage of dictionary information or the participants' language ability.

Interestingly, the study results suggested that the ability to use information in the dictionary was not influenced by the learners' language proficiency, which somewhat contradicts East's (2006) findings. However, no language proficiency tests were given to the participants in this study. The proficiency level was simply determined based on their education level: the high-school students were referred to as pre-advanced learners while the university students were considered advanced. Nevertheless, since the participants' language proficiency did not appear to have an effect on dictionary usage, dictionary-use skills were used as the independent variable in this study. The learners' dictionary-use skill level was determined based on the total test score. The results showed that unskilled dictionary users benefited the most from the bilingual dictionary on both comprehension and production of new words. On the other hand, the monolingual dictionary did not seem to help these learners.

A different picture was shown with regard to the average dictionary users. The bilingualized dictionary seemed to aid these learners with new word comprehension. The monolingual dictionary appeared to help the average users more than the unskilled learners though it was shown to be less effective than the bilingualized dictionary on overall usage. For the skilled dictionary users, there were no significant differences in effectiveness among the

three types of dictionaries. To explain the results, Laufer and Hadar (1997) stated that the effectiveness of dictionaries might depend on the user type and the tasks with which they are engaged. They further speculated that the monolingual part of the bilingualized dictionary was probably not utilized by the unskilled learners. Although it was used by average users for comprehension, using the monolingual part of the bilingualized dictionary for production purposes might have been too difficult for the unskilled learners. Based on these results, Laufer and Hadar concluded that the bilingualized dictionary might be the most suitable choice for all types of learners. However, they noted that when learners make progress in dictionary-use skills, they might be able to benefit from the information contained in the monolingual dictionary, "first in comprehension and later in production" (p. 195). Thus, dictionary-use skills training is worth the attention, and it is as important as providing learners with information about words (Laufer & Hadar).

While many studies exploring the effectiveness of dictionaries investigated different types of dictionaries (e.g., monolingual vs. bilingual, paper vs. electronic, or providing definition only vs. with example sentences), Harvey and Yuill (1997) examined the efficacy of a specific pedagogical dictionary, the Collins COBUILD English Language Dictionary (CCELD). Their introspective study focused on the dictionary's productive role on writing. A major feature of CCELD that differs from other monolingual dictionaries is that the word definitions are explained in full sentences. Because of this special characteristic, the CCELD was assumed to be useful in helping learners gain information needed for their written work. In this study, the participants were given a theme and asked to write an essay with the CCELD being used when necessary. The participants were asked to fill out tables and flowcharts to record each step they take to find a word in the dictionary and the rationales of taking these steps. In order for the

participants to effectively reflect on their dictionary look-ups, some basic lexicographic and linguistic terms were taught prior to the study. Additionally, instruction regarding dictionary conventions was provided by the researchers in order to make sure that the participants understood the CCELD profile. Although the dictionary-use skills training was not the focus of the study, this information session might have functioned as a form of instruction. The results provided some evidence for the CCELD to be effective in answering the learners' needs while writing. The success rate of the look-ups was reported to be high, and difficulty in finding information seemed to be caused by the absence of information rather than the misuse of the dictionary. As mentioned above, some of the instructions provided prior to the study appeared to be similar to possible components of a dictionary-use skills course. Therefore, the high rate of successful dictionary use might have been caused partially by the skills instruction, although it cannot be determined from this study alone.

One of the earliest empirical studies that directly examined the effect of dictionary-use skills instruction on second language performance was by Jacobs' (1989). He investigated the relationship between the dictionary-use skills instruction on the use of monolingual dictionaries and second language performance in writing. It was hypothesized that students who received dictionary-use skills training would be able to locate errors and correct them in a passage better than students who did not use dictionaries or did not receive the skills training. The dictionary-use skills training was also thought to facilitate increased dictionary use when students are engaged in writing.

Fifty-four college students in Thailand majoring in English participated in this study. Three reading and writing classes were used for the experiment. Based on regular class observation, the researchers and teachers expected the students' experience with dictionaries to

be minimal or non-existent. Pre- and post-tests were administered before and after skills training that asked the participants to correct passages. Dictionary use was not allowed during the pre-test by students in any of the classes. After the pre-test, students in one class received the dictionary-use skills instruction, while the other two classes only received instruction on error correction in writing compositions without incorporating dictionary-use skills. In order to observe a possible increase in dictionary use caused by skills instruction, the participants were given a choice to use dictionaries in a final exam which was administered after the post-test.

While no significant differences in scores between the pre-test and the post-test for either of the control groups was observed, the experimental group that received the instructions on how to use a monolingual dictionary showed significant improvement in the post-test. The second hypothesis was also confirmed: Over 70% of the students in the experiment group brought monolingual dictionaries to the final exam, while less than 60% of the students in the two control groups used bilingual or monolingual dictionaries. Observing these results, Jacobs concluded that dictionary-use skills training can lead to an improvement of the students' writing and greater dictionary use. However, he noted that although a significant improvement in the experiment group was shown, there were still many errors that the participants in this group failed to correct.

Jacob's (1989) study focused on dictionary skills that are utilized during error correction in writing, assuming that dictionaries were used often to check the learners' written work. Although it is true that writers often use dictionaries to see if their written passage is accurate, they can also be used before and during writing. It is possible that many errors could be avoided if a dictionary were used while writing a draft. Surprisingly, however, little research has been done on the effect of dictionary-use skills training on writing since then.

One of the few studies was Bishop's (2001) empirical research, which assessed the efficacy of dictionary-use skills training on the students' written product. The skills course was designed to be an online course and the topics covered were organized based on the previous studies conducted by Bishop (2000). The course had three parts: 1) *the dictionary as a reference book* whose objectives included getting the learners up to speed regarding dictionary conventions and symbol usage; 2) *the dictionary as a study aid*, in which the learners were expected to learn how to use the dictionary when writing or reading; 3) *guidelines*, which explored important points for learners to remember when using dictionaries for language learning.

Thirty adult students (15 students in the control group, 15 in the experimental group) who were enrolled in a university distance learning course were the participants of the study. They were asked to complete a three-phase task for nine to twelve hours which included the dictionary-use skills instruction in the second phase. The control group completed only phases one and three while the experimental group completed all three phases. The course effectiveness was measured by examining the first and the second drafts of the students' written work. During the first phase, students were required to write a short essay in French. The original copy of the essay was returned with no marking. In the second phase, the experimental group was given the training course and asked to complete an evaluation form. Both the experimental group and the control group of students were asked to redraft the unmarked version of the original essay for an hour and a half during the third phase. Two aspects of their essays, *accuracy* and *quality of language*, were assessed in order to measure the effectiveness of the training course.

While the experimental group of students showed improvement in accuracy of 14.3% and quality of 11.9%, the control group showed improvement in Accuracy of 1.5% and in Quality of 2.2%. The experimental group showed 13% and 10% more improvement in accuracy and quality,

respectively, than the control group. Therefore, Bishop (2001) concluded that the training course on dictionary skills was found to be effective in improving students' writing. Moreover, comments gathered from the students on the usefulness of each part of the skills course revealed that 66% of the subjects who answered the questionnaire (24 out of 30) rated the first part of the training, *Dictionary as a Reference Book* as very or fairly useful. A section of part two which provided advice on using the dictionary while reading was rated as very or fairly useful by 66% of the subjects while the section dealing with writing was rated very or fairly useful by 88%. Finally, part three, guidelines, was rated very or fairly useful by 62%.

Evaluations from students are useful for revising a course. However, high satisfaction rate does not always correlate with actual improvement in the learners' skills. Therefore, future studies investigating the efficacy of dictionary-use skills training should also include an objective measurement of the skills the way Bishop's (2001) study did.

DISCUSSION

Evident from the literature review above is the importance of learners developing dictionary-use skills. A better understanding of comprehensive skills that are involved in successful dictionary consultation is also needed. Several researchers have attempted to describe a skill set that learners need when using dictionaries. The strategies described by Scholfield (1982) and Wingate (2004) demonstrate the complex nature of successful dictionary consultation. It is clearly unreasonable to assume novice dictionary users come equipped with these strategies when they gain access to such learning tools. Thus, assuring that they have the skills described in the above studies would be important for their successful dictionary use. However, additional strategies might be required depending on the dictionary type and tasks in which the learners are

engaged. Specific strategies might be needed especially for a new type of dictionary (e.g., the bilingualized dictionary) since learners might be unable to use some of the functions depending on their language proficiency level, as Laufer and Hadar (1997) found in their study.

The comprehensive set of strategies described by Nesi's (1999) has been used as the basis for some dictionary-use skills training (e.g., Bishop, 2000). The adaptation of a comprehensive set of strategies is probably desired insofar as second language writing is concerned since learners should make use of grammatical information found in dictionaries to correctly use words in sentences. Additionally, teachers who design such skill courses should consider the appropriate dictionary type for their learners. For instance, the guidelines created in Bishop's (2000) study were intended for bilingual dictionary users. Other types and styles of dictionaries (monolingual, bilingualized, paper, electronic) might require extra instruction. Moreover, a dictionary such as the Collins COBUILD English language dictionary, in which definitions are shown in full sentences, might require special attention in a dictionary-use skills course, since the learners might not be familiar with these types of dictionaries.

Considering all the possible dictionary purposes and available types, it seems unrealistic, if not impossible, to compile all the strategies that might be involved in successful dictionary consultation. However, it may not be necessary to launch such a project. As Christianson (1997) found in his study, a strategy that works well for one learner might not work as effectively for others. The students themselves might have to develop and choose the most appropriate strategies depending on their purposes of dictionary consultation and the types of words that are being looked up. Furthermore, teaching the learners effective dictionary-use strategies does not guarantee that they will acquire the skills. It is important to be reminded by Lew and Galas's (2008) study that not all the strategies taught explicitly were acquired by the learners although it

appeared possible to teach such skills. Also, the questionnaire administered in their study revealed that the learners' perceived confidence in possessing the dictionary-use skills did not conform to the objective measurement of such skills. Future studies on skills training effectiveness should probably avoid using a subjective evaluation approach measuring the learners' skills.

The majority of the researchers who are concerned with learners' dictionary usage seem to agree on the need to teach strategies so that dictionaries can be utilized more effectively. As discussed in this paper, the effect of dictionary-use skills course on actual language performance has rarely been investigated. However, it is possible and worthwhile to investigate this issue by exploring the studies conducted on the effectiveness of dictionary consultation on language performance.

The second section of this literature review focused on writing in which learners often seek assistance from dictionaries. The studies involving learners' dictionary-use behaviors and their misuse (e.g., Christianson, 1997; Nesi & Meara, 1994) indicated that some sources of misuse can be avoided if the learners are instructed properly on how to use dictionaries. Acknowledging the fact that half of the errors in Nesi and Meara's (1994) study appeared to have been caused by the use of "kidrule," it would be important for language teachers to make sure their students are aware of the disadvantages of using such strategies. In fact, if the learners are instructed on how to use dictionaries, they would probably not need to resort to such strategies. Moreover, the high rate of dictionary misuse illustrates how unskilled the average dictionary learners are, and how beneficial it might be for them to have dictionary-use skills instruction.

The way dictionary-use skills should be taught is another issue, and time and effort would be required to compile results from empirical research on how such strategies should be

instructed. However, as Christianson (1997) suggested in his article, teachers can have successful dictionary users describe and demonstrate each step and the strategies they use when consulting a dictionaryas a part of skills training. Dictionary-use skills instruction does not have to be teacher-fronted. The learners would certainly be able to learn from peers who are more skilled in using dictionaries although some skills might not be suitable for other learners.

In terms of when to provide such instruction, East's (2006) and Laufer and Hadar's (1997) studies provide some insights. In East's study, the lower ability learners seemed to benefit more from the dictionary in terms of lexical sophistication. Thus, it might be beneficial to introduce dictionary-use skills instruction in the early stages of language learning. The fact that the higher ability participants were more successful in dictionary consultation than the lower ability group can also support the rationale for early introduction of such instruction. It might require some time for the novice dictionary users to become accustomed to dictionary-use strategies and therefore, such skills course should be introduced early in their learning. However, a reminder for teachers is that some dictionary types might not be appropriate for learners of a certain proficiency level. It is not clear why the unskilled users in Laufer and Hadar's (1997) study did not use the monolingual part of the bilingualized dictionary. It might be that the unskilled users did not have much practice or lacked dictionary-use skills, as Laufer and Hadar speculated. However, it might instead be due to their language proficiency level. These learners' proficiency levels might have been too low to make use of the monolingual dictionary. Therefore, the type of dictionary is certainly one of the important points for the language teachers to consider when providing the students with dictionary-use skills instruction.

Another point that language teachers should know is that certain features of a dictionary might be more helpful for improving students' writing. A feature of the CCELD that provide

definitions in full sentences might help the learners better when used for writing. While the CCELD and other monolingual dictionaries were not compared in this paper, teachers should be aware of the fact that such dictionaries are available for learners and should inform the students of the options.

Although there is little empirical research conducted on the actual efficacy of dictionary-use skills on writing, Jacobs's (1989) and Bishop's (2001) studies confirmed the effectiveness of such instruction on the learners' language performance to some extent. The differences in the types of dictionaries that were used and tasks in which the learners were engaged render the findings difficult to generalize. There is certainly a need to verify these findings using similar research methods. Nevertheless, results from different studies using a variety of tasks and dictionaries indicate the importance of dictionary-use skills instruction for writing. Therefore, it can be concluded that such skills courses certainly have a place in general language instruction to improve learners' writing skills.

CONCLUSION

This review of the literature should remind language teachers of the potential usefulness of dictionary-skills training not only for reading, but also for writing. Second/foreign language teachers should also be aware of the complex nature of dictionary use and the wide variety of dictionaries available for the learners.

As can been seen in this literature review, dictionary-related studies have been conducted focusing on various languages and task types, rendering it difficult to verify their results with regard to specific language and task. Therefore, more empirical research on the specific skills that are required for successful dictionary consultation and the effectiveness of skills training is

undoubtedly needed. However, second/foreign language teachers should probably not wait for the results of future studies, but should instead start incorporating dictionary-use skills training immediately in order to help their students.

It is hoped that the information summarized in this paper regarding dictionary-use strategies and the effectiveness of learning such skills will raise awareness among language teachers and help them aid their learners in effective dictionary use.

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