

DICTIONARIES: A BLESSING OR A CURSE? ADDRESSING CLASSROOM-LEVEL QUESTIONS ON VOCABULARY RETENTION WITH SLA RESEARCH

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ABSTRACT

Despite a wealth of research existing on the effects of dictionary use relating to L2 vocabulary acquisition or reading comprehension, findings do not often reach the English Language Teaching (ELT) classroom. As a result, teachers' classroom policies on dictionary use, be it the degree of use or type of dictionary permitted, are often based on conjecture or "common sense" assumptions rather than empirically-grounded knowledge. This short literature review of SLA studies focussing on dictionary use was stimulated by a question from a conversational school teacher seeking information regarding if or how his students should be using dictionaries in class. While the studies examined in this review largely support the role of dictionary use including comprehension and vocabulary acquisition, they also highlight best practices relating to how dictionaries should be best used. Learner training in effective dictionary use strategies is therefore a key recommendation for classroom practice.

INTRODUCTION

This study began as a requirement as part of the second language acquisition (SLA) module in my MA TESOL course in 2016. I was tasked with writing a research paper on an area of interest within SLA literature that would have some link to the educational context in which I was working. When this was announced in our course packet at the start of the semester, I admittedly regarded this project with a measure of cynicism. It was hard for me, isolated within the bubble of *eikaiwa* schools, a context all but forgotten in the corridors of academia (Nagatomo, 2013; Lowe, 2015), to imagine what practical benefit the loftiness of SLA research could offer me and the teachers I worked with. Serendipitously, one evening, a colleague came to me with a query from a student, "What dictionary should I be using, English-only or bilingual?" Therein lay the impetus for this project. As a result of this grassroots pedagogical need, I was reassured that SLA research need not only be directed towards those with letters after their

name. Rather, it has the potential to offer peace of mind for those teachers who may have been largely overlooked in academia thus far.

Extensive debate among both teachers and researchers has taken place regarding the role of dictionaries in language learning (Knight, 1994; Luppescu & Day, 1993; Zou, Xie, Wang, Wong, & Wu, 2015). The prevalence of communicative language teaching in contemporary classrooms has meant that some teachers have de-emphasized or even abolished dictionary use in favour of having students attempt to infer unknown word meanings from context. However, a wide range of studies exist that provide a convincing argument for dictionary use as an aid to vocabulary noticing and acquisition (Bruton, 2007; Fraser, 1999; Knight, 1994; Laufer & Hill, 2000; Luppescu & Day, 1993). If learners are given training on how to use dictionaries effectively, it is claimed that dictionaries can facilitate deep processing of lexical items and, especially in the case of lower-proficiency learners, improve their performance in reading and writing tasks (Bruton, 2007; Knight, 1994).

As previously mentioned, this article and review of literature was stimulated by a question posed by an instructor working in a private English conversation (*eikaiwa*) school in Japan. Although *eikaiwa* schools are primarily focused on providing English conversation practice, there is often a huge range in the courses offered by these institutions in terms of teaching style and student learning goals (Makino, 2016). The instructor expressed uncertainty over the role of dictionaries in his classroom during reading and writing exercises from a set textbook and asked if I would find him some answers from the SLA literature as part of my MA TESOL studies. A year later, this topic reappeared on my radar once more due to the inescapable presence of electronic dictionaries and online dictionary apps in my university classes. It is hoped that this article will act as a bridge between the teaching and research spheres and that in combination with ground-level pedagogical decision-making on the instructor's part, empirical findings from academic research can inform and develop classroom practice in both *eikaiwa* and university settings.

LITERATURE REVIEW

Language learners often rely on dictionaries both in and out of the classroom, with teachers attempting to encourage students to curtail dictionary use in favour of inferring word meaning from context (Knight, 1994; Prichard, 2008; Tang, 1997; Zou et al., 2015). A study by Tang (1997) on electronic dictionary use reported claims from teachers that looking up words in the dictionary causes anti-social behaviour in the classroom, encourages overreliance on a single source of information, distracts the students, and discourages students from moving beyond word-level analysis (i.e. neglecting sentence- and text-level). Another criticism levelled at dictionary use is that it greatly increases the time learners require to complete a task. This is due to the fact that searching for and selecting an appropriate word definition can be extremely time

consuming if done on multiple occasions (Knight, 1994; Luppescu & Day, 1993; Prichard, 2008). Although some of these concerns may have stemmed from legitimate pedagogical issues, there is also a sense that in some cases resistance to dictionary use from language teachers is derived from conjecture rather than empirical evidence (Fraser, 1999; Knight, 1994; Prichard, 2008).

Over the last 30 years, in fact, several studies have provided support for the argument that selective use of dictionaries is beneficial to language learners. An early study by Knight (1994) of university Spanish students showed that lower-proficiency students utilizing a dictionary during a reading activity learned more words than those who did not. In fact, it was found that use of the dictionary actually allowed the lower-proficiency students to learn a similar amount of new words as the higher-proficiency group (51% to 55% respectively). Furthermore, although the higher-proficiency group did not exhibit a dramatic difference in reading proficiency scores between the dictionary and no-dictionary groups (80.33 to 67.83), the lower-proficiency dictionary group displayed markedly higher scores (67.70) compared with their no-dictionary equivalents (46.70). Knight concluded that lower-proficiency students are often at a disadvantage when asked to guess unknown words from the context as they are more reliant on vocabulary knowledge than higher-proficiency learners and, as a result, should be encouraged to take advantage of their dictionaries in class.

A study by Laufer and Hill (2000) that investigated the effects of electronic dictionary usage on incidental vocabulary learning also found that dictionary use had a positive effect on vocabulary retention. This study featured two participant groups, one in Israel and one in Hong Kong, which were administered a reading task with twelve unknown target words highlighted in the text. Students' dictionary look-up patterns were recorded during the task via the electronic dictionary software and an unexpected retention test was given upon completion of the task. This study found that the students in the Israeli group successfully remembered 33.3% of the words and the Hong Kong group remembered 62%. These figures far exceeded the findings from previous studies on word retention following dictionary use, such as Knight (1994), who found 20% retention, and Hulstijn, Hollander, and Greidanus (1996), who observed 25%. However, it should be noted that Laufer and Hill's study design varied in several ways from these older studies. On the basis of empirical research in SLA (Hulstijn et al., 1996; Knight, 1994; Luppescu & Day, 1993, Laufer & Hill, 2000) there is some consensus that dictionaries can indeed serve a positive role in the retention of lexis and the scaffolding of reading tasks.

Effective Dictionary Use

While the aforementioned resistance from language teachers to dictionary use may still remain in many ELT contexts, a sizeable amount of research has chosen to focus on not only *if*, but also *how* learners should utilize their dictionaries. It has been widely recognised that language learners often lack even rudimentary skills or strategies for effective dictionary usage (Chi, 1998;

Fraser, 1999; Prichard, 2008; Tang, 1997). Literature on the utilization of dictionaries in the classroom predominantly claims there is a need for teachers to set aside time to train learners on efficient look-up strategies and familiarize them with the varied grammatical, phonetic, and idiomatic information found in many modern dictionaries (Chi, 1998; Fraser, 1999; Laufer & Hill, 2000; Prichard, 2008; Tang, 1997).

A key theoretical basis that lies behind many recommendations for effective dictionary usage is Craik and Lockhart's (1972) levels of processing depth theory. This theory argues that the chance of a new piece of information being stored in long-term memory is governed by the shallowness or depth with which it is processed. Relating to dictionary use, this means that the deeper and more varied students' analysis of a dictionary item is, the greater the chances that it will be retained long-term for future use. Students should therefore investigate the grammatical, phonetic, or pragmatic information of a word, as well as any example sentences, audio or visuals (in an electronic dictionary) in order to increase the possibility of retention (Laufer & Hill, 2000). Speaking the word aloud, or writing it with an example sentence into a vocabulary notebook, would also deepen processing, but this also needs to be weighed against practical (time) considerations in a classroom setting.

Laufer and Hulstijn's (2001) involvement load hypothesis offers further theoretical support regarding the potential benefits of selective dictionary use for L2 vocabulary retention. The involvement load hypothesis consists of three central assumptions:

1. Retention of lexis when processed incidentally is dependent on *need*, *search*, and *evaluation* (together defined as *involvement*) within a task.
2. Words processed with a higher involvement load will be retained better than those with a lower involvement load (with all other factors being equal).
3. Teacher/researcher-designed tasks with a higher involvement load will be more effective for vocabulary retention than those with a lower involvement load (with all other factors being equal) (Laufer & Hulstijn, 2001, pp. 14-18).

If we apply the involvement load hypothesis to dictionary use, it suggests that dictionary use when encountering unknown words provides at least the conditions for the *search* and *evaluation* criteria necessary for a higher involvement load. When learners notice an unknown word, the *search* criteria is fulfilled when students utilize their dictionary to find the definition and thus establish the form-meaning connection. Finally, once the dictionary definition has been found, the *evaluation* criteria is fulfilled as learners investigate grammatical, phonetic, or pragmatic information in the word entry. Additionally, for polysemous words, learners need to check each word entry and judiciously select which word sense is acceptable for their purposes. The *need* element is provided if the word being looked up is necessary for productive communication of meaning or receptive comprehension of meaning. Selective dictionary use,

where learners consult dictionaries to discover the definitions of words necessary for communication/comprehension, fulfils the three criteria Laufer and Hulstijn state are necessary for *involvement*. It can be argued, therefore, that principled dictionary use in the language classroom will contribute to learners' retention of new lexical items.

As for the promotion of what we mean by principled dictionary use, the usage habits of advanced language students can act as a guide for learners when examining what entails effective dictionary strategies. Prichard (2008), in a study of intermediate to advanced Japanese university students' dictionary use, found that these students often examined each sense or entry of a polysemous word and checked example sentences in order to ensure they made the most appropriate word selection. They also focused on high-frequency words that would allow them to reach a comprehension threshold (roughly 95-98% text coverage) while relying on other strategies for lower-frequency or technical words. Fraser (1999) also found that the most effective strategy that Francophone English for Academic Purposes learners utilized in terms of reading comprehension and vocabulary learning was a combination of inferencing meaning followed by consulting a dictionary. These studies support the idea that strategic dictionary use can contribute to vocabulary learning by raising attention to form-meaning connections, stimulating rehearsal of words for long-term storage, and encouraging elaboration of associations with other knowledge (Fraser, 1999).

Frequency of Dictionary Use

A further consideration aside from *how* learners consult dictionaries is *how often* or *when* they consult them. Selective dictionary use, focusing only on words that are highly relevant for task completion or words that are important to the main point of a passage, should be encouraged in order to prevent overly time-consuming and inefficient look-up practices (Prichard, 2008). Furthermore, it has been noted that dictionary use benefits learners less as they grow in proficiency as they develop a solid base of high-frequency words and become more able to accurately infer word meaning through context. Lower proficiency learners are encouraged to consult the dictionary in order to bring them up to a 95% level of text coverage and, from there, guess any additional unknown lexis from context (Prichard, 2008).

Learners and teachers may also have to weigh up the potential drawbacks or benefits of the type of dictionary that they use. Laufer and Hadar (1997) found that bilingualized dictionaries that contained both L1 and L2 information were more effective for vocabulary retention than their traditional monolingual or bilingual counterparts. However, the study also stated that the effectiveness of each type of dictionary was highly dependent on the proficiency of the learner and as a result, the individual learner should be taken into account when making any decision over dictionary selection. A further issue for consideration is whether paper or electronic dictionaries are more beneficial for classroom use. Although electronic dictionaries allow

students to look up words more quickly and are therefore less time-consuming and disruptive to the communicatively-oriented classroom, Zou et al. (2015) found that paper-based dictionaries facilitated greater word retention than their electronic counterparts. The study hypothesized that the paper-based dictionaries took more time to find and interpret word definitions, and therefore stimulated deeper processing and a higher involvement load in line with Craik and Lockhart's (1972) and Laufer and Hulstijn's (2001) aforementioned theories (Zou et al., 2015). Despite these findings, however, electronic dictionaries offer learners a wide range of benefits such as visual/video elaboration of definitions, the inclusion of supplementary slang/idiomatic dictionaries, the ability for students to perform fast bi-directional (L1-L2/L2-L1) searches, and audio-phonetic information.

CONCLUSION

This literature review was originally motivated by a question from an *eikaiwa* instructor regarding the viability of dictionary use for beginner language learners. Having examined a range of studies focusing largely on the retention of vocabulary items and the development of reading comprehension, it is clear that dictionary consultation does indeed have a place in the language classroom, particularly in the case of lower-proficiency learners. However, there are some caveats to this statement.

1. Dictionary consultation should be selective, focusing only on useful, high-frequency vocabulary or lexis that is highly relevant to understanding of reading passages or comprehension tasks. Consulting dictionaries for every unknown word, especially low-frequency items, should be avoided due to the practice being extremely time-consuming and inefficient for word retention.
2. Teachers are advised to set aside time to train students in effective dictionary usage, such as checking for grammatical or phonetic information, examining polysemous word meanings and example sentences, and attempting to infer unknown word meanings from context before confirming their guesses through dictionary definitions.

These strategies will allow learners to get a deeper and more accurate sense of word meaning and use while, at the same time, ensuring dictionary usage does not become a disruptive presence in a communicative classroom.

Whether in the casual *eikaiwa* classroom or more formalized higher education contexts, it is vital that teachers are informed in dictionary usage by empirical research findings rather than conjecture. Furthermore, due to the current ubiquitous presence of easy online and electronic dictionary access via smartphones in every adult ELT setting in Japan, instructing students in effective, principled dictionary use may prove to be a valuable use of time for language teachers. Although largely situated in the university classroom, the studies cited in this article offer solid,

tested ground upon which educators from a wide variety of contexts beyond the ivory tower can develop their practice.

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