

## **Learner Perceptions of a “Guess and Check” Approach to Vocabulary Learning**

**Joe Garner and Tricia Allan  
English for Liberal Arts  
International Christian University**

### **Abstract**

Research has shown that students taking L2 university courses must have a large vocabulary. Research has also suggested that “guess and check” may be an effective way for students to increase their vocabularies. This paper seeks to share the findings regarding students’ perceptions of the “guess and check” vocabulary building strategy that was introduced to students in Reading and Writing (R&W) classes in the academic years 2016 and 2017. The feedback which the students provided about the course clearly shows that the strategy was viewed very positively. The paper concludes that as the “guess and check” strategy appears to have a number of benefits in terms of vocabulary learning and is positively perceived by students, it is a strategy that should be taught in a wide range of L2 instruction classes.

While vocabulary knowledge is key to learners’ ability to understand what they read, there does not seem to be a consensus as to how many words a student needs in order to be able to do so effectively when taking L2 university courses. For example, Nation and Waring (1997) found that students need to know 3,000 to 5,000 word families for comprehension. Later research by Nation (2006) found that learners need a vocabulary of 8,000 to 9,000 word-families to comprehend written texts. This is approaching the 10,000 base words which Hazenberg and Hulstijn (1996) concluded were needed by non-native university students in their study of the vocabulary needs of L2 Dutch students. Whether we accept the lower or the higher figures, it is clear that building students’ L2 vocabulary knowledge is essential if they are to be able to achieve their learning goals in L2 university courses.

### **English Vocabulary Sizes of Japanese University Students**

Although the vocabulary sizes of different groups of students in Japan will inevitably differ due their varying educational experiences, it is important to have an understanding of the expected vocabulary sizes of students entering EFL university programs in Japan. One indicator of their vocabulary size is the Japanese Ministry of Education, Culture, Sports, Science, and Technology’s (2011) study guidelines which state that 3,000 words should be taught to students by the end of high school. As a result, students who have graduated from a Japanese high school should have, in theory, knowledge of 3,000 words. However, as Kaneko (2015) noted, “which 3,000 words should be learned and the rationale for the vocabulary size are not specified” (p. 9). Research into Japanese university students’ vocabulary knowledge would be able to provide more accurate information. While such research appears to be

## Student Perceptions of “Guess and Check”

relatively limited, one study found that Japanese university students have a vocabulary size of approximately 3,700 word families (McLean, Hogg, & Kramer, 2014). This figure shows that Japanese university students may have a vocabulary size which is well short of both Nation’s (2006) and Hazenberg and Hulstijn’s (1996) L2 vocabulary size requirements for comprehension. Therefore, it is clear that there is a significant gap between the vocabulary sizes of the students and the vocabulary knowledge which they need to succeed when taking L2 university content classes. Therefore, one of the key roles that language classes must play is enabling students to increase the number of words which they know.

### **Incidental and Deliberate Vocabulary Learning**

Vocabulary learning occurs either incidentally or deliberately. Nation (2015) defines incidental vocabulary acquisition as occurring “when the learner’s focus is on some other aspect of communication besides the individual words or phrases” (p.136). This occurs when students infer the meaning of an unknown word from its context; it most commonly occurs when students are reading, but can also take place when learners are processing aural input such as when watching videos, listening to lectures, or recorded audio material. In contrast, deliberate vocabulary learning takes place “when the learner consciously focuses on aspects of knowing a word” (Nation, 2015 p.136); examples of deliberate learning include checking the meaning of an unknown word in a dictionary, and using word cards/lists to learn unfamiliar vocabulary.

The widespread adoption of communicative learning methodologies led to researchers emphasizing the importance of incidental vocabulary learning. For example, in their review of research into vocabulary acquisition written in 1999, Huckin and Coady noted, “Most scholars seem to agree that, except for the first few thousand most common words, vocabulary learning predominantly occurs through extensive reading, with the learner guessing at the meaning of the unknown words” (p. 182). However, more recent research has shown the benefits of deliberate vocabulary learning (e.g. Elgort, 2011). Moreover, a number of researchers have noted that relying exclusively on incidental vocabulary learning has a number of problems. Firstly, learners may not be able to guess the meaning of the word correctly. Indeed, Nassaji’s (2003) study of intermediate-level ESL learners found that more than half of their guesses were incorrect. Also, research into retention of new vocabulary from incidental learning has generally shown high attrition rates (Waring, 2003). Moreover, in order for new vocabulary to be learnt, it may need to be encountered as many as 20 times (Waring, 2003), but analysis of corpora results have shown that generally this is unlikely to happen (Laufer & Rozovski-Roitblat, 2015). While this last weakness may be partly compensated for by extensive reading programs in which students read graded readers which repeat vocabulary in different contexts, the vast majority of readings which L2 students encounter in their university studies are unlikely to provide enough occurrences of unknown words. As Nation (2015) noted, the key learning conditions for vocabulary learning are “the number of meetings with each word and the quality of attention at each meeting” (p. 136); therefore, it is clear that course designers must not only provide students with opportunities to encounter unknown words repeatedly, they must also encourage students to develop strategies which make them pay attention to the meaning of unknown words. In other words, curricula need to include a combination of incidental and deliberate vocabulary learning opportunities.

### **Inferring Meaning in Combination with Dictionary Use**

Encouraging students to infer the meaning of words would appear to have a number of advantages. Nation (2015) argues that such a strategy is beneficial as it “can strengthen and enrich knowledge of partially known words” (p. 138). Perhaps more importantly, Nation (2015) also states, “words that are consciously guessed are likely to be better retained than words which are not consciously guessed” (p. 138). Nation’s contention would appear to be founded on what Hulstijn (1992) refers to as the “mental effort hypothesis” (p. 113). He notes that this hypothesis is based on the assumption that inferring meaning requires more effort and that “information that has been attained with more mental effort can be better retrieved and recalled than information that has been attained with less mental effort” (p. 113). Hulstijn’s (1992) research into the effectiveness of inferring meaning somewhat supported this hypothesis, but it should be noted that this was not the case for weaker participants. Therefore, it would seem that courses, especially those for less proficient students, should also include focused vocabulary learning tasks as they have been shown to increase significantly both the short- and long-term retention of words studied (Peters, Hulstijn, Sercu, & Lutjeharms, 2009). One such activity is to have students look up unknown words in a dictionary. Although, as Nation (2015) notes, some teachers discourage this approach as they believe that dictionary use takes students’ attention away from the reading, in fact students should be encouraged to see dictionary use as complementary strategy to inferring meaning. By encouraging students to use this strategy, they will see dictionary use as “a way of confirming a guess rather than replacing a guess” (Nation, 2015, p. 138). Consequently, a “guess and check” approach to vocabulary learning in which students initially infer the meaning of an unknown word and then check its meaning in dictionary, would seem to have a number of potential benefits. Firstly, students may be more likely to remember the meaning of the word due to the “mental effort” expended when inferring the word meaning. Having students subsequently check the meaning of the word in dictionary would then remove the risk of students inferring the incorrect meaning of a word (Fraser, 1999) while also partially compensating for the limited number of times a learner may encounter an unknown word (Laufer & Rozovski-Roitblat, 2015). Moreover, focused attention on the correct meaning of the word when checking it in a dictionary would also appear to further enhance the likelihood of the meaning of the word being remembered.

### **Developing Students’ Vocabulary in the Reading and Writing Course**

Reading and Writing (R&W) was a required class for Stream 4 students who did not participate in the Study English Abroad (SEA) program. Stream 4 students generally have a TOEFL ITP score of 350-450 on admission to the university, and most had not had the benefit of an overseas experience in an English speaking milieu in the summer vacation at the end of their first term of university English instruction. All had completed an extensive reading class for one hour a week in the spring term and had been required to read an ungraded novel as a summer reading assignment. Classes met once a week in the Autumn term and twice a week in Winter term. The overall aim was to provide students with opportunities to develop their reading and writing skills. In particular, classes focussed on improving reading strategies and skills, and on building vocabulary. A specific learning outcome indicator was to establish a vocabulary learning system with an implied sense of ownership and independent learning.

## Student Perceptions of “Guess and Check”

Classes used the *Longman Academic Reading Series Level 4* textbook. This was chosen as it focused on reading strategies, vocabulary building, note-taking, and critical thinking skills that students would require in core classes. Although the textbook is level B2 on the CEFR scale it was used in the second term of ELA as it also mirrors some of the challenges students would face in readings for core classes. During the course, students used a range of reading skills and strategies to understand the ideas in the passage in the textbook, and to discuss their opinions on these ideas. Feedback from teachers during academic year 2016 was that written homework reflecting on the ideas presented in texts was taking too much student time weighed against the learning benefit gains for reading skills. Work required outside classes was streamlined with new activities using Google forms replacing alternate, writing tasks. The guess and check activities that were introduced asked students to infer meaning from context then check for accuracy and to find synonyms. In order to build their vocabulary, the students were assigned a regular homework task of guessing the meaning of approximately six key words from the textbook reading passages; after guessing the meaning of each word, the students were then required to check its meaning in an English-English dictionary. They input their guesses and the dictionary definitions on a Google form. These forms were submitted to the teachers. Guessing first encouraged students to infer meaning from context as required in other tasks, the follow up dictionary check confirmed correct meanings and finding synonyms consolidated this. As shown above, research suggests that having learners perform this type of guessing and checking activity is an effective vocabulary building strategy.

### ***Method to Ascertain Learner Perceptions***

The changes to work outside class had resulted from teacher discussions about student workload and cost benefit. In order to gain insights into student perceptions of class requirements, in 2016 academic year the course coordinators redesigned the procedure for obtaining end of term student feedback on the course. This would act as a check that learners understood why they were asked to do specific tasks. Using a 5-point Likert scale, students were asked to choose how much they agreed or disagreed with a number of statements related to key elements of the course. For example, one such statement was: ‘The course helped me to develop and build my vocabulary’.

### ***Learner Perceptions in Student Feedback***

From the responses obtained in academic years 2016 and 2017, a clear majority of the students consistently identified that the course had been effective in this aspect of their learning, with 72% of a total of 90 respondents choosing ‘Agree’ or ‘Strongly Agree’ in response to the statement. This shows that the students clearly perceived that the course activities had led to vocabulary acquisition. However, on its own, this feedback does not provide specific information regarding the student perceptions of the strategy of guessing and checking the meaning of unknown vocabulary.

This was addressed in the Winter Term of 2017, when students were asked to provide short answers explaining how well they thought they could accomplish certain key aims of the course. They were not directed to comment on the “guess and check” Google form but to use the class learning objectives and if possible, to be specific about which activities in class or outside had worked well for their learning or could be improved. Of particular relevance to this paper were the responses explaining how well the students felt they could “guess the

## Student Perceptions of “Guess and Check”

meaning and find synonyms for vocabulary in a text”. The responses to this revealed a generally positive perception of how their ability to do this had been developed with over half commenting on the “guess and check” and synonym search tasks. An examination of the words used in the responses showed that the students identified the guessing element and thinking about possible meanings before dictionary look up as supportive of their vocabulary learning. This was illustrated by the regular use of words such as “help”, “effective”, “useful” and “good for” in their comments. A representative student response was, “I learned (the) importance of word guessing.” (See Appendix 1 for more student comments).

Further information regarding students’ perceptions of the benefits of guessing the meaning of a word before checking it in a dictionary was provided by course reflections which some of the students wrote. In a number of the classes, students were asked to reflect on how well they felt the learning outcomes of the classes had been achieved as a review activity in the final lesson. In this optional, written task of approximately 100 words, students were instructed to reflect on some of nine learning outcomes stated on the course syllabus. Of the 25 written reflections submitted, 18 students chose to write about the benefits of the vocabulary building aspects of the course, specifically the word guess and dictionary look up activities. Participants (n=18) named ‘word guess’ as the “most significant” task for learning vocabulary. A representative example is as follows: “The most significant part for me was developing and building vocabulary. Word Guess is very useful for me to read an unknown text without using dictionary. Also finding synonyms and practicing using help me to use it”. (See Appendix 2 for further student responses from written reflections.) The fact that so many of the students not only chose to reflect on this aspect of the course, but also to write about it in such positive terms seems to clearly indicate that having students guess a word’s meaning prior to checking the meaning was an aspect of the course which made a positive impression on them.

## Pedagogical Implications and Conclusions

Increasing the number of words which students can comprehend is essential if those students are to fulfil their potential in L2 university courses. There are a number of ways in which course designers can ensure that students have the opportunity to build their vocabularies. Some research has suggested that one effective approach to vocabulary building is having students guess the meaning of a word prior to checking this meaning in a dictionary. Such a strategy was explicitly introduced in R&W as the course homework required the students to guess and use a dictionary to learn the meanings of new vocabulary.

In order for L2 learners to continue to use a strategy after they have finished taking the course in which it is introduced, it is important that the students can see the value in using the strategy. It was therefore very pleasing to see that, not only had the students enjoyed the vocabulary building tasks, but had seen the links with their own wider learning and identified how the strategies had worked for them. Feedback from the students who took the R&W course seems to provide a clear indication that they perceived the “guess and check” strategy as being useful and practical. As such, it can be hoped that many of these students are continuing to utilize this strategy.

It may be true that some students use this strategy without it being explicitly taught. However, the feedback from the students would appear to indicate that for many of them this was a new way to try to understand and learn new words. As such, it is a strategy that teachers should consider introducing to their students. The way in which the strategy was introduced to

## Student Perceptions of “Guess and Check”

the students in R&W placed very few administrative demands on the teachers. Once the Google Forms have been created, it is easy to share them with the students and check whether the tasks have been completed.

In sum, the guess and check vocabulary development strategy has three key elements which recommend its use in classes: research has suggested it may be effective, it is easily manageable from a teacher’s perspective, and students view it very positively. Consequently, this is a strategy that course designers should consider making part of their syllabi.

## Student Perceptions of “Guess and Check”

### **Acknowledgements**

Students in reading and writing classes (R&W) who gave feedback in academic years 2016 and 2017 and their teachers - Tetsuya Fukuda, Yuko Hatakeyama, Takeshi Ishikawa, Mike Kleindl.

## Student Perceptions of “Guess and Check”

### References

- Cohen, Robert F. & Miller, Judy L. (2014) *Longman Academic Reading Series Level 4*. New York: Pearson Education Inc.
- Elgort, I. (2011). Deliberate learning and vocabulary acquisition in a second language. *Language Learning, 61*(2), 367-413.
- Fraser, C. A. (1999). Lexical processing strategy use and vocabulary learning through reading. *Studies in Second Language Acquisition, 21*(2), 225-241.
- Hazenberg, S., & Hulstijn, J. H. (1996). Defining a minimal receptive second-language vocabulary for non-native university students: An empirical investigation. *Applied Linguistics, 17*(2), 145-163.
- Huckin, T., & Coady, J. (1999). Incidental vocabulary acquisition in a second language: A review. *Studies in Second Language Acquisition, 21*(2), 181-193.
- Hulstijn, J. H. (1992). Retention of inferred and given word meanings: Experiments in incidental vocabulary learning. In *Vocabulary and Applied Linguistics* (pp. 113-125). Palgrave Macmillan, London.
- Kaneko, M. (2015). Vocabulary size required for the TOEFL iBT listening section. *The Language Teacher, 39*(1), 9-14.
- Laufer, B., & Rozovski-Roitblat, B. (2015). Retention of new words: Quantity of encounters, quality of task, and degree of knowledge. *Language Teaching Research, 19*(6), 687-711.
- McLean, S., Hogg, N., & Kramer, B. (2014). Estimations of Japanese university learners' English vocabulary sizes using the vocabulary size test. *Vocabulary Learning and Instruction, 3*(2), 47-55.
- Ministry of Education, Culture, Sports, Science and Technology (2011). *The Revisions of the Courses of Study for Elementary and Secondary Schools*. Retrieved from <[http://www.mext.go.jp/en/policy/education/elsec/title02/detail02/\\_icsFiles/afieldfile/2011/03/28/1303755\\_001.pdf](http://www.mext.go.jp/en/policy/education/elsec/title02/detail02/_icsFiles/afieldfile/2011/03/28/1303755_001.pdf)>
- Nation, P. (2006). How large a vocabulary is needed for reading and listening? *Canadian Modern Language Review, 63*(1), 59-82.
- Nation, P. (2015). Principles guiding vocabulary learning through extensive reading. *Reading in a Foreign Language, 27*(1), 136.
- Nation, P., & Waring, R. (1997). Vocabulary size, text coverage and word lists. *Vocabulary: Description, Acquisition and Pedagogy, 14*, 6-19.
- Peters, E., Hulstijn, J. H., Sercu, L., & Lutjeharms, M. (2009). Learning L2 German vocabulary through reading: The effect of three enhancement techniques compared. *Language Learning, 59*(1), 113-151.
- Waring, R. (2003). At what rate do learners learn and retain new vocabulary from reading a graded reader? *Reading in a Foreign Language, 15*(2), 130.



## Student Perceptions of “Guess and Check”

### Appendix 1

Examples of Student Responses Regarding Learning Objectives  
Winter Term AY 2017 R&W class.

“It helped to think about the meaning of the word before I use my dictionary.”

“It is necessary to expand my vocabulary for my academic life, so synonym search helps my learning.”

“Before I entered at [name of University], I am not good at guessing the meaning because I feel anxiety whether I can understand the contents or not. However, after I entered at [Name of university], I knew how effective it is to try to guess the meaning.”

“I could do this work and it was effective for me”

“I learned importance of word guessing.”

“It was helpful for me to memorize the meanings.”

“It was very useful to skim text book, and I would like to guess words from now.”

“It is helpful for me”

“It was the most useful skill for me that I could get in this class.”

“it was good for improving my vocabulary.”

### Appendix 2

Student Responses from Written Reflections.

“The most significant part for me was developing and building vocabulary. Word Guess is very useful for me to read an unknown text without using dictionary. Also finding synonyms and practicing using help me to use it”

“We searched synonyms of the words. I did Word Guess homework without fail. . By doing this I became able to guess word without dictionary. Therefore, I may be able to read quickly”

“The most impressive thing in R&W class was to learn how to develop and build vocabulary...Before this class I checked all the words in dictionary which I cannot understand. This always took me a lot of time. I learned that I can predict the words from the sentences and the structure without using a dictionary. Now I use this way in RCA and ARW (Core classes) Even sometimes my prediction is wrong, I found this way can read more smoothly and understand the main points more easily than before. I think R&W class is very important and contributes to other classes.”

“First my vocabulary skill develop not only by synonyms search but also by reading a lot of reading. Especially, through synonyms search, I became to guess the meaning of words and gradually my guess became more accurate”

Effects of a mobile game-based English vocabulary learning app on learners' perceptions and learning performance: A case study of Taiwanese EFL learners. Published online by Cambridge University Press: 04 April 2019. Chih-Ming Chen [Opens in a new window] Thus, this study applies a mixed methodology that combines quantitative and qualitative approaches to assess the effects of PHONE Words, a novel mobile English vocabulary learning app (application) designed with game-related functions (MEVLA-GF) and without game-related functions (MEVLA-NGF), on learners' perceptions and learning performance. Teaching and Learning Vocabulary: What English Language Learners Perceive to Be Effective and Ineffective Strategies. Seyyed Hatam Tamimi Saad\*1 and Fereshte Rajabi2. Vocabulary constitutes an essential part of every language-learning endeavour and deserves scholarly attention. The objective of the present study was three-fold: 1) exploring Iranian English language learners' Vocabulary Learning Strategies (VLSs), 2) examining language learners' perceptions of vocabulary learning, and 3) exploring Iranian English language teachers' Vocabulary Teaching Strategies (VTSs). Additionally, 78 learners were interviewed as to their perceptions of effective and ineffective VLSs as well as VTSs. Learners can generally communicate well, having learnt all the basic structures of the language. However, they need to broaden their vocabulary to express themselves more clearly and appropriately in a wide range of situations. Students might even have a receptive knowledge of a wider range of vocabulary, which means they can recognise the item and recognise its meaning. Nevertheless, their productive use of a wide range of vocabulary is normally limited, and this is one of the areas that need greater attention. At this stage we are concerned not only with students understanding the meaning of