A Case for Supplemental Vocabulary Component Development for Textbook-based English Classes

Todd Leroux

Abstract

This quantitative study investigated the necessary elements of a principled vocabulary component that would supplement learners' textbooks. This study then went on to investigate the receptive vocabulary sizes and textbook target language samples for three intact English communication classes in women's university in western Tokyo. Using the Vocabulary Size Test (VST) data was collected and participant vocabulary sizes assessed, which were then compared to assigned textbook target language samples run through the Range program. Both the VST and Range utilized the British National Corpus (BNC) as the base-word source. Research questions (RQ) investigated included comparing participant vocabulary size to textbook requirements; whether textbooks implicated gaps in participant /learner vocabulary knowledge; and if any one element of a vocabulary component could best address gaps between participant and textbook vocabulary levels. Indeed, the findings produced evidence regarding the above RQs: discrepancies between participant and textbook vocabulary do exist; the assigned textbook does contribute to gaps in participant/learner vocabulary albeit in a relatively minor role; and, the teaching of affixes would clearly assist in closing the gap between participant vocabulary knowledge and the assigned textbook vocabulary requirements.

Introduction

The position of this paper is that vocabulary is the foundation of language and, naturally, enhances communication. It comes as no surprise to many if not all language teachers that language learners are often able to express basic meaning albeit using frequent and long pauses as well as severely incorrect grammar. This communication success is consistent with the goal of a popular teaching approach

that has been adopted by many language teachers in Japan: the Communicative Approach. As above, the communicative approach to teaching language has the objective of having learners succeed at meaningful communication in relevant/real-life contexts, while the use of perfect grammar, and/or the use of appropriate pragmatics is secondary. Of course, the communicative approach is primarily intended for general English language classes as opposed to specific skill-based, special purpose or TOEIC/TOEFL achievement contexts.

In order to maximize student learning, which is the result of changes in many of the 'by-products' of learning such as increased learner ability, autonomy, motivation and confidence; and reduced learner task-avoidance, stress or fear of risk-taking, in this researcher's opinion, can be, as simple as it sounds, rooted in vocabulary development. This development would allow learners to be more able to utilize the textbooks or materials used in their classes impacting the aforementioned by-products of learning. Hence, it is assumed that a principled vocabulary component that supplements an assigned textbook would positively impact learners in a variety of ways. The question then becomes: What is needed for a vocabulary component to be effective?

Literature Review

A vocabulary component, to be effective, must be guided by a set of well-justified principles and contains five key elements: determining what vocabulary is to be focused on, how it is to be focused on, how it is to be sequenced, how it is to be taught and learned, and how students will be assessed (Nation, 2001, 1996). What is more, this program must be evaluated and adapted to meet the changing needs of learners, teachers and institutions.

A direct objective of a vocabulary component is to increase learners' usable vocabulary size, which is essentially the ability to use the vocabulary content presented across the four language skills – listening, speaking, reading, writing (Nation, 2001; Read, 2000; Laufer & Paribakht, 1998). Specific vocabulary goals (achievement-based) can be established, but only after the learners' needs (goals, interests, and existing vocabulary levels) have been established. Perhaps more importantly, an objective of this vocabulary component will be to provide the learners the skills and motivation to learn autonomously, at least regarding vocabulary (Ebata, 2010).

What vocabulary is to be focused on should be based on learner need. “It is logical to make the learners the focus of any sound needs analysis.” (Brown, 1995) Thus, a needs assessment administered upon commencement of the class must be designed with the vocabulary component in mind. Hence, in addition to obtaining information related to the language program’s other components, it must draw information relating to learners’ language use goals, interests/hobbies, as well as current learner vocabulary level. Regarding the former, this should be in the form of a questionnaire; regarding the latter, it is essential to administer some form of vocabulary level assessment (Nation & Beglar, 2007; Laufer & Nation, 1999; Meara, 1992; Read, 1988). The results of this needs analysis determine which and how much of this vocabulary is to be focused on (Nation, 2001, p. 383). This is vital given that vocabulary has been categorized into various lists, for example, the GSL, AWL, and BNC as well as a variety of technical or specialized lists (McCrostie, 2007; Nation, 2004; Chung & Nation, 2003; Coxhead, 2000; Waring & Nation, 1997; Nation & Hwang, 1995). Missing from this information set is knowledge of learning strategy use; however, this will be determined during the teaching and learning element to follow.

How vocabulary is to be focused on should be divided into intensive and extensive learning activity. As for intensive learning, vocabulary content should be divided into units and involve the teaching and learning of both words and strategies. This would involve in-class and out of class effort. Next, vocabulary must be focused on and approached from the three aspects of knowing a word: form, meaning and use in both receptive and productive domains (Nation, 2001, p. 27). To accommodate this in part, for high frequency and/or target vocabulary, the primary focus of the component, approximately 25% of this learning time/effort has to be directed toward each of the four strands of vocabulary learning: meaning-focused input, language-focused (deliberate) learning, meaning-focused output and fluency development. High frequency/target vocabulary applied in each of the four strands involves the application of the four language skills: listening, speaking, reading and writing. Furthermore, select high frequency/target words themselves should receive direct teacher attention, as will the teaching, practice and application of strategies for learning vocabulary or dealing with low-frequency/unknown words (Nation, 2001, 1996; Newton & Nation, 1997). As for an extensive learning activity, the assignment of graded readers as a regular activity (out of class) would provide the repetition of high frequency/target vocabulary, which is a requirement for the incremental acquisition of vocabulary (Joe, 2010; Webb, 2007; Zahar et al., 2001;

Nation, 2001, 1996). Other benefits of graded readers include the incidental acquisition of new vocabulary (to various degrees) and fluency development (Gorsuch & Taguchi, 2010; Horst, 2005; Claridge, 2005; Taguchi, et al., 2004). Furthermore, this form of input is correlated to increases in listening and speaking ability (i.e. general oral ability) (Iwahori, 2008). It is recommended that a small 'library' of graded readers be made available to learners with the intention of continued development as time progresses.

How the vocabulary content is sequenced should be based on the 'word' as the unit of progression. As such, the principle for introduction or inclusion in a vocabulary unit would be based on frequency and range of occurrence. Based on the needs analysis and the determination of the level of student vocabulary knowledge, the use of published lists could be used to provide the boundaries for the units of the vocabulary component (Nation, 2001, p. 386). Further, a search for suitable textbooks is recommended. Criteria for selection of a textbook would be that it is consistent with the principled design of this proposed vocabulary component. As such a textbook is required that:

- is consistent with the sequencing principle of using the 'word' as the unit of progress (i.e. based on frequency and range of use),
- presents all aspects of knowing a word: form, meaning, and use (see previous paragraph),
- is part of a series of textbooks so that a variety of range of vocabulary levels could be accommodated over time,
- is organized into manageable unit sizes (20 – 25 words per unit),
- is developed by or in association with those recognized in the field of SLA or vocabulary acquisition.

What is more, there is extensive research in support of avoiding the grouping of synonyms, opposites, free associates or lexical sets (commonly referred to as 'interference') (Erten & Tekin, 2008; Nation, 2001; Laufer, 1988) and is another selection consideration for a suitable textbook.

How this vocabulary should be taught and learned is part and parcel of all of the previous elements and particularly associated with the element of how vocabulary content would be focused on. Of note is the importance of learners maintaining their own records of words studied and all scores. This allows students to track their own development and progress. In addition, this entire process must be included in the grading criteria for the language program as a whole (Walters & Bozkurt, 2009;

Sediva & Koslova, 1999).

As mentioned, high frequency/target vocabulary (actual words) must receive direct focus (i.e. in-class attention). This would in part be accomplished through exercises and activities as they relate to the four strands. Meaning-focused input and output are communication activities that require the learners to comprehend 95 – 98 % of the text they are dealing with (Nation, 2001, p. 390; Hu & Nation, 2000). Regarding input, examples of exercises and activities associated with these strands include listening to stories; receptive information transfer using, for example, maps, tables, diagrams, calendars or lists; and graded readers. Communication activities are both meaning-focused input and output strand related and will involve negotiation (of meaning). Other example activities include role-play, cooperative tasks/ information exchange, as well as prepared writing activities. This aspect of the vocabulary component provides an instructor the opportunity to incorporate repetition and spaced learning of high frequency/target vocabulary, which are vital for acquisition (Cepeda, et al., 2006; Bower, 1987; Bloom & Shuell, 1981; Pimsleur, 1967).

Language-focused (deliberate) learning, another of the four strands, would also be an aspect of the vocabulary component. In this strand, high-frequency/target vocabulary could receive some, albeit limited, direct teaching or students could engage in various activities of intensive reading – using the textbook, for example, or other sources. Undoubtedly, this strand will primarily be used for the deliberate instruction of vocabulary learning strategies and activities that would be opportunities for learner training/practice. Proven learning strategies such as learning word parts and word stems, proper dictionary use, and learning from word cards (Nakata, 2008) would be presented to the students or perhaps a review if a strategy has been or is presently being used. As well, strategies for dealing with low-frequency or unknown vocabulary, for example, guessing from context could be introduced and practiced. The deliberate teaching, learning and training in strategies for both high and low-frequency vocabulary develop learners to be become autonomous in their vocabulary learning and language development as well as support vocabulary acquisition (Barcroft, 2009; Mizumoto & Takeuchi, 2009; Fan, 2003).

Fluency development is the final strand. As essential as the other three strands, fluency development recycles and reinforces existing knowledge whether as input (extensive reading/graded readers) or as output (quick-writes, rehearsed speaking

tasks). Fluency development through fluency activities engenders student confidence as learners can bear witness to their own improvement.

The final key element to the vocabulary component is assessment. Assessment can be broken into four categories: diagnostic, short-term achievement, long-term achievement and proficiency. The diagnostic component of assessment has to be initiated at the beginning of the program with the level test (i.e. determining what is to be studied). Short-term achievement assessment with a weekly or bi-weekly frequency would be conducted to monitor learner progress (and have students monitor themselves with their own record-keeping), which then is a motivating factor. As well, regular assessment and monitoring can guide any required adjustments to the vocabulary component itself. Long-term achievement assessment will determine how much of the high-frequency/target language has been learned. This should be administered at the beginning and near the end of the program. Learner achievement would also provide information for future course planning including how vocabulary is focused on as well as teaching aspects. Finally, a proficiency assessment must be administered at the end of the course. This is useful information when establishing goals for the vocabulary component in the future as well as gathering potential research data regarding incidental learning largely associated with the extensive reading aspect of the program.

The evaluation of a vocabulary component should be ongoing and include a variety of perspectives, learner, teacher and administration. Evaluation should include an assessment of all of the elements above by utilizing learner questionnaires to elicit attitudes and feelings, reviewing learner academic results, course materials, and teaching methods. Thus, both normative and summative course evaluations should occur.

The above proposal for a vocabulary component within an English language program should not only develop the vocabulary skills and abilities of the learners within it, but also add to the program itself and contribute to learners' overall language development.

A textbook-based English communication class without a vocabulary component as a supplement would not provide learners in the class with the vocabulary knowledge and/or skills they need to learn from and use any assigned textbook, effectively. What is more, overall learning and enhancing the by-products of learning would not be maximized.

RQ1: Are participants' receptive vocabulary sizes adequate in meeting the vocabulary requirements of an assigned textbook without a supplemental vocabulary component?

RQ2: Do textbook-only English classes implicate gaps in learner vocabulary?

RQ3: Is there a key element of a principled vocabulary component that could best aid in filling gaps that exist between participant/learner receptive vocabulary and required textbook vocabulary?

METHODOLOGY

Participants

Eighty-nine female university students are included in this study. Participants were from three intact, 2nd year EFL classes at a university in western Tokyo, two of which were instructed by the researcher. Classes met once a week for 90 minutes for a total of 15 weeks. English classes are a requirement until the third year of study, and student variability is clearly evident. Hence, there are as many different levels of ability and motivation as there are hairstyles. The classes use a popular textbook, which is thematically and to a lesser degree functionally organized. The textbook integrates the four skills and gives attention to common phrases and applicable vocabulary. Students are, on average, tested every four classes and tests include sections of listening, grammar, vocabulary and reading.

Instrumentation

Data regarding vocabulary size was obtained via another study being undertaken. The other study was related to reading fluency development; and hence, Nation's Vocabulary Size Test (VST) was the instrument of choice (for that study). The VST is a test to measure written receptive vocabulary size. In totality, it is a 140 – item instrument with a selection of ten words from 14 – 1000 level words from the British National Corpus (BNC). According to Nation, the test measures knowledge of written word form, the form and meaning connection, and to a smaller degree concept knowledge. The test measures largely decontextualized knowledge of the word although the tested word appears in a single non-defining context in the test. (2012) The test is presented in a multiple-choice format. It could be argued, the

VST is not appropriate for this type of application given that productive use of vocabulary is also of interest. However, in Beglar's 2010 examination and validation of the test, it was suggested that the test could be used with learners of a wide range of proficiency levels, which was the case with the intact classes used in this study. Further, several studies have shown that receptive vocabulary size is related to various aspects of productive language use, particularly speaking. For example, in studies ranging from accent reduction/pronunciation to fluency (or disfluency), relationships to receptive vocabulary size were identified (Bundgaard-Nielsen, 2011; Hilton, 2008; Marsden, 2008; Webb, 2008; Wu, 2011). Hence, though not ideal, the VST has empirical support for this specific application.

Microsoft Excel was applied to raw VST scores in order to determine various aggregate data values as well as create various plots.

Data regarding the vocabulary required for productive use was also taken from the textbook for the intact classes. Language summaries presented as a resource in the Teacher's Manual provided the data. These data were entered into a text file (.txt) and run through the Range program. Range separates these vocabulary units into their respective 1000 word levels – 1st, 2nd, 3rd, etc. Like the VST, Range is able to utilize the BNC for its base-words, so the VST and Range are natural partners.

Procedure

Participants completed the VST the second class of the spring semester. Participants sat two to a table; no conversation was permitted during the testing period. Dictionaries were not allowed during the sitting of the test. The instructor of the class administered the VST and circulated the classroom to ensure test procedure compliance. An example question was provided and solved to exhibit how to complete the VST. Given the non-experimental nature of this study, the full 140 – item test was not administered (though recommended). In fact, only the 1st to 4th - 1000 words were tested. As the classes were intact, there was a limited amount of time available given the responsibility of meeting syllabus objectives. All participants received ten minutes to complete 1000 levels one to four. Participant's VST's were scored by the researcher, and data entered in MS Excel for analysis.

There was a principled selection of textbook language summaries taking every fourth summary starting from Unit 4. Hence, language summaries for Units 4, 8, 12 & 16 were used. This selection represents 25% of the units offered in the textbook; and thus, approximately 25% of the target vocabulary of the textbook. A limited number

of textbook entries were not included in the Range analysis such as multi-word units that were not semantically transparent (clearly determinable from their parts), for example, 'sort of'. Further, the reading-based exercises that close each textbook unit were not included in this analysis as reading assignments during class or for homework allowed for dictionary use, and the productive exercise requirements (of the readings) were quite limited. Participant vocabulary sizes were then compared to vocabulary requirements of the textbook for final analysis of learner to textbook suitability, thus addressing RQ1, RQ2 and to a degree RQ3. In closing, based on initial observation of target language data in the textbook language summaries, a final analysis investigating the frequency and type of affixes relative to the total words examined was employed to address RQ3.

Results

Participant VST's (n = 89) offered interesting results. The mean score for participants for the 1st – 1000 was 7.82 from a 10-item measure with a median score of 8, while scores ranged from 3 to 10. Multiplying each word by 100 indicates that this sample of participants has a mean vocabulary size of 782 for the 1st – 1000 word level. Moving to each end of the participant vocabulary size continuum, participants scoring 3 of 10 items correct indicates up to 700 of the most frequent 1000 words are unknown. However, a scatterplot of VST scores of this level indicates only one participant was at this low vocabulary size though four participants scored only 5 of 10 items correct. At the other end of the continuum, learners scoring 10 of 10 items numbered 12, and scoring 9 numbered 21 (see fig. 1).

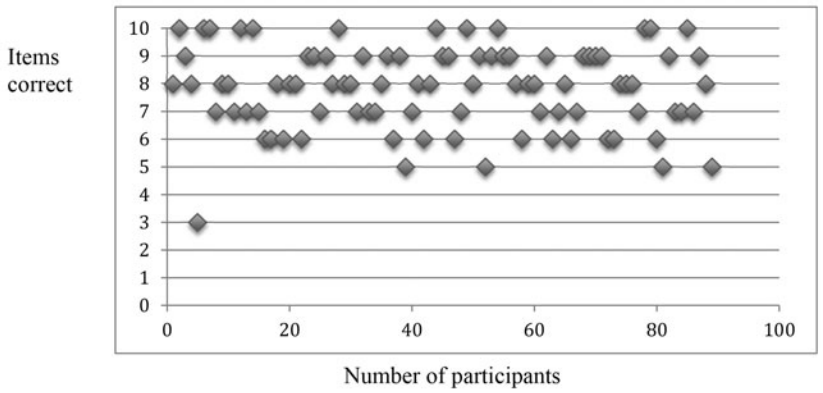

Fig. 1 Scatterplot of VST scores for 1st – 1000 vocabulary from BNC.

The mean score for learners of the 2nd – 1000 word level falls dramatically to 3.81 with a median score of 4. The range of scores was from 1 to 8 with only one participant scoring 8 while five participants scored 1. A scatterplot for this vocabulary level indicates clustering at the lower end of the scoring scale (see fig. 2).

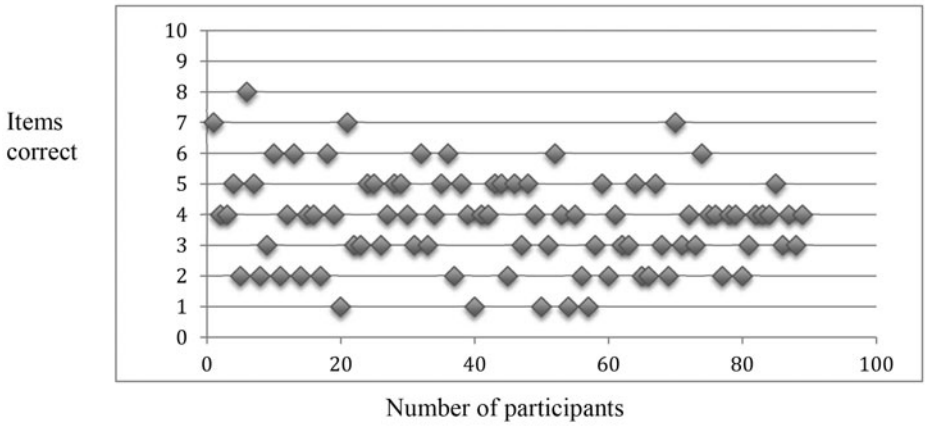

Fig. 2 Scatterplot of VST scores for 2nd – 1000 vocabulary from BNC.

Table 1 Descriptive statistics for participant VST scores.

Levels	1st – 1000	2nd – 1000	3rd – 1000	4th – 1000
Mean	7.82	3. 81	4.26	2.98
Median	8	4	4	3
Range				
Min.	3	1	0	0
Max.	10	8	9	7

Source: Primary data of participant VST scores with values calculated in MS Excel (n=89).

Scores for the 3rd and 4th – 1000 level vocabulary have means of 4.26 and 2.98, respectively and median scores of 4 and 3, respectively. There is evidence that some students were not able to finish the VST in the time allotted given the higher number of 0 scores, and/or students were beginning to or had already lost interest. Selected descriptive statistics for vocabulary levels one to four have been provided (see table 1).

Textbook language summary data totaling 210 word types (1 error of a repeated word occurred) were run through the Range program using BNC base-words from the 1st – 1000 to 14th – 1000 base-word levels. The results indicate a large majority of words being in the 1st and 2nd – 1000 word lists (60.66%). This is expected given that these two word lists are considered high frequency words though this percentage is lower than what would be expected when meeting English in other contexts, whether spoken or in print (Nation, 2001, p. 13). It is notable that textbook target language spans the 1st though 13th – 1000 base-words (see table 2).

The textbook language summaries had limited uses of prefixes attached to base words though there were some common applications of, for example, 'co, mis, self, in'. However, there was extensive use of suffixes. In all, 29 suffix forms were found in the four units analyzed. These forms and their frequency indicate their relative and general importance in effective use of the textbook by the participants and learners in general (see table 3).

Table 2 Textbook target language summary Range program output.

WORD LIST (levels)	TOKENS/%	TYPES/%	FAMILIES
one	77/36.49	77/36.67	71
two	51/24.17	50/23.81	48
three	24/11.37	24/11.43	24
four	16/ 7.58	16/ 7.62	16
five	8/ 3.79	8/ 3.81	8
six	10/ 4.74	10/ 4.76	10
seven	6/ 2.84	6/ 2.86	6
eight	3/ 1.42	3/ 1.43	3
nine	2/ 0.95	2/ 0.95	2
ten	3/ 1.42	3/ 1.43	3
11	1/ 0.47	1/ 0.48	1
12	2/ 0.95	2/ 0.95	2
13	1/ 0.47	1/ 0.48	1
14	0/ 0.00	0/ 0.00	0
not in the lists	7/ 3.32	7/ 3.33	?????
Total	211	210	195

Source: Richards, Jack, Jonathan Hull and Susan Proctor. "Interchange", 3rd Edition Teacher's Edition Book 3, New York, N.Y. (2005). Print.

a. Note: Textbook language summaries from Unit 4, 8, 12, 16.

Table 3 Textbook language summary use of suffixes and frequency

	Suffix	Frequency
1.	-er	10
2.	-ion	7
3.	-ing	6
4.	-able	5
5.	-ive	5
6.	-ed	4
7.	-(i)al	3
8.	-ful	3
9.	-y	2
10.	-ly	2
11.	-ity	2
12.	-ent	2
13.	-ness	2
14.	-ance	2
15.	-ous	2
16.	-ment	1
17.	-cant	1
18.	-ic	1
19.	-less	1
20.-23.	-ite, -ery,-ist,-ence,	1
24.-27.	-or, -ic, -ate, -ular	1
28.-29.	-age, -ology	1

Source: Richards, Jack, Jonathan Hull and Susan Proctor. "Interchange", 3rd Edition Teacher's Edition Book 3, New York, NY. (2005). Print.

a. Note: Textbook language summaries from Unit 4, 8, 12, 16.

Discussion

In regards to RQ1, "Are participant's receptive vocabulary sizes adequate in meeting the vocabulary requirements of an assigned textbook?" the answer is evidently, "No." In examining participant vocabulary size of participants at the 1st – 1000 word level the results suggest that though some students would be able to manage and perhaps try to use the textbook vocabulary productively, primarily in controlled and uncontrolled speaking activities, most would not. Well known in the discipline of vocabulary research is the 1st – 1000 and 2nd – 1000 words are what are known as high-frequency words. These high frequency words represent up to 80%

of the vocabulary used in written and spoken English depending on the source (Nation, 2001, p. 11). Further, the overwhelming majority of the 80% are found in the 1st – 1000 words often accounting for 70%+ (Nation, 2001, p. 15). Nation also posits that competency would be a comprehension rate of between 95 – 98% (2001, p. 390) for these levels. Only 37% (33 of 89) of participant VST scores are or approach empirical requirements of competency with the vocabulary used in their textbook. Unfortunately, the corollary (63% of participants) are below or well below having vocabulary sizes up to the level of their current textbook. As a result, it is evident that many participants are lacking in vocabulary size and the need for specific attention to vocabulary development would be in order. In closing, the fruits of developing learner vocabulary size would be tantamount to increasing the ability of learners. This yields many positive by-products such as increased self-confidence and motivation as well as reduced off-task behavior as well as the fear of risk taking.

Regarding RQ2: "Does textbook reliance implicate gaps in learner vocabulary?" In short, the evidence presented would suggest, "Yes." but not solely due to the textbook or textbook limitations. In fact, and in support of the reply to RQ1, gaps in learner vocabulary are more likely attributable to the lack of a vocabulary component accompanying participant English courses. According to the textbook target vocabulary analyzed with Range, the majority of target vocabulary is indeed high frequency though perhaps not without some comment. First, though there is a high percentage of target vocabulary in the 1st – 1000 word level, it is only 36.49% of the words targeted. The 2nd – 1000 words account for 24.17%, and collectively, in salute to the textbook, the target language approaches what could normally be expected in other contexts. What is more is that the target vocabulary presented in the language summaries is exclusively content words. Within the unit itself, in the exercises, the majority of words used are function words, which are also found in the 1st – 1000 high frequency words. Next, other target language declines in frequency with every 1000 level with the exception of the 5th and 6th – 1000 words. Hence, on the surface, it would appear that the textbook, though with some vocabulary level shortcomings, which can be argued to be completely necessary in order to present a theme appropriately, follows a reasonable guideline of vocabulary use relative to other contexts. However, reliance on a textbook alone, based on Range base-word separations, could lead to a disproportionate percentage of low-frequency words. In the case of the textbook almost 40% of the words fall into the 3rd to 13th word levels. In addition, participant vocabulary size shows a significant drop from the 1st – 1000 to

the 2nd – 1000 vocabulary; however, the drop after 2nd, 3rd, and 4th – 1000 word levels is clearly not as significant based on mean and median scores (see table 1). The participants have been exposed to a textbook series with, to the best of the knowledge of the researcher, no supplementary vocabulary component linked to English classes taken. This absence is the primary reason for gaps in participant vocabulary levels.

Regarding RQ3, "Is there a key element of a principled vocabulary component that could best aid in filling any gap that exists between participant/learner receptive vocabulary and required textbook vocabulary?" The data and subsequent analysis would suggest, "Perhaps." Indeed, like the four strands of vocabulary learning with each strand having equal importance, each element of a principled vocabulary component must receive attention. Omission or over-reliance on any single strand would lead, unquestionably, to other gaps or limitations in learners' abilities in working effectively with assigned textbooks. Every aspect of what and how to teach vocabulary is equally important. Having said this, one element of the aforementioned vocabulary component is the language-focused (deliberate) learning of affixes. Based on the analysis, the intense need for participant/learner recognition of the meaning of prefixes and suffixes, which have a high frequency of use in the 1st and 2nd – 1000 words of the assigned textbook target language, have been highlighted. In total 29 different suffixes were used on 210 word types from 195 word families. The total number of base words receiving a suffix was 71. It is logical to assume that though the VST does use affixes attached to base words, that some or many suffixes might cause learners or participants issues of non-recognition or non-comprehension of the word in question (Hayashi, 2011, p. 114) either in the VST or in the textbook. The opposite is also true. If learners or participants sitting the VST recognized a base word, then this may have aided them in comprehending the meaning of the word. It is clear that affix frequency, semantic transparency and the degree to which word forms change (spelling) will be factors in comprehension. Thus, given the sample of the assigned textbook target language using affixes, the need for focus in deliberate instruction is clear. In any event, though each element of a principled vocabulary component supplement is vital in achieving its ultimate goal, the teaching of affixes can greatly and quickly expand learner vocabularies (White, 1989, p. 285), particularly in the context under investigation.

Conclusion

This study investigated the need for a principled vocabulary component to supplement existing English communication classes in a women's university located in western Tokyo. Using primary data and analysis a sample of target language from an assigned textbook, several conclusions were reached:

1. RQ1. Participant's vocabulary size was inadequate relative to the vocabulary demands of the given textbook.
2. RQ2. Reliance on textbooks contributes to but is not solely responsible for gaps in participant vocabulary levels.
3. RQ3. There is no key element of a principled vocabulary component that needs to be addressed more than other elements though the need for raising the awareness and deliberate instruction of morphological affixes was clearly evident and appropriate for the context under investigation in this study.

In the opinion of the researcher, the results of this study, at a deeper level, imply the potential benefits of teacher collaboration in supplementing existing English language classes in university contexts with a vocabulary component. Teachers working together, sharing ideas, and especially the sharing workload associated with materials development, vocabulary-based or otherwise, would be a task most profitable. At the very root of this cooperation and collaboration is the consensus of teaching staff as to the benefit, to some degree, of standardized syllabi and teaching practices within the same context.

References

Barcroft, Joe. "Strategies And Performance In Intentional L2 Vocabulary Learning." *Language Awareness* 18.1 (2009): 74-89. *ERIC*. Web. 5 Jan. 2014.

Beglar, David. "A Rasch-Based Validation Of The Vocabulary Size Test." *Language Testing* 27.1 (2010): 101-118. *ERIC*. Web. 2 Jan. 2014.

Bloom, Kristine C., and Thomas J. Shuell. "Effects Of Massed And Distributed Practice On The Learning And Retention Of Second-Language Vocabulary." *Journal Of Educational Research* 74.4 (1981): 245-48. *ERIC*. Web. 5 Jan. 2014.

Bower, B. "Memory Boost From Spaced-Out Learning." *Science News* 131.16 (1987):

244. *ERIC*. Web. 5 Jan. 2014.

Brown, James Dean. The elements of language curriculum: A systematic approach to program development. Boston, Massachusetts: Heinle & Heinle, 1987. Print.

Cepeda, Nicholas J., et al. "Distributed Practice In Verbal Recall Tasks: A Review And Quantitative Synthesis." *Psychological Bulletin* 132.3 (2006): 354-380. *ERIC*. Web. 5 Jan. 2014.

Chung, Teresa Mihwa, and Paul Nation. "Technical Vocabulary In Specialised Texts." *Reading In A Foreign Language* 15.2 (2003): *ERIC*. Web. 5 Jan. 2014.

Claridge, Gillian. "Simplification In Graded Readers: Measuring The Authenticity Of Graded Texts." *Reading In A Foreign Language* 17.2 (2005): 144-158. *ERIC*. Web. 5 Jan. 2014.

Coxhead, Averil. "A New Academic Word List." *TESOL Quarterly* 34.2 (2000): 213-38. *ERIC*. Web. 5 Jan. 2014.

Ebata, Makiko. "Awakening Opportunity: Three Elements To Foster Learners' Autonomy." *Online Submission* (2010): *ERIC*. Web. 5 Jan. 2014.

Erten, Ismail Hakki, and Mustafa Tekin. "Effects On Vocabulary Acquisition Of Presenting New Words In Semantic Sets Versus Semantically Unrelated Sets." *System: An International Journal Of Educational Technology And Applied Linguistics* 36.3 (2008): 407-422. *ERIC*. Web. 5 Jan. 2014.

Fan, May Y. "Frequency Of Use, Perceived Usefulness, And Actual Usefulness Of Second Language Vocabulary Strategies: A Study Of Hong Kong Learners." *Modern Language Journal* 87.2 (2003): 222-41. *ERIC*. Web. 5 Jan. 2014.

Gorsuch, Greta, and Etsuo Taguchi. "Developing Reading Fluency And Comprehension Using Repeated Reading: Evidence From Longitudinal Student Reports." *Language Teaching Research* 14.1 (2010): 27-59. *ERIC*. Web. 5 Jan. 2014.

Hayashi, Yuko, and Victoria Murphy. "An Investigation Of Morphological Awareness In Japanese Learners Of English." *Language Learning Journal* 39.1 (2011): 105-120. *ERIC*. Web. 5 Jan. 2014.

Hilton, Heather. "The Link Between Vocabulary Knowledge And Spoken L2 Fluency." *Language Learning Journal* 36.2 (2008): 153-166. *ERIC*. Web. 1 Jan. 2014.

Horst, Marlise. "Learning L2 Vocabulary Through Extensive Reading: A Measurement Study." *Canadian Modern Language Review* 61.3 (2005): 355-382. *ERIC*. Web. 5 Jan. 2014.

Hsueh-Chao, Marcella Hu, and Paul Nation. "Unknown Vocabulary Density And

Reading Comprehension." *Reading In A Foreign Language* 13.1 (2000): 403-30. *ERIC*. Web. 5 Jan. 2014.

Iwahori, Yurika. "Developing Reading Fluency: A Study Of Extensive Reading In EFL." *Reading In A Foreign Language* 20.1 (2008): 70-91. *ERIC*. Web. 5 Jan. 2014.

Joe, Angela. "The Quality And Frequency Of Encounters With Vocabulary In An English For Academic Purposes Programme." *Reading In A Foreign Language* 22.1 (2010): 117-138. *ERIC*. Web. 5 Jan. 2014.

Laufer, Batia. "Ease And Difficulty In Vocabulary Learning: Some Teaching Implications." (1988): *ERIC*. Web. 5 Jan. 2014.

Laufer, Batia, and T. Sima Paribakht. "The Relationship Between Passive And Active Vocabularies: Effects Of Language Learning Context." *Language Learning* 48.3 (1998): 365-91. *ERIC*. Web. 5 Jan. 2014.

Laufer, Batia, and Paul Nation. "A Vocabulary-Size Test Of Controlled Productive Ability." *Language Testing* 16.1 (1999): 33-51. *ERIC*. Web. 5 Jan. 2014.

Marsden, Emma, and Annabelle David. "Vocabulary Use During Conversation: A Cross-Sectional Study Of Development From Year 9 To Year 13 Among Learners Of Spanish And French." *Language Learning Journal* 36.2 (2008): 181-198. *ERIC*. Web. 1 Jan. 2014.

McCrostie, James. "Investigating The Accuracy Of Teachers' Word Frequency Intuitions." *RELC Journal: A Journal Of Language Teaching And Research* 38.1 (2007): 53-66. *ERIC*. Web. 5 Jan. 2014.

Meara, Paul. "*EFL Vocabulary Tests*." University College Swansea: Centre for Applied Language Studies (1992).

Mizumoto, Atsushi, and Osamu Takeuchi. "Examining The Effectiveness Of Explicit Instruction Of Vocabulary Learning Strategies With Japanese EFL University Students." *Language Teaching Research* 13.4 (2009): 425-449. *ERIC*. Web. 5 Jan. 2014.

Nakata, Tatsuya. "English Vocabulary Learning With Word Lists, Word Cards And Computers: Implications From Cognitive Psychology Research For Optimal Spaced Learning." *Recall* 20.1 (2008): 3-20. *ERIC*. Web. 5 Jan. 2014.

Nation, Paul, and Hwang Kyongho. "Where Would General Service Vocabulary Stop And Special Purposes Vocabulary Begin?." *System* 23.1 (1995): 35-41. *ERIC*. Web. 5 Jan. 2014.

Nation, Paul. "The four strands of a language course." *TESOL in Context* 6,1 (1996): 7-12.

Nation, Paul. “Learning vocabulary in another language.” Cambridge, England: Cambridge University Press. (2001). Print

Nation, Paul. “A study of the most frequent word families in the British National Corpus.” In P. Bogaards and B. Laufer (eds.) *Vocabulary in a Second Language: Selection, Acquisition and Testing* Amsterdam: John Benjamins: 3-13.

Nation, Paul, and David Beglar. “A vocabulary size test.” *The Language Teacher* 31, 7 (2007): 9-13.

Nation, Paul. “The Vocabulary Size Test: Instructions and description.” http://www.victoria.ac.nz/lals/about/staff/publications/paul-nation/Vocabulary-Size-Test-information-and-specifications.pdf. (2012) Retrieved January 4, 2014.

Newton, Jonathan and Paul Nation. “Vocabulary and teaching.” *In Second Language Vocabulary Acquisition* J. Coady and T. Huckin (eds.) Cambridge University Press, Cambridge: 238-254 (1997). Print.

Pimsleur, Paul. “*A Memory Schedule*.” n.p.: (1967). *ERIC*. Web. 5 Jan. 2014.

Read, John. “Measuring the vocabulary knowledge of second language learners.” *RELC Journal* 19, 2(1988): 12-25. [24.4]

Read, John. “Assessing vocabulary knowledge and use.” Cambridge, England: Cambridge University Press. (2000). Print

Richards, Jack, Jonathan Hull and Susan Proctor. “Interchange”, 3rd Edition Teacher’s Edition Book 3. New York, NY. (2005) Print

Taguchi, Etsuo, Miyoko Takayasu-Maass, and Greta J. Gorsuch. “Developing Reading Fluency In EFL: How Assisted Repeated Reading And Extensive Reading Affect Fluency Development.” *Reading In A Foreign Language* 16.2 (2004): 70-96. *ERIC*. Web. 5 Jan. 2014.

Walters, JoDee, and Neval Bozkurt. “The Effect Of Keeping Vocabulary Notebooks On Vocabulary Acquisition.” *Language Teaching Research* 13.4 (2009): 403-423. *ERIC*. Web. 5 Jan. 2014.

Waring, Rob and Paul Nation. “Vocabulary size, text coverage, and word lists.” In *Vocabulary: Description, Acquisition and Pedagogy* N. Schmitt and M. McCarthy (eds.). Cambridge University Press, Cambridge: 6-19. (1997). Print.

Webb, Stuart. “The Effects Of Repetition On Vocabulary Knowledge.” *Applied Linguistics* 28.1 (2007): 46-65. *ERIC*. Web. 5 Jan. 2014.

Webb, Stuart. “RECEPTIVE AND PRODUCTIVE VOCABULARY SIZES OF L2 LEARNERS.” *Studies in Second Language Acquisition* 30.1 (2008): 79-95. *ProQuest*. Web. 3 Jan. 2014.

White, Thomas G., Michael A. Power and Sheida White. "Morphological Analysis: Implications for Teaching and Understanding Vocabulary Growth" *Reading Research Quarterly*, Vol. 24, No. 3 (Summer, 1989), pp. 283-304

Wu, Chen-Huei. "The Evaluation of Second Language Fluency and Foreign Accent." *ProQuest LLC* (2011). *ERIC*. Web. 2 Jan. 2014.

Zahar, Rick, Tom Cobb, and Nina Spada. "Acquiring Vocabulary Through Reading: Effects Of Frequency And Contextual Richness." *Canadian Modern Language Review* 57.4 (2001): 541-72. *ERIC*. Web. 5 Jan. 2014.