conference attendees to learn about the latest materials and resources on the market.

We received excellent feedback on last year's conference including praise for the intimate, friendly atmosphere; the effective coordination of conference events; and the "exceptionally useful insight" in our presentations. We expect similar successes this year. Conference details, including the event program, session types, travel and hotel arrangements, and venue information are available at <conference2014.jaltcall.org>. For those who do not register before the deadline, onsite registration is also available. Questions about the conference can be addressed to <jc2014@jaltcall.org>. We'll see you in June at Sugiyama Jogakuen University, Nagoya for JALTCALL 2014!

JALTCALL 2013, courtesy of Jim George

JALT Research Grants

Each year, JALT awards up to three grants for a maximum of 100,000 yen each for research on language teaching in Japan. Only JALT members who have no outside funding sources to conduct research are eligible to apply. The goal of the grants is to support language teachers in their professional development and to encourage teachers to engage in classroom-based research. Grant applications are collected each summer and vetted by the JALT Research Grants Committee. Winners of the grants receive funding before the start of the following school year during which they conduct their studies, provide quarterly reports, and receive guidance from the committee. Following the completion of the research, winners are invited to give presentations on their projects at the JALT national conference and to publish a paper in the Language Teacher. Information on the grants can be found on JALT's main website <jalt.org/researchgrants>.

Vocabulary size of Japanese university students: Preliminary results from JALT sponsored research

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Background

This article presents preliminary results from research funded by a 2012 JALT research grant (for details, McLean, 2012). Research on the vocabulary size of Japanese students is limited. Shillaw (1995), and Barrow, Nakanishi & Nishino (1999) suggest that the vocabulary size of non-English major Japanese university students is around 2,300 words. In these studies vocabulary knowledge was assessed over a limited range of word families, with students completing self-checking familiarity surveys. However, this approach may have measured the word forms students recalled being exposed to, or their ability to discern real English words from nonsense words, rather than measuring receptive reading vocabulary knowledge.

Aims

As a result of limited literature on the subject, we decided to apply for one of the three annual JALT research grants to assist university lecturers in Japan to make informed estimates of their students' vocabulary sizes. To do this, the average vocabulary size is being measured for various sample subpopulations of students. In addition, relationships between vocabulary size and other variables such as standardized English tests scores are being investigated.

Methods

Nation & Beglar's (2007) Vocabulary Size Test (VST) is being utilized to measure participant

receptive reading vocabulary size. 80 items representing the first 8,000 word families are being used, resulting in the test taking 40 minutes to complete. The number of correctly answered questions is multiplied by 100 to find a participant's vocabulary size. The corpus used in the selection and sequencing of the test items is the 10 million token spoken section of the British National Corpus (The spoken corpus lists are available from <vuw.ac.nz/lals/staff/paul-nation/nation.aspx.>) (Nation and Beglar, 2007).

Sample

At the time of writing this article 118 classes have taken the test online and 82 classes have taken the paper form of the test. The following preliminary results are based on the VST scores of 1,279 students (n = 1,279), from only 56 of the classes described above. Table 1 shows the number of classes and students from different student subpopulations that have taken the VST.

Preliminary Results

Table 2 shows the descriptive data for the entire preliminary data set. The mean VST score for Japanese university students surveyed was 39.39 representing a mean written receptive vocabulary size of approximately 3,939 word families. The most salient feature of Table 2 is the relatively large size of the standard deviation compared to the mean. Table 3 shows the mean VST scores and standard deviation of the various subpopulation samples. An ANOVA examining a year effect yielded no significant differences between the year groups, $F(2,1276) = 2.04$, $p = .13$. Table 4 shows descriptive statistics for VST scores by year.

Table 5 shows the descriptive statistics of VST scores split by *hensachi* (national ability test results) levels. The ANOVA examining the difference between these *hensachi* groupings was significant, $F(2,1276) = 83.98$, $p < .001$. The $\eta^2 = .12$ indicates a relatively strong relationship between department *hensachi* and VST scores (Table 6). This suggests that student in university departments with higher *hensachi* scores tend to have greater vocabulary sizes.

Tables 7 and 8 show that both English majors and science majors had significantly greater mean VST scores than arts majors $F(2,1276) = 22.10$, $p < .001$, while the greater mean VST scores of English majors relative to science majors was not significant. The $\eta^2 = .03$ indicates a small-to-medium strength relationship between major and VST score.

Preliminary Conclusions

Considering that Shillaw (1995) and Barrow, et al. (1999) tested students' knowledge of only the "Nation's (1990) 3,000 word list" and the first 3,000 words of "JACET 4,000 Basic Words," respectively, and that the current study measured participants knowledge of the first 8,000 words of the spoken BNC sub-corpus it may be expected that the average found by this study is greater. Additionally, the multiple-choice nature of the VST results in students' scores on the VST will be inflated to a degree. However, this does not mean that students know most of the first four thousand words of English, but correctly answered a mean of 39.39 questions from the 80 questions of the VST. The large range in VST scores within *hensachi* groupings might be the result of private universities accepting an increasing number of students on recommendations, the degree to which students took the test seriously, and other factors. A department's *hensachi* is established by averaging only the *hensachi* of students who entered the department on their entrance exams scores and does not include those who enter on recommendations.

Future Directions

Owing to the very low number of university departments with a *hensachi* of less than 45 in Japan the lower boundary may be altered to less than 50. It is hoped that a Rasch analysis of the VST results and investigating the correlation between personal English *hensachi* and personal VST scores will assist in explaining the large variance in VST scores within *hensachi* bands and student subpopulations. A publication on one part of the data collected will be published in the Vocabulary Learning and Instruction journal <vli-journal.org> in 2014, and will be accompanied by a presentation at the JALT Vocabulary SIG Vocabulary Symposium on the 14th of June 2014.

References

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Table 1. Number of classes and students (in brackets) that data has been collected from

	Hensachi (Program)	1st years	2nd years	3rd years	4th years
English majors	>60	0	1 (n = 23)	1 (n = 11)	0
	45-59	3 (n = 64)	0	0	0
	<45	1 (n = 26)	0	0	0
Arts majors	>60	2 (n = 49)	7 (n = 144)		
	45-59	16 (n = 339)	8 (n = 206)	1 (n = 29)	
	<45	0	1 (n = 7)		
Science majors	>60	6 (n = 153)	1 (n = 25)		
	45-59	0	5 (n = 125)		
	<45	3 (n = 78)	0		

Table 2. Preliminary descriptive statistics for Japanese university students' VST Scores

	N	Range	Min	Max	*M*	*SD*	Skew	*SES*	Kurt	*SEK*
VST Score	1279	57	14	71	39.39	8.30	-0.06	0.07	-0.04	0.14

Table 3. Mean and standard deviation (in brackets) of VST scores for each student subsample

	Hensachi (Program)	1st year	2nd year	3rd year
English majors	>60		36.78 (7.56)	42.09 (7.20)
	45-59	44.75 (5.62)		
	<45	38.96 (6.26)		
Arts majors	>60	38.98 (4.78)	40.56 (7.58)	
	45-59	36.73 (8.03)	38.76 (8.78)	39.07 (5.47)
	<45		32.71 (3.25)	
Science majors	>60	48.12 (4.61)	44.80 (4.94)	
	45-59		36.50 (7.55)	
	<45	33.35 (6.49)		

Table 4. Descriptive statistics for VST scores by year

Year	*N*	Range	Min	Max	*M*	*SD*	Skew	*SES*	Kurt	*SEK*
1	709	55	16	71	39.78	8.49	0.01	0.09	-0.17	0.18
2	530	47	14	61	38.84	8.18	-0.17	0.11	0.07	0.21
3	40	22	29	51	39.90	6.06	-0.19	0.37	-0.79	0.73

Table 5. Descriptive statistics for VST scores by hensachi

Hensachi	*N*	Range	Min	Max	*M*	*SD*	Skew	*SES*	KURT	*SEK*
≥60	405	47	18	65	43.32	7.30	-0.45	0.12	0.54	0.24
45-59	763	57	14	71	38.00	8.21	0.12	0.09	0.28	0.18
≤44	111	32	18	50	34.62	6.69	-0.01	0.23	-0.48	0.46

Table 6. Post-Hoc Scheffe Analysis of VST scores by hensachi level

					95% CI	
(I) *hensachi*	(J) *hensachi*	Mean Difference (I-J)	SE	p	LL	UL
≥60	45-59	5.32*	.48	0.00	4.14	6.49
	≤44	8.70*	.84	0.00	6.65	10.75
45-59	≥60	-5.32*	.48	0.00	-6.49	-4.14
	≤44	3.38*	.79	0.00	1.43	5.33
≤44	≥60	-8.70*	.84	0.00	-10.75	-6.65
	45-59	-3.38*	.79	0.00	-5.33	-1.43

* The mean difference is significant at the 0.01 level.

Table 7. Descriptive statistics for VST scores by major

Major	*N*	Range	Min	Max	*M*	*SD*	Skew	*SES*	Kurt	*SEK*
English	124	36	22	58	41.82	7.04	-0.48	0.22	-0.04	0.43
Arts	774	56	15	71	38.18	8.02	0.13	0.09	0.45	0.18
Science	381	51	14	65	41.07	8.79	-0.33	-0.13	-0.38	0.25

Table 8. Post-Hoc Sheffe Analysis of VST scores by major

					95% CI	
(I) Major	(J) Major	*Mean Dif.* (I-J)	SE	P	LL	UL
Eng.	Arts	3.64*	.79	0.00	1.71	5.58
	Sci.	.75	.85	0.68	-1.32	2.82
Arts	Eng.	-3.64*	.79	0.00	-5.58	-1.71
	Sci.	-2.90*	.51	0.00	-4.15	-1.64
Sci.	Eng.	-.75	.85	0.68	-2.82	1.32
	Arts	2.90*	.51	0.00	1.64	4.15

* The mean difference is significant at the 0.01 level.