

Collocation Research based on Corpora Collected from English Textbooks for Japanese Upper Secondary Schools

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Abstract

The purpose of this paper is to compare Verb and Noun collocations among six English I textbooks compiled as all the same level for Japanese upper secondary schools and examine how collocations for Japanese learners of English deviate from those which are frequently used in COBUILD. The main result is that the target textbooks have no consensus on which and how collocations should be taught, although they follow the high frequency of use of collocations in the daily life of native speakers of English. This can lead teachers to reconsider the effective teaching of collocations in the classrooms.

1. Introduction

Collocation has come under spotlight as one particular area of vocabulary research which has been more discussed on the standpoint of language use for the last two decades. It is because it seems that English collocations are inherently acquired based on the native intuition and non-native speakers of English feel much difficulty understanding and producing them. It is also because non-native speakers' own languages are not direct-translationally equivalent to many English collocations. Therefore, as learners develop their English proficiency, they will recognize that English collocations should be explicitly learned to command nativelike English.

Compared with the collocation studies in other countries to date, there has not been much research done on English collocation in Japan. This is reflected in the description of collocation in the government guidelines for teaching in the Ministry of Education, Culture, Sports, Science and Technology: "Basic collocations which are selected for learners should be taught." This vague description never explains which collocations are basic and how many collocations should be selected. Accordingly, English textbooks for Japanese learners of English may be compiled by those who would not have clear concept and consensus on collocation.

The aim of this paper is to compare Verb and Noun collocations among six English I textbooks which are compiled as all the same level for Japanese upper

secondary schools, and examine how collocations for Japanese learners of English deviate from those which are frequently used in COBUILD. This is a follow-up research of the former collocation study among four different levels of seven English I textbooks for Japanese upper secondary schools. The findings in the former research show the two main points which should be revised. One concerns the issue of total tokens and types of these seven textbooks. They have widely different total tokens and types according to different-level textbooks and they strongly affect the findings of the former research. The other point is regarding the selection of collocations. The selected collocations are chosen among some 500 English words already learned at the lower secondary schools. However, they are not always used in English I textbooks at the upper secondary schools. Therefore this research is conducted considering these two points: collection of the same level textbooks and re-selection of collocations.

2. Methodologies

2.1 Research questions

The following research questions are set up to be examined.

- (1) Don't English I textbooks have any general concept and consensus on what kinds of collocations should be taught?
- (2) Don't English I textbooks have any general concept and consensus on how many collocations should be taught?
- (3) Don't English I textbooks have any general concept and consensus on how collocations should be presented and taught in the textbooks?
- (4) Doesn't the choice of collocations used in English I textbooks for Japanese upper secondary schools refer to the collocations which are frequently used in major corpora such as *Bank of English*?

2.2 Choice of English textbooks and collocations

English I textbooks for the tenth graders are used for this research. One of the reasons to select English I textbooks is that they are compiled to cultivate comprehensive English ability. The government guideline for teaching explains that English I textbooks have purpose to develop students' basic abilities to understand speakers' and writers' intention about things of everyday life, to tell and write about their intentions and information, and to foster a positive attitude toward communication. The other reason is that the majority of tenth graders is supposed to use them to develop their basic English abilities, as is shown in the government

guidelines for teaching set by the Ministry of Education, Culture, Sports, Science and Technology. Among some fifty English I textbooks, the six textbooks were chosen because they are considered as almost the same level according to the customer survey by textbook publishers. Selected English I textbooks are *Create*, *Milestone*, *One World*, *Royal English*, *Sunshine*, and *Unicorn*, and the total tokens and types of them are following:

Table 1. Total tokens and types of target English I textbooks

	Unicorn I	Milestone I	Creative I	Sunshine I	One World I	Royal English I
Total tokens	10107	9457	10213	9538	8591	10641
Total types	1907	1931	2023	1851	1814	1988

Eighty target collocations were prepared. They were all verb and noun combinations. Selected are collocations among combinations of 507 words learned at the lower secondary schools and some words and collocates which are common in all the selected textbooks. They are all checked by *COBUILD English Collocations on CD-ROM* and the *BBI Dictionary of English Word Combinations* (Benson et al., 1997). Especially, *COBUILD English Collocations on CD-ROM* is useful to know how frequent word combinations are widely used in the daily life of native speakers of English, because there are about 140,000 node/collocate pairs in the collection and about 2.6 million different examples and all examples are taken from the *Bank of English*, which is the largest bank of its kind in the world.

Table 2. Selected collocations

	node	collocates		node	collocates		node	collocates		node	collocates
1	break	deadlock	22	make	difference	43	take	part	64	example	set
2	bring	peace	23	make	money	44	take	action	65	example	follow
3	bring	end	24	make	sense	45	take	care	66	face	make
4	carry	weight	25	make	way	46	take	advantage	67	mind	change
5	catch	eye	26	make	decision	47	take	look	68	part	play
6	catch	glimpse	27	make	use	48	take	account	69	pick	take
7	catch	train	28	meet	needs	49	take	years	70	problem	solve
8	catch	bus	29	meet	standards	50	turn	attention	71	set	fire
9	catch	breath	30	meet	requirement	51	made	call	72	set	record
10	catch	fire	31	play	role	52	got	call	73	set	standard
11	cut	rates	32	play	part	53	took	turn	74	way	find
12	cut	rate	33	put	pressure	54	made	visit	75	difference	tell
13	cut	tax	34	put	money	55	paid	visit	76	distance	keep
14	cut	costs	35	put	end	56	take	walk	77	job	get
15	cut	price	36	run	country	57	take	boat	78	job	do
16	draw	attention	37	run	business	58	take	bus	79	job	take
17	draw	conclusions	38	run	company	59	make	friends	80	job	find
18	get	rid	39	stand	chance	60	take	holiday			
19	keep	eye	40	stand	trial	61	take	picture			
20	lose	weight	41	take	place	62	take	vacation			
21	lose	sight	42	take	time	63	raise	money			

2.3 Procedure

The following procedure is adopted:

- (1) Textbooks are changed to computerized texts to facilitate this quantitative research.
- (2) The frequency of use of the target collocations and the context in each textbook is examined by means of TEXTANA, a concordance software program.

3. Data analysis and findings

3.1 Research question 1: Don't English I textbooks have any general concept and consensus on what kinds of collocations should be taught?

Table 3. Frequency of use of collocations

	node	collocates	Creative	One World	Royal	Sunshine	Unicorn	Milestone	
1	catch	fire		1					1
2	get	rid			2				2
3	keep	eye						1	1
4	lose	sight						1	1
5	make	difference						1	1
6	make	money	1			1			2
7	make	way				1			1
8	make	decision				1			1
9	play	part			1		3		4
10	put	end						1	1
11	take	place			1			1	2
12	take	time	5		3				8
13	take	part			2		2		4
14	take	care		1	4				5
15	take	look		1					1
16	made	call				1			1
17	got	call				1			1
18	paid	visit	1						1
19	take	walk		1			1		2
20	take	bus	1						1
21	make	friends		1					1
22	take	holiday					1		1
23	take	picture					1		1
24	raise	money	1			1			2
25	face	make		2					2
26	problem	solve	2	2		2			6
27	set	record	2						2
28	pay	attention		2	1		1	2	6
			13	11	14	8	9	7	62
			7	8	6	7	6	7	

Research question 1 is to examine whether the target textbooks have general concept and consensus on what kinds of collocations should be taught. In order to answer this question, the number of frequency of use of target collocations was checked by means of TEXTANA, a concordance software program. As shown in table 3, one of twenty-eight collocations, “pay attention” is only common among the four textbooks, “solve problem” is only common among the three textbooks, and eight collocations are common among two textbooks. Therefore, the collocations which are used in the six target textbooks as a whole are varied and research question 1 is confirmed.

3.2 Research question 2: Don't English I textbooks have any general concept and consensus on how many collocations should be taught?

Research question 2 is to examine whether the target textbooks have general concept and consensus on how many collocations should be taught. According to Table 3 already shown in research question 1, the total number of collocations found in the target textbooks is only a few, from 7 to 14, which seems that they are different according to different textbooks. However, the number of collocations of different types is almost the same, from 6 to 8. In this respect that the number of collocations in the target textbooks is only a few, and almost the same number of different types, they pay little attention to collocations and so they do not share any general concept of them. Therefore, it can be said that the research question 2 is not confirmed.

3.3 Research question 3: Don't English I textbooks have any general concept and consensus on how collocations should be presented and taught in the textbooks?

Research question 3 is to examine whether the target textbooks have general concept and consensus on how collocations should be presented and taught in the textbooks. Table 4 shows that collocations are introduced in various ways, but that only some collocations are focused on in the textbooks (Table 5). For example, “pay attention” appear in four textbooks, but it is explicitly added to three phrase lists out of four textbooks. “Raise money” and “take walk” are not mentioned in any lists. This may be because each textbook has different concept on which collocation is important and should be taught. Therefore, it appears that question 3 is confirmed.

Table 4. How target collocations appear in the textbooks

	Creative	One	Royal	Sunshine	Unicorn	Milestone
collocations paraphrased into another easy expressions in the footnote.		1	1	1		
collocations added examples	2		2	2		
collocations added Japanese translation		3		3		
phrase list at the end of a book						

¹ = Some collocations are paraphrased into some clear and easy expressions..

² = Some collocations are shown in the footnotes and some are not.

³ = Some collocations have Japanese translation.

3.4 Research question 4: Doesn't the choice of collocations used in English I textbooks for Japanese upper secondary schools refer to the collocations

which are frequently used in major corpora such as *Bank of English*?

Research question 4 is to examine whether the choice of collocations used in target English textbooks refers to the collocations which frequently appear in *Bank of English*. According to Table 6, collocations treated in target

English textbooks have high frequency of use in *Bank of English*. However, these collocations appear only once or twice in the textbooks, although *Bank of English* shows they have the high frequency of use in the daily life of native speakers of English. Therefore, research question 4 cannot be confirmed.

Table 5. collocations shown in Phrase lists

node	collocates	Creative	One World	Royal	Sunshine	Unicorn	Milestone
take	time	x		x			
problem	solve	x	x		x		
pay	attention		x				
take	care						
play	part						
take	part						
get	rid						
make	money	x					
take	place						
take	walk		x			x	
raise	money	x			x		
face	make		x				
set	record	x					
way	make				x		
catch	fire		x				
keep	eye						x
lose	sight						
make	difference						
make	decision						
put	end						
take	look						
made	call						
got	call				x		
paid	visit						
take	bus	x					
make	friends						
take	holiday					x	
take	picture					x	

Table 6. Frequency of use of collocations in COBUILD and 6 English 1 textbooks (COBUILD)

1	take	part	7880
2	take	place	7398
3	take	time	4067
4	make	use	3437
5	play	part	3394
6	pay	attention	3383
7	take	action	3219
8	play	role	3163
9	take	care	3154
10	get	rid	3091
11	find	way	2912
12	make	difference	2758
13	make	money	2688
14	make	sense	2519
15	take	advantage	2359
16	make	way	2343
17	cut	rates	2126
18	make	decision	1966
19	take	look	1949
20	take	account	1902
21	put	pressure	1820
22	take	years	1724
23	put	money	1564
24	keep	eye	1490
25	raise	money	1439
26	set	fire	1292
27	solve	problem	1283
28	set	record	1243
29	make	friends	1193
30	cut	tax	1131
31	meet	needs	992
32	cut	costs	942
33	put	end	933
34	cut	price	767
35	lose	weight	729
36	draw	attention	696
37	set	standard	661
38	run	country	610
39	made	call	567
40	stand	chance	564

(English 1)

1	take	time	8
2	problem	solve	6
3	pay	attention	6
4	take	care	5
5	play	part	4
6	take	part	4
7	get	rid	2
8	make	money	2
9	take	place	2
10	take	walk	2
11	raise	money	2
12	face	make	2
13	set	record	2
14	catch	fire	1
15	keep	eye	1
16	lose	sight	1
17	make	difference	1
18	make	way	1
19	make	decision	1
20	put	end	1
21	take	look	1
22	made	call	1
23	got	call	1
24	paid	visit	1
25	take	bus	1
26	make	friends	1
27	take	holiday	1
28	take	picture	1
			62

3.5 Summary

The result analyzed by the means of TEXTANA can be summarized:

- (1) Six English I textbooks have no consensus on collocations which should be taught among them.
- (2) There are only a few collocations in the textbooks and there is not so much difference on the number of collocations among them.

- (3) Each textbook has different concept on which collocations are important and how they should be taught. (Some collocations are explicitly presented in some textbooks, but some are not.)
- (4) Six English I textbooks follow the high frequency of use of collocations in the daily life of native speakers of English.

4. Pedagogical implications and discussion

Findings in the present research indicate some pedagogical implications and raise more discussion.

- (1) New vocabulary should be presented with some of its most frequent collocates.

The findings of research questions 1, 2 and 4 indicate that only a few types of collocations are treated once or twice in target textbooks, although the collocations treated in the textbooks accord with those used frequently in *Bank of English*. This is contrary to the arguments of Bahns (1993) and Howarth (1998) that emphasize the importance of collocation teaching for learners. Moreover, Gitsaki and Taylor (1999) claim that teachers should supply the new lexical item together with its most frequent collocations in an EFL class, while they are being learnt.

In respect of these three claims, when introducing new vocabulary, teachers should provide it together with some useful lexical collocates and help learners build a database of collocations. This is thought to be fairly important for Japanese learners of English, because the total of 1400 words should be learned by tenth graders with an English textbook I, according to the government guidelines for teaching by the Ministry of Education, Culture, Sports, Science and Technology of Japan. It is said, however, that 7000 to 8000 words and more are necessary to have a conversation without any serious trouble. As one of the most important aims for tenth graders is to “foster a positive attitude toward communication,” teachers should conduct the effective construction including the introduction of new words and the frequently-combined collocates so that their students can develop enough vocabulary for communication.

- (2) Collocations should be treated several times in the textbooks

Considering the finding that the collocations were repeated only once or twice in the textbooks related to research questions 1 and 2, collocations should be treated more often in the textbooks to retain collocations in students’ memory. Nation (1990) introduces several linguists’ research on learners’ retention of words. Kachroo (1962) examined how many times certain words are repeatedly treated in a

textbook and how they are fixed in informants' memory. His finding shows that words repeated more than seven times were acquired by almost all the informants and, more than half of words repeated only once or twice were not memorized by them. Salling (1959) and Crothers and Suppes (1967) conducted almost the same research. Salling suggested that at least five-time repetition of words should be necessary to memorize them. Crothers and Suppes (1967) claim that six or seven repetition of words should be needed. Based on the former research, collocations should be treated much more often in the textbooks.

(3) Collocations should be taught explicitly.

Considering research question 3, some collocations are not treated explicitly in the footnotes and phrase lists and the treatment of some certain collocations is also different among the target textbooks. The textbooks should have consensus on which collocations should be learned for 10th graders, otherwise different students would learn different collocations. Therefore, first consensus on which collocations should be treated ought to be reached. Then, the collocations treated in textbooks should be explicitly written on them. This is claimed by Schmitt (2000) and Nation (1995). Schmitt claims that both explicit and incidental learning is necessary, especially certain important words make excellent targets for explicit attention, for example, the most frequent words in a language and technical vocabulary. Nation also argues that we should consider vocabulary teaching in terms of cost/benefits, with the value of learning such words well worth the time required to teach them explicitly; on the other hand, infrequent words in general English are probably best left to incidental learning. Based on argument of these two researchers, some important collocations which are used frequently should be taught explicitly.

5. Further research

The present research based on corpora collected from English textbooks for Japanese Upper secondary Schools was limited so that questions remain to be answered. There are two main questions which should be clarified in further research.

One of them is related to treatment of English II textbooks, which is advanced textbooks continuously used after finishing English I textbooks: Is more number of various collocations treated in them and how? The second question is how collocations are treated in English textbooks for nonspecific learners of English? Not only Japanese learners of English but also non native speakers of English in other

countries should have difficulty mastering collocations. Mackin (1978) claims that collocations are so numerous that it is difficult for non-native speakers of English to rule out any methodical teaching or acquisition of them and learners can acquire some degree of collocational competence in years of study, reading and observation of the language.

Reference:

- Bahns, J. 1993. Lexical collocations: A contrastive view. *ELT Journal*. 47/1: 56-63.
- Bahns, J. and Eldaw, M. 1993. Should we teach EFL students collocations? *System*. **21/1: 101-114.**
- Benson et al. 1986. *Lexicographic Description of English*. Amsterdam: John Benjamins.
- Biskup, D. 1992. L1 influence on learner's renderings of English collocations: A Polish/German empirical study. In Arnaud and Béjoint (eds.). *Vocabulary and Applied Linguistics*. Macmillan. 85-93.
- Caroli, M. T. 1998. *Relating collocations to foreign language learning*. Unpublished **MA thesis. University of Reading. Department of Linguistic Science.**
- Crothers, E. and Suppes, P. 1967. *Experiments in Second-Language Learning*, New York: Academic Press.**
- Ghadessy, M. 1989. The use of vocabulary and collocations in the writing of primary school students in Singapore. In Nation and Carter (eds.). *AILA Review*, 6: 110-117.
- Gitasaki, C. and Taylor, R. P. 1999. English Collocations and their Place in the EFL Classroom. www.jr.asu.ac.jp/~rtaylor/collocations.html. (July 23, 1999).
- Granger, S. 1998. Prefabricated patterns in advanced EFL writing: Collocations and Formulae. In Cowie (ed.) *Phraseology*. 145-160.
- Howarth, P. 1998. The phraseology of learners' academic writing. In Cowie (ed.). *Phraseology*. 161-186.
- Kachroo, J. N. 1962. 'Report on an investigation into the teaching of vocabulary in the first year of English', *Bulletin of the Central Institute of English*, 2, 67-72.
- Mackin, R. 1978. On collocations: Words shall be known by the company they keep. In Strevens (ed.). *In honour of A. S. Hornby*. 149-165.
- Nation, I. S. P. 1990. *Teaching and Learning Vocabulary*. Heinle & Heinle Publishers.

- Nation, I. S. P. and Hwang K. 1995. 'Where would general service vocabulary stop and special purposes vocabulary begin?', *System*, 23, 35-41.
- Palmer, H. E. 1933. *Second Interim Report on English Collocations*. Tokyo: Kaitakusha.
- Pawley and Syder (1983) 'Two puzzles for linguistic theory: nativelike selection and nativelike fluency', in J. Richards and R. W. Schmidt (eds.), *Language and Communication* (191-225), London: Longman
- Salling, A. 1959. What can frequency counts teach the language teacher? *Contact*, 3, 24-29.
- Schmitt, N. 2000. *Vocabulary in Language Teaching*. Cambridge: Cambridge University Press.
- Takizawa, N. 1999. Collocation: Internet linguistic information 16. *Language 4 [Gengo]*. 96-97.

English I Textbooks:

Creative English course I (Daiichi Gakushusha)

Milestone English course I (Keirinkan)

One World English course I (Kyoiku Syuppan)

Royal English I (Obunsha)

Sunshine English course I (Kairyudo)

Unicorn English course I (Bun-eido)