

Do Good EFL and CSL Learners Learn Words in Different Ways?

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Introduction

Foreign language teachers might be interested in the effectiveness of vocabulary learning strategies among different foreign language learners. Furthermore, they might want to know whether different second language learners adopt different language learning strategies. English and Chinese are truly distinct in their basic linguistic characters. There are many major differences between English and Chinese. These make foreign language learners face a serious challenge. Chinese does not have an alphabet and that is why CSL learners have huge difficulty in learning Chinese logographic system. On the contrary, Chinese learners may have a hard time reading English and spelling words correctly (Swan, 1997). Research has shown English as a foreign language (EFL) learners and Chinese as a second language (CSL) learners used different language learning strategies when learning vocabulary (Lin, Wu, & Chen, 2014). The current study aims to discover the effectiveness of language learning strategies used by EFL and CSL learners.

Literature Review

Why do language learners have trouble learning a foreign/second language? One of the reasons that the basic natures of languages are distinctly different. For example, the phonological system in English provides much more information on writing system than that in Chinese. English learners are able to spell the word correctly by listening to its pronunciation. However, Chinese learners would be probably unable to write the character down just by its sound. Chinese phonological system provides less sufficient information for learners to associate to semantic system. The orthographic system and phonological system of Chinese are not as closely related as the alphabetical system and phonological system of English. Chinese learners have to make a lot of efforts to acquire the orthographical system before they can associate and connect the orthographical, phonological, and semantic systems in Chinese (Tan, Spinks, Eden, Perfetti, & Siok, 2005).

Due to the drastic differences existing in language systems, second language learners might try to use some strategies to cope with language learning difficulties they encounter. Language learning strategies (LLS) can be defined as purposeful processes or means used by language learners to meliorate language learning outcomes (Chamot, 1987). Oxford (1990) grouped language learning strategies into direct and indirect strategies. Direct strategies included memory strategies, cognitive strategies, and compensation strategies, whereas, indirect strategies comprised metacognitive strategies, affective strategies and social strategies. The following review of literature sketched out the studies on language learning strategies used by EFL and CSL learners.

McBride-Chang and Kail (2002) investigated the influence factors of beginning English reading performance among kindergarten students in Hong Kong. Among these factors such as the syllable awareness, speeded naming, visual processing and speed of processing, they discovered that syllable awareness was the strongest predictor of beginning English reading. Fan (2003) found that Hong Kong EFL learners frequently guessed unknown words. The strategies they considered useful are not those they used more frequently. High proficient learners used. Some studies indicated that EFL learners prefer to use metacognitive and compensation strategies (Green, 1991; Rahimi, Riaz, & Saif, 2008); while Magogwe and Oliver (2007) stated that EFL learners in Botswana exhibited no preference for compensation strategies. In addition, students' learning experience also affected students' choice of learning strategies.

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Furthermore, students' learning style did not affect their strategy use except that students who have a global learning styles prefer to use compensation and affective strategies (Rahimi, Riazi, & Saif, 2008). Yeung and Chan (2013) discovered that second language phonological awareness and oral language skills are the most influential predictors in early EFL reading development and the result also confirmed findings of other researchers. (Keung & Ho, 2009; McBride-Chang & Kail, 2002). Furthermore, first language tone awareness of the young EFL Chinese learners was a significant cross-language transfer factor to the early English reading proficiency.

Wei (2015) asserted that EFL learners using key-word and word part mnemonic methods did not remember target words better than the self-strategy group. The results showed that the participants using the word part technique performed better in the translation tests than those using the keyword method and there were no significant differences both in the form and meaning recognition tests among the three groups. Starreveld, De Groot, Rossmark, and Van Hell (2014) asserted that the cognate effect existed because the response time was statistically different for L2 word production in picture naming and in the sentence context situations. Cognate words are the L2 words that share more grapheme similarities with L1 words. The difference of response time of L2 cognate and non-cognate words for the Dutch EFL learners was statistically significant, which implies the L2 vocabulary learning process was deeply influenced by their L1.

Lan (2013) found L2 learners learned more vocabulary and applied more vocabulary strategies when they used co-sharing-based vocabulary learning strategy system. EFL learners who used co-sharing strategy function in this vocabulary learning software applied more strategy categories than the contrast group who did not use the function. The top five strategies used by those who used co-sharing function were practice, contextualization, translation, note taking, and key words. On the other hand, the top five strategies used by EFL learners who did not use the co-sharing function were practice, contextualization, note taking, grouping, and imagery. The goal of Lan's study was to build up and assess a co-sharing vocabulary learning strategy system through modern technology for young L2 learners' vocabulary learning and vocabulary learning strategy improvement.

Hsu (2008) conducted a survey about EFL elementary students' learning preference and outcome about immediate and delayed recall, productive recall, and pronunciation ability. The participants, who learned English as a foreign language, were 243 Chinese-speaking 4th grade students. These students were divided into experimental group and control group. The experiment group learned different sets of English words using keyword method. The results showed that the experiment group performed better than the control group in immediate receptive/delayed recall and productive recall of the new words. Students with different proficiency level acquired new vocabulary significantly through keyword method. There was no significant difference in pronunciation ability of the new words between experiment and control groups.

Chu (2008) found that the instruction of memory strategy has positive effects on vocabulary learning of elementary students. The participants were 126 fourth grade students from four classes in southern Taiwan. Two classes were randomly selected to be the experiment group and the others the control group. The experimental group was given the memory strategy skill instruction in a semester while the control group was not given any memory strategy instruction. At the end of the semester all of the subjects were given the English vocabulary posttests and the language learning strategy questionnaire. The result of study showed that no matter the proficiency level of the subjects is high or low, they all improved in English vocabulary ability. Moreover, Chu also found that the most used methods to learn English vocabulary are reviewing and rote repetitions. The elementary students with higher proficiency level significantly used more rote repetition, placing new words into a context, rhyming, syllabification, basic Phonics and word formation than the students with lower proficiency. Chu asserted that memory learning strategy instruction has great effects on elementary students when learning to spell English vocabulary and memory learning strategy instruction boosts student's frequency of memory strategy use.

Durgunoglu (1997) and Koda (2005, 2008) suggested that metalinguistic awareness can be transferred from native language to another language in order to smooth the progress of learners' reading comprehension. This effect may vary according to the linguistic difference between the native language and target language. Zhang, Koda, and Sun (2014) concentrated on awareness of compound words in both English and Chinese and radical awareness in Chinese to tackle the effect of morphological awareness on target language reading comprehension and to address on the role of typological distance and transfer facilitation effect on reading proficiency for young Chinese EFL learners. Using hierarchical regression analysis, the results showed that the contribution of Chinese compound awareness was larger than the contribution of Chinese reading comprehension to English reading comprehension.

The contribution of Chinese radical awareness to English reading comprehension was insignificant. On the contrary, English reading comprehension and English compound awareness had no significant contribution to Chinese reading comprehension. Only Chinese compound awareness played an important role in Chinese reading comprehension. In different models of word segmentation and lexical recognition proposed, researchers suggested that there is an interface between bottom-up processing of character recognition and top-down processing of word interpretation during segmenting words in a sentence to identify lexical representations. (Li, Rayner & Cave, 2009). Based on the previous findings, Bai, Liang, Blythe, Zang, Yan and Liversedge (2013) investigated insertions of inter-word spacing and found that had a significant influence on reading comprehension for both adult and young CFL learners. The spacing could assist their identification of new lexical terms as well as their linkages with the other characters in the sentences.

Yum, Midgley, Holcomb and Grainger (2014) investigated native English speakers learning Chinese through laboratory controlled condition by using the brain electrical activity to detect learners' cognitive activities. They found that fast learners might learn Chinese words by identifying and integrating parts of representations of the characters. On the other hand, the slow learners might learn each word as a whole. They also suggested that the slow learners should be more affected by the total number of strokes in a character and by word length (single vs. two-character words). They asserted that, for both fast and slow learners, words with many strokes were more difficult to learn than words with few strokes. Furthermore, the more complex words were harder to learn for slow learners as learning progressed, but for the fast learners the learning difficulties would decrease.

Researchers examined language learning from the hypotheses of assimilation and accommodation to understand the brain's response to different writing systems. Assimilation means that learners use their existed reading procedures in acquiring a new language writing system, while accommodation indicates that learners use new schemes for reading the new writing system (Perfetti & Liu, 2005; Piaget, 1983). Another study tested the hypotheses of assimilation and accommodation by examining brain activation among native Chinese speakers, native English speakers, and Chinese learners of English when they performed rhyming judgment tests in either English or Chinese. The hypothesis was tested by comparing native Chinese speakers' brain responses when they were performing the rhyming task in English (CE group) and performing the rhyming task in Chinese (CC group), while accommodation was examined by comparing CE group to native English speakers completing the rhyming task in English (EE group). The result showed the CE group was more similar to the CC group than to the EE group in their brain response comparisons which indicates that the CE group applied the assimilation process more often than the accommodation process (Cao, Tao, Liu, Perfetti, & Booth, 2013).

Over the years, researchers have suggested that reading and listening skills were closely related among language learners. However, Tan, Spinks, Eden, Perfetti and Siok (2005) argued that learning Chinese characters entailed connecting semantic system with phonological and orthographical systems. They reported that phonological awareness did not significantly predict reading performance for Chinese native learners while their writing ability and rapid automatized naming results significantly predicted reading performance. Tan et al. (2005) suggested that writing skills are more related to reading ability than phonological awareness in Chinese character learning.

Chinese characters have independent orthographic and phonological systems. Research showed that for high frequency Chinese characters, the orthographical system was first triggered and then the semantic system and that the phonological system needs the greatest time to process. On the other hand, for low frequency Chinese characters, orthographical system was first set off; then semantic and phonological systems are processed concurrently (Chen & Peng, 2001; Chen, Wang, & Peng, 2003).

Hao, Hong, Jong, Hwang, Su and Yang (2010) investigated the effects of an online Chinese character learning game as well as CFL learner's learning strategies and their attitudes toward this game. Through this online game, non-native Chinese learners could use their gestures to write Chinese characters in the correct stroke orders. All nine subjects responded that this interactive online game is a good supplementary tool for learning strokes. Among these participants, learners used many strategies expressed very few affirmative attitudes toward this game. The most frequently used strategies by these learners were compensation strategies which helped them overcome their lacking of target language knowledge.

Among Chinese, Spanish, and English, Spanish learners were able to acquire Spanish vocabulary much easier than English learners learning English vocabulary because of the closer grapheme-and-phoneme correspondence (GPC) in Spanish. Chinese possessed the least GPC, Chinese learners had to spend longer time associating the Chinese orthographical system with the phonological and semantic systems. And lower graders of Chinese native learners were much more influenced by orthographical neighborhood size effect than higher graders. It is also due to the lower correspondence of logography and phonology in Chinese (Zhao, Li, & Bi, 2012).

The aforementioned studies tried to address the issue of language learning strategies from different perspectives. However, each study seemed to focus on learning of one language only. No research compared the effectiveness of using learning strategies by Chinese and English second/ foreign language learners in one study. Therefore, the present study intends to examine the effectiveness of language learning strategies used by EFL and CSL learners.

Methods and Procedure

The subjects of the study are 257 language learners in Taiwan. Among them, 106 language learners are male, and 151 language learners are female. The Vocabulary Learning Strategy Inventory (V.L.S.I.) (Lin, Wu, and Chen, 2014) was used as the experimental instrument. This inventory was revised from Strategy Inventory for Language Learning (SILL)(Oxford, 1990). It consists of six subcategories, memory, cognitive, compensation, meta-cognitive, affective, and social strategies. Cronbach's α value (= .919) was computed to measure the internal consistency reliability. Exploratory factor analysis with a principal components extraction was used in original Lin's (2010) instrument construction. The memory strategy consists of item one, two, and three. The factor loadings are .668, .686, and .645.

The cognitive strategy is composed of item four, five, and six, and the factor loadings are .693, .687, and .708. The compensation strategy includes item seven, eight, and nine; the factor loadings are .663, .542, and .569. The meta-cognitive strategy contains item 10, 11, and 12; the factor loadings are .761, .741, and .697. The affective strategy embraces item 13, 14, and 15 with the factor loadings of .567, .888, and .674. The social strategy comprises item 16, 17, and 18; the factor loadings are .721, .502, and .582. The subjects are asked to answer the V. L. S. I. first; then 20 words/ characters are presented at the end of the questionnaire to test the subjects' vocabulary knowledge. The subjects are supposed to write the translation of the 20 target words/ characters. Every correct translation scores one point. Finally, SPSS are used to analyze the effectiveness of the subjects' strategy use in terms of the vocabulary test scores.

The strategies are listed as follows:

1. I will visualize the image of a word when memorizing it.
2. I will use flash cards to learn vocabulary.
3. I learn vocabulary in phrases or sentences.
4. I pay attention to the root, prefix, or suffix of a word when learning it.
5. I am cautious about usage of a new word.
6. I underline parts of a word/ a character that are difficult to spell or write.
7. I guess the meaning of an unknown word from its context.
8. I look up the meaning of an unknown word in a dictionary.
9. I guess the meaning of an unknown word from the words I know.
10. I will do a vocabulary self test to check up on my learning.
11. I will analyze my error to avoid repeating it.
12. I will try to resolve difficulties when learning new words.
13. I try to relax myself when frustrated by my inability to learn vocabulary successfully.
14. I will tell my friends when encountering vocabulary learning obstacles.
15. I reward myself when getting good grades for vocabulary tests.
16. I consult others on vocabulary learning.
17. I study with friends for vocabulary tests.
18. I apply new words I learn to daily discourses.

Results

Among the 257 subjects, 106 (41.2%) subjects are male, and 151 (58.8%) are female. Table one states the demographic information of the subjects. Twelve (4.7%) subjects are 0-12 of age. Thirty seven (17.1%) subjects are 13-18 of age. 126 (58.1%) are at the age of 19-30. Forty-four (20.3%) subjects are over 30 years old. 103 (40%) subjects are EFL learners, and the other 154 (60%) subjects are CSL learners.

Table 1: Demographic Information of Subjects

		Number of Subjects	%
Age	0-12 years old	12	4.7
	13-18 years old	37	17.1
	19-30 years old	126	58.1
	Over 30 years old	44	20.3
Learner	EFL	103	40.0
	CSL	154	60.0

Table 2 illuminates the different strategies used by different proficiency language level students. The subjects are divided into six groups. The first group subjects are CSL learners who get the less than 6 points in the vocabulary test. The second group subjects are CSL learners who get 7-14 points in the vocabulary test. The third group subjects are CSL learners who get 15-20 points in the vocabulary test. The fourth group subjects are EFL learners who get the less than 6 points in the vocabulary test. The second group subjects are EFL learners who get 7-14 points in the vocabulary test. The third group subjects are EFL learners who get 15-20 points in the vocabulary test. To test whether the discrepancies among the means of the six groups are statistically significant, one-way analysis of variance (ANOVA) is conducted. The null hypothesis, "the means of every strategy use by different groups are equal," is tested individually. Table 2 indicated that results of the ANOVA reject the null hypothesis of strategy 2, 5, 6, 7, 8, and 12. The results are $F=3.1698^*$, $p<.05$; $F=2.766^*$, $p<.05$; $F=3.906^*$, $p<.05$; $F=32.966$, $p<.05$; $F=4.693^*$, $p<.05$; $F=3.202^*$, $p<.05$, respectively. The results of the ANOVA accept the null hypothesis of strategy 1, 3, 4, 9, 10, 11, 13, 14, 15, 16, 17, 18. The results are $F=1.034$, $p>.05$; $F=2.157$, $p>.05$; $F=1.240$, $p>.05$; $F=1.881$, $p>.05$; $F=.968$, $p>.05$; $F=.439$, $p>.05$; $F=.231$, $p>.05$; $F=.839$, $p>.05$; $F=1.811$, $p>.05$; $F=.777$, $p>.05$; $F=2.103$, $p>.05$; $F=.775$, $p>.05$, respectively. This means only strategy 2, 5, 6, 7, 8, and 12 are used statistically different among the six groups of students.

Table 2 ANOVA on the strategy use by different group students.

		Sum of Squares	df	Mean Square	F	Sig.
st1	Between groups	11.678	5	2.336	1.034	.398
	Within groups	566.955	251	2.259		
	Total	578.633	256			
st2	Between groups	25.783	5	5.157	3.169*	.009
	Within groups	408.437	251	1.627		
	Total	434.220	256			
st3	Between groups	28.435	5	5.687	2.157	.059
	Within groups	661.636	251	2.636		
	Total	690.070	256			
st4	Between groups	14.661	5	2.932	1.240	.291
	Within groups	593.580	251	2.365		
	Total	608.241	256			
st5	Between groups	31.203	5	6.241	2.766*	.019
	Within groups	566.268	251	2.256		
	Total	597.471	256			
st6	Between groups	58.696	5	11.739	3.906*	.002
	Within groups	754.354	251	3.005		
	Total	813.051	256			
st7	Between groups	30.906	5	6.181	2.966*	.013
	Within groups	523.087	251	2.084		
	Total	553.992	256			
st8	Between groups	52.374	5	10.475	4.693*	.000
	Within groups	560.186	251	2.232		
	Total	612.560	256			
st9	Between groups	19.322	5	3.864	1.881	.098
	Within groups	515.721	251	2.055		
	Total	535.043	256			
st10	Between groups	13.087	5	2.617	.968	.438
	Within groups	679.014	251	2.705		
	Total	692.101	256			
st11	Between groups	5.895	5	1.179	.439	.821
	Within groups	674.720	251	2.688		
	Total	680.615	256			
st12	Between groups	31.506	5	6.301	3.202*	.008
	Within groups	493.926	251	1.968		
	Total	525.432	256			
st13	Between groups	2.597	5	.519	.231	.949
	Within groups	565.396	251	2.253		
	Total	567.992	256			
st14	Between groups	10.066	5	2.013	.839	.523
	Within groups	602.626	251	2.401		
	Total	612.693	256			
st15	Between groups	19.089	5	3.818	1.811	.111
	Within groups	529.292	251	2.109		
	Total	548.381	256			
st16	Between groups	10.758	5	2.152	.777	.567
	Within groups	695.172	251	2.770		
	Total	705.930	256			
st17	Between groups	29.207	5	5.841	2.103	.066
	Within groups	697.314	251	2.778		
	Total	726.521	256			
st18	Between groups	14.016	5	2.803	.715	.612
	Within groups	983.532	251	3.918		
	Total	997.549	256			

Note. * $p < .05$.

Table 3 exhibits the Dunnett T3 post hoc tests of the differences of the means of strategy 2, 5, 6, 7, 8, 12 use among the six groups of subjects. Concerning the use of strategy 2, and 7 no significant difference is found between any two groups. Regarding the use of strategy 5, group six students use it more often than group 4 students. That means comparing to low test score EFL learners, high test score EFL learners often pay attention to the usage of a new word. As for the use of strategy six, group six students use it more often than group 2 students.

This shows that high test score EFL learners tend to underline a difficult word more often than middle test score CSL learners. With regard to the use of strategy 8, group six subjects use it more frequently than group 2, 4, and 5 learners. In addition, group 3 learners use it more frequently than group 4 learners. This signifies that both EFL and CSL high test score learners prefer to look up unknown words in a dictionary. As for the use of strategy 12, group 6 learners use it more than group 4 learners. This conveys the idea that high test score EFL learners try harder to solve problems concerning vocabulary learning than low test score EFL learners.

Table 3. The Dunnett T3 Post Hoc Tests of The Differences of the Means of Strategy 2, 5, 6, 7, 8, and 12 use

ategy	Str	(I) group	(J) group	Mean difference(I-J)	Std. error	Sig.	95% confidence interval	
							Lower bound	Upper bound
st2	1.00	2.00	3.00	.120	.281	1.000	-.74	.98
			4.00	-.125	.294	1.000	-1.02	.77
			5.00	.792	.441	.675	-.60	2.18
			6.00	.001	.330	1.000	-1.01	1.01
			3.00	-.462	.296	.839	-1.36	.44
			4.00	-1.20	.281	1.000	-.98	.74
	2.00	3.00	4.00	-.245	.220	.989	-.90	.41
			5.00	.672	.395	.741	-.61	1.95
			6.00	-.119	.266	1.000	-.94	.71
			1.00	-.582	.221	.135	-1.24	.08
			2.00	.125	.294	1.000	-.77	1.02
			4.00	.245	.220	.989	-.41	.90
	3.00	4.00	5.00	.917	.405	.352	-.38	2.22
			6.00	.126	.280	1.000	-.74	.99
			1.00	-.337	.239	.920	-1.05	.37
			2.00	-.792	.441	.675	-2.18	.60
			3.00	-.672	.395	.741	-1.95	.61
			5.00	-.917	.405	.352	-2.22	.38
	4.00	5.00	6.00	-.791	.432	.648	-2.16	.58
			1.00	-1.254	.406	.066	-2.56	.05
			2.00	-.001	.330	1.000	-1.01	1.01
			3.00	.119	.266	1.000	-.71	.94
			4.00	-.126	.280	1.000	-.99	.74
			6.00	.791	.432	.648	-.58	2.16
5.00	6.00	1.00	-.463	.281	.786	-1.33	.40	
		2.00	.462	.296	.839	-.44	1.36	
		3.00	.582	.221	.135	-.08	1.24	
		4.00	.337	.239	.920	-.37	1.05	
		5.00	1.254	.406	.066	-.05	2.56	
		6.00	.463	.281	.786	-.40	1.33	
st5	1.00	2.00	3.00	.192	.317	1.000	-.78	1.16
			4.00	.172	.327	1.000	-.82	1.17
			5.00	1.389	.466	.075	-.08	2.85
			6.00	.182	.372	1.000	-.96	1.33
			3.00	-.071	.327	1.000	-1.07	.93
			4.00	-.192	.317	1.000	-1.16	.78
	2.00	3.00	4.00	-.020	.269	1.000	-.82	.78
			5.00	1.197	.427	.125	-.17	2.57
			6.00	-.010	.323	1.000	-1.01	.99
			1.00	-.264	.270	.997	-1.07	.54
			2.00	-.172	.327	1.000	-1.17	.82
			4.00	.020	.269	1.000	-.78	.82
3.00	4.00	5.00	1.217	.435	.122	-.17	2.60	

		5.00	.010	.332	1.000	-1.01	1.03
		6.00	-.244	.281	.999	-1.08	.59
	4.00	1.00	-1.389	.466	.075	-2.85	.08
		2.00	-1.197	.427	.125	-2.57	.17
		3.00	-1.217	.435	.122	-2.60	.17
		5.00	-1.207	.470	.190	-2.69	.27
		6.00	-1.460*	.435	.033	-2.85	-.07
	5.00	1.00	-.182	.372	1.000	-1.33	.96
		2.00	.010	.323	1.000	-.99	1.01
		3.00	-.010	.332	1.000	-1.03	1.01
		4.00	1.207	.470	.190	-.27	2.69
		6.00	-.253	.333	1.000	-1.28	.77
	6.00	1.00	.071	.327	1.000	-.93	1.07
		2.00	.264	.270	.997	-.54	1.07
		3.00	.244	.281	.999	-.59	1.08
		4.00	1.460*	.435	.033	.07	2.85
		5.00	.253	.333	1.000	-.77	1.28
st6	1.00	2.00	.154	.402	1.000	-1.07	1.38
		3.00	-.599	.390	.855	-1.79	.60
		4.00	.226	.585	1.000	-1.61	2.07
		5.00	-.289	.433	1.000	-1.62	1.04
		6.00	-1.028	.387	.142	-2.21	.16
	2.00	1.00	-.154	.402	1.000	-1.38	1.07
		3.00	-.753	.317	.246	-1.70	.19
		4.00	.072	.539	1.000	-1.65	1.80
		5.00	-.443	.368	.974	-1.57	.68
		6.00	-1.182*	.313	.004	-2.12	-.25
	3.00	1.00	.599	.390	.855	-.60	1.79
		2.00	.753	.317	.246	-.19	1.70
		4.00	.825	.530	.833	-.88	2.53
		5.00	.310	.355	.999	-.78	1.40
		6.00	-.429	.298	.909	-1.32	.46
	4.00	1.00	-.226	.585	1.000	-2.07	1.61
		2.00	-.072	.539	1.000	-1.80	1.65
		3.00	-.825	.530	.833	-2.53	.88
		5.00	-.515	.562	.997	-2.30	1.27
		6.00	-1.254	.528	.292	-2.96	.45
	5.00	1.00	.289	.433	1.000	-1.04	1.62
		2.00	.443	.368	.974	-.68	1.57
		3.00	-.310	.355	.999	-1.40	.78
		4.00	.515	.562	.997	-1.27	2.30
		6.00	-.739	.352	.443	-1.82	.35
	6.00	1.00	1.028	.387	.142	-.16	2.21
		2.00	1.182*	.313	.004	.25	2.12
		3.00	.429	.298	.909	-.46	1.32
		4.00	1.254	.528	.292	-.45	2.96
		5.00	.739	.352	.443	-.35	1.82
st7	1.00	2.00	.314	.317	.996	-.65	1.28
		3.00	-.228	.305	1.000	-1.16	.70
		4.00	.933	.425	.384	-.40	2.26
		5.00	.321	.332	.997	-.70	1.34
		6.00	-.258	.322	1.000	-1.24	.72
	2.00	1.00	-.314	.317	.996	-1.28	.65
		3.00	-.541	.257	.427	-1.31	.23
		4.00	.619	.392	.823	-.63	1.86
		5.00	.008	.289	1.000	-.87	.89
		6.00	-.572	.278	.462	-1.40	.26
	3.00	1.00	.228	.305	1.000	-.70	1.16
		2.00	.541	.257	.427	-.23	1.31

		4.00	1.160	.382	.073	-.06	2.38
		5.00	.549	.275	.520	-.30	1.39
		6.00	-.030	.263	1.000	-.82	.76
	4.00	1.00	-.933	.425	.384	-2.26	.40
		2.00	-.619	.392	.823	-1.86	.63
		3.00	-1.160	.382	.073	-2.38	.06
		5.00	-.611	.404	.861	-1.89	.67
		6.00	-1.190	.396	.073	-2.44	.06
	5.00	1.00	-.321	.332	.997	-1.34	.70
		2.00	-.008	.289	1.000	-.89	.87
		3.00	-.549	.275	.520	-1.39	.30
		4.00	.611	.404	.861	-.67	1.89
		6.00	-.579	.294	.539	-1.48	.32
	6.00	1.00	.258	.322	1.000	-.72	1.24
		2.00	.572	.278	.462	-.26	1.40
		3.00	.030	.263	1.000	-.76	.82
		4.00	1.190	.396	.073	-.06	2.44
		5.00	.579	.294	.539	-.32	1.48
st8	1.00	2.00	.274	.366	1.000	-.86	1.40
		3.00	-.456	.379	.975	-1.62	.71
		4.00	.810	.458	.698	-.61	2.23
		5.00	.325	.397	.999	-.90	1.54
		6.00	-.611	.378	.803	-1.77	.55
	2.00	1.00	-.274	.366	1.000	-1.40	.86
		3.00	-.729	.265	.097	-1.52	.06
		4.00	.536	.369	.889	-.64	1.71
		5.00	.051	.289	1.000	-.84	.94
		6.00	-.885*	.263	.015	-1.67	-.10
	3.00	1.00	.456	.379	.975	-.71	1.62
		2.00	.729	.265	.097	-.06	1.52
		4.00	1.265*	.383	.034	.06	2.47
		5.00	.780	.306	.180	-.16	1.72
		6.00	-.156	.281	1.000	-1.00	.68
	4.00	1.00	-.810	.458	.698	-2.23	.61
		2.00	-.536	.369	.889	-1.71	.64
		3.00	-1.265*	.383	.034	-2.47	-.06
		5.00	-.485	.400	.970	-1.74	.77
		6.00	-1.421*	.381	.011	-2.62	-.22
	5.00	1.00	-.325	.397	.999	-1.54	.90
		2.00	-.051	.289	1.000	-.94	.84
		3.00	-.780	.306	.180	-1.72	.16
		4.00	.485	.400	.970	-.77	1.74
		6.00	-.936*	.304	.047	-1.87	-.01
	6.00	1.00	.611	.378	.803	-.55	1.77
		2.00	.885*	.263	.015	.10	1.67
		3.00	.156	.281	1.000	-.68	1.00
		4.00	1.421*	.381	.011	.22	2.62
		5.00	.936*	.304	.047	.01	1.87
	1.00	2.00	-.268	.338	1.000	-1.32	.78
		3.00	-.412	.371	.988	-1.55	.72
		4.00	.512	.422	.971	-.79	1.81
		5.00	.315	.409	1.000	-.94	1.57
		6.00	-.663	.347	.588	-1.73	.41
	2.00	1.00	.268	.338	1.000	-.78	1.32
		3.00	-.144	.258	1.000	-.92	.63
		4.00	.779	.327	.281	-.26	1.82
2	st1						

	5.00	.583	.311	.616	-.39	1.56
	6.00	-.395	.222	.691	-1.06	.27
3.00	1.00	.412	.371	.988	-.72	1.55
	2.00	.144	.258	1.000	-.63	.92
	4.00	.923	.361	.186	-.20	2.05
	5.00	.727	.346	.443	-.34	1.79
	6.00	-.251	.270	.998	-1.06	.55
4.00	1.00	-.512	.422	.971	-1.81	.79
	2.00	-.779	.327	.281	-1.82	.26
	3.00	-.923	.361	.186	-2.05	.20
	5.00	-.197	.400	1.000	-1.44	1.05
	6.00	-1.175*	.336	.022	-2.24	-.11
5.00	1.00	-.315	.409	1.000	-1.57	.94
	2.00	-.583	.311	.616	-1.56	.39
	3.00	-.727	.346	.443	-1.79	.34
	4.00	.197	.400	1.000	-1.05	1.44
	6.00	-.978	.320	.058	-1.97	.02
6.00	1.00	.663	.347	.588	-.41	1.73
	2.00	.395	.222	.691	-.27	1.06
	3.00	.251	.270	.998	-.55	1.06
	4.00	1.175*	.336	.022	.11	2.24
	5.00	.978	.320	.058	-.02	1.97

*. The mean difference is significant at the .05 level.

Conclusion

The current study aims to find out whether successful EFL and CSL learners use similar strategy to learn words in the target languages. EFL and CSL learners are divided into three groups, high test score groups, middle test score groups, and low test score groups, respectively according to their vocabulary / character test scores. The results show that English high test score students incline to pay attention to the usage of a new word, underline difficult word, look up unknown words in a dictionary, and resolve vocabulary learning problems more recurrently than EFL or CSL lower test score learner. It seems that there is not any statistically significant difference between the strategy use by high test score EFL learners and high test score CSL learners. This might draw the conclusion that despite the linguistic divergent features between Chinese and English, high test score EFL and CSL learners opt for similar strategies to learn vocabulary/ characters.

The limitation of the study is that the vocabulary/ character tests are composed of 20 questions only. It is hard to assess learners' vocabulary levels by merely 20 questions. Future studies might encompass more test questions to get more comprehensive results.

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