A Study on the Influence of English Dictionary on Incidental Acquisition of Second Language Words Based on Attention Theory and Intelligible Input Theory

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Abstract: In the absence of target language, English dictionaries serve as reference books, reference books and learning resources. It is not only conducive to increasing the amount of target language input for students, so as to achieve understandable input for students in the process of language learning, but also the use of English dictionaries in the process of language learning is the embodiment of second language vocabulary learning strategies and independent learning ability. Incidental vocabulary acquisition emphasizes the unintentional nature of vocabulary learning, and can also refer to the process in which the subject learns the corresponding vocabulary knowledge through input reinforcement without knowing the vocabulary test. The use of English learning dictionaries is not only conducive to the incidental acquisition of vocabulary knowledge, but also to the cultivation of learners' autonomous learning ability and vocabulary learning strategies. The use of English dictionaries is one of the vocabulary learning strategies. Through in-depth research on the use of English dictionaries, the learning strategies of second language vocabulary can be continuously improved and more effective vocabulary learning methods can be developed. At the same time, the use of English dictionaries involves related theories such as incidental acquisition theory, comprehensible input, input volume hypothesis, attention theory and processing level theory. This paper can further confirm the guidance of these theories in vocabulary teaching, and also find out the shortcomings of the theories so as to constantly supplement and improve the existing research theories.
Keywords: English Dictionary; Second Language Vocabulary; Vocabulary Incidental Acquisition

1. INTRODUCTION

Under the background of China's new curriculum reform, education takes the development of students' core quality as the main goal to achieve the improvement of students' learning ability. At the same time,

the English Curriculum Standards for Senior High Schools (2017 edition) (later replaced by the New Curriculum Standards) pointed out that developing students' ability to use learning strategies is the main way to improve students' learning ability, an important content of teaching, and an important part of the core quality of English subjects.

In addition, according to the English Teaching Syllabus for Full-time Senior High Schools (Experimental Revision) revised by the Ministry of Education of China in 2000, the overall goal of senior high school English curriculum is to "enable students to further clarify the purpose of English learning on the basis of English learning at the stage of compulsory education, develop the ability of independent learning and cooperative learning, and form effective English learning strategies." Cultivate students' ability to use language comprehensively". It can be seen that, on the one hand, the cultivation of students' learning strategies and the improvement of their learning ability are the main teaching objectives at present.

On the other hand, the New Curriculum Standard points out that the effective use of learning strategies is helpful to improve the effect and efficiency of students' English learning, and help students develop the habit and ability of independent learning. The use of learning strategies is not only transferable, but also conducive to the development of students' lifelong learning ability.

At the same time, the content requirements of the New Curriculum Standard mentioned that in the compulsory content of phonetic knowledge, it is required to learn the pronunciation of multi-syllable words by using phonetic alphabet knowledge when consulting the dictionary. In the vocabulary knowledge compulsory content, it is required to "understand the meaning and function of the key words in the text, as well as the intention and attitude conveyed by dictionaries and other resources". In the compulsory content of learning strategy, it is required to select appropriate reference books, dictionaries and other tools to assist English learning. In the implementation recommendations, it is also emphasized to "guide students to make reasonable use of electronic dictionaries and other tools to carry out learning". Therefore, it is one of the necessary strategies for students to look up the pronunciation, spelling, meaning and pragmatics of vocabulary with the help of English dictionary in the process of second language vocabulary learning.

2. OVERVIEW OF RELEVANT THEORIES

2.1 Intelligibility Input Theory

The comprehensible input hypothesis theory is one of the five hypotheses of second language acquisition theory, who believes that input is the basis of language learning, and comprehensible input is a necessary condition to produce language acquisition, because "language occurs naturally after sufficient comprehensible input is obtained, rather than being directly taught." " (Krashen, 1981). If the learner receives sufficient (qualitative and quantitative) comprehensible input, "i+1" is automatically generated (" i "refers to the current language ability," 1 "refers to the language input slightly higher than" i "). "1" should be intelligible (meaning the understanding of input information, not the understanding of language form). Therefore, when learners use external forces to learn tasks that are slightly more difficult than their current level, it is more conducive to students' acquisition, because it is in their recent development zone, that is, the input of i+1. Then, after looking up the target words with the help of the dictionary, students will have a corresponding understanding of the relevant target word knowledge, thus contributing to the comprehensible input to achieve the incidental acquisition of vocabulary.

2.2 The Theory of Attention

Attention theory argues that attention is a necessary and sufficient condition for converting input into output (Bundesen, 1990). In his research, he compares consciousness with awareness, intention and knowledge, and interprets the importance of attention in the process of language learning from different levels. In consciousness and awareness, he compares the difference between conscious perception and unconscious perception, attention and perception, and the difference in understanding between the two from three levels. Later, Bundesen further verified in the influence of perception on vocabulary (Bundesen, 1990) acquisition that attention to relevant knowledge of target words (morphology, pronunciation, parts of speech, collocation, etc.) is the direct cause of affecting vocabulary acquisition, that is to say, attention is the beginning of cognitive processing and a necessary condition for acquiring relevant target words. Therefore, in the process of using the dictionary to query the target words, the relevant knowledge of the target words will attract the attention of learners to different degrees, thus launching the cognitive processing of vocabulary acquisition. "Retention of new

vocabulary knowledge depends on the quantity and quality of individual attention to words" (Carroll, 1999; Kuppens, 2010).

3. RESEARCH DESIGN

3.1 Research Objects

First of all, 232 students from four parallel classes in grade one of a high school were given questionnaires, 222 of which were valid. Because high school students are forbidden to carry mobile phones, this paper mainly investigates the use of paper dictionaries in high school students. Then, an experimental study was conducted on students in two of the four classes at random. For the situation of the two classes (see Table 1), the score samples came from the entrance test of students in senior one, and the data showed that the scores of the two classes were not significant. Therefore, the target vocabulary selected by the preparatory research on students in one class is of great reference value. There were 101 subjects in the two classes. The average age is 15 years old, including 28 boys and 23 girls in class A; Class B has 29 boys and 21 girls. Class A was randomly selected as the pre-experimental class and Class B as the formal experimental class. In the formal experiment, the students of class B were randomly divided into three groups according to their seats: Group 1 was composed of 15 subjects, group 2 was composed of 16 subjects, and group 3 was composed of 19 subjects.

Table 1: Entrance Examination Results of the First Year of High School

Class and Grade	Number of People	Average Score of Admission	Standard Deviation	Significance
Class A	51	69.7	13.0	0.987
Class B	50	73.7	12.3	

3.2 Research Process

First of all, 232 paper questionnaires were distributed to four parallel classes in the first grade of a high school, and the students filled out the questionnaires anonymously according to the actual situation in the English evening self-study. After eliminating the incomplete questionnaires, a total of 222 valid questionnaires were recovered. Secondly, the influence of information utilization on vocabulary acquisition is explored through experimental research, which is mainly divided into two main links: preparatory experiment and formal experiment. The preparatory experiment is mainly to select effective target words and test the difficulty

and effectiveness of the target word test. The formal experiment mainly includes four main links: pre-test of target words, reading text and checking dictionary information, and real-time and delayed test of target word knowledge.

3.2.1 Preparatory Experiment to Screen Target Words

First of all, the independent sample T test is carried out on the admission scores of the two classes, and the result shows that the admission scores of class A and Class B are not significantly different. Secondly, the students of Class A were asked to read a 262-word exposit and mark the new words at the same time, which took 20 minutes. After that, the new words marked by the students were statistically sorted and the proportion of new words was ranked from high to low, and the first 20 words were selected as the target words:

(nourish/cemetery/fancy/hood/pirate/inhabitant/rotted/spoiled/star ve/beg/acquaint/skeleton/disguise/thrill/wicked/curse/Embryriddleaer onautical/perform/creature/publication), target has 10 nouns, there are four adjectives, there are six verb, and the target vocabulary in reading the text are basic appears only once, thus eliminate the present frequency to vocabulary acquisition at the same time the influence of context of situation, this abundance is very low, The meaning of almost all target words can not be guessed by the context, which excludes the interference of knowing the meaning by the context. At the same time, in order to test the effectiveness of the experiment, the students of class A also carried out the same task steps as the formal experiment, that is, the subjects of class A also had to check the dictionary information and participate in the target vocabulary test, but the students of this class did not participate in the formal experiment. Through the pre-experiment of class A, the difficult task of recalling the morphology of target words and making sentences was changed into the task of recognizing the morphology of target words and writing Chinese interpretation. In addition, in the identification and inspection of collocation information, it is required to select all the correct results, otherwise there will be no results, which not only reduces the difficulty of vocabulary test, but also improves the effectiveness of vocabulary test.

3.2.2 Vocabulary Pre-Test for Experimental Class

Vocabulary pre-test was conducted for students in class B. The vocabulary knowledge test standard was based on the five-level vocabulary

scale Saito, Kazuya which included both vocabulary recognition knowledge and recall knowledge (Saito, 2017), so as to test the depth of subjects' existing knowledge of target words. The results showed that (see Table 2), almost all the subjects' target words were concentrated between 1-2 points, so it can be seen that these words were unknown to them, so this paper will be more effective.

Table 2: Pre-Test of Target Word Knowledge

	Mean Value	**Number of Cases**	**Standard Deviation**
1.Nourish	1.16	49	0.514
2.Cemeteries	1.35	49	0.481
3.Rotted	1.37	49	0.487
4.Spoiled	1.39	49	0.492
5.Starve	1.51	49	0.617
6.Disguise	1.29	49	0.456
7.Inhabitant	1.22	49	0.422
8.Acquaint	1.22	49	0.422
9.Skeleton	1.12	49	0.331
10.Fancy	1.51	49	0.617
11.Pirate	1.39	49	0.492
12.Thrill	1.31	49	0.466
13.Riddle	1.65	49	0.522
14.Hood	1.69	49	0.652
15. Wicked	1.39	49	0.492
16.Beg	1.65	49	0.663
17.Perform	2.22	49	0.798
18.Curse	1.65	49	0.631
19.Publication	1.53	49	0.710
20.Creature	1.57	49	0.500

3.3 Read Text and Dictionary Information

The students of the experimental class first read the articles with highlighted target words, and then looked at the target word information sent by the teacher. Except for group 3, which needed to make corresponding notes on the information of the target words, the other two groups were to consult the corresponding word information normally, and each of the three groups had 40 minutes to complete the corresponding task.

3.4 Real-Time and Delayed Testing of Target Words

After completing the relevant tasks, the subjects were subjected to

instant post-test, which included: recall and recognition of the Chinese interpretation of the target word, recognition of knowledge information such as target word collocation, morphology and synonyms; meanwhile, delayed post-test was conducted one week after the instant test. The contents of the instant test and delayed test remained unchanged except for the change of question number sequence. After the delayed post-test, 5 subjects in each group were randomly selected for a reflection interview on the task completion process to obtain their thoughts on the completion of the task as a useful supplement to the experimental data. At the same time, marking the significant factors conducive to vocabulary learning helps to identify the subjects' thinking patterns.

3.5 Data Analysis

The average and percentage of 25 questions were obtained from 222 questionnaires by Excel, and the scores of each of the five sections were compared by pie chart and bar chart, so as to understand the current situation of the use of paper dictionaries by high school students. Secondly, Excel was used to separately count the scores and total scores of each word knowledge in the paper vocabulary test filled in by the three groups of subjects, and then Excel was used to summarize the scores of the three groups under the immediate and delayed four types of vocabulary knowledge, as well as the changes of the total scores and four types of results under the immediate and delayed four types of vocabulary knowledge.

Then, the single factor ANOVA multiple comparison test was conducted by SPSS (26.0) to compare the difference and significance of the immediate and delayed post-test results of information utilization on Chinese and English translation, target word meaning recognition, collocation recognition, and synonym and morphology recognition, respectively. At the same time, the influence and significance of information usage on the immediate and delayed performance of target vocabulary were tested by multivariate analysis.

4. RESEARCH RESULTS

By controlling the use of target vocabulary knowledge by the three groups of students in the experimental class, the amount of input, the breadth of attention and the depth of cognitive processing of the subject are further controlled, so as to further confirm the guidance of second

language acquisition theories such as input hypothesis, attention theory, comprehensible input and semantic network structure on vocabulary teaching.

4.1 The Situation of Instant Test of Target Word Knowledge

Immediately after reading the text and viewing information about the target word, the subjects took a 20-minute vocabulary knowledge test. In this paper, SPSS (26.0) is used to analyze the four types of vocabulary knowledge by single factor ANOVA, and then the differences between vocabulary knowledge and the correlation between dictionary usage and target word knowledge are analyzed by repeated variables. Finally, vocabulary knowledge is divided into two categories: recall knowledge and recognition knowledge. Repeated variable analysis was carried out to understand the acquisition of recall and recognition knowledge in the three groups.

4.1.1 Recall the Chinese Interpretation of the Target Word

SPSS (26.0) was used to conduct descriptive analysis of the scores of Chinese interpretation of target words and single factor ANOVA test. The data showed that (see Table 3) there were differences in the scores of the three groups of subjects, but the scores among the three groups could not constitute significant differences. Group 1 had the highest score in Chinese interpretation, averaging 13.47; Group 2 was followed by Group 2 with a mean value of 12.94.

Group 3 had the lowest score. The research shows that the three groups of subjects have relatively high performance in both the recall of the Chinese interpretation of the target word and the identification and discrimination of the target word interpretation. Because in the same period of time, group 1 only paid attention to the definition information of the target word, while group 2 and Group 3 also scattered their time on other vocabulary knowledge, so group 1 paid the longest attention to the definition information of the target word. Therefore, according to the limitation of attention, group 1 is more conducive to acquiring the interpretive information of target words.

Table 3: (a) Recalls Chinese Definitions Instantly

The Use of Dictionary Information	Mean Value	Number of Cases	Standard Deviation	Significance
1	13.47	15	3.871	.254
2	12.94	16	3.151	

Table 3: (b) Recalls Chinese Definitions Instantly

The Use of Dictionary Information	Mean Value	Number of Cases	Standard Deviation	Significance
3	11.32	19	4.522	
Total	12.48	50	3.965	

4.1.2 Clarification and Application of Target Words

As can be seen from Table 4, group 2 had the highest score, with an average of 14.88; The second group was group 1, whose mean value was 13.60. Finally, there is group 3, with a mean of 12.63. Similarly, although there were differences in performance among the three groups, there was no significant difference.

Table 4: Analysis and Application of Target Words

The Use of Dictionary Information	Mean Value	Number of Cases	Standard Deviation	Significance
1	13.60	15	3.225	.243
2	14.88	16	3.649	
3	12.63	19	4.475	
Total	13.64	50	3.911	

4.1.3 Recognition of Collocation Information of Target Words

In the recognition of collocation information of target words (see Table 5), group 3 (11.79) > Group 1 (11.33) > Group 2 (10.75), and there was no significant difference between the three groups. Since group 2 and Group 3 pay attention to collocation information, example sentences and synonyms except the definition information of the target word, group 3 has the highest performance in the recognition of collocation information.

Table 5: Identifying Word Collocation Information in Real Time

The Use of Dictionary Information	Mean Value	Number of Cases	Standard Deviation	Significance
1	11.33	15	3.976	.799
2	10.75	16	5.260	
3	11.79	19	4.366	
Total	11.32	50	4.492	

4.1.4 Recognition of Synonyms and Morphology of Target Words

The data show (see Table 6) that the three groups of subjects have significant differences in the recognition of synonyms and morphology of target words, and the results of the three groups of subjects are in the order of high to low, group 2 (9.44) > Group 3 (8.58) > group 1 (4.53). At the

same time, the single factor ANOVA test of the three groups of vocabulary knowledge further proves that there is a significant achievement between group 1 and group 2 or between group 1 and group 3 in the recognition of synonyms and morphology of target words. Since the total amount of input, attention and cognitive depth of group 2 and Group 3 are much higher than those of group 1, the scores of group 2 and group 3 are higher than those of group 1, thus confirming that higher input, attention and wider semantic network are more conducive to incidental vocabulary acquisition.

Table 6: Identifying Synonyms and Morphology of Target Words

The Use of Dictionary Information	Mean Value	Number of Cases	Standard Deviation	Significance
1	4.53	15	6.022	.049
2	9.44	16	6.186	
3	8.58	19	5.113	
Total	7.64	50	6.003	

4.1.5 The Correlation between Dictionary Information Utilization and Vocabulary Knowledge

In order to further test the immediate acquisition of target word knowledge by the use of dictionary information, this paper uses SPSS (26.0) to conduct repeated variable detection on the vocabulary knowledge scores of the three groups of target words.

The results of the postulative sphericity of the in-subject effect test show (see Table 7) that there is a correlation between vocabulary knowledge and the use of dictionary information. In other words, the score of vocabulary knowledge type will change with the change of the subject's use of dictionary information. However, both the inter-subject effect test and the multiple posthoc comparisons (see table 8 and 9) show that there is no significant difference between the three groups in lexical knowledge achievement.

Table 7: In-Body Effect Test

Source		Mean Square	F	Significance
Lexical Knowledge * Dictionary Information Utilization	Assumed sphericity	42.650	3.012	.008
	Greenhaus - Geissler	49.192	3.012	.012
	Sin Ferdett	44.364	3.012	.009
	Lower limit	127.949	3.012	.059

Table 8: Inter-Agent Effect Test

Measure: MEASURE_1 After Conversion Variable: Average	Class III Sum of Squares	Degree of Freedom	Mean Square	F	Significance
The Source	25154.705	1	25154.705	600.821	.000
Intercept	54.160	2	27.080	.647	.528
Dictionary Information Utilization	1967.760	47	41.867		

Table 9: Multiple Comparisons

(I) Utilization of Dictionary Information	(J) Utilization of Dictionary Information	Mean Difference (I-	Standard Error	Significance
1	2	-1.27	1.163	.282
	3	-.35	1.117	.758
2	1	1.27	1.163	.282
	3	.92	1.098	.406
3	1	.35	1.117	.758
	2	-.92	1.098	.406

4.1.6 Recalling Knowledge and Identifying Knowledge of Target Words

According to the data (see table 10), the acquisition of recalling knowledge in the three groups of subjects was as follows, from high to low: Group 1 > Group 2 > Group 3, while the recognition knowledge of the three groups of subjects changed, and their acquisition results were ranked as group 2 > Group 3 > Group 1 from high to low. In this paper, recalling knowledge accounted for only 20 points, while recognizing knowledge accounted for 80 points, so the two groups could not be compared accordingly. However, in order to understand the differences in vocabulary knowledge among the three groups of subjects, this paper conducted multivariate analysis on them, and the research results showed that (see Table 11), the significance between group 1 and group 2 was.710, the significance between group 1 and group 3 was.120, and the significance between group 2 and group 3 was.230. Therefore, there was no significant difference between the three groups of recall knowledge. Similarly, there was no significant difference among the three groups in recognition knowledge, with the significance between group 1 and group 2 being.187, between group 1 and group 3 being.333, and between group 2 and group 3 being.647.

Table 10: Describes Statistics

	The Use of Dictionary Information	Mean Value	Number of Cases	Standard Deviation
Recall knowledge	1	13.47	3.871	15
	2	12.94	3.151	16
	3	11.32	4.522	19
	Total	12.48	3.965	50
Recognition knowledge	1	29.47	9.007	15
	2	34.50	12.18 7	16
	3	33.00	9.939	19
	Total	32.42	10.447	50

Table 11: Multiple Comparisons

Dependent Variable	(I) Utilization of Dictionary Information	(J) Utilization of Dictionary Information	Mean Difference (I-	Standard Error	Significance
Recall knowledge	1	2	.53	1.413	.710
		3	2.15	1.358	.120
	2	1	-.53	1.413	.710
		3	1.62	1.334	.230
	3	1	-2.15	1.358	.120
		2	-1.62	1.334	.230
Recognition knowledge	1	2	-5.03	3.759	.187
		3	-3.53	3.613	.333
	2	1	5.03	3.759	.187
		3	1.50	3.549	.674
	3	1	3.53	3.613	.333
		2	-1.50	3.549	.674

4.2 The Situation of Delayed Test of Target Word Knowledge

A week later, the subjects in the experimental class were tested again with the same vocabulary content, and the results after the test were also analyzed in the same way as in the real-time test. In the delayed post-test, except for target word recognition and blank filling, the scores of other target word related knowledge are the highest in group 2, so group 2 is more conducive to the retention of Chinese interpretation, synonyms, collocation information and morphology of target words. On the one hand, compared with group 1, group 2 not only pays more attention to the knowledge of target words, but also invests more participation load, which results in the deeper cognitive processing of target words in group 2. Meanwhile, various lexical knowledge forms a semantic network system to

enhance subjects' understanding of target word knowledge. On the other hand, although group 2 and group 3 have the same amount of input and attention, because of their fixed time and limited energy, group 3 cannot complete the corresponding task in a limited time.

4.2.1 Recall the Chinese Interpretation of the Target Word

In the delayed test of the recall of the Chinese interpretation of the target word, the retention of the Chinese interpretation of the target word (see Table 12) was in the order of group 2 (6.50) > Group 3 (5.32) > Group 1 (3.87). At the same time, the single factor ANOVA test was conducted, and the data showed that the significance among the three groups was.588 >.05, so there was no significant difference among the three groups.

Table 12: Description Delay

Dictionary Information Utilization	Mean Value	Number of Cases	Standard Deviation	Significance
1	3.87	15	4.673	. 588
2	6.50	16	6.470	
3	5.32	19	5.657	
Total	5.26	50	5.649	

4.2.2 Interpretation Analysis and Application of Target Words

According to the data (see Table 13), in the discrimination and application of target words, the average score of group 1 was 13.87, followed by group 3, and the average value of group 2 was the lowest, and its significance was.517 >.05 through the single factor ANOVA test, so the difference between the three groups was not significant. Although the depth of cognitive processing of target words in group 3 and group 2 is much greater than that in group 1, group 1 gets the highest score. The reason may be that students in Group 1 only focus their attention on the interpretation, while other groups need to disperse their attention on different levels of vocabulary knowledge. Due to the limited attention resources, Group 1 gets the best score.

Table 13: Discriminating Word Meanings and Application Delay

Dictionary Information Utilization	Mean Value	Number of Cases	Standard Deviation	Significance
1	13.87	15	4.103	. 517
2	12.19	16	4.004	
3	12.53	19	4.611	
Total	12.82	50	4.246	

4.2.3 Identify Collocation Information of Target Words

As can be seen from their reports (see table 14), the recognition scores of collocation information of target words in the three groups are as follows: Group 2 (12.88) > Group 1 (12.53) > group 3 (11.47), and the significance is.588 >.05. Both group 2 and group 1 are higher than group 3, which not only refutes the input hypothesis, but also further indicates that students do not input the corresponding parameters without any discount when completing tasks. In addition, the acquisition of target words is not only the quantity but the quality of input, but also affected by factors other than the amount of input.

Table 14: Vocabulary Collocation Delay

Dictionary Information Utilization	Mean Value	Number of Cases	Standard Deviation	Significance
1	12.53	15	3.962	. 588
2	12.88	16	5.414	
3	11.47	19	3.044	
Total	12.24	50	4.153	

4.2.4 Identify Synonyms and Morphology of Target Words

The recognition scores of synonyms and morphology of target words are as follows (see Table 15): Group 2 (6.50) > Group 3 (5.32) > group 1 (2.80), and the significance is.203 >.05.

Table 15: Synonyms delay

Dictionary Information Utilization	Mean Value	Number Of Cases	Standard Deviation	Significance
1	2.80	15	5.116	.203
2	6.50	16	6.470	
3	5.32	19	5.657	
Total	4.94	50	5.857	

4.2.5 Concluding Remarks

Most of the previous studies on supplementary acquisition first asked subjects to read the text, then asked subjects to complete the target word-centered receptive task (word meaning matching, writing word definition, presentation of notes) or productive task (translation, filling in the blank, writing sentences or writing compositions) after reading, and finally tested the breadth and depth of knowledge of the target word. In this paper, the subject's view of dictionary entry information is taken as its receptive task, and the utilization of dictionary entry information is taken as its research variable to verify the incidental acquisition of vocabulary information by

different utilization of dictionary information. In addition, the incidental acquisition of the target word knowledge includes not only recall knowledge (recall of the Chinese interpretation of the target word), but also recognition knowledge (meaning, collocation, synonyms and morphology of the target word). The detection of diverse vocabulary knowledge also makes the research more effective.

5. RESEARCH CONCLUSIONS

5.1 Research Status

5.1.1 Current use of Paper Dictionaries by High School Students

First of all, most high school students can realize the importance of dictionary use in vocabulary learning, because they believe that dictionary use can help solve the problems in language learning. Secondly, learners have insufficient understanding of the macro and micro structure of English dictionaries. Therefore, most students can use the dictionary to search the definition, spelling and collocation information of the target word, but often can not find the corresponding examples, variants, parts of speech and other knowledge. According to the classification criteria of the six dictionary skills proposed, familiarity with dictionary structure belongs to the skill of locating information. Therefore, learners' weak cognition of dictionary structure leads to the fact that learners are able to find the definition of target words, while they are unable to locate and retrieve other knowledge information of target words efficiently. The main reason for this is the lack of dictionary teaching. In addition, the dictionary is mainly used in reading and writing activities to query its interpretation information. Listening, speaking, reading and writing are the four major language activities in the classroom. Because of their different activities, we divide them into input and output activities. The input activities are mainly to solve the problems in language learning. As Robinson said, only comprehensible input can effectively promote the language acquisition of students (Robinson & Robinson, 2001). This is why lexicographers often query the definition, collocation, pragmatics and other relevant vocabulary knowledge of target words when reading, which is also one of the purposes of lexicographers to compile dictionaries. So why do students seldom use dictionaries in listening activities? This is because the main task of listening activities requires students to understand the background vocabulary related to listening and the core words in the question stem in advance, and these learning tasks test students' autonomy very much, so students who

lack autonomy rarely use them. "Speaking" as an extended activity of listening, reading and writing, one is that the activity time is relatively short, and the other is that as an output task, the corresponding input information has been paved the way. In addition, most of the problems encountered in oral English require students to search English target words according to Chinese. At present, except electronic dictionaries and Chinese-English Dictionary, English target words can be searched through Chinese, while Oxford English-Chinese Dictionary and Collins Dictionary can only search relevant vocabulary knowledge through English letters and English target words, while Chinese-English Dictionary only presents English target words. If you want to understand the relevant morphology, collocation and pragmatic information, you need to consult the English-Chinese dictionary. Because of the complexity and time consuming of the query tasks, students rarely search dictionaries in oral activities. Writing task is another output task. Currently, reading and writing are mostly integrated in teaching materials and teaching, and corresponding topic, structure and vocabulary information are input on the basis of reading. While writing task should examine multiple aspects of vocabulary knowledge, such as target word morphology, pragmatics, parts of speech and collocation information. At the same time, the writing task is a difficult task and the teacher usually assigns it after class, so learners often use dictionaries to solve language problems in the writing task.

5.1.2 Dictionary use is Conducive To Incidental Acquisition of Target Words

In this paper, the three groups of subjects' investigation of target word knowledge mainly includes passive knowledge and active knowledge of target word, and mainly guides learners to recall and recognize relevant vocabulary knowledge. By comparing the scores of the subjects in the vocabulary pre-test with the scores of the subjects after viewing the dictionary information, it can be found that the three groups of subjects have acquired relevant vocabulary knowledge after viewing the dictionary information. It can be seen that the corresponding attention and understandable explanation of the target words are conducive to the incidental acquisition of vocabulary.

(1) Paying attention to the corresponding target word knowledge for a longer period of time is more conducive to immediate vocabulary acquisition: Among the three groups of subjects, group 1 paid the longest attention to the interpretation information of the target word, so the performance of group 1 was relatively high in both the recall of the Chinese

interpretation of the target word and the identification and discrimination of the definition of the target word.

(2) Attention to target word knowledge is conducive to the immediate acquisition of corresponding vocabulary knowledge: According to the attention theory, the premise of acquisition is attention. The recognition results of collocation information, synonyms and target words in group 2 and group 3 were higher than those in group 1.

(3) It is partially proved that high input and wide attention are more conducive to instant vocabulary acquisition: In the recognition of synonyms and morphology of target words, because the total amount of input, attention and cognitive depth of group 2 and group 3 are much higher than those of group 1, the scores of group 2 and group 3 are higher than those of group 1, thus confirming that higher input, attention and wider semantic network are more conducive to incidental vocabulary acquisition. However, group 2 and group 3 have the same total amount of input but do not get the same acquisition result, thus negating the input quantity hypothesis. The same is true for and against other types of vocabulary knowledge. It can be seen that the acquisition of vocabulary knowledge does not fully develop according to the input hypothesis, and the reason may be affected by the type and form of vocabulary knowledge tested. Smidt also believes that the input load should not be the only criterion to evaluate the effectiveness of a task (Smidt & Hegelheimer, 2004), and the effectiveness of a task may also be affected by many factors, such as the type of assessment, the combination of search and different assessment types, and the objective aspect of vocabulary knowledge. It is also said that the total input load value, the components in the input load, the degree of input of each component in the input load and the type of lexical knowledge tested may be interfering factors. This paper only partially confirmed the input volume hypothesis theory, so the quantification standard of input value in the input volume hypothesis theory has been questioned again, which is also consistent with the question raised by Crowther (Crowther et al., 2015). She believes that the input hypothesis theory is more of a test to verify the acquisition of the definition of the target word, because the learning tasks such as writing and filling in the blank are all investigations of the meaning of the target word. In addition to the investigation of the meaning of the target words, this paper also investigates the recognition of the collocation, synonyms and morphology of the target words. In addition to the recall of Chinese interpretation, this paper also investigates the discrimination and application of the meaning of the target words. This led to inconsistent

results with Saito, Polat, Hummel, Koda and other studies supporting the input volume hypothesis (Hummel, 2021; Koda, 2015; Polat, 2016; Saito, 2019). It can be seen that the input hypothesis cannot fully explain the cognitive and psychological input index of learners in learning. On the one hand, the quantitative standard of the input index is determined by the complexity of the task, and the complexity also determines the difficulty of the task, the duration of the input and the duration of the attention. As a result, although the complexity of the task increases the input of the learners, due to the limited attention resources, the learners will not be able to participate in the task. Therefore, students cannot pay attention to all vocabulary knowledge in a certain period of time, and their excessive investment time also leads to the decline of their attention. According to Brown affective filtering hypothesis (Brown et al., 2008), moderate pressure is more conducive to learners' language acquisition, which explains why group 1 > Group 2 in the collocation information of target words, group 1 > Group 3 in the discrimination and application of the meaning of target words, and group 1 > Group 2 > Group 3 in the recall of the Chinese interpretation of target words. On the other hand, Richards argues that most studies supporting the input volume hypothesis regard vocabulary acquisition as the acquisition of target word interpretation (Richards & Schmidt, 2013), that is, limiting the vocabulary knowledge of target words to the definition. Therefore, most studies supporting the input volume hypothesis only verify the acquisition of target word interpretation by the level of input volume. In addition, the criterion of input value assignment in the input quantity hypothesis is highly controversial. Rassaei analyzed the total cognitive processing depth of students' learning process from the psychological and cognitive macro levels (Rassaei, 2012). At the micro level, it mainly consisted of three aspects: "demand", "search" and "evaluation". At the same time, it was mainly divided into three levels: "none", "moderate" and "intense" in terms of the value assigned to the three components. The situation of vocabulary acquisition is related to the total amount of input. In general, the higher the input, the better the vocabulary acquisition. Ellis expands the cognitive level of engagement into four levels (Ellis, 2008): assessment is divided into four levels, namely negative, medium (gestalt practice), strong (sentence writing) and very strong (essay writing), and search is divided into three levels, namely negative, medium, strong (reasoning) and strong (dictionary reference). Bundesen analyzes it from the level of psychological motivation (Bundesen, 1990). He believes that the level of demand cannot be simply divided into internal and external motivations, because external

motivations can also produce moderate and strong needs. Therefore, the assignment of input volume needs to be further improved.

(4) Tasks with high input and wide attention are more conducive to the retention of vocabulary knowledge: In the delayed post-test, except for target word recognition and blank filling, the scores of other target word related knowledge are the highest in group 2, so group 2 is more conducive to the retention of Chinese interpretation, synonyms, collocation information and morphology of target words. On the one hand, compared with group 1, group 2 not only pays more attention to the knowledge of target words, but also invests more participation load, which results in the deeper cognitive processing of target words in group 2. Meanwhile, various lexical knowledge forms a semantic network system to enhance subjects' understanding of target word knowledge. On the other hand, although group 2 and group 3 have the same amount of input and attention, because of their fixed time and limited energy, group 3 cannot complete the corresponding task in a limited time.

(5) Vocabulary knowledge will be gradually lost with time: By comparing the results of immediate and delayed vocabulary knowledge, we find that the immediate results are much higher than the delayed results, which means that the vocabulary information is lost with the passage of time. At the same time, the study also found that the delay performance of the collocation information of the target word was higher than the immediate performance, and the recall information was the most lost, followed by the recognition of synonyms and morphology, and the discrimination of meaning and use was the least lost. In other words, most of the target word knowledge will be lost with time, and the attention and cognitive processing of different target word knowledge will lead to different retention of vocabulary knowledge. The loss of vocabulary knowledge further confirms the deep processing theory proposed by Kuppens (Kuppens, 2010), who believes that the processing of lexical meaning belongs to deep processing while the phonology and form of words belong to shallow cognition. It can be seen that in addition to time, the type of vocabulary knowledge is also one of the factors affecting its memory retention

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