Online Independent Vocabulary Learning Experience of Hong Kong University Students

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Abstract

In response to the limited vocabulary size of its undergraduates, an independent vocabulary learning platform, VLearn was designed and launched in a university in Hong Kong. As an e-learning environment that supports self-directed vocabulary learning of Chinese learners, the primary aim of VLearn is to equip users with appropriate knowledge and skills for vocabulary expansion. This paper introduces the contents of VLearn, and the theoretical underpinnings of its design. It also reports on the vocabulary learning experience of its users during an eight week evaluation study. Suggestions are made on how independent vocabulary building at higher education, as well as comprehensive vocabulary instruction at early years could be supported by means of technology.

Keywords: vocabulary teaching and learning; e-learning strategies; Chinese learners; self-directed learning; English language education

Introduction

A second language learner must possess an 8,000 to 9,000 word-family vocabulary in order to comprehend most written discourse in English and a vocabulary of 15,000 in order to read with minimal disturbance (Nation, 2001; 2006). However, a number of studies have shown that the vocabulary size of Hong Kong university students does not measure up to such a standard. Cobb and Horst (2000), for example, found that undergraduates in Hong Kong performed well at only between 3,000 and 5,000 frequency word levels. In a more recent study, Chui (2005) investigated the first-year entrants of a local university and concluded that the majority of students possess no more than a 3,000 word vocabulary. In other words, most Hong Kong undergraduates do not seem to have acquired the 'threshold' level of vocabulary to interact with English academic texts effectively at university where English is adopted as a medium of instruction.

Literature Review

Hong Kong students begin their compulsory English learning in the second/foreign language classroom in primary one. In the English Language Education Key Learning Area Curriculum Guide (P1-S3) (CDC, 2002), broad learning outcomes of the four language skills are stipulated clearly for each key stage. The role and function of vocabulary, however, is not specifically mentioned. As Zimmerman (1997) puts it, the teaching and learning of vocabulary has long been undervalued in the field of teaching English as a second language. Systematic learning and acquisition of English lexicon appears to be secondary to that of grammar and other linguistic skills (Coady, 1997). With the implementation of communicative language teaching in Hong Kong (Curriculum Development Council, 1999), which focuses largely on developing the communicative competence of learners, the teaching of vocabulary seems to be largely at the implicit and incidental end (DeCarrico, 2006). Learners' attention is usually directed to using the language for communicative purposes, rather than to the structural learning of unknown words (Nation, 1990). When approaching a text, for instance, teachers may frequently suggest the importance of understanding the general sense of the discourse, rather than the meaning of individual lexical items (Hill, 2005).

Since the handover in 1997, the role of English language has been greatly reduced in Hong Kong. Meanwhile, the use of Chinese has been actively promoted in various social domains (Bolton, 2002). The degree of bilingualism in the community has further been weakened with the 'mother tongue policy' in 1997 (Poon, 1999), by which the majority of schools are mandated to use Chinese as the medium of instruction. Rose (1999) argued that English has gradually shifted from a second language to a foreign language in the post-colonial Hong Kong, and learners' authentic exposure to it is rare. The growing dominance of Chinese language use in the social context supports the argument that Hong Kong appears to be a largely monolingual Chinese society, whereas English remains more a foreign than a second language for most of its citizens. While incidental vocabulary learning works well for native speakers, who are always immersed in their mother language, it may be less effective for second or foreign language learners due to their limited exposure (DeCarrico, 2006). Opportunities for learners to practice the target language, either in or outside the classroom, are very limited.

Despite such a restricted authentic exposure to the target language, the literature tends to suggest that incidental vocabulary learning could greatly be facilitated if learners are equipped with appropriate vocabulary learning strategies (DeCarrico, 2006). Examples of these include determination strategies, cognitive strategies, and metacognitive strategies (Schmitt, 1997). Nevertheless, as revealed by various studies, most Chinese students seem to possess a narrow

range of vocabulary learning strategies. Zhang (2009), for example, investigated the English vocabulary size of 481 students from six universities in Western China, and studied their vocabulary learning approach. Results indicate that the most common strategies used by the students were: using a dictionary, guessing meaning in contexts, and taking notes. In his study with 850 students from Beijing, Gu (1997) concludes that low proficient students tend to resort to visual repetition when they attempt to learn unfamiliar words, which is "the kind of strategy they might have used in primary school to memorize Chinese characters" (p.666), This suggests that weaker students would rely much on their first language learning strategy in learning a second/foreign language. As for learners of English in Hong Kong, using bilingual/monolingual dictionaries is considered as the most helpful discovery strategy of vocabulary learning, followed by guessing from textual context (Xu, 2010).

Chinese learners of English appear to have strong preferences for guessing and dictionary strategies vis-à-vis strategies like social strategies and metacognitive strategies (Marin, 2006; Gu, 2010). The reasons that govern such learning styles, however, are hitherto speculative. Xing and Jordan (2012) attribute such phenomena to the examination-oriented education system in the cultural context.

Alongside rigid language course design, learners are rarely provided with ample opportunities to learn the language through social interaction, nor do they consider it necessary to do so. Gu (2002), on the other hand, related these word study strategies to the way Chinese learners perceive educational achievement. From a cultural perspective, success in Chinese societies is greatly associated with diligence, while failure with lack of effort (Biggs, 1996, & Phillipson, 2007). Thus, it is not surprising to find that learners tend to devote their time to ways that could demonstrate their hard work (e.g. taking notes) amid the learning process.

In the Hong Kong primary and secondary classrooms, English teaching often follows a P-P-P model (i.e. Presentation, Practice and Production). When a new item is introduced, the teacher will first provide adequate input before students are assigned with opportunities to practice the taught item and use it on their own in some learning tasks (Tang, 2004). This is the case when direct vocabulary teaching is involved. As noted by Tang and Nesi (2003), English language teachers in Hong Kong did not plan to teach a lot of new words in a lesson. The teaching of a new word was often confined to the provision of input on pronunciation and/or meaning. Also, there was no occasion when students were asked to take part in output activities.

In view of the English vocabulary learning environment in Hong Kong and the learning characteristics of Chinese learners as mentioned above, boosting the vocabulary size of Hong Kong students at university level may require consideration of learning needs, learner characteristics, and self-disposition. First, these undergraduates have limited knowledge of word meanings as there are no guidelines for systematic second language vocabulary development in the curriculum and in the classroom. Second, given the low status of vocabulary teaching in second language education, it seems unlikely that explicit vocabulary learning alone would bring forth sustainable growth in the target vocabulary. Third, the majority of Chinese learners are found to be under-equipped with appropriate vocabulary learning strategies that foster incidental or independent vocabulary learning. Their restricted use of, among other things, social strategies and metacognitive regulation suggests that vocabulary learning occurs primarily in a controlled environment with instruction, rather than in an autonomous manner that drives self-learning. Self-initiated learning is not practised nor promoted in the second or foreign language classroom.

Regardless of their discipline, university undergraduates in Hong Kong have to take a few credit-bearing English courses in their junior years. However, these courses primarily focus on academic reading and writing and job-related communication. There is no particular English course which aims to expand students' vocabulary knowledge and size. Consequently, these university students have to take greater responsibility for their own learning if they want to learn more words. They are expected to take control and responsibility for their own learning by choosing appropriate materials to read and adopting different strategies to consolidate their learning. Over the past few decades, researchers have argued that autonomous learning should be promoted as it encourages the active involvement of learners and enables them to become more independent in what they think, learn and how they behave (Littlewood, 1996a). However, typical Chinese learners are perceived as dependent (Pierson, 1996) and passive (Tang & Nesi, 2003). It was also claimed that many students in Asia have very weak intention in learning independently outside class, which in turn limits their second language learning (Lee, 1998). Thus, by developing both procedural and personal autonomy (White, 2011), Chinese university students may be better motivated to take an active role in improving the quality of their own learning, to spend time on vocabulary learning, and to choose appropriate materials that suit their learning needs.

An Online Independent Vocabulary Learning Platform

Learner autonomy is regarded as a crucial characteristic of all sustained learning that attains long-term success (Littlewood, 1996b), and an e-learning platform is considered a virtual language coach that supports self-directed learning (Wielgolawski, 2011). In order to address the concern of vocabulary learning needs and the learning characteristics of Hong Kong university students, an independent vocabulary learning support platform VLearn was designed and launched in a university in Hong Kong. The aim was to (a) empower university students with the knowledge and skills to learn new words independently outside the classroom (b) strengthen their knowledge of words and strategies to learn and remember words; (c) engage them in online strategies-based instruction for independent learning. An evaluation project was developed to examine learners' experiences using VLearn. The project consisted of three stages. In Stage 1, participants were invited to a workshop on vocabulary learning in VLearn. Stage 2 was an eight week self-report study in which participants were provided with vocabulary learning logbooks to record their vocabulary learning experiences. The final stage was an evaluation study designed to collect feedback from participants on the content design and track their vocabulary learning profiles. The data collected helps understand the usefulness of VLearn, and how university students tackle new words in an independent vocabulary learning environment. The results of the evaluation study would help improve English vocabulary instruction at university in the future.

Content design. Better learning is likely to take place when learners are aware of how their learning is carried out (Nation, 2001). Thus, the different aspects of word knowledge and a wide range of vocabulary learning strategies with sequenced learning activities are included in VLearn. The learning materials are divided into four sections: word knowledge, word formation, meaning relations, and vocabulary learning. A taxonomy of vocabulary learning strategies from Gu and Johnson (1996), Oxford (1990) and Schmitt (1997) was adopted to devise relevant methods for students to discover meaning of new words and to remember them. Table 1 below outlines the contents of each section in VLearn, while Table 2 provides a simple taxonomy of vocabulary learning strategies in the Vocabulary Learning section.

Table 1. Organization of VLearn

Word Knowledge	• Word meaning
	• Aspects of word knowledge
Word Formation	• Internal structure of a word
	• Word formation processes
Meaning Relations	• Various types of semantic relationship
Vocabulary Learning	• Various vocabulary learning methods and vocabulary building strategies

Table 2. Taxonomy of vocabulary learning strategies introduced in VLearn

Strategies for the discovery of a new word's meaning	**Strategies for consolidating a word once it has been encountered**
Determination strategies (DET)	Social strategies (SOC)
Social strategies (SOC)	Memory strategies (MEM)
	Cognitive strategies (COG)
	Metacognitive strategies (MET)

Sequenced learning activities. To meet the expected teaching and learning styles inherant in the Hong Kong English classroom, the contents of each section are structured into three learning sequences: input, practice, and quiz.

Input. The input section focuses on the conceptualization of word knowledge, word formation process, meaning relations and descriptions of vocabulary learning strategies. To be more specific, learners are not only introduced to the different aspects of word knowledge, but also presented with word formation mechanisms and morphological knowledge which facilitates the decoding and understanding of lexical items they may encounter. In addition to the conceptualization of word knowledge, there are a number of tools and strategies to remember and consolidate words learned.

Practice. The practice section provides students with ample examples of applications of vocabulary learning strategies and self-assessed exercises for consolidation. With instant feedback provided, learners can check their mastery of concepts and are directed to revisit the content of the relevant webpages for better understanding.

Quiz. Quizzes are available in the end of the sections 'Word Knowledge,' 'Word Formation' and 'Word Sense Relation.' The quiz section is used for learners' active retrieval of word knowledge and self-assessment. It offers students concrete opportunities to assume responsibility for their learning through assessing their learning progress.

Methods

Twenty undergraduates from different disciplines signed up for the workshop in Stage 1. In the workshop, participants attended a lecture about the contents of VLearn. Topics included word knowledge, word formation, meaning relations and vocabulary strategies. At the end of the workshop, participants were invited to join an eight week self-report study of their vocabulary learning journey. Fifteen of them volunteered to take part in Stage 2.

In the self-report study, participants were asked to go through the contents of VLearn in detail. Hyperlinks to reading materials such as online newspaper articles were provided on a weekly basis to support their reading. Strategies employed to learn different vocabulary items were subsequently documented in their logbooks (Figure 1) which were then collected at the end of the eighth week for quantitative and qualitative analysis.

Figure 1. A sample page of VLearn logbook

One week after the completion of the self-report study, participants were invited to fill out a questionnaire and attend individual interviews. The questionnaire was conducted to examine students' feedback and attitudes towards the usage of VLearn. The questionnaire, adopting a 7-point Likert scale ranging from 7 (strongly agree) to 1 (strongly disagree), consisted of 28 questions based on the design framework, usefulness and effectiveness of input, technical design and technical support. Individual interviews were subsequently conducted. Data from the questionnaire and logbook analysis were triangulated with the interviews to verify the validity and reliability of the data.

Findings

Survey on Perceived Usefulness and Effectiveness of the Contents

The overall design of having input, practice and quiz appeared to be well-received by the participants. They rated positively towards the usefulness and appropriate level of difficulty of the contents at each stage (see Table 3 for an overview). In particular, the input section was rated relatively highly. It is not surprising to find that participants favored input as the contents were probably new to them and might not have been covered in formal English classes at primary and secondary levels and at university if they were non-English majors. In the interview, some participants expressed they would like to have more examples and more frequent recommended resources.

Table 3. Perceived usefulness and level of difficulty of the contents

	Usefulness		Appropriate Level of Difficulty	
	Mean	SD	Mean	SD
Input	5.14	0.86	5.29	1.14
Exercises	4.71	0.73	5.21	1.19
Quizzes	4.71	0.99	5.21	1.19

Although the standard deviation indicated different perceptions of the level of difficulty of the content, it is encouraging that these participants, who are all non-English majors, did not find the contents difficult for them to learn on their own. The discrepancy within the group could possibly be explained by their disciplines of study and language backgrounds. In fact, around 40 per cent of the participants were science majors, whereas the other participants study within Arts, Business Administration, Engineering, and Social Science. Similarly, around 35 per cent of the participants received outstanding English results in the public examination before entering the university, while the rest of them only attained the minimum English requirement for university entry. Notwithstanding limited coverage in the local English curriculum and English courses at university, the input in different sections appeared to be favored by the participants in a self-access learning environment (see Table 4).

In the Vocabulary Learning Strategies section, the 'Keyword method', 'Imagery', 'Stories', and 'Semantic map' scored relatively lower than other strategies. As reported in the interviews, these methods were new to the participants. They were, somehow, considered as less straightforward. At the same time, they required a certain degree of creativity. As argued by Wong (2004), the Chinese education system demanded conformity and 'might not be conducive to the development of creative thinking' (p. 156). This could possibly explain why our participants appear not to favor the 'creative' methods of learning vocabulary, which they would consider difficult to master. Not surprisingly, the nature of the strategies and participants' familiarity with the strategies are likely to be associated with the participants' perceived usefulness of the input given.

Table 4. Perceived usefulness of the input sections

Input		Mean	SD
Word Knowledge		5.43	1.02
Word Formation Processes		5.50	1.09
Word Sense Relations		5.21	0.58
Vocabulary Learning Strategies	Vocabulary Collector	5.07	1.00
	Word List	5.36	0.93
	Keyword Method	4.62	0.77
	Imagery	3.92	1.26
	Stories	4.00	1.75
	Semantic Map	4.07	1.14

When participants showed a clear preference of different vocabulary learning methods, it is also predictable to find similar results for the effectiveness of using those methods in learning and remembering new words (Table 5). Participants also rated 'Vocabulary Collector' and 'Word List' strategies considerably higher, showing they would still rely on familiar strategies when they encountered new words. However, participants seemed to be quite receptive to other unfamiliar strategies as well. They were aware of the effectiveness of 'Imagery', 'Stories', and

'Semantic Map' in helping them remember new words, suggesting they understood the nature of these methods. They also made use of the sounds in their first/native language to learn and remember the pronunciation of new words.

Learning Journey: A Logbook Analysis

During the eight week self-learning period, fifteen participants encountered a total number of 626 new words. The sources of those new words mainly came from academic materials (e.g. IELTS word lists, GRE word lists, course materials), leisure reading materials (e.g. magazines, newspaper articles), and entertainment (e.g. television, songs, movies). Yet, it is noteworthy that the students did not seem to have developed English reading habits and needed to be provided with reading sources or materials to facilitate their learning.

Table 5. Perceived effectiveness in Vocabulary Learning Strategies in learning and remembering new words

	Learning new words		Remembering new words	
	Mean	SD	Mean	SD
Vocabulary Collector	5.00	1.24	5.07	1.14
Word List	5.29	0.99	5.21	1.37
Keyword Method	4.21	0.97	4.43	1.16
Imagery	3.71	1.38	4.14	1.61
Stories	3.31	1.49	3.57	1.45
Semantic Map	3.71	1.33	4.00	1.30

Aspects of word knowledge. Of all the 626 new words, participants showed a clear interest in knowing the meaning, pronunciation, spelling, and parts of speech (Figure 2). Of these aspects, word meaning received by far the most attention. With the belief that understanding the meaning of a new word is crucial, some participants expressed they consistently looked for meanings when they encountered unfamiliar vocabulary items. The result is not surprising, for learning vocabulary is often perceived as learning meanings (Brown, 2010). Mastering the pronunciation of a word also appears to be an important part of the participants' vocabulary learning process. According to these second/foreign language learners, they habitually made an effort to check the pronunciation of unfamiliar lexical items. It is noteworthy that technology has promoted the practice. One participant related this habit to the availability of the mobile application in his smartphone, which allowed him to check the pronunciation more readily. The results on aspects of word knowledge are consistent with the direct vocabulary teaching observed in Hong Kong schools where teaching meaning and pronunciation were the principal treatments of new words (Tang & Nesi, 2003).
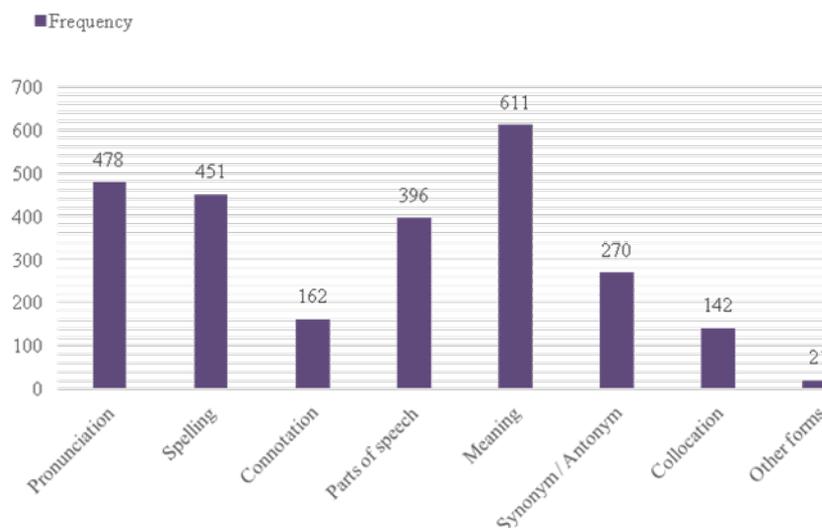
Figure 1: Aspects of word knowledge

Noticeably, the learning of connotation, collocation, synonyms or antonyms, and other forms of a word were not the major concerns of the participants. Whilst a participant suggested that he only put effort into learning a word by identifying its connotation and collocation when he found the lexical item particularly sophisticated, other participants commented that their English teachers seldom encouraged them to focus on these two aspects during their lessons. As a result, they did not even understand what these concepts mean. Also remarkable to note, whether or not a word has 'other forms' received the least attention of all eight aspects of word knowledge. One probable explanation may be that the participants were very much goal-oriented. They were satisfied with their learning after comprehending the meaning or knowing the sound of the word and therefore did not explore its word family.

Vocabulary Learning Strategies. An examination of the learning logs reveals an unbalanced use of vocabulary learning strategies by the participants. They tended to use strategies which are useful and effective in learning new words rather than remembering or consolidating the learning of new words. Table 6 below shows how frequently vocabulary learning strategies were used by the participants. Determination strategies, particularly 'consulting dictionaries' and 'guessing from context' methods, played a pivotal role in the vocabulary learning process. Social strategies, however, were rarely adopted by participants, implying that they might find learning a more personal or individual process.

Table 6. Vocabulary learning strategies adopted by the participants (Total number of new words = 626)

Vocabulary Learning Strategies Adopted (in order of frequency)	Taxonomy	%
Consult dictionary	DET	96
Guess from context	DET	38
Practice new word	COG	23
Continue to revise	MET	20
Keep a vocabulary notebook	COG	18
Use a thesaurus	MEM	15
Connect words with already known words	MEM	14
Analyze its word parts	DET	8
Connect the word to its synonym, etc.	MEM	7
Find out L1 translation	DET	6
Narrate a story with new words	MEM	4
Ask other people	SOC	3
Associate word with mother tongue	MEM	3
Compile a word list	DET/COG	3
Create an image / picture	MEM	2
Draw a semantic map	MEM	1
Other strategies	/	0

It may be worth noting that consulting a dictionary was by far the most valued determination strategy in the self-report study. Apparently, the participants relied heavily on dictionaries in vocabulary learning because dictionaries can provide word knowledge (meaning, pronunciation, spelling, and parts of speech) they were most eager to learn about a new word. Most participants also suggested that consulting dictionaries was the most 'straightforward' and 'effective' method to gain vocabulary knowledge. Indeed, technology also reinforced their choice as the online dictionaries and mobile applications on dictionaries have greatly enhanced the readiness and availability of the resource.

Guessing from context was another popular determination strategy adopted. One participant explained that she usually tried to guess the meaning of an unknown word from the context due to her belief that such practice "might facilitate deep processing." Yet, she considered confirming her guesses via consulting dictionaries to be necessary since she was worried she might misinterpret the meaning of a word without doing so.

Certain strategies were rarely used by the participants. In particular, social strategies were rarely adopted. Out of the 626 words learned, only 16 words (3%) had been learned through asking other people. While a participant admitted that she would ask her friend, who was an English major, only if she studied in the library with her, other participants indicated that they 'did not see the need of doing so.' From their perspective, asking other people for help was 'unnecessary' because they could always check the meaning of a word using online dictionaries with ease.

Indeed, various types of memory strategies, including forming an image, narrating a story with new words, creating an image/picture and drawing a semantic map, were scarcely adopted. To

most participants, these methods of learning vocabulary were "too creative" and "ime-consuming." Not seeing "the purpose of using the methods" and being "uncertain about how the methods worked." they were more willing to spend time memorizing new words as they perceived it a "more direct method" to learn vocabulary. These comments suggested that participants were not familiar with these methods or they did not even know these memory strategies for new words.

Discussion

Aspects of Word Knowledge

In most Asian countries, explicit or direct teaching of vocabulary is common in English as a Second Language (ESL) and English as a Foreign Language (EFL) classroom. However, the great majority of the planned and unplanned new words to be taught in Chinese ESL/EFL classrooms is only treated with unmodified or premodified input, indicating that teachers mostly focus on sound and meaning of the new words, and the presentation was short and direct (Tang and Nesi, 2003). According to Brown (2010), form and meaning often receive the most attention in general English textbooks at different levels, while the other aspects of word knowledge receive negligible or even no attention. Vocabulary teaching and learning in the Asian ESF/EFL context attends mainly to the 'partial-precise dimension' of receptive word knowledge. They fail to address the 'depth dimension' in developing vocabulary knowledge (Zhang, 2012, p.33).

Although participants in this study favored the word knowledge content in the input section, in the actual learning process, it is obvious that they still put great emphasis on meaning, form and pronunciation with little attention given to collocations, connotations and other forms because most aspects of word knowledge are neglected in earlier years of English vocabulary instruction.

Use of Dictionaries

Consistently, a dictionary is perceived by both teachers and students as the most straightforward method to understand and learn new words. However, most traditional analogue dictionaries can only provide limited knowledge of a word. A comprehensive coverage of all aspects of word knowledge in a single dictionary is always impossible because of pragmatic concerns, e.g. price, page limit and weight. Online dictionaries or mobile applications on dictionaries, on the other hand, are considered as "convenient," "handy" and "accessible" vocabulary learning tools for most participants in this study. Most digitised dictionaries will include popular aspects of word knowledge, e.g. sound, spelling, grammar, and synonyms, which are also found in traditional dictionaries. Some well-developed digitized dictionaries include word origins, word lists and forum to stimulate interest, suggest learning needs, and promote collaborative learning. With easy accessibility to technology and detailed information, online dictionaries or mobile applications on dictionaries are more preferred resources to enhance the depth dimension in vocabulary knowledge development among second language learners. Although most analogue and digitized dictionaries provide examples to illustrate the use and usage of the target word, abundant exposure and authentic language use in different contexts and genres and in spoken and written modes enables learners to hypothesize and understand form, meaning, and use of the word (Nation, 2001). The language corpus available as internet resources (e.g., Michigan Corpus of Academic Spoken English, British National Corpus) allows learners to see how the word is used appropriately and correctly in authentic texts so as to strengthen their exposure to aspects of word knowledge.

Vocabulary Instruction

In this study, participants claimed that most input in VLearn were unfamiliar to them. The failure to provide relevant and adequate input about the meaning of a word and different vocabulary learning strategies in instruction and textbooks has led to participants overlooking the 'what' and 'how' of learning a word. The instruction on new words in local textbooks primarily attends to receptive knowledge with explanation of meaning and form. In classroom practice, teachers will teach the sound as well. As noted by Waring (2002), teachers often leave vocabulary learning to students themselves and rarely introduce different vocabulary learning strategies for vocabulary development. Strategies which require creative use of language were not practised in the classroom. Imagery, narrating a story with new words, and drawing a semantic map are not favored by English teachers because these methods require more class time than can be afforded. Participants' past learning experience indeed had a strong influence on their choice of vocabulary learning strategies during the learning process. As noted, vocabulary treatment in textbooks and instructional practices are not conducive to strategy development. Participants in this study showed an imbalance in the use of strategies for learning and remembering new words. They adopted memory, cognitive, and metacognitive strategies sparingly. Thus, it is not surprising that most students learn and forget new words easily. Consequently, this limits their vocabulary growth throughout their years of English study.

Vocabulary instruction in the early years seems to initiate impoverished word knowledge and word processing problems. As such, English curriculum developers, textbook writers and English teachers should take greater responsibility for ensuring an extensive and systematic coverage of the various aspects of word knowledge and the different vocabulary learning strategies at different stages of schooling. It is important that systematic introduction of aspects of word knowledge should start in early years of English education and the practice of a variety of vocabulary learning and building strategies should also be strengthened through instruction.

Online Independent Learning for Asian Students

To promote independent second language learning, it is crucial to help learners develop a positive learning attitude, set specific learning goals, and develop a process for language knowledge and use. However, effective independent online platforms must not ignore the contextual and cultural background of the target users. Studies have shown that Asian students prefer teacher guidance (Gan, 2009) and they often see teachers as an authority in their learning process (Littlewood, 2000). Second language learners at all ages, levels and learning modes need guidance and support during the language learning process. Rich content on word knowledge and a variety of vocabulary learning strategies were viewed by the participants as helpful in setting vocabulary learning goals and raising their awareness of the process of acquiring vocabulary knowledge. The design of VLearn addresses the learning culture of these Chinese second language learners who expect a familiar structured and sequenced learning path to guide them in the process of learning.

Future Development

To date, numerous online resources and websites on vocabulary learning are available online. Yet, to maintain interest and motivation to access the site for continuous self-improvement and self-learning, elements for sustainment are required. At present, most vocabulary learning platforms are static pages with regular reviewing and updating. To improve the sustainability of an online platform for independent learning, learners need to be 'activated' and 'involved'. They need to develop a sense of ownership of the platform and be a member of the bigger

vocabulary learning community. With the popularity of social interaction in the virtual environment, VLearn can be transformed to create an interactive and dialogic setting for collaborative learning with the Web 2.0 concept. The shared learning experience will then be more conducive and supportive to provide a vigorous learning environment where students have full autonomy to be in charge of their own vocabulary learning. VLearn can also be enhanced by integrating more interactive components such as discussion boards, which can allow an exchange of ideas among users. As such, new information and knowledge can be generated in order for VLearn to serve as a self-managed platform and a growing learning community.

Conclusion

VLearn seemed to be a fruitful experience among this particular cohort of university students. Participants claimed to have learned more about how to learn new words. However, the evaluation study also showed that learners' word knowledge and strategy use were to a great extent affected by what they were taught at school. These results can be used to make informed curriculum and pedagogical decisions to support comprehensive vocabulary instruction in the early years and promote independent vocabulary building in higher education. The study also sheds light on the great potential of making use of existing technology to develop the depth dimension of word knowledge, exchange learning experiences, reflect on one's own learning and refine vocabulary learning goals independently in this digital native era. Asian classrooms share a lot of similarities – learning culture, teaching style, examination system, as well as learning difficulties. In learning a second or foreign language, most Asian students find vocabulary particularly problematic. The difficulties of learning vocabulary cannot be ignored, both in the early years or at a tertiary level. Different aspects of word knowledge and a variety of vocabulary learning strategies should be systematically introduced and practiced throughout the instructed second/foreign language learning process and in a self-directed learning experience.

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