

Vocabulary Learning Strategies among Chinese University Students: A Mixed-Methods Study

Qiuhua Jing*

Geely University, Chengdu 641423, Sichuan, China

**Author to whom correspondence should be addressed.*

Copyright: © 2026 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: This study employed a mixed approach to investigate vocabulary learning strategies among Chinese university students ^[1]. Quantitative data from 100 undergraduate students and qualitative data from 17 postgraduate students in Ireland were collected. The results showed that repetition was the most commonly used learning strategy. Vocabulary usage, association, and word formation strategies were also relatively common. Although students recognized the importance of vocabulary learning, most received little guidance on strategies. The students who applied various strategies were found to have a better vocabulary mastery and more learning autonomy ^[2]. The recommendation of this study is to improve the explicit instructions regarding the strategies and not use the rote memorization but the differentiated approach in the methods of teaching that is focused on students.

Keywords: Vocabulary learning strategies; Chinese learners; Vocabulary acquisition; Mixed-methods research; Second language acquisition

Online publication: April 26, 2026

1. Introduction

Knowledge of vocabulary is among the most important parts of learning a second language ^[3]. The adequate vocabulary would allow learners to comprehend spoken and written language, articulate their thoughts accurately, and be actively engaged in both academic and social intercourse. However, many Chinese learners continue to struggle with vocabulary acquisition. This study investigates:

- (1) Which vocabulary learning strategies do Chinese learners frequently use?
- (2) How do Chinese learners view vocabulary learning?
- (3) What is the relationship between vocabulary learning strategies and vocabulary competence?
- (4) To what extent do Chinese learners receive formal support in vocabulary learning?

2. Literature review

2.1. Vocabulary learning strategies in second language acquisition

The understanding of the vocabulary is commonly regarded as an essential part of the second language acquisition process

^[4]. Unless learners have enough vocabulary, they will probably not be able to communicate effectively even with perfect grammar skills. The initial studies on vocabulary acquisition were mostly about the vocabulary size and lexical knowledge. Nevertheless, the scientists came to understand over time that effective vocabulary learning is determined by more than just the amount of vocabulary a learner has, it is also influenced by the way they learn vocabulary ^[5]. This change in the viewpoint resulted in a growing interest in vocabulary learning strategies (VLS), which are the techniques and behaviors that learners employ in order to discover, remember, retain, and utilize new vocabulary items. Vocabulary learning strategies are normally viewed as a sub-category of language learning strategies. Oxford (1990) defines language learning strategies as particular behaviors which learners undertake in order to facilitate learning, make it quicker or more efficient ^[6]. The effective application of strategies has been found to be associated with successful language learning outcomes in all research conducted. Active users of several vocabulary learning strategies are more prone to acquire a bigger vocabulary and attain more advanced language proficiency. As a result, the knowledge of vocabulary learning strategies of learners has become one of the significant issues in the studies of the second language acquisition.

2.2. Classifying Vocabulary Learning Strategies

Among the numerous groupings of vocabulary learning strategies, the grouping suggested by Schmitt (1997) has been considered as the most effective and commonly used concept ^[7]. Schmitt came up with an inclusive way of classifying which was particularly meant to be used in vocabulary learning. Schmitt separates the vocabulary learning strategies into two major groups, namely, discovery strategies and consolidation strategies. In these two groups, Schmitt also breaks them down into five major vocabulary learning strategies.

2.2.1. Determination strategies

The students apply the word definition strategy in order to determine the meanings of unfamiliar words by themselves. Typical examples are inferring the meaning through the context, analyzing the affix structure or using a dictionary.

2.2.2. Social strategies

Social strategies are defined as interactions with other people in the learning process. The learners can request their teachers, classmates or native speakers to explain new words.

2.2.3. Memory strategies

Strategies of memory are useful in helping learners create associations between newly learned vocabulary and the knowledge that they already have. The popular ones are association, imagery, keyword techniques, semantic grouping, and mnemonic devices.

2.2.4. Cognitive strategies

The concept of cognitive strategies refers to mechanical and repetitive learning tasks like repeated writing of words, vocabulary noting or repetition of words aloud. They are popularly applied especially in test-based learning institutions.

2.2.5. Metacognitive strategies

The term metacognitive strategies is used to describe how students are able to plan, monitor and evaluate the acquisition of vocabulary. The examples would be choosing learning sources, continuous revision of vocabulary, and evaluation of learning achievements. Schmitt classification system has been extensively applied in the studies that involve students representing various linguistic and cultural backgrounds. It has a comprehensive character which makes it well-suited to exploring the behavior of students in vocabulary learning and comparing the strategies they prefer under various circumstances.

2.3. Previous research on vocabulary learning strategies

The first studies of the topic have demonstrated that effective language learners are more likely to employ a greater variety of vocabulary learning strategies than unsuccessful learners^[6,8]. In the same way, Gu (2018) indicated that the application of learning strategies had a significant correlation with the vocabulary size and proficiency in English among the Chinese learners^[9]. Over the past few years, technology has broadened the list of vocabulary learning methods used by learners of languages. Mobile-assisted language learning (MALL) is getting more and more attention in the research field^[10].

3. Methodology

3.1. Research design

The research design that was used in this study is a mixed-methods research design because it aimed at investigating vocabulary learning strategies of Chinese-English learners. The study involved two groups of participants. The first group was composed of 100 undergraduate students who were studying a university course of Chinese origin, i.e., Geely University, in China. When the data were collected, every participant had already finished not less than four semesters of university English language courses; hence, learners were requested to respond to two questionnaires that aimed to assess their attitude towards vocabulary learning and the application of vocabulary learning strategies. The second group comprised of 17 Chinese master degree students who are studying in the Master of English Education programme at Trinity College Dublin in Ireland. Their ages ranged between 24 and 28 years old with 9 females and 8 males. Interviews were conducted where participants were free to express their views about the main topics of the research. After the interviews, participants completed a vocabulary test by means of the mobile application Baicizhan, a popular online vocabulary training website in China. The given test was intended to assess the level of receptive vocabulary in participants and give them an objective measure of their vocabulary proficiency. Complementary evidence in the form of vocabulary scores were employed to confirm the connection between strategy use and vocabulary learning results. Even though this test was not to be used as a standardized formal evaluation, it gave the helpful comparative data about the knowledge of the vocabulary among participants and helped to interpret the findings of the interviews.

4. Results and discussion

4.1. Rehearsal strategies remain the dominant vocabulary learning approach

About 69 percent of the respondents indicated that they use repetition-based learning strategies like listening to and reading vocabulary, repeating vocabulary, memorizing vocabulary lists, and going through vocabulary notes. The 17 participants that were interviewed all indicated that they had a lot of experience using repetition-based vocabulary learning in their secondary education classes. Although these strategies may be useful in memorizing information in small amounts of time, students felt that they were boring and ineffective in retaining information over longer periods of time. It is indicative of the exam-focused educational system in China and it implies that more profound learning processing is required^[11].

4.2. Learners value vocabulary learning but receive limited strategy instruction

The majority of students perceive vocabulary learning as important in exams (IELTS, CET) and academic performance. Nevertheless, almost half of the participants stated that they have never been taught systematically how to learn vocabulary. The participants noted that the teachers seldom used systematic methods of learning but rather gave simple means of finding the affixes. The reason behind this gap might be the fact that even though they are aware of the downsides of rote memorization, they continue using it^[12].

4.3. Multiple strategy use and vocabulary proficiency

The vocabulary test results obtained by the respondents demonstrated that there were great disparities between the sizes of their vocabularies, with some having about 7,300 words and others almost 14,800 words. The higher-scoring learners used

a greater range of learning strategies such as contextual inference, word formation, pre-use, and skill application whereas the lower-scoring learners depended more on repetition. It is consistent with this view that strategic flexibility can be associated with vocabulary increase^[13].

4.4. The growing role of technology

Another significant finding is the increasing adoption of digital technology in vocabulary learning. According to many learners, they do make use of mobile apps and online apps to assist with acquiring vocabularies. These platforms are ranked by respondents as being very interactive, user-friendly and very efficient when it comes to practicing vocabulary on a daily basis. These findings are in line with the latest studies in the area of Mobile-Assisted Language Learning (MALL). As Teng (2021) and Schmitt (2019) note, in the current digital era, the acquisition of vocabulary is becoming more dependent on technological-enabled learning settings that integrate vocabulary contact, autonomous learning and strategic practice^[10,14].

5. Conclusion and pedagogical implications

5.1. Conclusion

The research design that was used in this study involved a mixed-methods approach in studying the vocabulary learning strategies of Chinese English learners. The purpose of the research was to explore the particular strategy choices made by students, their comprehension of the process of vocabulary acquisition, and the connection between the use of strategies and vocabulary mastery.

The findings are as follows:

To begin with, repetition is the most frequent vocabulary learning approach that can be found in Chinese learners. Although there are more learning materials available, the process of vocabulary acquisition by students is still largely dominated by repetitive methods of memorizing word lists, copying words and reviewing vocabulary books^[15].

Second, most students are aware of how important it is to acquire a vocabulary. All participants were in agreement that vocabulary knowledge was the main variable that determined language proficiency, academic performance, and communication abilities. Nevertheless, the findings have also shown that there are many students who do not have enough formal training in vocabulary learning methods.

Third, the findings indicate a positive association between the utilization of various strategies and the level of vocabulary proficiency. Those with a greater variety of vocabulary employ various methods of learning vocabulary including contextual learning, analysis of word formation, dictionary usage and technology-assisted learning^[16].

Conversely, those who have less extensive vocabulary tend to use repetition and memorization more often. Lastly, the use of technology in learning vocabulary has become a significant aspect of the development of vocabulary in students. Applications like mobile applications that are available to students as well provide them with an opportunity to review vocabulary and monitor their progress in an easy and interesting manner. But the usefulness of these resources will largely depend on how well students can deal with distractions and develop good study routines.

The findings show that effective vocabulary acquisition goes beyond the fact of acquiring the knowledge of vocabulary^[17]. To learn vocabulary effectively, it needs to have strategic vision, adaptive learning processes and students actively involved. Hence, vocabulary acquisition ought to be perceived not as plain rote memorization but as a dynamic and self-regulating mechanism^[18].

5.2. Pedagogical implications

To begin with, strategic rules should be incorporated in the lesson plans. To continue, the teaching process needs to go beyond memorizing by repetition, but include such methods as context related, semantic, and word building strategies. Moreover, it is advisable that learners are motivated to become strategically flexible and use the methods to good effect in the context of self-directed education^[19].

5.3. Limitations and suggestions for future research

The sample size was rather small, and it was especially visible in the interview survey. Secondly, the research was based mainly on self-assessments. Subsequent studies may be able to provide more practical information about the process of learning vocabulary.

In conclusion, with the ever-evolving language learning environments, there is a need to carry out more research on verifying the long-term impacts of mobile vocabulary learning. In spite of these shortcomings, the present paper has added to the emerging area of strategies of vocabulary learning by thoroughly examining the experiences of vocabulary learning of Chinese students.

Disclosure statement

The author declares no conflict of interest.

References

- [1] Dornyei Z, 2007, *Research Methods in Applied Linguistics: Quantitative, Qualitative, and Mixed Methodologies*. Oxford University Press, London.
- [2] Lewis M, 1993, *The Lexical Approach*. Language Teaching Publications, East Sussex.
- [3] Coady J, Huckin T, 1997, *Second Language Vocabulary Acquisition*. Cambridge University Press, Cambridge.
- [4] Cohen AD, Aphek E, 1981, *Study in Second Language Acquisition*. Cambridge University Press, Cambridge.
- [5] Cohen AD, 1990, *Language Learning: Insights for Learners, Teachers and Researchers*. Newbury House/Harper Row, New York.
- [6] Oxford RL, 1990, *Language Learning Strategies: What Every Teacher Should Know*. Heinle, New York.
- [7] Schmitt N, McCarthy MJ, 1997, *Vocabulary: Description, Acquisition and Pedagogy*. Cambridge University Press, Cambridge.
- [8] Naiman N, et al., 1978, *The Good Language Learner*, thesis, The Ontario Institute for Studies in Education.
- [9] Gu Y, 2018, *Vocabulary Learning Strategies*. The TESOL Encyclopedia of English Language Teaching, Wiley Blackwell, New Jersey.
- [10] Teng F, 2021, *Vocabulary Learning in the Digital Age: Theory and Practice*. Springer, Cham.
- [11] Craik R, Lockhart RS, 1972, Levels of Processing: A Framework for Memory Research. *Journal of Verbal Learning and Verbal Behavior*, 6: 18–25.
- [12] Ellis R, 1994, *The Study of Second Language Acquisition*. Oxford University Press, London.
- [13] McCarthy M, 1990, *Vocabulary*. Oxford University Press, London.
- [14] Schmitt N, 2019, Understanding Vocabulary Acquisition, Instruction, and Assessment: A Research Agenda. *Language Teaching*, 52: 261–274.
- [15] Nation ISP, 2013, *Learning Vocabulary in Another Language* (2nd ed.). Cambridge University Press, Cambridge.
- [16] Takač VP, Singleton D, 2008, *Vocabulary Learning Strategies and Foreign Language Acquisition*. Multilingual Matters Ltd, Bristol.
- [17] Oxford RL, 2017, *Teaching and Researching Language Learning Strategies: Self-Regulation in Context* (2nd ed.). Routledge, London.
- [18] Stuart W, 2008, Receptive and Productive Vocabulary Size of L2 Learners. *Studies in Second Language Acquisition*, 30(1): 79–95.
- [19] Schmitt N, 2000, *Vocabulary in Language Teaching*. Cambridge University Press, Cambridge.

Publisher's note

Whioce Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.