

Developing a Set of Flashcards for Chinese Characters in the Chinese Reading Comprehension Course for Beginners

Đặng Hồng Nhung^{1*}, Đặng Thị Ngọc Minh¹

¹Hung Vuong University – Phu Tho Province

<p>Abstract: Flashcards are a valuable tool for enhancing memory retention, particularly in foreign language acquisition, with Chinese characters serving as a prime example. As logograms, Chinese characters pose a greater challenge for Vietnamese learners accustomed to the Latin alphabet, often leading to difficulties in memorization and a sense of monotony in the learning process. Flashcards provide an effective and engaging solution to this challenge.</p>	<p>Review Paper</p> <p>*Corresponding Author: Đặng Hồng Nhung Hung Vuong University – Phu Tho Province</p> <p>How to cite this paper: Đặng Hồng Nhung & Đặng Thị Ngọc Minh (2025). Developing a Set of Flashcards for Chinese Characters in the Chinese Reading Comprehension Course for Beginners. <i>Middle East Res J. Humanities Soc. Sci.</i>, 5(2): 49-53.</p> <p>Article History: Submit: 09.03.2025 Accepted: 07.04.2025 Published: 12.04.2025 </p>
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1. INTRODUCTION

Chinese is a notoriously challenging language to learn, requiring the application of effective methods to make the learning process more manageable. Vocabulary acquisition plays a crucial role in mastering the language, serving as the key to fluency in Chinese. Among the many challenges faced by beginners in learning Chinese, memorizing Chinese characters stands out as particularly difficult. In the book *Studies on Chinese Characters* by the author Thi Dat Chi, it is noted that “Learning Chinese characters is an arduous task, a sentiment not only shared by foreign learners but also by native Chinese speakers themselves.” Specifically, Chinese characters are ideographic, characterized by numerous strokes and intricate structures, with many characters bearing a resemblance to one another. As a result, learners often face greater difficulty in memorizing Chinese characters compared to phonetic scripts (such as the Latin alphabet or Korean Hangul). Common obstacles include forgetting strokes, confusing visually similar characters, and so on. At Hung Vuong University, the number of students studying Chinese is substantial (approximately 1,000 students), most of whom are new to the language. Consequently, effective methods for memorizing Chinese characters are required to inspire students and enhance their learning experience. Currently, educational materials often emphasize challenging characters, which may discourage learners. For example,

in the first-year Chinese reading comprehension course, students are exposed to a considerable number of new words (on average 20-30 new words per lesson), with very few visual aids, resulting in a dry and difficult learning experience. Therefore, the development of a Chinese character Flashcard system for the introductory Chinese reading comprehension course is essential, as it will not only stimulate interest but also significantly enhance students' ability to retain Chinese characters.

2. RESEARCH CONTENT

2.1. The Concept of Flashcards

Flashcards, also referred to as intelligent learning cards, have been integrated into teaching methodologies worldwide. However, in Vietnam, the prevalence and widespread use of this learning technique remain relatively limited, predominantly restricted to urban centers and large cities. The term "Flashcard" is a fusion of the words "flash" and "card," signifying the swift memorization of information on the card, “as fast as a flash” (Yen. T.N., 2019). An alternative definition, provided by Alizadeth (2016), describes Flashcards as compact cards, each containing an image and the corresponding label. Moreover, research has posited that Flashcards are cards featuring images and words, arranged in a variety of distinct combinations. Flashcards facilitate a clearer understanding of the instructor's explanations, providing a valuable aid to students. The

tool offers numerous advantages, owing to its high degree of interactivity and adaptability. Not only does it promote efficient information retention, but it also encourages the development of active cognitive engagement. When using Flashcards, learners are required to actively process information by attempting to recall or link details from one side of the card to the other, thereby strengthening their ability to retrieve information from memory. This process is vital for the construction and reinforcement of long-term memory. Furthermore, Flashcards can be easily customized to align with the specific learning needs of individual students, enabling learners to craft cards that focus on content that requires further attention. Additionally, Flashcards exhibit great versatility in their application. They can be employed in solitary study, group learning, or even in everyday contexts, such as during a commute on the bus or subway, or just before going to bed. Traditional paper Flashcards offer the advantage of portability and independence from electronic devices, while digital Flashcards allow for the storage of vast quantities of information and the integration of multimedia elements such as images, audio, and video, thereby enhancing the overall learning experience. Flashcards transcend their role as mere learning aids; they represent a method of active memory training that is both effective and efficient. Owing to their convenience, flexibility, and potential for optimizing the learning process, Flashcards have become the preferred tool for many learners seeking to acquire and retain knowledge in a sustainable and enduring manner.

2.2. The Benefits of Flashcards

Flashcards are a highly effective tool for enhancing memory retention, particularly in the context of foreign language learning, such as the acquisition of Chinese characters. Chinese characters are ideographic, and for Vietnamese learners accustomed to the Latin alphabet, these characters present a greater challenge in terms of memorization, which can lead to frustration and disengagement. Flashcards serve as an excellent remedy to this problem, as memory retention naturally declines over time. Thus, Flashcards play an essential role in bolstering memory retention throughout the learning process. Some of the primary advantages of Flashcards include:

- **Augmenting memory retention through Spaced Repetition:** German psychologist Hermann Ebbinghaus introduced the concept of memory decay over time, known as the forgetting curve. Ebbinghaus observed that the forgetting curve follows an exponential trajectory. Initially, memory retention is at 100% when a learner first encounters specific information, but it declines rapidly to approximately 40% in the first few days. After this initial drop, the rate of memory decay slows considerably. Ebbinghaus proposed a solution to counter this forgetting curve: the Spaced Repetition method. Based on his understanding of memory processes, Ebbinghaus conducted experiments using

Spaced Repetition by memorizing a list of words until he had fully retained them, after which he refrained from reviewing the list. Once he could no longer recall any of the words, he re-studied them and compared the second trial to the original forgetting curve. The results indicated a substantial improvement in memory retention during the second attempt. Therefore, when learners intentionally review previously learned material at strategically spaced intervals, the likelihood of consolidating this information into long-term memory increases significantly. Given the efficacy of Spaced Repetition, numerous researchers have adopted this technique in general learning, and particularly in language acquisition. One such researcher, Sebastian Leitner, integrated Spaced Repetition with Flashcards. This approach allows learners to focus more on challenging content. Flashcards containing complex or unfamiliar material are reviewed more frequently within shorter intervals, while familiar and easily recalled information is revisited less often. This method optimizes learning time by ensuring that effort is not wasted on material already mastered, and attention is directed toward new or difficult concepts.

- **Dividing Knowledge into Manageable Segments:** Flashcards play a crucial role in breaking down complex knowledge into smaller, more accessible, and memorable chunks, proving particularly effective when learning vocabulary. When studying a new language like Chinese, learners are often confronted with an overwhelming amount of vocabulary, along with several other complex elements, such as the writing system (Chinese characters), pronunciation, meaning, and contextual usage. Flashcards help to divide these challenges into manageable segments, allowing learners to focus on individual aspects of vocabulary for more efficient acquisition. For example, each Flashcard can contain a Chinese word with essential information such as the character, pinyin (phonetic transcription), Vietnamese meaning, and an illustrative image. The front of the Flashcard may include the Chinese character and an image depicting the character, helping the learner to visually associate the character and infer its meaning. The back of the Flashcard may contain the pinyin and Vietnamese translation. Organizing information in this manner alleviates the pressure of learning, enabling learners to concentrate on one vocabulary item at a time, thus avoiding feelings of being overwhelmed by the large volume of vocabulary and discouragement from struggling with memory retention. Flashcards also facilitate systematic review of learned vocabulary. Studying individual words on Flashcards trains learners to recognize and retain each word independently, before integrating them into broader contexts. As a result, the vocabulary gradually becomes a natural part of the learner's lexicon, rather than remaining as

transient, short-term memory. Furthermore, Flashcards offer learners the opportunity for immediate self-assessment and feedback regarding their level of retention. If the learner struggles to recall the meaning or pronunciation of a word, they can review the card more frequently, reinforcing memory more effectively. Through the approach of dividing knowledge into smaller segments, Flashcards prove to be an invaluable tool in vocabulary acquisition, making the language-learning process more manageable and effective.

- **Enhancing Focus and Fostering Self-Directed Learning:** The use of Flashcards helps learners avoid being overwhelmed by large amounts of information, allowing them to concentrate on memorizing smaller, more manageable segments. This not only improves attention but also minimizes distractions. Flashcards promote sustained concentration throughout the learning process, as each card represents a single word or phrase. Furthermore, the process of testing recall through Flashcards trains learners to develop long-term focus, not only during study sessions but also in situations that demand quick and accurate thinking. Flashcards, being compact and portable, can be used at any time and in any location, enabling learners to take a proactive approach to their studies. With their compact design and flexibility, Flashcards have become an ideal tool for self-revision and knowledge reinforcement whenever spare time is available—whether during a break, while traveling long distances by car, or at any opportune moment. This method is an effective strategy for memorization and the assimilation of new information. In countries with advanced educational systems, such as the United States, South Korea, and Canada, Flashcards are commonly used as an educational tool and can be easily found everywhere due to their convenience. The practice of self-learning through Flashcards encourages learners to take the initiative in planning and assessing their own knowledge without the need for external supervision. This not only helps learners develop self-management skills but also boosts their confidence when facing tests or real-life situations. By allowing learners to adjust the frequency of their revision, Flashcards enable them to focus on areas of weakness, thus maximizing learning efficiency and achieving noticeable progress.

2.3. Design and Application of Flashcard Sets in Chinese Reading Comprehension

The incorporation of Flashcards into the foundational study of Chinese characters is a dynamic, visual, and effective learning method, which not only aids students in memorizing the written form of characters but also in mastering pronunciation, meaning, and contextual usage. Each Flashcard is designed with two sides: the front displays the Chinese character accompanied by an illustrative image, while the back

contains the pinyin (phonetic transcription) and the Vietnamese meaning, facilitating a deeper understanding and better memorization through real-world associations. The images used are carefully selected to either directly represent the meaning of the character or to evoke closely related associations, helping students connect the character's meaning with a concrete image, thereby solidifying it in memory.

To enhance the effectiveness of learning, the Spaced Repetition method is employed, which ensures that students review the Flashcards at strategically timed intervals, thus preventing the forgetting curve. This method is grounded in the principle that individuals tend to forget what they have learned unless it is revisited at optimal times. By scheduling review sessions so that the Chinese characters are revisited at increasing intervals, students can reinforce long-term memory retention. Moreover, tracking daily learning progress by marking the number of cards mastered, not yet learned, and those requiring further revision allows students to closely monitor their memorization progress.

Beyond merely memorizing the written form and meanings, Flashcards also play a significant role in supporting pronunciation and intonation practice. Students can combine Flashcard use with popular pronunciation tools such as Pleco or Anki to listen to and repeat the accurate pronunciation of each character. An effective way to practice pronunciation involves students first viewing the character, guessing its meaning, and then reading it aloud before flipping the card to check the correct pronunciation. This not only helps students become familiar with the tones of Mandarin but also boosts their confidence in using the language in communication.

Moreover, recording one's own voice and comparing it with the pronunciation in the application is also an effective method for identifying and correcting pronunciation errors. Additionally, Flashcards serve as a valuable tool for reinforcing contextual usage. Students can use the cards to form sentences, which not only helps them understand the meaning of individual words but also ensures they grasp how to use the words in real-life contexts. For example, with cards containing words like "家" (jiā, home) and "人" (rén, person), students can combine them to create simple sentences such as "我家有三口人" (Wǒ jiā yǒu sān kǒu rén - My family has three members) for practice. Encouraging students to create sentences with the Chinese characters they have learned enhances their ability to apply the language, transforming the learning experience from being monotonous into something more dynamic and creative. This approach ensures that students not only memorize Chinese characters passively but also actively incorporate them into everyday communication situations.

The Flashcard learning method can also be refreshed and made more engaging through games and group activities. Educational games like "flip the card and guess the meaning," "match the characters with their meanings," or "Chinese character race" not only create an energetic learning atmosphere but also stimulate healthy competition, boosting motivation to learn. For instance, in the "flip the card and guess the meaning" game, students quickly flip each card and must state the meaning of the Chinese character within three seconds. Correct answers earn points, while incorrect answers result in the card being placed back in the review queue. These activities not only naturally reinforce knowledge but also help alleviate the stress associated with studying. Group activities, such as the "fast memorization competition," are also highly effective, as they encourage students to form teams and review together, fostering a sense of camaraderie and collective progress. Group learning offers opportunities for students to exchange ideas, discuss challenging characters, and share personal memory tips, thereby increasing interaction and mutual learning. To ensure systematic study and track progress, students can categorize their Flashcards into three groups: "mastered," "needs review," and "not yet remembered."

This classification method allows students to easily identify which Chinese characters they have mastered and which ones require further practice, enabling them to focus their time and efforts on areas of weakness. Another method involves using a review box with multiple compartments (typically 5 to 7). New cards are placed in the first compartment. If the student answers correctly, the card moves to the next compartment; if incorrect, the card returns to the first compartment. This approach ensures that more challenging characters are reviewed more frequently, while those already mastered are spaced out, optimizing study time. Additionally, recording daily progress, evaluating the number of words memorized, and assessing accuracy after each review session are effective methods for students to track their own improvement. A progress tracker could include columns such as: "Chinese Character," "Pinyin," "Meaning," "Review Session," and "Result," providing a clear view of progress over time.

2.4. Evaluating the Effectiveness of Flashcard Usage

The effectiveness of using Flashcards in learning Chinese characters can be evaluated through various methods. First, student interviews can be employed to gather feedback on the ease of use, level of engagement, and effectiveness of Flashcards in memorizing Chinese characters. Questions may revolve around whether students find Flashcards helpful for long-term retention, whether this method motivates them more, or if they have any suggestions for improving the approach. Additionally, regular assessments play a crucial role in comparing students' ability to remember Chinese characters before and after applying this

method. Weekly quizzes not only help gauge progress but also motivate students to maintain consistent review habits. Furthermore, data analysis provides a scientific and objective approach to measure the effectiveness of Flashcards. By tracking the percentage of characters retained after each review session, a clear picture of each student's improvement can be obtained.

3. CONCLUSION AND RECOMMENDATIONS

After the research, design, and trial phase, the Flashcard (memory card) system for learning Chinese characters in the Basic Chinese Reading Comprehension course has been completed with a scientific, visual design that is suitable for beginner-level students. The results of the practical trials conducted with the K22 Chinese Language Program E student group at Hung Vuong University show that the use of Flashcards has had a significant impact on the learning process, helping students memorize vocabulary quickly, accurately, and more sustainably. By combining Chinese characters, illustrative images, and Pinyin, students can naturally associate the meaning of the word while reducing their reliance on Pinyin, thereby improving their ability to recognize Chinese characters and enhancing their reading comprehension skills.

Despite these benefits, the study also highlights some limitations that need to be addressed. Firstly, selecting appropriate images for each vocabulary word requires a high level of precision to ensure that students can easily make the connection. Some images in the initial Flashcard set did not clearly reflect the meaning of the word, causing difficulties for students in the process of associating and memorizing. Additionally, the current Flashcard set primarily focuses on individual vocabulary words and does not incorporate fixed phrases or example sentences, which would help students better understand how words are used in specific contexts. This may somewhat limit students' ability to apply vocabulary in real-life situations.

Currently, the Flashcards are primarily available in printed form, which confines the learning experience to a limited environment. Given the growing use of digital platforms and the increasing trend for flexible learning among students, an electronic version or a learning app would be a promising direction to enhance the long-term effectiveness of Flashcard usage.

Based on the research results and practical trials, the research team proposes several solutions to enhance and maximize the effectiveness of the Flashcard system, as well as expand its applicability in language learning. Currently, the Flashcard set mainly focuses on helping students recognize and memorize the characters. However, to support a more comprehensive learning process, the research team suggests adding fixed phrases, example sentences, and specific usage contexts. This will not only help students master vocabulary but also understand how to use these words in communication

and reading. Expanding the content will also contribute to enhancing students' language application skills, allowing them to use vocabulary more flexibly in real-life situations.

Illustrative images play an essential role in helping students memorize vocabulary by linking images to the meaning of words. To improve the effectiveness of the Flashcard set, it is crucial to choose clear, easily understood, highly symbolic images that accurately reflect the meaning of the word. Additionally, a unified design style could be applied to create consistency across the cards, making it easier for students to recognize and memorize the content.

Flashcards are a useful tool, but their effectiveness largely depends on how students use them in practice. Therefore, activities should be introduced to guide students on how to use Flashcards effectively. For example, spaced repetition methods can be applied to review vocabulary in cycles, or Flashcards can be combined with other learning techniques such as note-taking, forming sentences with new words, or practicing communication.

In addition to using Flashcards in the Basic Chinese Reading Comprehension course, it would be beneficial to develop additional sets for other skills such as grammar, listening practice, or speaking. This would help create a more comprehensive learning system, supporting students in developing a balanced set of skills while learning Chinese.

The study of Flashcards for Chinese characters in the Basic Chinese Reading Comprehension course has shown promising results, proving the effectiveness of vocabulary learning through images and repetition. While there are still some limitations to address, the research team believes that Flashcards will continue to be a valuable tool in supporting students throughout their learning process as they master Chinese. In the future, if integrated with modern technologies, the Flashcard system could further unleash its potential, contributing to improving the quality of Chinese language education in schools.

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