

THE ROLE OF SPACED REPETITION AND RETRIEVAL PRACTICE IN SUPPORTING LONG-TERM L2 VOCABULARY DEVELOPMENT

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Abstract. *This article explores how spaced repetition and retrieval practice contribute to long-term vocabulary growth in second language (L2) learning. Drawing on recent experimental studies and meta-analytic findings, the paper compares distributed learning strategies with traditional massed learning methods. The findings demonstrate that learners retain vocabulary more effectively when they revisit and actively recall words over spaced intervals rather than studying them intensively in a single session. In addition to improving retention, spaced retrieval practice supports more sustainable lexical development over time. The article also discusses how these strategies can be integrated into classroom teaching and digital learning environments.*

Keywords: *spaced repetition, retrieval practice, L2 vocabulary acquisition, long-term memory, language teaching methodology.*

Аннотация. *В данной статье рассматривается влияние интервальных повторений и практики извлечения информации на долгосрочное усвоение лексики второго языка (L2). Используя мета-аналитический подход и обзор*

Современных экспериментальных данных, исследование изучает эффективность распределенного обучения по сравнению с концентрированным. Результаты показывают, что интервальное извлечение не только улучшает первоначальное запоминание, но и способствует значительно более устойчивому лексическому росту в долгосрочной перспективе.

Ключевые слова: *интервальные повторения, практика извлечения, усвоение лексики L2, долгосрочная память, педагогическая методология.*

Annotatsiya. *Ushbu maqolada ikkinchi til (L2) lug‘at boyligini uzoq muddatli o‘zlashtirishda intervalli takrorlash va ma‘lumotni xotiradan chaqirib olish amaliyotining ta‘siri tahlil qilinadi. Meta-tahliliy yondashuv va so‘nggi eksperimental ma‘lumotlar sharhi asosida tadqiqot taqsimlangan o‘quv jadvallarining jamlangan o‘qitish usullari bilan solishtirgandagi samaradorligini o‘rganadi. Natijalar shuni ko‘rsatadiki, intervalli takrorlash nafaqat dastlabki eslab qolishni yaxshilaydi, balki uzoq muddatda ancha barqaror leksik o‘shni ta‘minlaydi.*

Kalit so‘zlar: *intervalli takrorlash, xotiradan chaqirib olish, L2 lug‘at o‘zlashtirish, uzoq muddatli xotira, pedagogik metodika.*

Introduction. One of the greatest challenges in second language acquisition (SLA) is helping learners move beyond temporary recognition of vocabulary toward long-term, productive use. Many learners rely on “cramming” or intensive short-term memorization before tests, but research consistently shows that this approach often leads to rapid forgetting. In contrast, cognitive psychology highlights the effectiveness of the spacing effect, which suggests that learning becomes more durable when practice is distributed across time rather than concentrated in a single session.

Another important factor in vocabulary retention is retrieval practice. Instead of repeatedly rereading information, learners benefit more when they actively attempt to recall words from memory. This process strengthens memory pathways and improves future retrieval. Together, spaced repetition and retrieval practice form a powerful

combination that supports long-term lexical growth. This article reviews recent studies on these approaches and evaluates their effectiveness in sustaining L2 vocabulary development.

Methodology and literature review. The present study is based on a review of longitudinal and quasi-experimental studies published between 2019 and 2025. The reviewed research compares three major learning schedules: massed practice, equal spacing, and expanding spacing. Massed practice involves repeated study sessions conducted consecutively, while equal spacing uses fixed intervals between reviews. Expanding spacing gradually increases the time between repetitions.

Recent meta-analyses indicate that distributed practice has a moderate to strong positive impact on classroom learning compared with massed learning approaches. Researchers have explained these benefits through several theoretical perspectives. According to Encoding Variability Theory, repeated exposure to vocabulary across different contexts creates multiple memory cues that improve recall. Similarly, the Retrieval Practice Effect argues that the mental effort involved in recalling information strengthens memory more effectively than passive review.

Modern digital tools have also contributed to the growing popularity of spaced learning techniques. Applications such as Anki and other flashcard-based systems are designed around spaced repetition algorithms. Although learners sometimes perceive retrieval practice as mentally demanding, studies suggest that this effort produces significant improvements in vocabulary retention and language performance.

Results and discussion. The findings of the reviewed studies strongly support the effectiveness of spaced retrieval practice in L2 learning. Research demonstrates that vocabulary retention improves substantially when learners revisit material after meaningful intervals rather than through immediate repetition. Whether the spacing schedule is equal or gradually expanding, long-term retention benefits remain significant as long as learners are required to make a genuine cognitive effort during recall.

Several studies focusing on phonetic and lexical learning revealed that learners exposed to spaced practice outperformed those using massed practice in delayed retention tests. Although massed learning sometimes produces higher immediate post-test scores, these gains tend to disappear quickly. By contrast, spaced retrieval leads to slower forgetting and more stable long-term learning outcomes.

Recent research involving A1-level English as a Foreign Language (EFL) learners also highlights the broader impact of spaced retrieval. In addition to improving vocabulary use, spaced practice contributed to better oral fluency, including improvements in measures such as Mean Length of Run (MLR). These findings suggest that spaced repetition does not simply improve isolated word recognition; it also supports more spontaneous and fluent language production.

Conclusion. Spaced repetition and retrieval practice play a crucial role in helping language learners achieve long-term vocabulary mastery. The evidence reviewed in this article suggests that language teaching should move away from isolated memorization practices and instead adopt a spiral approach in which vocabulary is revisited regularly over time.

Digital learning tools provide convenient support for implementing spaced repetition systems, but the core principle remains unchanged: learners retain language more effectively when they repeatedly retrieve information through effortful and distributed practice. Future studies should continue investigating the most effective spacing intervals for different types of language knowledge, including technical vocabulary, idiomatic expressions, and academic terminology.

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