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## Grounding Chinese Language Vocabulary Teaching and Assessment in the Working Memory Research

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Abstract: Since Baddeley and Hitch's seminal research in 1974 on working memory (WM), this topic has been of great interest to language educators. Although there are some variations in the definitions of WM, recent findings in WM have contributed vastly to our understanding of language learning, especially its effects on second language acquisition (SLA). For example, the phonological component of WM (PWM) and the executive component of WM (EWM) have been found to be positively correlated with language learning. This paper discusses two general, yet highly relevant WM findings that could directly affect the effectiveness of Chinese Language (CL) vocabulary teaching and learning, as well as the quality of its assessment. First, PWM is found to be critical for the long-term learning of phonological forms of new words. Second, EWM is heavily involved in interpreting the semantic characteristics of new words, which consequently affects the quality of learners' reading comprehension. These two ideas are hardly discussed in the Chinese literature, both conceptual and empirical. While past vocabulary acquisition studies have mainly focused on the cognitive-processing approach, active processing, 'elaborate processing' (or lexical elaboration) and other effective learning tasks and strategies, it is high time to balance the spotlight to the WM (particularly PWM and EWM) to ensure an optimum control on the teaching and learning effectiveness of such approaches, as well as the validity of this language assessment. Given the unique phonological, orthographical and morphological properties of the CL, this discussion will shed some light on the vocabulary acquisition of this Sino-Tibetan language family member. Together, these two WM concepts could have crucial implications for the design, development, and planning of vocabularies and ultimately reading comprehension teaching and assessment in language education. Hopefully, this will raise an awareness and trigger a dialogue about the meaning of these findings for future language teaching, learning, and assessment.

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