

Repositioning Vocabulary Acquisition via Digital Mind Mapping in Vietnamese High Schools

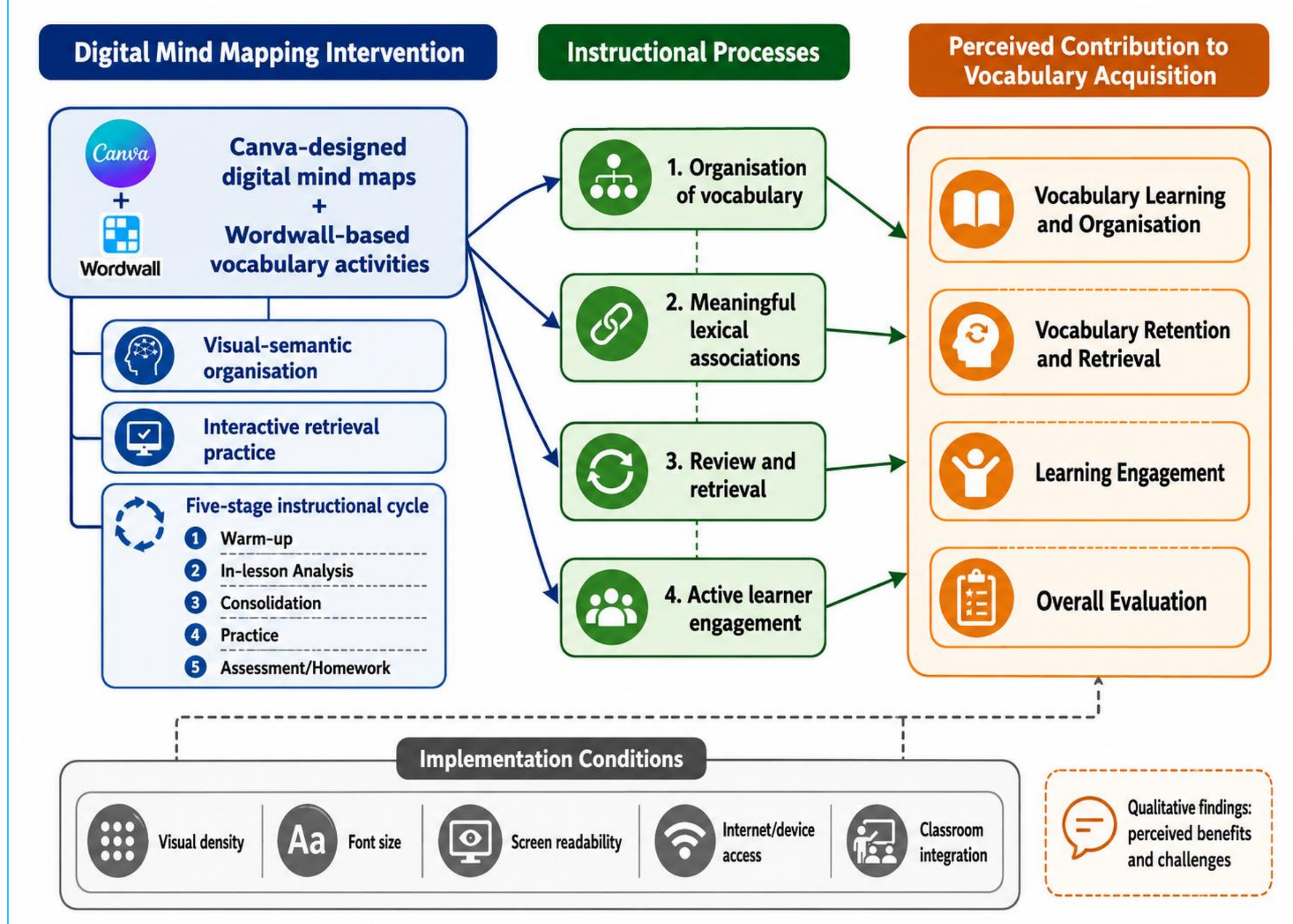
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ABSTRACT

Vocabulary learning is central to reading comprehension, yet Grade 12 students often review new words through isolated bilingual lists. This study examined students' perceptions of a Canva - Wordwall approach used in Grade 12 Global Success reading lessons. All 78 students from two intact classes completed a post-intervention questionnaire containing three categorical closed questions and one open-ended question. Canva maps organised vocabulary visually, while Wordwall activities supported retrieval through a five-stage instructional cycle. Every student reported that the approach helped them remember at least part of the lesson; 47.4% selected 'very much'. Most students (57.7%) preferred combining paper maps with online activities. Open feedback emphasised concise content, larger fonts, clear contrast, useful images, and mobile-friendly design. Digital distribution was estimated to save 250,000 VND across the two classes over one semester, while the school English Club page offered a potential audience of about 1,400 followers. The findings indicate perceived usefulness and classroom feasibility, not objectively measured long-term vocabulary gains.

Keywords: digital mind mapping; vocabulary learning; Canva; Wordwall; EFL

CONCEPTUAL FRAMEWORK



LITERATURE REVIEW

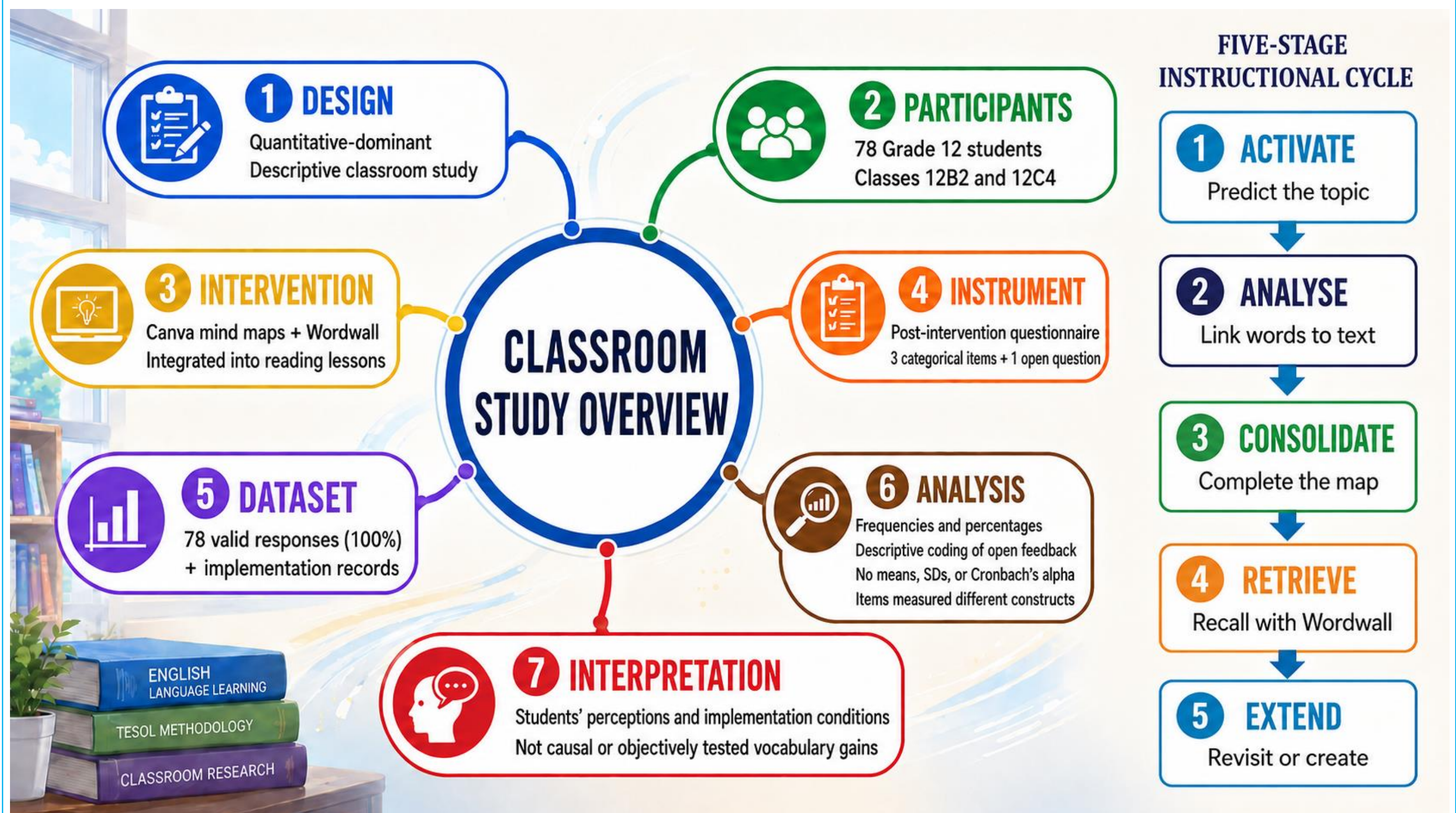
THEME	WHAT THE LITERATURE ESTABLISHES	WHAT REMAINS UNCERTAIN
VOCABULARY ACQUISITION	Word knowledge is multidimensional and develops through repeated encounters, meaningful organisation, and retrieval. <i>Nation (2013); Schmitt (2008)</i>	Questionnaire reports indicate perceived helpfulness; they do not demonstrate long-term retention.
DIGITAL MIND MAPPING	Non-linear maps can connect lexical meanings and associations through branches, keywords, colour, images, and spatial organisation. <i>Buzan & Buzan (1993); Davies (2011)</i>	Visual support depends on careful lexical selection and readable design; density may increase processing demands (Sweller, 1988).
EMPIRICAL EVIDENCE	Studies generally report benefits for vocabulary recall, retention, or motivation, but findings vary across contexts, learners, and research designs. <i>Feng et al. (2023); Shi et al. (2023); Shi & Tsai (2024); Tran et al. (2024)</i>	Evidence remains limited for routine Grade 12 reading lessons in Vietnamese public high schools.

RESEARCH GAP

Limited classroom evidence explains how Canva-based visual-semantic organisation and Wordwall retrieval work together in routine Grade 12 Vietnamese reading lessons, including students' perceived benefits and implementation challenges.

Present study: 78 students in two intact classes; perception-focused evidence rather than causal proof of vocabulary gains.

METHODOLOGY



AIMS & RESEARCH QUESTIONS

- Examine students' perceived contribution of digital mind mapping to vocabulary retention and learning.
- Identify practical benefits and implementation challenges in regular Grade 12 reading lessons.

RQ1. How do Grade 12 students perceive the contribution of digital mind mapping to their English vocabulary retention and learning?

RQ2. What practical benefits and challenges emerge from its implementation in a Vietnamese high-school context?

REFERENCES

- Buzan, T., & Buzan, B. (1993). *The mind map book*. Plume.
- Davies, M. (2011). Concept mapping, mind mapping and argument mapping. *Higher Education*, 62(3), 279–301.
- Feng, R., Alsager, H. N., Azizi, Z., & Sarabani, L. (2023). Impact of mind-mapping technique on EFL learners. *Heliyon*, 9(6), e16560.
- Karpicke, J. D., & Roediger, H. L., III. (2008). Repeated retrieval during learning is the key to long-term retention. *Science*, 319(5865), 966–968.
- Nation, I. S. P. (2013). *Learning vocabulary in another language* (2nd ed.). Cambridge University Press.
- Paivio, A. (1986). *Mental representations: A dual coding approach*. Oxford University Press.
- Schmitt, N. (2008). Instructed second language vocabulary learning. *Language Teaching Research*, 12(3), 329–363.
- Shi, Y., Yang, H., Dou, Y., & Zeng, Y. (2023). Effects of mind mapping-based instruction. *Asia Pacific Education Review*, 24(3), 303–317.
- Shi, Y.-S., & Tsai, C.-Y. (2024). Fostering vocabulary learning. *Computer Assisted Language Learning*, 37(4), 634–686.
- Sweller, J. (1988). Cognitive load during problem solving. *Cognitive Science*, 12(2), 257–285.
- Tran, T. N. P., Ngo, T. B. N., & Nguyen, T. H. P. (2024). The use of electronic mind maps to develop EFL students' vocabulary. *AsiaCALL Conference Proceedings*, 6, 133–143.

FINDINGS

PERCEIVED HELPFULNESS

100%

47.4% very much · 52.6% part of the lesson
reported some help

Perception - not a delayed retention test.

DELIVERY PREFERENCE

57.7%

33.3% online games · 9.0% paper only
preferred hybrid learning

Paper mapping + online retrieval was the leading option.

PREFERRED REVIEW TASK

59.0%

selected word meanings
28.2% summary · 6.4% phrases · 6.4% pronunciation

Students prioritised direct lexical meaning.

DESIGN & PRACTICAL EVIDENCE

39.7%

positive / no change
25.6% clarity · 23.1% readability · 9.0% variety
≈250,000 VND saved · 1,400 potential social-media reach

CONCLUSION

- Students perceived the Canva - Wordwall approach as helpful for vocabulary review and preferred a hybrid paper-digital format.
- Canva supported visual organisation; Wordwall provided complementary retrieval practice.
- Effective maps should be concise, readable on mobile screens, visually clear, and supported by meaningful images.
- The study provides context-specific evidence of perceived usefulness and feasibility, not proof of long-term vocabulary gains.