

## **CHAPTER IV**

### **CONCLUSION AND SUGGESTION**

#### **4.1 Conclusion**

This scoping review has systematically mapped the pedagogical design principles and theoretical models that underpin web-based vocabulary instruction. The findings reveal that a wide range of pedagogical principles, including gamification, mobile-assisted learning, collaborative learning, contextual and culturally relevant designs, multimedia, personalized learning, repetition, and critical thinking, have been integrated to enhance learners' vocabulary acquisition. These principles consistently aim to improve motivation, engagement, retention, and the meaningful application of vocabulary in authentic communicative contexts.

The review also identified several key theoretical models supporting these pedagogical approaches, such as Gamification Theory, Multimedia Learning Theory, Sociocultural Theory, Situated Learning Theory, Cognitive Load Theory, Self-Determination Theory, Dual Coding Theory, and Connectivism. These frameworks explain how and why web-based vocabulary instruction can be effective by addressing learners' cognitive, affective, and social needs while leveraging the affordances of digital technologies. They provide essential guidance for designing vocabulary tasks that balance motivational elements with cognitive manageability and authentic, situated practice.

Overall, this review highlights the strong potential of web-based vocabulary instruction to transform traditional vocabulary learning into a more engaging, contextualized, and learner-centered process. However, the success of these approaches depends on thoughtful integration of pedagogical principles with sound theoretical foundations to ensure that technology serves pedagogical goals rather than driving them. Future research and practice should continue exploring how these frameworks can be adapted to diverse educational contexts, supporting equitable and sustainable vocabulary development in a digital era.

## 4.2 Suggestion

Based on the findings of this scoping review, educators and instructional designers are encouraged to thoughtfully integrate web-based tools with pedagogical principles grounded in relevant theoretical models. In particular, designing vocabulary tasks that blend gamification, multimedia, collaboration, and personalization can significantly enhance learner engagement and vocabulary retention. However, these designs must be carefully aligned with language learning objectives and scaffolded to support cognitive processing, cultural relevance, and meaningful language use, rather than relying on technology features alone.

Furthermore, future research should investigate how these pedagogical and theoretical frameworks can be adapted to various learner profiles, educational levels, and local contexts, especially in under-resourced or culturally diverse environments. It is recommended that policymakers and institutions support teacher professional development to build digital and pedagogical competencies, ensuring that web-based vocabulary instruction is implemented in an equitable, sustainable, and learner-centered way.

