

Assessing the Cross-cultural Effectiveness of Simulation-based Learning for School Leaders in the Asia Pacific Region

School leader learning has long been criticized for the slow pace of adopting new learning methods, especially those using learning technologies. Despite early innovators' success in experimenting with simulation-based learning (SBL) in the 20th century, the adoption of SBL remains limited in educational leadership and management (EDLM). The use of simulations is particularly scarce in EDLM programs in the Asia Pacific region. This project responds to several gaps in research and practice. First, there is a need for relevant, high-impact instructional content that leverages learning technologies in preparing school leaders to implement educational reforms. Second, there is a need to validate the effectiveness of active learning methods that address global social and environmental sustainability challenges. Finally, single-society or single-university studies dominate the multi-disciplinary literature on simulation-based learning. Thus, there is a need for comparative studies of simulation effectiveness, especially cross-cultural research. This project leverages an existing English language online computer simulation, Leading Change for Sustainability in Schools (LCSS), to study the effects of SBL on prospective school leaders in five societies (Mainland China, Hong Kong, Thailand, Malaysia, and Australia). In the development stage, the research team will translate, culturally adapt, program, and test five new versions of the LCSS simulation in the five societies. Next, the research team will examine the effectiveness of an LCSS instructional module (i.e., intervention) with students in EDLM preparation programs. The learning engagement and outcomes of participant samples will be evaluated and compared across the five societies using a quasi-experimental, non-equivalent groups, time-series research design. Data on the participants' simulation usage, decision-making, and results will be used to examine changes in behavioral engagement, knowledge, skills, and attitudes. Qualitative data extracted from an online discussion forum will be analyzed with sentiment and thematic analysis to gain further insights into students' cognitive and behavioral engagement and responses to simulation-based learning. Finally, the research will explore how individual- and societal-level factors influence the effectiveness of SBL. The project will make several significant contributions. First, it will yield five culturally-adapted, validated versions of the online simulation on two essential EDLM curriculum topics: sustainability and change management. Second, the research will yield insights into the use, acceptance, and effectiveness of learning technologies in EDLM programs. Finally, the multi-society, quasi-experimental study conducted in the Asia Pacific region will break new ground in SBL research by analyzing learning engagement and outcomes within a cross-cultural framework.