

Project Summary for IAL Website

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Project Title:	Enhancing Adult Learning Using A Mobile Micro-Learning Platform With Integrated Nudging Interventions: A Design-Based Research Approach
Project Number:	GA19-06
Year of Approval:	2020
Funding Source:	WDARF
Objectives and intended outcomes of the project:	Two problems have plagued research in the area of adult learning: 1) adult learners are mainly presented as a homogenous group, and 2) the perception of adult learners is confounded with their reality. Recent research suggests that to help adult learners; we should harness technologies for learning and enhance the adult learners' learning ability.
Project Team	
Principal Investigator:	Assoc Prof Oh Lih Bin, Dept of IS Analytics, SOC
Summary of Project (up to 300 words)	
<p>This research proposal seeks to contribute to adult learning endeavors in three key ways. First, we diverge from current literature that mainly presents adult learners as a homogenous group by developing archetypes of adult learners using a comprehensive set of dimensions. Second, we seek to develop a theoretically grounded mobile micro-learning platform. This platform will be built based on 1) cognitive load theory to reduce the unnecessary cognitive burden on adult learners and 2) nudging theory to influence effective learning behaviors. Third, we seek to empirically investigate the impact of the mobile micro-learning intervention on adult learning outcomes in order to assess its effectiveness.</p> <p>Our overarching methodology is the design-based research (DBR) (Anderson & Shattuck, 2012; Reeves, 2006; Sandoval, 2014), which informs design, theory, and practice concurrently through iterative implementations. First, researchers analyze practical problems in collaboration with practitioners. Second, solutions are developed according to existing design principles and technological innovations. Third, iterative cycles of testing and refinement of solutions in practice. Fourth, researchers reflect to produce design principles and enhance solution implementation. Through these research phases, four corresponding research questions will be addressed:</p> <ol style="list-style-type: none"> 1. <i>What are the different archetypes of adult learners?</i> 2. <i>How could mobile micro-learning platforms be designed with integrated nudging interventions to improve adult learning?</i> 3. <i>What are the impacts of mobile micro-learning platforms on adult learning?</i> 4. <i>What implications do the results have for the refinement of mobile micro-learning interventions?</i> <p>The rest of the proposal is as follows. We provide a review of the theoretical perspectives and streams of literature that we draw from to develop the proposed mobile micro-learning platform. Next, we discuss the preliminary works that set the foundations for the proposed research: 1) the functionalities already implemented in our prototype and 2) the conceptual development of adult learners archetypes. After that, we present our research methods. Finally, we present potential contributions of our work, and other essential information such as data management issues, ethics, risks, and clearance.</p>	

