

**Research Project Title:** DEVELOPMENT OF A FLASH-BASED MOBILE LEARNING SYSTEM FOR ENGLISH AS SECOND LANGUAGE

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## ABSTRACT

The objectives of this study were (1) to identify components needed for effective mLearning system, (2) to develop a Flash-based Mobile Learning system for English as a second language (FML4ESL), (3) to try out the FML4ESL in a simulated situation, and (4) to evaluate the effectiveness of the developed FML4ESL.

In developing the FML4ESL plan, based on Adobe Flash-based multimedia mobile learning system where multimedia (text and sound) features of the mobile devices are utilized for learning English language as second language, A) a need assessment survey was conducted to evaluate the need for mobile learning in general and mobile English learning in particular; B) consultation with experts in mobile technology and ESL lecturers, a prototype system (FML4ESL) was designed, developed, and tested; C) volunteers among Assumption University students were used as sample to try out the developed system in order to explore and to evaluate its usefulness and effectiveness; D) ANOVA was utilized to compare the scores of pretests and posttests of participants in this research for evaluating its effectiveness and usefulness; and finally F) pre-surveys and post-surveys were utilized to evaluate the learners' satisfactions and effectiveness of FML4ESL.

In designing and developing the FML4ESL plan, the researcher followed seven steps: (1) review of documents, (2) survey of need for the system, (3) design conceptual framework for mLearning model, (4) survey of expert opinion, (5) a prototype for FML4ESL, (6) system verification, (7) finalize the FML4ESL. The prototype system was developed and tested.

The results of pretest and posttests showed a statistically significant ( $p < 0.05$ ) improvement in the scores of English proficiency tests after trying out the FML4ESL. The results of the surveys showed that Flash-based mobile learning for English as second language was effective in improving students' English proficiency especially in the area of pronunciation, listening, and reading comprehension. Participants in this research expressed the convenience and just-in-time learning of mobile learning as the positive and important aspects of learning English using their mobile devices. Participants expressed their desire to have access to more mobile English lessons and integration of FML4ESL to their existing English classes as supplements.