

## ABSTRACT

**Title** : A Study of Blended Learning Model in Basic Courses of Engineering  
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This research aimed to study the blended learning management model in “Basic Engineering” courses. The objectives of this qualitative and quantitative research were to 1) analyze and synthesize the basic information connecting the blended learning management, 2) study the opinion of executives on blended learning management in higher education institutes in Thailand, 3) study the opinion of online learning experts on the components and steps of blended learning management model in “Basic Engineering” course, and 4) to summarize and present the study of blended learning management model in “Basic Engineering” courses. The research instruments were structured interview form, online questionnaire with 5 ratio scales. The samples for interviewing were 4 experts on blended learning management, and the samples for online learning were 21 experts on web based instruction design. The data was statistically analyzed by frequency and percentage.

The research findings were as follow:

1. The blended learning management model composed of 2 components; 1) the policy of blended learning management in the university which mixed the e-learning system and classroom learning. The classroom learning system was 100% portion whereas the online learning was used for supporting learners to gain most benefit, 2) the learning activities consisted of 2.1 pre-teaching, 2.2 learning management, 2.3 blended learning method, 2.4 evaluation.

2. The steps of blended learning management composed of 6 steps; 1) identify the problem, 2) study the problem via web based instruction, 3) investigate the problem solving via web base instruction, 4) construct knowledge in the classroom, 5) apply knowledge in the classroom, 6) evaluation via web based instruction.