

Adapting a Concept Map Model in Teaching and Learning History Subject

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Abstract—People learn much better from words and pictures. An effective way to introduce new scientific terms and to explain process flow is very important. Concept mapping allows students to understand the relationships between concepts and the domain. Multimedia offers great advantages to enhance learning environment and good knowledge representation technique to represent history facts in a visual and graphical form. Therefore, this research proposes a multimedia teaching and learning prototype that applies concept maps for history subject. It helps to facilitate history learning process subject as this subject requires students to imagine and memorize facts, concepts and process in order to understand the subject. The objectives of this research are: (i) to design a multimedia prototype application for teaching and learning history subject for secondary school, (ii) to apply concept map design in the teaching and learning module for multimedia prototype application and (iii) to evaluate the effectiveness and the usability of the prototype application. This research used ADDIE, a standard methodology in multimedia application development. A testing has been conducted to evaluate the effectiveness and the usability of Multimedia Teaching and Learning History subject. The finding shows an increment in the average test score of the experimental group which is 85.5% as compared to the control group. The novelty of this research are: (i) a subject concept can be demonstrated through the linkages connection between subtopics and (ii) new knowledge of few animated concept map design can be described.

Keywords—teaching and learning, multimedia application, concept map, hierarchy, history