

DEVELOPMENT OF A COMPUTER BASED TEACHING AID ON BASICS OF REACTION MECHANISMS IN ORGANIC CHEMISTRY

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ABSTRACT

A new computer based interactive visual aid which contains animations and simulations were developed to use as a teaching aid to teach basic concepts of reaction mechanism in organic chemistry. It also includes three dimensional environments of some simple molecules and reactions. Flash CS4 tool, MOPAC and some web tools were used in the development of the visual aid. Then the developed computer based teaching aid was assessed in an advanced level chemistry class, in which students have already completed organic chemistry lessons using traditional method, to evaluate how this computer based teaching aid can potentially increase the perception and understanding of the subject among students. Both students and teachers were given different questionnaires in order to evaluate the effectiveness of the visual aid. They showed a positive attitude towards the developed computer based teaching aid and suggestions were made for further improvement.