

An ERPs study with information process theory on stereochemistry Education

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Abstract

The aim of this study was to investigate the process of stereochemistry cognition with information process theory by ERPs analysis. In this study, ERPs were recorded while 18 volunteer participants responded for two-dimensional (2D) pictures and 2D chemical structures. The participants were divided to high score group (HSG) and low score group (LSG) with the scores of chemical conceptual questionnaire. The results showed that HSG and LSG were not significant on ERPs data when they recognizing 2D pictures without chemistry concepts. However, HSG and LSG were significant on ERPs data when recognizing 2D chemical structures. The result showed that participants used different strategies to recognize content-based pictures.