

**THE EFFECTIVENESS OF INTERACTIVE LEARNING MODULE WITH
MACROMEDIA FLASH IN PROBLEM BASED LEARNING TO
INCREASE STUDENT'S ACHIEVEMENT AND FOSTER
STUDENT'S CREATIVITY IN TEACHING OF
COLLOIDAL SYSTEM**

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ABSTRACT

The effectiveness of Interactive Learning Module with Macromedia Flash in the teaching of Colloidal System was the treatment that applied in this research. This research was conducted in three different schools; those are SMA Negeri 1 Medan, SMA Negeri 3 Medan and SMA Swasta Dharwangsa Medan by using the interactive learning module in experimental class and using Direct Instruction with regular chemistry textbook in control class. The effectivity of Interactive Learning Module to increase Senior High School student's achievement that was found based on their ability to answer the test that consist of pretest as preliminary test and posttest as test after treatment. And also to foster student's creativity that was found by assessment by descriptor by observe each students in every meeting from the creativity indicator questionnaire. The result of this research showed that in experiment class, that taught using interactive learning module have the percentage of gain is 74% and in control class that taught using direct instruction using regular chemistry textbook have the percentage of gain is 59%. The effectivity of interactive learning module with macromedia flash by using Problem Based Learning (PBL) is 12.16%. The average percentage of student's creativity in experiment class is 89.42% and in control class is 85.17%. It means that the Interactive Learning Module with Macromedia Flash was effective to increase student's achievement and foster student's creativity. From the result of this research, this media especially Interactive Learning Module is suitable applied in teaching and learning process in chemistry lesson, especially in topic Colloidal System because it can improve student's achievement and foster student's creativity.