

**THE IMPLEMENTATION OF CONTEXTUAL TEACHING AND LEARNING MODEL  
BASED ON COLLABORATIVE WITH MEDIA INDEX CARD MATCH TO INCREASE  
STUDENT'S ACHIEVEMENT ON SALT HYDROLYSIS TOPIC**

**Rolina Pandiangan ( 4123332017)**

**ABSTRACT**

The purpose of this research is know the students achievement on salt hydrolysis is learned by contextual teaching and learning ( CTL) model based on collaborative with media index card match. The population of this research is all of student in SMA N 1 Berastagi grade XI Science. The sample are 2 class from student in SMA N 1 Berastagi by purposive random sampling methods. The experimental class is learned by Contextual teaching and learning model based on collaborative with media index card match and control class is learned by conventional method. The instruments are using multiple choice test to see the student's achievement. The instrument of research is standardiz by expert validator t-test and empiric validity. Data analysis using statistic calculation The result of standardiz test is 22 items valid with reability 0.64. The result data shows that the student's achievement taught by contextual teaching and learning model based on collaborative with media index card match give higher than taught by convensional method. It can be seen from the average of gain and also proved with t-test, the normalized gain in experimental class (  $0.744 \pm 0.12$ ) and control class ( $0.648 \pm 0.14$ ).The statement support the data research result of hypothesis test is  $t_{count} = 2.915$  and  $t_{table} = 1.672$  , then  $t_{count} > t_{table}$  ( $2.915 > 1.672$  ). the calculation result shows that  $H_a$  is received or  $H_o$  is rejected, so the student's achievement taught by using CTL based on collaborative with media is higher than direct instruction model. The most level of cognitive aspect improved are C1 (Recalling), C2 (Comprehention), C3 (application), and C4 (analysis) : C1 is 0,61( medium category ), C2 is 0,71 ( high category ), C3 0,8 (high category), and C4 is 0,63( medium category ). in Control class C1 is 0.58(medium category),C2 is 0,55 (medium category),C3 is 0,8(high category),C4 is 0,47(medium category)

Keywords: Contextual Teaching and Learning, Collaborative, Students Achievement