

## **Abstract**

*Keywords: learning outcomes, diagnostic assessment, cognitive diagnostics*

Low mathematics learning outcomes are one of the problems in learning that need to be solved. One effort that can be made is to use diagnostic assessments. The aim of this research is to determine the effect of cognitive diagnostic assessments in mathematics learning on the learning outcomes of class IV students at SDN Kepanjin. This research is a type of quantitative research with a one group pretest-posttest design. Based on analysis of data obtained from research results regarding the influence of cognitive diagnostic assessments in mathematics learning on the learning outcomes of class IV students at SDN Kepanjin. The results of the research that has been carried out show that the average pretest score is 52.3, while the posttest has an average score of 84.8. Apart from that, the results of the paired sample t-test obtained a value of  $t_{\text{count}} = 12.795$  while  $t_{\text{table}} = 2.262$ , which means  $t_{\text{count}} > t_{\text{table}}$  ( $12.795 > 2.262$ ), so it can be concluded that  $H_0$  is rejected while the alternative hypothesis ( $H_a$ ) is accepted. This shows that the diagnostic assessment has a significant influence on mathematics learning outcomes of 4<sup>th</sup> grade students at SDN Kepanjin.