## IMPLEMENTATION OF GEOGRAPHIC LEARNING WITH SPATIAL REPRESENTATION IN SENIOR HIGH SCHOOL

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## **ABSTRACT**

The research objective this year specifically describes the effect of learning geography with spatial representations on geography awareness because of learning. Long-term research aims at building geographic awareness, critical thinking, and geography skills because of learning.

The research method used experimental pretest-posttest control group design. The research was conducted at MAN 1 Yogyakarta involving a population of 180 students as a population and 90 students were sampled purposively based on the equivalence of the initial test. They consist of students who have an initial understanding of the low, medium, and high spatial representations proportionally. Two groups, namely experimental and control, were selected randomly and were given a pretest to determine the initial conditions that were not significantly different. Methods of data collection using tests, questionnaires, and observation sheets. The instrument validation was done through expert judgment with the Aiken category and the reliability estimation used the KR-20 technique. The data analysis looked at the influence of the variables separately using the t-test calculation

The results showed that the alternative hypothesis (Ha) was accepted, namely that there was an effect of geography learning with representation on the material "food security and renewable energy on the level of geographical awareness.  $t_{count}$  3,74>  $t_{table}$  2,57 with  $\alpha$  = 1% which means H<sub>0</sub> is rejected. The average level of geographic awareness of the experimental class is 78.5 and the control class is 60.5. Three groups of students based on their initial abilities in the experimental class, namely: low, medium, and high have different levels of change in the understanding of each spatial representation factor. Five factors of spatial representation content in geography learning: visual, verbal, mathematical, digital, and cognitive. Three factors of geographical awareness, namely: caring, polite, responsive, and tolerant attitude towards the surrounding environment; trying to be part of the solution to environmental problems; love the homeland

Kata Kunci: geography, spatial representation, learning, geographical awareness, visual, verbal, mathematical, digital, and cognitive