

# THE EFFECT OF GOOGLEEARTH AIDED REMOTE SENSING LEARNING TO SPATIAL THINKING ABILITY

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## ABSTRACT

Spatial thinking ability (STA) has an important role in the study of geography which is currently supported by many geospatial technologies. Remote sensing learning has a strategic position to support the formation of student STA. This study aims to (1) test the effectiveness of Google Earth-assisted remote sensing learning on students' spatial thinking skills, (2) analyze the differences in the influence of Google Earth-assisted remote sensing learning on male and female STA students; (3) examine the relationship between STA students with remote sensing learning achievements. This study uses a quasi-experimental design. The subjects in this study were students of the Department of Geography Education. Subjects were treated as remote sensing learning with the help of dynamic imagery in Google Earth. The experimental and control classes used are geography education students who are taking remote sensing courses. Data collection is done by the test method. The test instrument was in the form of multiple choice questions developed based on the STA concept proposed by Gresmehl & Gresmehl. Data analysis techniques to test hypotheses are t-test and Pearson product moment correlation. The expected results of research are (1) Google Earth-assisted remote sensing learning is effective for improving student STA. This can be seen from the test results that show the coefficient  $t = 30.187$  with degrees  $\text{sig} = 0,000$ . (2) The ability of spatial thinking of male and female students after carrying out remote sensing learning assisted by Google Earth shows significantly different results. This is indicated by the results of the analysis which shows  $t = 3,742$  with  $\text{sig} = 0,002$ . (3) There is a positive and significant relationship between STA students with remote sensing learning achievement. This can be seen from the high significance coefficient.

Kata Kunci: *spatial thinking ability, remote sensing, google earth*