

ABSTRAK

PENGARUH MEDIA PEMBELAJARAN BERBASIS TEKNOLOGI GEOSPASIAL TERHADAP KEMAMPUAN BERPIKIR SPASIAL SISWA DI SMA NEGERI 13 BANDAR LAMPUNG

Oleh

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Penelitian ini bertujuan untuk menganalisis penerapan media pembelajaran berbasis teknologi geospasial terhadap kemampuan berpikir spasial siswa kelas XI SMA Negeri 13 Bandar Lampung serta pengaruh penggunaan media pembelajaran berbasis teknologi geospasial terhadap kemampuan berpikir spasial siswa kelas XI SMA Negeri 13 Bandar Lampung.

Penelitian menggunakan pendekatan kuantitatif dengan desain *quasi experiment* melalui model *non-equivalent control group design*. Subjek penelitian terdiri atas dua kelas, yaitu kelas eksperimen yang diberi perlakuan pembelajaran berbasis teknologi geospasial dan kelas kontrol yang menggunakan pembelajaran konvensional. Instrumen penelitian berupa *Spatial Thinking Ability Test* (STAT) yang disusun berdasarkan indikator berpikir spasial menurut Bednarz dan Lee. Analisis data dilakukan menggunakan uji normalitas, uji homogenitas, uji regresi linear sederhana, uji-t, uji cohen's d dan uji N-Gain.

Hasil penelitian menunjukkan bahwa terdapat perbedaan yang signifikan antara kemampuan berpikir spasial siswa pada kelas eksperimen dan kelas kontrol. Peningkatan kemampuan berpikir spasial siswa pada kelas eksperimen berada pada kategori lebih tinggi dibandingkan kelas kontrol. Dengan demikian, media pembelajaran berbasis teknologi geospasial berpengaruh positif terhadap peningkatan kemampuan berpikir spasial siswa kelas XI SMA Negeri 13 Bandar Lampung.

Kata Kunci: Teknologi Geospasial, Media Pembelajaran, Berpikir Spasial.

ABSTRACT

THE EFFECT OF GEOSPATIAL TECHNOLOGY BASED LEARNING MEDIA ON STUDENTS' SPATIAL THINKING SKILLS AT SMA NEGERI 13 BANDAR LAMPUNG

By

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This study aims to analyze the application of geospatial technology-based learning media to the spatial thinking ability of grade XI students of SMA Negeri 13 Bandar Lampung and the effect of the use of geospatial technology-based learning media on the spatial thinking ability of grade XI students of SMA Negeri 13 Bandar Lampung. The study uses a quantitative approach with *quasi experiment* design through *a non-equivalent control group design model*. The research subjects consisted of two classes, namely the experimental class that was given the treatment of learning based on geospatial technology and the control class that used conventional learning. The research instrument is in the form of *the Spatial Thinking Ability Test* (STAT) which is compiled based on spatial thinking indicators according to Bednarz and Lee. Data analysis was carried out using normality tests, homogeneity tests, simple linear regression test, t-tests, and N-Gain tests. The results showed that there was a significant difference between students' spatial thinking skills in the experimental class and the control class. The improvement of students' spatial thinking skills in the experimental class was in the higher category than the control class. Thus, geospatial technology-based learning media has a positive effect on improving the spatial thinking ability of grade XI students of SMA Negeri 13 Bandar Lampung.

Keywords: Geospatial Technology, Learning Media, Spatial Thinking.