

PENGARUH PEMBELAJARAN IPA DENGAN MODEL *SCIENCE, ENVIRONMENT, TECHNOLOGY AND SOCIETY* (SETS) TERHADAP KESIAPSIAGAAN BENCANA GEMPA BUMI DAN PEMAHAMAN KONSEP PADA TEMA GEMPABUMI PESERTA DIDIK SMP N 1 WATES

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui: (1) pengaruh pembelajaran IPA dengan model *Science, Environment, Technology and Society* (SETS) terhadap kesiapsiagaan bencana gempa bumi peserta didik SMP N 1 Wates, dan (2) pengaruh pembelajaran IPA dengan model *Science, Environment, Technology and Society* (SETS) terhadap pemahaman konsep pada tema gempa bumi peserta didik SMP N 1 Wates.

Penelitian ini merupakan penelitian kuasi eksperimen dengan desain *nonequivalent pretest posttest control group design*. Populasi penelitian merupakan peserta didik kelas VII SMP N 1 Wates yang berjumlah 192 orang. Teknik pengambilan sampel menggunakan *cluster random sampling*. Sampel penelitian berjumlah 64 peserta didik yang terdiri dari peserta didik kelas VII B sebagai kelas eksperimen dan peserta didik kelas VII D sebagai kelas kontrol. Instrumen penelitian yang digunakan berupa angket kesiapsiagaan bencana gempa bumi, lembar observasi kesiapsiagaan bencana gempa bumi, soal *pretest* dan soal *posttest*. Analisis data dilakukan dengan teknik analisis deskriptif dan analisis inferensial menggunakan Uji Mann Whitney.

Hasil penelitian ini adalah: (1) ada pengaruh pembelajaran IPA dengan model *Science, Environment, Technology and Society* (SETS) terhadap kesiapsiagaan bencana gempa bumi peserta didik SMP N 1 Wates, dan (2) ada pengaruh pembelajaran IPA dengan model *Science, Environment, Technology and Society* (SETS) terhadap pemahaman konsep pada tema gempa bumi peserta didik SMP N 1 Wates.

Kata kunci: kesiapsiagaan bencana, pemahaman konsep, pembelajaran IPA, SETS

**THE INFLUENCE OF SCIENCE LEARNING USING SCIENCE,
ENVIRONMENT, TECHNOLOGY AND SOCIETY (SETS) MODEL
TOWARDS EARTHQUAKE DISASTER PREPAREDNESS AND
EARTHQUAKE CONCEPTS UNDERSTANDING OF STUDENTS OF
SMP N 1 WATES**

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ABSTRACT

This research was aimed to know: (1) the influence of science learning using science, environment, technology and society model towards earthquake disaster preparedness of students in SMP N 1 Wates, and (2) the influence of science learning using science, environment, technology and society model towards earthquake concepts understanding of students in SMP N 1 Wates.

It was a quasi-experimental research with nonequivalent pretest posttest control group design. The research population was 192 students of SMP N 1 Wates. Sampling was done using cluster random sampling technique. The research samples was 64 students consisted of VII B class' students as an experimental class and VII D class' students as a control class. The instruments used were in forms of earthquake disaster preparedness questionnaire, earthquake disaster preparedness observation sheets and *pretest* and *posttest*. Data analysis technique used was a descriptive and inferential analysis technique using Mann Whitney test.

The research results are: (1) there is influences of science learning using science, environment, technology and society model towards earthquake disaster preparedness of students in SMP N 1 Wates, and (2) there is influences of science learning using science, environment, technology and society model towards earthquake concepts understanding of students in SMP N 1 Wates.

Keywords: *disaster preparedness, concept understanding, science learning, SETS*