

## ABSTRAK

**SUTARTO:** Pengaruh Pendekatan Science Environment Technology Society (SETS) Dan Pendekatan Contextual Teaching And Learning (CTL) Terhadap Kemampuan Berpikir Kritis Sains Peserta Didik SMP. **Tesis. Yogyakarta: Program Pascasarjana, Universitas Negeri Yogyakarta, 2013.**

Tujuan penelitian ini adalah: 1). menganalisis pengaruh pendekatan SETS terhadap kemampuan berpikir kritis sains, 2). menganalisis pengaruh pendekatan CTL terhadap kemampuan berpikir kritis sains, 3). menganalisis perbedaan pengaruh antara pendekatan SETS dan pendekatan CTL terhadap kemampuan berpikir kritis sains, 4) menganalisis pendekatan yang lebih efektif antara pendekatan SETS dan pendekatan CTL terhadap kemampuan berpikir kritis sains.

Penelitian kuantitatif ini menggunakan jenis penelitian *quasi-experiment* dengan desain *pretest-posttest with nonequivalent group*. Kelompok A diberi perlakuan dengan pendekatan SETS dan kelompok B diberi perlakuan dengan pendekatan CTL. Penelitian dilaksanakan di kelas VII (reguler) SMP Muhammadiyah 2 Yogyakarta tahun ajaran 2012/2013. Penentuan sampel menggunakan *cluster random sampling technique*. Pengambilan data menggunakan tes tertulis. Uji pengaruh pendekatan SETS dan pendekatan CTL menggunakan uji *paired sample t-test*, uji beda pengaruh pendekatan menggunakan uji *independent sample t test*, dan uji pendekatan yang lebih efektif berdasarkan tiga kriteria yaitu persentase ketuntasan belajar, uji *one sample t test*, dan perbandingan rerata *posttest*. Semua uji dilakukan berbantuan *SPSS 16 for windows*.

Kesimpulan hasil penelitian ini adalah sebagai berikut. 1) Pendekatan SETS berpengaruh secara signifikan terhadap kemampuan berpikir kritis sains. 2) Pendekatan CTL berpengaruh secara signifikan terhadap kemampuan berpikir kritis sains. 3) Ada beda pengaruh antara pendekatan SETS dan pendekatan CTL terhadap kemampuan berpikir kritis sains. 4) Pendekatan SETS lebih efektif dari pada pendekatan CTL terhadap kemampuan berpikir kritis sains.

Kata kunci: Pendekatan SETS, Pendekatan CTL, berpikir kritis sains

## ABSTRACT

**SUTARTO:** *The Effect of Science Environment Technology Society (SETS) Approach and Contextual Teaching and Learning (CTL) Approach on Science Critical Thinking Ability of Junior High School Students.* **Thesis. Yogyakarta: Graduate School, Yogyakarta State University, 2013.**

The purposes of this study are: 1). to analyze the effect of SETS approach on the science critical thinking ability, 2). to analyze the effect of CTL approach on the science critical thinking ability, 3). to analyze the differences influence approach between SETS approach and CTL approach on the critical thinking ability, 4). to analyze the more effective approach between SETS approach and CTL approach on the science critical thinking of junior high school students.

This quantitative research study used a type of quasi-experiment with a pre-test-post-test design with non-equivalent groups. Group A was treated with the SETS approach and group B was treated with the CTL approach. The experiment was conducted in class VII (regular) of Junior High School of Muhammadiyah 2 Yogyakarta in the academic year of 2012/2013. The sample was established using the random cluster sampling technique. The data were obtained by using a written test. The data analysis to determine the effect of SETS approach used the paired sample t-test, to determine the effect of CTL approach used the paired sample t-test, to determine the differences influence used the independent sample t-test, and knowing effective approach used criteria of the percentage of mastery learning, test one sample t test, and comparison of the mean posttest. All of the testing was carried out with the aid of *SPSS 16 for windows*.

The results of this study are as follows. 1) SETS approach significant influence on the critical thinking skills in science. 2) CTL approach significant influence on the critical thinking skills in science. 3) There is differences influence between SETS approach and CTL approach on critical thinking skills in science. 4) SETS approach more effective than CTL approach on the critical thinking skills in science.

Keywords: *SETS Approach , CTL Approach, Critical Thinking in Science*