

Sinta Nurriyah Kusuma Widianingrat 2026. *Implementasi Pendekatan Deep Learning Berbantuan Eksperimen untuk Meningkatkan Kemampuan Berpikir Ilmiah Murid SMP*. Skripsi, Progam Studi Pendidikan IPA, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Trunodjoyo Madura.
Pembimbing: Fatimatul Munawaroh.

ABSTRAK

Abstrak: Penelitian ini bertujuan untuk mengetahui perbedaan kemampuan berpikir ilmiah murid antara kelas yang menerapkan pendekatan *deep learning* berbantuan eksperimen dan kelas konvensional, mengetahui peningkatan kemampuan berpikir ilmiah murid setelah implementasi pembelajaran, mengetahui keterlaksanaan pembelajaran, dan mengetahui respons murid terhadap pembelajaran. Metode pada penelitian adalah kuantitatif dengan jenis *quasi experiment* dan *nonequivalent control group design*. Pendekatan pembelajaran yang digunakan *deep learning* diintegrasikan dengan model *guided inquiry* berbantuan eksperimen. Populasi penelitian seluruh murid kelas VIII UPTD SMP Negeri 2 Bangkalan. Sampel penelitian yaitu kelas VIII C sebagai kelas eksperimen dan kelas VIII D sebagai kelas kontrol dipilih berdasarkan teknik *purposive sampling*. Teknik pengumpulan data diambil melalui tes kemampuan berpikir ilmiah (*pretest* dan *posttest*), observasi keterlaksanaan pembelajaran, angket respons murid, wawancara, dan dokumentasi. Hasil penelitian menunjukkan bahwa terdapat perbedaan kemampuan berpikir ilmiah antara kelas eksperimen dan kelas kontrol, dengan nilai signifikansi $0,000 < 0,05$. Peningkatan kemampuan berpikir ilmiah kelas eksperimen memperoleh nilai *N-Gain* sebesar 0,34 dengan kategori sedang. Keterlaksanaan pembelajaran mencapai nilai 100% dengan kategori sangat baik. Selain itu, implementasi pembelajaran pendekatan *deep learning* berbantuan eksperimen memperoleh respons sangat positif. Dengan demikian, pendekatan *deep learning* berbantuan eksperimen dapat untuk meningkatkan kemampuan berpikir ilmiah murid SMP pada materi getaran, gelombang, dan cahaya.

Kata kunci: eksperimen, *guided inquiry*, kemampuan berpikir ilmiah, pendekatan *deep learning*.

Sinta Nurriyah Kusuma Widianingrat 2026. Implementation of Experiment-Assisted Deep Learning Approach to Improve Junior High School Students' Scientific Thinking Skills. Thesis, Science Education Study Program, Faculty of Teacher Training and Education, Trunodjoyo University, Madura.
Advisor: Fatimatul Munawaroh.

ABSTRACT

Abstract: This research aims to determine the differences in students' scientific thinking abilities between classes that apply the deep learning approach assisted by experiments and conventional classes, determine the increase in students' scientific thinking abilities after implementing learning, determine the implementation of learning, and determine students' responses to learning. The research method is quantitative with a quasi-experimental type and nonequivalent control group design. The learning approach used by deep learning is integrated with a guided inquiry model assisted by experiments. The research population was all students in class VIII UPTD SMP Negeri 2 Bangkalan. The research samples, namely class VIII C as the experimental class and class VIII D as the control class were selected based on purposive sampling techniques. Data collection techniques were taken through scientific thinking ability tests (pretest and posttest), observation of learning implementation, student response questionnaires, interviews, and documentation. The results showed that there were differences in scientific thinking abilities between the experimental class and the control class, with a significance value of $0.000 < 0.05$. Increasing scientific thinking skills in the experimental class obtained an N-Gain value of 0.34 in the medium category. The implementation of learning reached a score of 100% in the very good category. Apart from that, the implementation of the deep learning approach assisted by experiments received a very positive response. Thus, the deep learning approach assisted by experiments can improve middle school students' scientific thinking skills on the topics of vibrations, waves, and light.

Keywords: experiment, guided inquiry, deep learning approach, scientific thinkin skills.