ABSTRAK

Nova, W. I.A.P. (2023), Pengaruh Model *Project Based Learning (*PjBL*)* terhadap Keterampilan Proses Sains dan Hasil Belajar Kognitif Peserta Didik pada Mata Pelajaran IPA SMP. Tesis, Pendidikan IPA, Program Pascasarjana, Universitas Pendidikan Ganesha.

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Kata-kata kunci: keterampilan proses sains, hasil belajar kognitif, model *Project*

Based Learning, pembelajaran konvensional.

Penelitian ini bertujuan mendeskripsikan dan menjelaskan perbedaan keterampilan proses sains dan hasil belajar kognitif antara peserta didik yang belajar menggunakan *Project Based Learning* (PjBL) dan pembelajaran konvensional pada mata pelajaran IPA. Jenis penelitian ini merupakan eksperimen semu (*quasi experiment*) dengan rancangan *non-equivalent pretest-posttest control group design*. Populasi dalam penelitian ini adalah seluruh peserta didik kelas VIII SMPN 1 Marga, Kabupaten Tabanan Tahun Ajaran 2022/2023. Pengambilan sampel penelitian berdasarkan teknik *simple random sampling* berdasarkan kelas dengan mengambil empat kelas sebagai sampel untuk kelas eksperimen dan kontrol. Instrumen penelitian yaitu lembar observasi keterampilan proses sains dan tes hasil belajar kognitif. Data dalam penelitian ini berupa skor keterampilan proses sains peserta didik dan skor hasil belajar kognitif yang dianalisis berdasarkan analisis deskriptif dan uji *Multivariate Analysis of Covariance* (MANCOVA). Hasil penelitian menunjukan bahwa: (1) secara simultan terdapat perbedaan keterampilan proses sains dan hasil belajar kognitif antara peserta didik yang belajar menggunakan *Project Based Learning* (PjBL) dan pembelajaran konvensional pada mata pelajaran IPA, (2) terdapat perbedaan keterampilan proses sains antara peserta didik yang belajar menggunakan *Project Based Learning* (PjBL) dan pembelajaran konvensional pada mata pelajaran IPA, dan (3) terdapat perbedaan hasil belajar kognitif antara peserta didik yang belajar menggunakan *Project Based Learning* (PjBL) dan pembelajaran konvensional pada mata pelajaran IPA. Kelompok peserta didik yang belajar menggunakan *Project Based Learning* (PjBL) menunjukkan keterampilan proses sains dan hasil belajar kognitif pada mata pelajaran IPA lebih unggul dibandingkan kelompok peserta didik yang belajar dengan pembelajaran konvensional.

ABSTRACT

Nova, W.I.A.P. (2023), The Effect of Project Based Learning (PjBL) Model in Science Process Skills and Cognitive Learning Outcomes of Students in Junior High School of Science Subjects. Thesis, Science Education, Postgraduate Program, Ganesha University of Education.

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Key words: science process skills, cognitive learning outcomes, Project models
Based on learning, conventional learning.

This study was conducted to describe and explain the differences in science process skills and cognitive learning outcomes between students who learn using Project Based Learning (PjBL) and conventional learning in science subjects. The research type was a quasi-experimental research design with a non-equivalent pretest-posttest control group design. The research population was all class VIII students of SMPN 1 Marga, Tabanan Regency for the 2022/2023 academic year. The research sample was taken using a class-based simple random sampling technique by taking four classes as samples for the experimental and control classes. The research instruments were observation sheets of science process skills and cognitive learning outcomes tests. The research obtained were students' science process skill scores and cognitive learning outcomes scores which were analyzed descriptively and the Multivariate Analysis of Covariance (MANCOVA) test. The results showed that: (1) simultaneously, there are differences in science process skills and cognitive learning outcomes between students who learned to use Project Based Learning (PjBL) and conventional learning in science subjects, (2) there are differences in science process skills between students who studied using Project Based Learning (PjBL) and conventional learning in science subjects, and (3) there are differences in cognitive learning outcomes between students who learned to use Project Based Learning (PjBL) and conventional learning in science subjects. The group of students who studied using Project Based Learning (PjBL) demonstrated science process skills and cognitive learning outcomes in science subjects were superior to those of the group of students who studied with conventional learning.