

ABSTRAK

PENGARUH PENERAPAN MODEL *PROBLEM BASED LEARNING*
TERHADAP KEMAMPUAN *EVALUASI* DAN *INFERENSI*
PADA MATA PELAJARAN IPA KELAS V
SD KANISIUS KALASAN
YOGYAKARTA

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2017

Kata kunci: model *problem based learning*, kemampuan *evaluasi*, kemampuan *inferensi*, mata pelajaran IPA.

Latar belakang penelitian ini adalah keprihatinan terhadap rendahnya tingkat kemampuan kognitif siswa Indonesia pada mata pelajaran IPA yang dilihat pada penelitian PISA tahun 2012 dan 2015. Penelitian dilakukan untuk mengetahui pengaruh penerapan model *Problem Based Learning* terhadap kemampuan *evaluasi* dan *inferensi* pada mata pelajaran IPA kelas V SD Kanisius Kalasan Yogyakarta.

Jenis penelitian menggunakan *quasi experimental* tipe *non-equivalent control group design*. Populasi penelitian ini adalah seluruh siswa kelas V SD Kanisius Kalasan sebanyak 61 siswa. Sampel terdiri dari 31 siswa kelas VA sebagai kelompok eksperimen dan 30 siswa kelas VB sebagai kelompok kontrol. Langkah-langkah model *Problem Based Learning* yang diterapkan pada kelompok eksperimen yaitu (1) mengorientasi peserta didik terhadap masalah, (2) mengorientasi peserta didik untuk belajar, (3) membimbing penyelidikan individual maupun kelompok, (4) mengembangkan dan menyajikan hasil karya, dan (5) menganalisis dan mengevaluasi proses pemecahan masalah.

Hasil penelitian menunjukkan bahwa (1) model *Problem Based Learning* tidak berpengaruh terhadap kemampuan *evaluasi*. Rerata skor kelompok eksperimen ($M = 0,61$, $SE = 0,15$) lebih tinggi dari kelompok kontrol ($M = 0,59$, $SE = 0,17$). Perbedaan tersebut tidak signifikan dengan $t(59) = -0,12$, $p = 0,904$ ($p > 0,05$). *Effect size* sebesar $r = 0,013$ (0,02%) yang termasuk kategori efek kecil. (2) model *Problem Based Learning* berpengaruh terhadap kemampuan *inferensi*. Rerata skor kelompok eksperimen ($M = 0,90$, $SE = 0,13$) lebih tinggi dari kelompok kontrol ($M = 0,45$, $SE = 0,14$). Perbedaan tersebut signifikan dengan $t(59) = -2,42$, $p = 0,02$ ($p < 0,05$). *Effect size* sebesar $r = 0,30$ (0,9%) yang termasuk kategori efek sedang.

ABSTRACT

**THE EFFECT OF THE IMPLEMENTATION OF PROBLEM BASED LEARNING
MODEL ON THE ABILITY TO EVALUATE AND INFERENCE SKILLS IN
NATURAL SCIENCE SUBJECT FOR THE FIFTH GRADE
IN KANISIUS KALASAN ELEMENTARY SCHOOL
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Keywords: model of problem based learning, the ability to evaluate, ability to inference, natural science subject.

The background of this study was directed to the concern about the low level of cognitive ability of Indonesian students in science subject according to PISA study in 2012 and 2015. The aims of the study was to find out the effect of the implementation of problem based learning model on the ability to evaluate and inference in science subject for the fifth grade students in Kanisius Kalasan Elementary School, Yogyakarta in odd semester 2016/2017.

This study used quasi experimental research with nonequivalent control group design. The population of this study were 61 of the 5th grade students in Kanisius Kalasan Elementary School. The sample were 31 students of class VA as the experimental group and 30 students of class VB as the control group. The treatment for the experimental group was problem based learning model. There a 5 steps in the Problem Based Learning models applied to the experimental group that (1) orient students to the problem, (2) orient learners to learn, (3) guiding the investigation individually or in groups, (4) develop and present work, (5) analyze and evaluate the problem-solving process.

The results of this study showed that (1) problem based learning model does not affect on the ability to evaluate. The mean score of the experimental group ($M = 0.61$, $SE = 0.15$) higher than the control group ($M = 0.59$, $SE = 0.17$). The difference is not significant with $t(59) = -0,12$, $p = 0,904$ ($p > 0,05$). The effect size of is $r = 0,013$ (0,02%) included in small effect category. (2) problem based learning model affect on the ability to inference. The mean score for the experimental group ($M = 0.90$, $SE = 0.13$) higher than control group ($M = 0.45$, $SE = 0.14$). The difference is significant with $t(59) = -2.42$, $p = 0.02$ ($p < 0.05$). The effect size of is $r = 0,30$ (0,9%) included in medium effect category.