

ABSTRAK

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

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Kata kunci: model PBL, kemampuan *evaluasi*, kemampuan *inferensi*, mata pelajaran IPA.

Latar belakang penelitian ini adalah keprihatinan terhadap rendahnya tingkat kemampuan IPA siswa Indonesia pada penelitian PISA tahun 2012 dan 2015. Tujuan penelitian ini adalah untuk mengetahui pengaruh penerapan model PBL terhadap kemampuan *evaluasi* dan *inferensi* pada mata pelajaran IPA kelas IV SD Kanisius Sengkan Yogyakarta pada semester gasal tahun ajaran 2016/2017.

Penelitian ini menggunakan penelitian *quasi experimental* tipe *non-equivalent control group design*. Populasi pada penelitian ini adalah seluruh siswa kelas IV SD Kanisius Sengkan Yogyakarta sebanyak 93 siswa. Sampel penelitian ini terdiri dari 31 siswa kelas IV A sebagai kelompok kontrol dan 31 siswa kelas IV C sebagai kelompok eksperimen. *Treatment* yang diterapkan di kelompok eksperimen adalah model PBL. Ada 5 langkah dalam model PBL yaitu (1) Mengorientasikan siswa pada masalah, (2) Mengorganisasi siswa untuk belajar, (3) Membimbing penyelidikan individu maupun kelompok, (4) Mengembangkan dan menyajikan hasil karya, (5) Menganalisis dan mengevaluasi proses pemecahan masalah.

Hasil penelitian menunjukkan bahwa 1) Model *Problem Based Learning* (PBL) berpengaruh terhadap kemampuan *evaluasi*. Rerata kelompok eksperimen ($M = 0,903$, $SE = 0,131$) lebih tinggi daripada kelompok kontrol ($M = 0,279$, $SE = 0,191$). Perbedaan tersebut signifikan dengan harga $t(60) = -2,685$ dan $p = 0,009$ ($p < 0,05$). *Effect size* model PBL terhadap kemampuan *evaluasi* menunjukkan nilai $r = 0,32$ (10%) masuk dalam kategori “efek menengah”. 2) Model PBL berpengaruh terhadap kemampuan *inferensi*. Rerata kelompok eksperimen ($M = 0,849$, $SE = 0,134$) lebih tinggi daripada kelompok kontrol ($M = 0,139$, $SE = 0,179$). Perbedaan tersebut signifikan dengan harga $t(60) = -3,162$ dan $p = 0,002$ ($p < 0,05$). *Effect size* model PBL terhadap kemampuan *inferensi* menunjukkan nilai $r = 0,37$ (14%) masuk dalam kategori “efek menengah”.

ABSTRACT

**THE EFFECTS OF THE IMPLEMENTATION OF PROBLEM BASED LEARNING
MODEL ON THE EVALUATING AND INFERENCE SKILLS IN SCIENCE
SUBJECT FOR THE FOURTH GRADE STUDENTS
KANISIUS SENGKAN ELEMENTARY SCHOOL YOGYAKARTA**

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Key words: PBL model, evaluating skill, inference skill, natural science subject.

The background of the research is the concern towards the lack of science skill of Indonesian students based on the results of study of PISA on 2012 and 2015. The aim of this research is to know the effect of the implementation of Problem Based Learning (PBL) model on the evaluating and inference skills in science subject for the fourth grade students in Kanisius Sengkan Elementary School on the first semester of 2016/2017 academic year.

This research uses quasi experimental, non-equivalent control group design type. The population of this study is the grade four students of Kanisius Sengkan Elementary school who are 93 students. The sample of the research are 31 students of class A as control group and 31 students of class C as experimental group. The treatment that applied in the experimental group is PBL model. There are 5 steps on the model. Those are orienting the students to the problem, organizing students to learn, guiding the student or a group of student in the process of solving problem, developing and presenting the work result, and analyzing and evaluating the process of solving problem.

The result of the research shows that 1.) PBL model brings effect towards evaluating skill. The average score of experimental group ($M = 0,903$, $SE = 0,131$) is higher than the average score of control group ($M = 0,279$, $SE = 0,191$). The difference between the average score of experimental and control group is significant with the price of $t(60) = -2,685$ and $p = 0,009$ ($p < 0,05$). The effect size of PBL model towards evaluating skill is $r = 0,32$ (10%) included in “medium effect” category. 2) PBL model brings effect towards inference skill. The average score of experimental group ($M = 0,849$, $SE = 0,134$) is higher than the average score of control group ($M = 0,139$, $SE = 0,179$). The difference between the average score of experimental and control group is significant with the price of $t(60) = -3,162$ and $p = 0,002$ ($p < 0,05$). The effect size of PBL model towards inference skill is $r = 0,37$ (14%) included in “medium effect” category.