

## ABSTRAK

**PENGARUH PENERAPAN MODEL *PROBLEM BASED LEARNING*  
TERHADAP KEMAMPUAN *EVALUASI* DAN *INFERENSI*  
PADA MATA PELAJARAN IPA KELAS IV  
SDN PERUMNAS CONDONGCATUR YOGYAKARTA**

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Kata kunci: model *Problem Based Learning*, 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. Penelitian ini bertujuan untuk mengetahui pengaruh penerapan model *Problem Based Learning* (PBL) terhadap kemampuan *evaluasi* dan *inferensi* pada mata pelajaran IPA kelas IV SDN Perumnas Condongcatur Yogyakarta.

Penelitian ini menggunakan metode *quasi experimental* tipe *non-equivalent control group design*. Sampel penelitian ini sebanyak 56 orang, terdiri dari 26 orang kelas IV B sebagai kelompok eksperimen dan 30 siswa kelas IV C sebagai kelompok kontrol. *Treatment* yang diterapkan di kelompok eksperimen adalah model PBL. Ada 5 langkah dalam model PBL yaitu orientasi siswa pada masalah, mengorganisasi siswa untuk belajar, melakukan penyelidikan individual atau kelompok, mengembangkan dan menyajikan hasil karya, menganalisis dan mengevaluasi proses pemecahan masalah.

Hasil penelitian menunjukkan bahwa 1) Model PBL berpengaruh terhadap terhadap kemampuan *evaluasi*. Skor rerata selisih kelompok eksperimen ( $M = 0,68$ ,  $SE = 0,07$ ) lebih tinggi daripada rerata selisih kelompok kontrol ( $M = 0,44$ ,  $SE = 0,09$ ). Perbedaan skor signifikan  $t(54) = -2,068$ ,  $p = 0,043$  ( $p < 0,05$ ). *Effect size* model PBL terhadap kemampuan *evaluasi* adalah 0,26 atau setara dengan 7%. 2) Model PBL berpengaruh terhadap terhadap kemampuan *inferensi*. Skor rerata selisih kelompok eksperimen ( $M = 0,76$ ,  $SE = 0,09$ ) lebih tinggi daripada rerata selisih kelompok kontrol ( $M = 0,32$ ,  $SE = 0,09$ ). Perbedaan skor signifikan  $t(54) = -3,28$ ,  $p = 0,002$  ( $p < 0,05$ ). *Effect size* model PBL terhadap kemampuan *inferensi* adalah 0,41 atau setara dengan 17%.

**ABSTRACT**

**THE EFFECTS OF THE IMPLEMENTATION OF PROBLEM BASED LEARNING MODEL ON THE ABILITY TO EVALUATE AND INFERENCE IN SCIENCE SUBJECT FOR THE FOURTH GRADE STUDENTS IN PERUMNAS CONDONGCATUR YOGYAKARTA ELEMENTARY SCHOOL**

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*Keywords: PBL model, the ability to evaluate, the ability to analyze, natural science subject.*

*The background of this study was directed to the concern about the low of students science ability at Indonesian country according to PISA 2012 and 2015 research. The aims of the study was to find out the effect of the implementation of inquiry method on the ability to apply and analyze in science subject for the fourth grade students in Perumnas Condongcatur Yogyakarta Elementary School.*

*This study used quasi experimental research with nonequivalent control group design. The samples were 56 students, consist of 26 students class IVB as the experimental group and 30 students of class IV C as the control group. The treatment for the experimental group was PBL model. There are 5 steps including orientate students toward the problem, organize students to study, lead the individual or group inquiry, develop and present the result, and analyze and evaluate problem solving.*

*The result of this study showed that 1) PBL model affects on the ability to evaluate. The average score of the experimental group ( $M = 0,68$ ,  $SE = 0,07$ ) was higher than control groups ( $M = 0,44$ ,  $SE = 0,09$ ). The difference was significant  $t(54) = -2,06$ ,  $p = 0,043$  ( $p < 0,05$ ). The effect size on the ability to evaluate was 0,26, as same as 7%. 2) PBL model affects on the ability to inference. The average score of the experimental group ( $M = 0,76$ ,  $SE = 0,09$ ) was higher than control groups ( $M = 0,32$ ,  $SE = 0,09$ ). The difference was significant  $t(54) = -3,28$ ,  $p = 0,002$  ( $p < 0,05$ ). The effect size on the ability to inference was 0,41, as same as 17%.*