

## ABSTRAK

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

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Kata kunci: model *Problem Based Learning*, kemampuan *interpretasi*, kemampuan *analisis*, mata pelajaran IPA.

Latar belakang penelitian ini adalah keprihatinan terhadap semakin rendahnya tingkat kemampuan IPA siswa Indonesia pada penelitian PISA tahun 2009 dan 2012. Tujuan penelitian ini adalah untuk mengetahui pengaruh penerapan model *Problem Based Learning* terhadap kemampuan *interpretasi* dan *analisis* pada mata pelajaran IPA kelas V SD Kanisius Kalasan Yogyakarta.

Penelitian ini menggunakan penelitian *quasi experimental* tipe *non-equivalent control group design*. Populasi penelitian ini adalah seluruh siswa kelas V SD Kanisius Kalasan Yogyakarta sebanyak 61 siswa. Sampel penelitian ini terdiri dari 31 siswa kelas VA sebagai kelompok eksperimen dan 30 siswa kelas VB sebagai kelompok kontrol. *Treatment* yang diterapkan di kelompok eksperimen adalah model *Problem Based Learning*. Ada 5 langkah dalam model *Problem Based Learning* yaitu mengorientasikan siswa terhadap masalah, mengorganisasi siswa untuk belajar, membimbing penyelidikan individual maupun kelompok, mengembangkan dan menyajikan hasil karya, dan menganalisis dan mengevaluasi proses pemecahan masalah.

Hasil penelitian menunjukkan bahwa 1) Model *Problem Based Learning* berpengaruh terhadap kemampuan *interpretasi*. Hal tersebut ditunjukkan dengan rerata kelompok eksperimen ( $M = 0,41$ ,  $SE = 0,13$ ) lebih tinggi dari kelompok kontrol ( $M = -0,23$ ,  $SE = 0,13$ ). Perbedaan tersebut signifikan dengan  $t(59) = -3,35$  dan  $p = 0,001$  ( $p < 0,05$ ). Besar pengaruh perlakuan terhadap kemampuan *interpretasi* adalah  $r = 0,40$  atau 16% yang setara dengan efek “menengah”. 2) Model *Problem Based Learning* tidak berpengaruh terhadap kemampuan *analisis*. Hal tersebut ditunjukkan dengan rerata kelompok eksperimen ( $M = 0,34$ ;  $SE = 0,12$ ) lebih tinggi dari kelompok kontrol ( $M = 0,08$ ;  $SE = 0,14$ ). Perbedaan ini tidak signifikan dengan  $t(59) = -1,30$ , dan  $p = 0,197$  ( $p > 0,05$ ). Besar pengaruh perlakuan terhadap kemampuan *analisis* adalah  $r = 0,173$  atau 3% yang setara dengan efek kecil.

**ABSTRACT****THE EFFECTS OF THE IMPLEMENTATION OF PROBLEM BASED LEARNING MODEL ON THE ABILITY TO INTERPRET AND ANALYZE IN NATURAL SCIENCES FOR THE FIFTH GRADE KANISIUS ELEMENTARY SCHOOL STUDENTS OF KALASAN YOGYAKARTA**

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*Keywords: Problem Based Learning model, the ability to interpretation, ability to analyze, natural science subject.*

*The background of this research is growing concern over the low level of natural sciences ability of Indonesian students at PISA study in 2009 and 2012. The aim of this study was to determine the effect of Problem Based Learning model application on the ability of interpret and analyze in natural sciences for the fifth grade Kanisius Elementary School students of Kalasan Yogyakarta.*

*This study uses a quasi-experimental research is non-equivalent control group design. The study population was all students of the fifth grade Kanisius Elementary School students of Kalasan Yogyakarta as many as 61 students. The research sample consisted of 31 students of fifth grade A as an experimental group and 30 students of B as the control group. Treatment that is applied in the experimental group is a model of problem-based learning. There are five steps in Problem Based Learning models of orienting students to the problem of organizing learners to learn, guiding the investigation individually or in groups, develop and present the work, and to analyze and evaluate the problem-solving process.*

*The results showed that 1) Model Problem Based Learning affect the ability of interpretation. This is indicated by the mean experimental group ( $M = 0.41$ ,  $SE = 0.13$ ) higher than the control group ( $M = -0.23$ ,  $SE = 0.13$ ). The significant difference with  $t(59) = -3.35$  and  $p = 0.001$  ( $p < 0.05$ ). The effect size of the treatment on the ability of the interpretation is  $r = 0.40$  or 16%, which is equivalent to the effect of "medium". 2) Model Problem Based Learning did not affect the ability of the analysis. This is indicated by the mean experimental group ( $M = 0.34$ ;  $SE = 0.12$ ) higher than the control group ( $M = 0.08$ ;  $SE = 0.14$ ). These differences were not significant with  $t(59) = -1.30$  and  $p = 0.197$  ( $p > 0.05$ ). The effect size of the treatment on the ability of analysis is  $r = 0.173$ , or 3%, which is equivalent to little effect.*