ABSTRAK

PENGARUH PENERAPAN MODEL *PROBLEM BASED LEARNING* TERHADAP KEMAMPUAN *INTERPRETASI* DAN *ANALISIS* PADA MATA PELAJARAN IPA KELAS IV SD KANISIUS SENGKAN 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 rendahnya tingkat kemampuan IPA siswa Indonesia pada penelitian PISA tahun 2012 dan 2015. Penelitian ini bertujuan mengetahui pengaruh penerapan model *Problem Based Learning* terhadap kemampuan *interpretasi* dan *analisis* pada mata pelajaran IPA kelas IV SD Kanisius Sengkan Yogyakarta pada semester gasal tahun ajaran 2016/2017.

Penelitian ini merupakan penelitian *quasi experimental* tipe *non-equivalent control group design*. Populasi penelitian ini adalah seluruh siswa kelas IV SD Kanisius Sengkan Yogyakarta sebanyak 93 siswa. Sampel penelitian ini terdiri dari 31 siswa kelas IVC sebagai kelompok eksperimen dan 31 siswa kelas IVA 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 pada masalah, mengorganisasi siswa untuk belajar, membimbing penyelidikan individu 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*. Rerata kelompok eksperimen *(M=1,15; SE=0,11)* lebih tinggi daripada kelompok kontrol (*M=0,48; SE=0,14*). Perbedaan tersebut signifikan dengan harga *t(60)=-3,60* dan *p=0,001* ($p < 0,05$). *Effect size* sebesar $r=0,42$ setara dengan 17,7% yang temasuk kategori "efek menengah". 2) Model *Problem Based Learning* berpengaruh terhadap kemampuan *analisis*. Rerata kelompok eksperimen *(M=0,78; SE=0,12)* lebih tinggi daripada kelompok kontrol (*M=0,15; SE=0,13*). Perbedaan tersebut signifikan dengan harga *t(60)=-3,52* dan *p=0,001* ($p < 0,05$). *Effect size* sebesar $r=0,41$ setara dengan 17,1% yang temasuk kategori "efek menengah".

ABSTRACT

THE EFFECTS OF THE IMPLEMENTATION OF PROBLEM BASED LEARNING MODEL ON THE ABILITY TO INTERPRET AND ANALYZE IN SCIENCE SUBJECT FOR THE FOURTH GRADE STUDENTS IN KANISIUS SENGKAN ELEMENTARY SCHOOL, YOGYAKARTA

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Keywords: Problem Based Learning model, the ability to interpret, ability to analyze, natural in 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 Problem Based Learning model on the ability to interpret and analyze in science subject for the fourth grade students in Kanisius Sengkan 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 93 of the 4th grade students in Kanisius Sengkan Elementary School. The samples were 31 students of class IVC as the experimental group and 31 students of class IVA as the control group. The treatment for the experimental group was Problem Based Learning model. There are 5 steps in the Problem Based Learning model including orienting the students to the problem, organizing the students to learn, guiding the students or a group of studentsin the process of solving problem, developing and presenting the work result, and analyzing and evaluating the process of solving problem.

The result of this study showed that 1) Problem Based Learning model affects on the ability to interpret. The average score of experimental group (M=1,15; SE=0,11) is higher than the average of control group (M=0,48; SE=0,14). The difference between the average score of experimental group and control group is significant. It is shown by the value of t(60)=-3,60 and p=0,001 (p < 0,05). The effect size was r=0,42 equal with 17,7% categorized into"medium effect". 2) Problem Based Learning model affects on the ability to analyze. The average score of experimental group (M=0,78; SE=0,12) is higher than the average of control group (M=0,15; SE=0,12). The difference between the average score of experimental group and control group is significant. It is shown by the value of t(60)=-3,52 and p=0,001 (p < 0,05). The effect size was r=0,41 equal with 17,1% categorized into "medium effect".