ABSTRAK

Aprizal Panjaitan (2024) Analisis Kemampuan Matematis Siswa Menggunakan Model Pembelajaran *Problem Based Learning* Di SMP Swasta Bahal Batu Siborong-Borong

Penelitian ini bertujuan untuk mengetahui kemampuan komunikasi siswa VII di SMP Swasta Bahal Batu Siborong-borong ditinjau dari indikator komunikasi matematis setelah diberikan model pembelajaran *Problem Based Learning* dan mengetahui kesulitan yang dialami siswa VII di SMP Swasta Bahal Batu Siborong-borong dalam menyelesaikan masalah komunikasi matematis setelah diajarkan menggunakan model pembelajaran Problem Based Learning ditinjau dari indikator komunikasi matematis. Penelitian ini merupakan penelitian kualitatif deskriptif. Subjek penelitian ini adalah siswa/i kelas VII di SMP Swasta Bahal Batu Siborong-borong yang berjumlah 30 orang, kemudian diangkat untuk subjek wawancara berdasarkan tingkat kemampuan komunikasi matematis siswa yang berbeda (tinggi, sedang, rendah). Teknik pengumpulan data yang dilakukan adalah metode tes meliputi kemampuan komunikasi matematis dan metode wawancara. Adapun hasil penelitian sebagai berikut: (1) Kemampuan komunikasi matematis siswa kelas VII di SMP Swasta Bahal Batu Siborong-borong setelah diajar menggunakan model pembelajaran *Problem Based Leaning* (PBL) diketahui bahwa 36.67% siswa dengan kategori rendah tidak memenuhi kemampuan komunikasi matematis, 40.00% siswa dengan kategori sedang tidak memenuhi kemampuan komunikasi matematis dan 23.33% siswa dengan kategori tinggi memenuhi kemampuan komunikasi matematis. Setelah dirata-ratakan, indikator kemampuan komunikasi matematis siswa yang paling tinggi persentasenya adalah menyatakan masalah kehidupan sehari-hari ke dalam simbol atau bahasa matematis dan menuliskan informasi dari pernyataan ke dalam bahasa matematika dengan presentase sebesar 66.67%, sedangkan indikator kemampuan komunikasi matematis siswa yang paling rendah adalah menginterpretasikan gambar atau simbol matematis ke dalam model matematika dengan persentase sebesar 46.67%. (2) Kesulitan-kesulitan yang dihadapi siswa kelas VII di SMP Swasta Bahal Batu Siborong-borong dalam kemampuan komunikasi matematis pada siswa berkemampuan komunikasi matematis rendah yaitu mengalami kesulitan fakta, konsep, operasi dan prinsip. Pada siswa berkemampuan komunikasi matematis sedang, siswa mengalami kesulitan fakta dan konsep.

Kata kunci: kemampuan komunikasi matematis, model pembelajaran *Problem Based Leaning* (pbl)

ABSTRACT

Aprizal Panjaitan (2024) Analysis of Students' Mathematical Skills Using the Problem Based Learning Model at Bahal Batu Siborong-Borong Private Middle School

This research aims to determine the communication skills of VII students at Bahal Batu Siborong-borong Private Middle School in terms of mathematical communication indicators after being given the Problem Based Learning learning model and to find out the difficulties experienced by VII students at Bahal Batu Siborong-borong Private Middle School in solving mathematical communication problems after taught using the Problem Based Learning learning model in terms of mathematical communication indicators. This research is descriptive qualitative research. The subjects of this research were 30 class VII students at Bahal Batu Siborong-borong Private Middle School, who were then appointed as interview subjects based on the students' different levels of mathematical communication skills (high, medium, low). The data collection technique used was a test method including mathematical communication skills and interview methods. The results of the research are as follows: (1) The mathematical communication skills of class VII students at Bahal Batu Siborong-borong Private Middle School after being taught using the Problem Based Leaning (PBL) learning model, it is known that 36.67% of students in the low category do not meet mathematical communication skills, 40.00% students in the medium category do not meet mathematical communication skills and 23.33% of students in the high category meet mathematical communication skills. After being averaged, the indicator of students' mathematical communication skills with the highest percentage is expressing daily life problems into symbols or mathematical language and writing information from statements into mathematical language with a percentage of 66.67%, while the indicator of students' mathematical communication abilities is the highest. low is interpreting mathematical images or symbols into mathematical models with a percentage of 46.67%. (2) The difficulties faced by class VII students at Bahal Batu Siborong-borong Private Middle School in mathematical communication skills among students with low mathematical communication skills are experiencing difficulties with facts, concepts, operations and principles. For students with moderate mathematical communication skills, students experience difficulties with facts and concepts.

Keywords: *Mathematical Communication Skills, Problem Based Leaning (PBL) Learning Model*