ABSTRAK

Penelitian ini dilatarbelakangi oleh pembelajaran yang umumnya berpusat pada guru dan tidak melatih kemampuan siswa untuk memecahkan masalah dalam kehidupan sehari-hari. Tujuan penelitian ini adalah untuk memperoleh informasi mengenai proses serta hasil pembelajaran berbasis masalah tipe Tan dalam konteks pengolahan air sumur tercemar. Metode penelitian yang digunakan adalah *one-group pretest-posttest design*, dengan subyek penelitian adalah siswa SMA kelas XII-IPA di salah satu SMA di Kota Bandung yang berjumlah 35 orang. Instrumen penelitian yang digunakan meliputi format observasi performa guru, format observasi performa siswa dan butir soal. Hasil penelitian menunjukkan bahwa performa guru dalam merencanakan dan melaksanakan pembelajaran tergolong sangat baik. Performa siswa ditinjau dari aspek pengetahuan tergolong kategori baik, sikap selama pembelajaran tergolong sangat baik dan keterampilan saat melakukan eksperimen tergolong sangat baik. Hasil belajar pada tahap menganalisis masalah dikategorikan tinggi (*N-gain* = 0,7), mengorganisasikan masalah dikategorikan sedang (*N-gain* = 0,5), menemukan solusi pemecahan masalah dikategorikan sedang (*N-gain* = 0,5), menyimpulkan hasil pemecahan masalah dikategorikan sedang (*N-gain* = 0,5), dan menggabungkan konsep kimia kedalam pemecahan masalah dikategorikan sedang (*N-gain* = 0,5). Dengan demikian, pembelajaran berbasis masalah tipe Tan dapat meningkatkan performa guru dan performa siswa serta dapat meningkatkan kemampuan pemecahan masalah siswa.

Kata kunci: Pemecahan Masalah, Air Sumur Tercemar, Tipe Tan

ABSTRACT

This research is motivated by the learning that is generally centered on the teacher and does not train students' ability to solve problems in daily life. The purposes of this research were to obtain information about the process and the results of problem-based learning type Tan in the context of wells contaminated water treatment. The method which used was one group pretest-posttest design, the research subjects were 35 high school students in grade XII-IPA from one of senior high school in Bandung. The instruments of this research were observation format of teacher performance, observation format of student performance, and student worksheets. The results showed that the performance of teachers in planning and implementing the learning is excellent. The performance of students from the aspect of knowledge was classified as good, the attitude was in excellent and skills when performing an experiment was in excellent. The learning result in step analyzing problems was categorized high (N-gain = 0.7), organizing issues was categorized moderate (N-gain = 0.5), discover solutions of problem solving was categorized moderate (N-gain = 0.5), summarize the results problem solving was categorized average (N-gain = 0.5), and combining the concept of problem solving into chemical was categorized intermediate (N-gain = 0.5). Thus, problem-based learning type Tan can improve the performance of teachers and student and can improve students' problem-solving abilities.

Keywords: Problem Solving, Contaminated Well Water, Type Tan.