

## ABSTRAK

Penelitian ini dilatarbelakangi oleh proses pembelajaran kimia yang masih menekankan pada aspek mengingat dan memahami. Namun aspek tingkat tinggi seperti menganalisis masalah, mengevaluasi, dan mencipta belum dilatihkan kepada siswa. Sehingga siswa kurang terlatih mengembangkan keterampilan memecahkan masalah serta kesulitan dalam menerapkan konsep-konsep yang dipelajari dalam kegiatan pembelajaran di kehidupan sehari-hari. Penelitian ini bertujuan untuk memperoleh informasi mengenai pengaruh pendekatan *Problem Based Learning* tipe Tan terhadap kinerja guru dan siswa serta penguasaan konsep siswa pada konteks penyakit kencing batu. Metode yang digunakan dalam penelitian ini adalah *pre-experiment* dengan *one group pretest-posttest design*. Subjek penelitian terdiri dari 25 siswa kelas XI IPA pada salah satu SMA di kota Bandung. Instrumen penelitian yang digunakan adalah lembar observasi kinerja guru, lembar analisis observasi, lembar kerja siswa, dan butir soal. Penilaian konsep siswa dinilai berdasarkan hasil *pretest* dan *posttest* yang diukur dengan menggunakan uji *paired simple t-test*. Hasil penelitian menunjukkan bahwa kinerja guru dalam merencanakan pembelajaran *Problem Based Learning* berkategori sangat baik (90%) dan melaksanakan *Problem Based Learning* berkategori sangat baik (91%). Kinerja siswa selama kegiatan *Problem Based Learning* dalam aspek kognisi berkategori baik (72%), aspek sikap berkategori sangat baik (88%), dan aspek keterampilan berkategori sangat baik (87%). Penguasaan konsep siswa pada konteks penyakit kencing batu meningkat dengan nilai rata-rata N-gain sebesar 0,34 berkategori sedang dan penguasaan konsep dasar siswa berbasis konsep kelarutan dan hasil kali kelarutan meningkat secara signifikan sebesar 16%. Hal ini menunjukkan bahwa penerapan pendekatan *Problem Based Learning* berbasis tipe Tan dapat meningkatkan penguasaan konsep siswa.

**Kata Kunci:** *Problem Based Learning* tipe Tan, kinerja guru, kinerja siswa, penguasaan konsep.

## **ABSTRACT**

*This study was based on the problem in chemistry learning process that is focused on aspects of remembering and understanding. But the high-level aspects such as analyze problems, evaluate, and create yet practised to students. This cause student's lack of skill in solving problems in their real life. The purpose of this study is to obtain information about Problem Based Learning approach in increasing student's concepts mastery in kidney stone disease context. This study was using pre-experimental method with one group pretest-posttest design. Subject in this study consisted of 25 student of XI science from one of the high school in Bandung. The research instrument consisted of teacher performance assessment observation sheet, attitude, and student performance observation sheet, worksheets assessment format, and item written test. Student's concepts mastery assessed from the result in pretest and posttest were measured using the paired sample t-test. The result showed that the influence of Problem Based Learning Tan model in kidney stone disease context toward the teacher performance in planning learning obtained excellent category by the percentage of 90% and the teacher performance in implementing learning obtained excellent category by the percentage of 91%. The student performance in aspect of cognition obtained good category by the percentage of 72%, aspect of attitude obtained excellent category by the percentage of 88%, and aspect of performance obtained excellent category by the percentage of 87%. Student's concept mastery in kidney stone disease context increase with average value of N-Gain is 0,34 obtained medium category and student's concept mastery based on solubility concept increase significantly is 16%. This case shows that the implementation of Problem Based Learning Tan model approach can increasing student's concepts mastery.*

**Keywords:** *Problem based learning Tan model, teacher performance, student performance, concepts mastery.*