

## ABSTRAK

Keterampilan proses sains (KPS) merupakan hal yang sangat penting dimiliki oleh siswa. KPS memungkinkan siswa mengembangkan keterampilan dasar, sikap kritis, dan mempelajari konsep maka KPS perlu dikembangkan pada siswa. Penelitian ini bertujuan untuk mengetahui KPS siswa kelas XII pada pembelajaran penurunan titik beku larutan menggunakan model inkuiri terbimbing dengan media laboratorium virtual. Dalam penelitian ini digunakan metode deskriptif dengan subjek penelitian siswa kelas XII sebanyak 40 orang di salah satu SMA Negeri di kota Bandung. Data penelitian diperoleh menggunakan instrumen penelitian berupa lembar pedoman observasi, tes tertulis dan angket. Terdapat 14 sub indikator KPS yang menjadi fokus dalam penelitian ini. Hasil penelitian menunjukkan terdapat lima sub indikator KPS yang tergolong kategori baik sekali yaitu keterampilan membuat tabel pengamatan, keterampilan menerapkan rumus, keterampilan menghubungkan hasil percobaan, keterampilan mengamati titik beku larutan, dan keterampilan mendiskusikan hasil percobaan. Terdapat delapan sub indikator KPS yang tergolong kategori baik yaitu keterampilan membuat hipotesis, keterampilan membuat grafik, keterampilan membuat kesimpulan, keterampilan menerapkan konsep, keterampilan menentukan alat dan bahan, keterampilan menentukan variabel yang diukur, keterampilan merancang langkah kerja, dan keterampilan mengajukan pertanyaan. Terdapat satu sub indikator KPS yang tergolong kategori cukup yaitu keterampilan mengetahui alasan penggunaan alat dan bahan. Berdasarkan hasil penelitian diketahui bahwa secara keseluruhan penggunaan model inkuiri terbimbing dengan laboratorium virtual pada pembelajaran penurunan titik beku larutan dapat mengembangkan KPS dengan kategori baik. Pendapat siswa mengenai model ini yaitu sebagian besar siswa tidak mengalami kesulitan pada keenam tahapan inkuiri terbimbing dengan media laboratorium virtual.

## ABSTRACT

Science process skills (SPS) are very essential things in the learning process. SPS allow students to develop basic skills, critical thinking, critical attitude, and learning concept. Therefore SPS needs to be developed in students. The purpose of this research is to obtain information about student's science process skills achievement on freezing point depression in solutions learning using guided inquiry model with a virtual laboratory. This research used a descriptive method, and the subject of this research is 40 students of grade 12 in a senior high school in Bandung. In addition, the data was obtained through a research instrument in the form of observation guidelines, written tests and questionnaires. However, there are 14 sub-indicators of SPS that are focusing on this research. Moreover the results showed that there were five sub-indicators classified into excellent category, including skill to make table's observation, skill to apply the formula skill, skill to link the results of the experiment, skill to observe the freezing point of solutions, and skill to discuss the results of the experiment. In addition, there are eight sub-indicators classified into good category, including skill to make hypotheses, skill to make a graph, skill to make a conclusion, skill to apply concepts, skill to determine tools and materials, skill to determine measured variables, skill to design experimental procedure, and skill to ask question. On the other hand, there is one sub-indicator classified into enough category, it is skill to determine the reason of using the tools and materials. Based on the results, the research showed that using a guided inquiry model with a laboratory virtual on freezing point depression in solutions learning can develop student's SPS that classified into good category. Student's response to this model is that most students do not have difficulty to do all of the stage in guided inquiry model with a virtual laboratory.