

Abstract
Principles and Procedures in Chemistry Laboratory Exercises:
What do students recognize?
Lori Allen
University of Wisconsin - Parkside

This project attempted to determine what principles and procedures students recognize between past and present laboratory exercises and their depth of understanding. Students completed a total of four sets of two laboratory exercises and evaluation was based on the performance on the exercises plus a written comparison report. Preliminary data suggests that the students focus more on the procedural similarities versus conceptual similarities in their comparison reports and that the students have difficulty writing and predicting chemical reactions. More work is needed to determine how writing and predicting chemical reactions impacts their success in later coursework and what approaches might alleviate this problem. The report touches on these issues in more detail and provides insights for future directions. The eventual aim of this work is to understand how students assimilate their prior laboratory exercises or experiences into their current laboratory work.

WTS 2005-06