

# Under the Microscope: Examining the Research Base on Biological Lab Experiences

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This 18-month study examines key research literature from 1987-2006 on laboratory experiences in life science in order to propose a new model for increased engagement in lab-based activities among students in grades 1-13.

Project researchers are reviewing articles from publications in North America, Australia, and Europe to examine the published research on life-science laboratory experiences and their bearings on questions of progressions in learning and the adequate education of students with regard to the characteristics of living systems and how they are studied and understood. The analysis will identify areas in which more research is needed and recommend a theoretical framework with which to construct and critique progressions in laboratory exercises for biology/life science. By reporting in both research and practitioner literatures, we hope to stimulate a conversation about the role, value, and design of laboratory experiences that will strengthen our students' understanding of the processes of life and the life sciences.

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