

Abstract Submitted
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Addressing Quantitative, Conceptual and Writing Goals in an Introductory Laboratory¹ SCOTT BONHAM, DOUG HARPER, Western Kentucky University — There can be a number of different goals in introductory physics laboratories, such as measurement and data, conceptual understanding, and scientific communication. When the department revised the first semester calculus-based physics lab, a task force developed learning objectives, which emphasized measurement, data and analysis, but also gave importance to conceptual understanding and scientific communication. This poster will describe strategies used to address the different objectives at the same time. Many labs have both a qualitative (conceptual) component as well as a quantitative component, on-line pre-lab questions are used to help students prepare for lab, including identifying main concepts and reading technical material, and scaffolding approaches are used to help students learn the software and develop their technical writing skills. Positive results in the evaluation will also be shown.

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