MAR14-2013-008782

Abstract for an Invited Paper
for the MAR14 Meeting of
the American Physical Society

Jonathan Reichert and Barbara Wolff-Reichert Award: Updating Lab Curricula via the Tom Sawyer method of painting a fence

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The undergraduate curriculum ought to provide a broad foundation for a career in experimental science. (After all, even theoretical physicists benefit from a foundational understanding of experimentalism – and may even, at some point in their careers, be called upon to teach undergraduate courses with labs.) Yet, while the teaching of mathematical formalism within the traditional physics major consists of an extended, "spiral curriculum" (which repeatedly revisits, reinforces, and refines key concepts), a great many programs would benefit from expanding the curricular "space" given to lab instruction: I will argue that research experience ought not be considered a substitute for the sort of broad grounding a full curriculum of lab instruction can provide. Most importantly, I will describe powerful ways in which we can help you to introduce new instructional lab modules (and models). Inertia is no longer a valid excuse: far too much assistance is available to you for it to be ignored. Let the revolution begin!