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Hollylynne Stohl Lee. *Engaging Students in Reasoning About the Logic of Hypothesis Testing.*

Given the opportunity to introduce a class of undergraduate introductory statistics students to hypothesis testing, we sought a strategy that focused on developing the conceptual understanding of “p-values” and their role in hypothesis testing, rather than leaning on formulas and computations. Our paper [submitted to *Mathematics Teacher*] shares an adaptation of a teaching technique by Peter Howley (2008) used to introduce hypothesis testing. The lesson intends to help students articulate the logic of a hypothesis test by reasoning through a context and using graphs to indicate a rejection region before any formal terminology or processes are introduced. We will share the lesson, sample student responses, and a task to extend the lesson. Our approach to introducing hypothesis testing can be used to prompt a discussion in the group about the value of hypothesis testing in the curriculum and to hear approaches by others that promote meaningful understanding of this formal technique. (Received September 19, 2011)