

# Preparing Graduate Students to Teach Introductory Biology as Inquiry: The Use of Inquiry Caselets to Solve Teaching Dilemmas

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Current calls for science education teaching reform at the higher education level promote the use of inquiry-based science experiences in the classroom in order to achieve greater science literacy and a stronger understanding of basic concepts and processes of the nature of science (NSES, NRC, 1996). Problems faced by those who wish to implement this reform, however, lie in the lack of teaching preparation and professional development materials available, especially those which are pedagogically-specific and geared toward college-level science instruction (Tanner & Allen, 2006). In K-12 education, case discussions are an effective professional learning strategy in any discipline; they provide reflection-on-action experiences that help develop awareness of active practitioners. This mini-workshop will present the development and use of *caselets*, an abbreviated form of case discussions, with college-level biology laboratory instructors. Caselets introduce teaching dilemmas that typically occur when teaching science as inquiry in laboratory environments; their abbreviated form allows them to be part of the limited instructional preparation time often given to these teachers. Mini-workshop time will be spent reviewing sample caselets, discussing benefits of their use in laboratory environments, discussing teaching dilemmas common to teaching science as inquiry in laboratory settings, and brainstorming additional caselet topics.

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