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Describing Student Epistemologies in Reformed Laboratories: Developing valid descriptions of student treatment of lab experience using a mixed methodology CHRISTOPHER SHUBERT, University of New Hampshire — Traditional introductory physics laboratories serve as validation of material presented in lectures, however, reformed laboratory activities stress the active construction of understanding through a student's lab experience. Our question probes the buy-in of students to reformed labs: How are students approaching knowledge construction in reformed lab activities? We seek a description of student epistemology achieved through a mixed methodology that utilizes group video from reformed student lab activities, individual interviews, and an analysis that stresses validity of developed codes. In individual interviews clips of group video are presented and discussed further. Validity of codes are assessed as they correspond to both individual learners and material design. Our labs are informed by the underpinnings of Modeling Instruction and are adapted to our lecture course which covers biologically motivated algebra based content. We will present key aspects of our methodology and initial descriptions of individual student epistemologies.

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