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One of the challenges of teaching introductory calculus is the large variance in student backgrounds. Formative assessment can be used to target which students need help, but little is known about why formative assessment is effective with adult learners. The purpose of this qualitative study was to investigate which functions of formative assessment help instructors to provide the scaffolding needed to help students in an introductory calculus course progress through their Zones of Proximal Development during the weekly group labs. These scaffolding opportunities allowed a rapid and rich acquisition of the concepts of limits, derivatives, and definite integrals within the Approximation Framework. By providing students a low-stakes opportunity to demonstrate their current understanding, students were able to evaluate their progress and ask further questions after the activity was completed; this information was used to plan the discussion in the next class period. This discussion provided the scaffolding students needed to progress through the activities as well as providing peripheral participation opportunities for students who would not ordinarily ask questions during class. (Received September 23, 2012)