1145-AI-1628 Christine Andrews-Larson and Shelby McCrackin* (slm14c@my.fsu.edu). The next time around: Scaffolding and shifts in argumentation in initial and subsequent implementations of inquiry-oriented instructional materials.

Considerable learning is entailed in adopting an inquiry-oriented approach to teaching an undergraduate mathematics class. In this analysis, we examine classroom video data of three instructors' initial implementation of an inquiry-oriented instructional unit and their implementation of the same unit one year later. We document consistent increases in instances of eliciting and building on student contributions across tasks and instructors. We then use Toulmin's argumentation scheme to offer an illustration of how classroom discussions became more mathematically robust and student-centered from initial to subsequent implementations. Implications for instructor learning will be discussed. (Received September 23, 2018)