

Argument Driven Inquiry (ADI) Labs Using Citizen Science Programs as a Pre-CURE Backbone

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East Carolina University has reformed the Introductory Biology, Chemistry and Physics labs to use the same Argument Driven Inquiry format and expectations. The consistent expectations for method design, claim formation, and evidence based justification allows students to develop their science argumentation skills as a central learning objective for their overall science education. Students create data-based posters that are the center for discussion and write lab reports that go through an intensive peer-review session to receive feedback from their classmates. In the second semester biology lab at ECU that focuses on evolution and ecology, we use the citizen science project BudBurst as a pre-CURE laboratory activity. In this workshop, we will discuss the ADI format, present data on implementation, and walk through the citizen science-based ADI lab. Attendees will participate in a mock ADI poster session and a peer-review paper session based on the BudBurst activity to better understand how to integrate these key activities in their own curriculum.

Keywords: argument driven inquiry, citizen science, CURE, BudBurst

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