

# Taking the Next Step: Turning Undergraduate Research into A Manuscript

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## ABSTRACT

Students in the science classroom need additional pedagogical support (Akinoglu 2008; Firman et al. 2019). Inquiry-based learning (IBL) is a form of support which can deepen students' conceptual understanding more than traditional learning (Aktamis et al., 2016). The purpose of the current study is to investigate how K-12 students and undergraduate mentors view questioning in scientific inquiry through participation in the iBEARS (Inclusive Biologist Exploring Active Research with Students) program. iBEARS is a novel program that allows undergraduate students to mentor K-12 students through a semester-long IBL experience, intended to promote the development of 21st century skills in undergraduate students, and content knowledge in K-12 students (St. Louis et al., 2021). The participants of this study are undergraduate mentors and K-12 students. Using a qualitative methods design, we used the *Views About Scientific Inquiry* (Lederman et al., 2014) instrument to investigate how participants consider questioning in the scientific inquiry process. Preliminary results of this study show that undergraduate mentors' views about questioning decreased, becoming more naïve (rather than informed) after serving as mentors, while K-12 students' views about questioning were mostly stagnant. Additional research is needed to understand further why views about questioning changed after serving as a mentor, and how participation in this classroom intervention affected K-12 student views. Preliminary results of this study give insight into how students and mentors view questioning in science, and how IBL interventions may affect these views. Future directions and the process of disseminating the current study into an undergraduate manuscript is discussed.

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