For whom do workshops work? Personal and contextual factors associated with college instructors’ implementation of inquiry-based learning after professional development.

Student-centered, research-based instructional strategies (RBIS), such as inquiry-based learning (IBL), have been shown to improve learning and persistence in US undergraduate STEM education. Professional development (PD) of college instructors has been identified as the most influential factor in the adoption of RBIS. This research uses longitudinal survey data at 3 points from 580 participants in one of three sets of broadly similar, intensive IBL workshop offerings from 2010-2019. Because these workshops sought to increase classroom implementation of IBL, the focus of this research is to identify the factors most strongly associated with IBL implementation. We first used descriptive statistics to develop profiles of IBL implementers and non-implementers, then used regression analyses to identify personal and contextual factors that were strongly associated with IBL implementation and non-implementation. For example, we find a strong relationship between IBL implementation and department chair support (a contextual factor), and weak relationships with personal factors such as prior teaching experience. By identifying factors that can help or hinder IBL implementation, the study helps to clarify instructors’ decision-making about teaching and inform future PD offerings. (Received September 11, 2019)