Perceived affordances and constraints regarding instructors’ use of Peer Instruction: Implications for Promoting Instructional Change

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Research has documented that physics faculty are generally aware of research-based instructional strategies and are interested in using them. However, the use of research-based instructional strategies is not widespread. A large, unsolved problem in our field is how to effectively spread and sustain the use of research-based instructional strategies in undergraduate physics education. In this research study, we conducted extensive interviews with faculty from across the country regarding their current and past instructional practices as well as their experiences, knowledge and use of Peer Instruction (PI). In this talk I will discuss how faculty come to know about PI, how PI is often used by faculty, and the reasons faculty give for taking up or not taking up aspects of PI. Through this work, we established that 1) faculty commonly modify and adapt PI, 2) most faculty readily acknowledge the shortcomings of lecture, and 3) faculty are concerned that PI use will be taxing on their time, limit their coverage of content, and be a struggle to implement. With a better understanding of faculty’s reasoning and struggles, change agents can learn to better partner with faculty in working towards effective instructional change.

1This work was supported, in part, by the National Science Foundation, Grant No. DUE-0715698