

Investigative Science Learning Environment (ISLE):
helping students learn physics by practicing it and be empowered

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The Investigative Science Learning Environment (ISLE) approach is an intentional approach to learning and teaching physics that has two major goals: to systematically engage students in the activities that mirror scientific practice while they are constructing and applying new knowledge and to help them grow as learners and be empowered during that process. The former means that everything that happens in the classroom and at home related to students learning of physics mirrors the activities in which practicing scientists engage. The latter means that the decisions that the instructor makes while planning, enacting, and assessing the instruction support student intellectual and emotional growth. In my talk I will discuss how the ISLE approach addresses these goals in practice and share the research findings collected in the studies of ISLE students and ISLE teachers.