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Assessing Program Learning Objectives to Improve Undergraduate Physics Education CARRIE MENKE, Univ of California - Merced — Our physics undergraduate program has five program learning objectives (PLOs) focusing on (1) physical principles, (2) mathematical expertise, (3) experimental technique, (4) communication and teamwork, and (5) research proficiency. One PLO is assessed each year, with the results guiding modifications in our curriculum and future assessment practices; we have just completed our first cycle of assessing all PLOs. Our approach strives to maximize the ease and applicability of our assessment practices while maintaining faculty's flexibility in course design and delivery. Objectives are mapped onto our core curriculum with identified coursework collected as direct evidence. We've utilized mostly descriptive rubrics, applying them at the course and program levels as well as sharing them with the students. This has resulted in more efficient assessment that is also applicable to reaccreditation efforts, higher inter-rater reliability than with other rubric types, and higher quality capstone projects. We've also found that the varied quality of student writing can interfere with our assessment of other objectives. This poster outlines our processes, resources, and how we have used PLO assessment to strengthen our undergraduate program.

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