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Dis/Ability in the Physics Learning and Research Communities

Abstract:  
I will present research my group has been conducting on the accessibility of physics learning and research communities. We have explored this question from several directions. In one research stream, we use the Universal Design for Learning framework, which supports instructors in preparing for variation across learners, to operationalize accessible learning experiences. We explored the enactment of practices aligned with this framework in introductory postsecondary physics classrooms, through observations and interviews with students, and written curricula, through document analysis. Our findings point to a need for professional development around supporting learners with diverse needs, abilities, and interests as well as resources to support collaboration between discipline-based curriculum developers and disability/accessibility experts. Towards this goal, we developed an Ability Profile toy model to support instructors and curriculum developers in planning for learner variation. We argue that instructors and curriculum developers should be cognizant of the load their curricular activities place on dimensions of ability and provide options for students and/or variation in which dimensions are taxed in class. Finally, I will present the beginning stages of a project aimed at measuring and improving physicists’ knowledge and attitudes about dis/ability and the malleability of the impact of impairment on a successful physics career.

Thursday, May 9, 2019  
4:30 PM in SCI 242  
Refreshments will be served at 4:20 p.m.