



Are you really teaching if no one is learning?

How proper implementation of interactive-lecture methods can increase student understanding.

Edward E. Prather

Executive Director,
Center for Astro. Education (CAE)
Steward Observatory, University of Arizona

This professional development seminar will provide results from research into how the successful implementation of active engagement instructional strategies can improve students understanding beyond what is achieved by traditional instructional methods, even when used in the lecture portion of the science classroom. From questioning in the classroom to small group collaborative activities - many forms of interactive teaching will be modeled and discussed.

Members of the Center for Astronomy Education (CAE) at the University of Arizona have been developing and conducting research on the effectiveness of learner-centered instructional strategies and materials that put students in an active role in the traditional lecture classroom. The results of this work have been incorporated into a series of "Teaching Excellence Workshops" that members of CAE have been conducting around the nation as part of the NASA Spitzer Education and Public Outreach Program, JPL Navigator/Exoplanet-Exploration Public Engagement Program and the NSF CCLI Phase III Collaboration of Astronomy Teaching Scholars (CATS) Program. The goal of these workshops is to improve participant's implementation and pedagogical content knowledge of research-validated interactive learning strategies.

FRIDAY, SEPTEMBER 25

COLLOQUIUM: 4 PM - 5 PM
Nebraska Union Auditorium

RECEPTION: 5 PM - 6 PM
Nebraska Union Heritage Room

About the Presenter:

Dr. Edward E. Prather is an Associate Staff Scientist with Steward Observatory and Senior Lecturer in the Department of Astronomy at the University of Arizona. In 1995 he earned a B.S. in physics and astronomy at the University of Washington and in 2000 earned his Ph.D in physics from the University of Maine. Since 2004 he has served as Executive Director of the NASA and NSF funded Center for Astronomy Education (CAE) at the University of Arizona. CAE has created a national collaboration of Astronomy faculty, post-docs, graduate and undergraduate students who are actively engaged in conducting fundamental research on core issues related to the teaching and learning of Astro-101 and other STEM topics.

This talk is a part of the Learning and Teaching Lecture Series, sponsored by the Center for Science, Mathematics & Computer Education in cooperation with the College of Arts & Sciences and the College of Education and Human Sciences.



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