

Physics Department Seminar

Usual
time

Friday March 16th, 2007

11:00 am in Holt 268

But new
location

“The Role of Research in Improving Science Education”

CANDIDATE SEMINAR

Science Education Coordinator Position
College of Natural Sciences



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Abstract:

The improvement of science education has been described by scientific and political leaders as a critical task facing our country. Ironically, although advances in scientific research and applications over the past century have been vast, advances in science education have not been similarly impressive. Science education at the university level has been characterized by only limited degrees of scholarly documentation, critical scrutiny by peers, and dissemination through archival journals and books. Moreover, there is only a limited amount of cooperation among science educators in different fields. However, promising new research-based approaches are being initiated in a variety of science-education disciplines. I will describe and illustrate the ways in which controlled and documented experiments are being used to investigate student learning and to assess new instructional methods, including programs in teacher preparation. This type of work is helping to build a field that grows on foundations laid through previous results. I will also describe recent efforts toward establishing mutually beneficial collaborations among science-education researchers in diverse disciplines.