

Bureau of Educational Research Seminar Series:

# MAKING SENSE OF SCIENCE: AN ONLINE ENVIRONMENT TO HELP ELEMENTARY TEACHERS BETTER UNDERSTAND THE SCIENCE IDEAS THEY TEACH



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### WHEN:

THURS., April 2nd 12-1:00PM

### WHERE:

242 EDUCATION BUILDING

A serious issue of practice is that science teaching at the elementary level is often of low quality, partly because of the **low level of teachers' own conceptual understanding** of the science ideas they are asked to teach.

Instructional interviews with college students helped with formative evaluation and revision of web-based resources. Responses showed that the resources were effective in **increasing the participants' conceptual understanding of buoyancy**, and contributed to the further articulation of the theoretical perspective on teachers' conceptions as a dynamic system of conceptual components.

These resources were made available online, and the online version was found to be as effective as the face to face version. This presentation discusses **the resources, the online version, and the power of formative evaluation for designing effective instructional resources.**