

1067-97-645

**Robert Lee Mayes\*** (rmayes2@uwyo.edu), Department 3992, 1000 E. University Avenue, University of Wyoming, Laramie, WY 82071. *University of Wyoming Science and Mathematics Teaching Center: Report on Mathematics Teaching, Education, and Outreach through a joint unit of College of Arts and Sciences and College of Education.* Preliminary report.

This presentation on the University of Wyoming Science and Mathematics Teaching Center (SMTC) is part of the Special Session on Centers for Teaching/Education/Outreach in Departments of Mathematics. The SMTC is unique in that it is a joint unit in the College of Arts and Sciences and the College of Education. This allows the SMTC to create collaborative efforts between UW and Wyoming school districts that provide for content-based professional development for K-12 STEM teachers. The professional development engages mathematicians, mathematics educators, scientists and science educators in working with STEM teachers to improve both their content understanding and teaching practice. The professional development includes master's programs for middle school mathematics and secondary school mathematics, grant funded workshops for STEM teachers, and conferences/speakers centered on mathematics education. Current projects include: NSF Math Teaching Learning Center project which is creating a multi-university online master's degree program for secondary mathematics teaching; NSF Pathways project with a focus on quantitative reasoning in developing environmental literacy; MSP QR STEM project focusing on interdisciplinary study of energy and environment with mathe underpinnings. (Received September 12, 2010)