



Math/Science REPORT

Volume 2 - Issue 1

January 16, 2009

- **Goal 1: Increasing student interest, participation, and achievement in math & science**
- **Goal 2: Raising public support and awareness of the importance of science and math**
- **Goal 3: Establishing effective collaborations with internal and external partners**



- **Goal 1: Increasing student interest, participation, and achievement in math & science**

REVISED GRADES 9-12 MATH STANDARDS AND SCIENCE LAB DEFINITION NOW UNDER PUBLIC REVIEW

Five public review sessions of the revised “Standards for Excellence” have been completed. The Math and Science Bureau has recommended that the grades 9-12 Mathematics “Topics for Further Study” be removed from the rule as they address concepts beyond Algebra II and are not expected for ALL students; they would be available as a guidance document on the MSB web page. The rule is now awaiting Secretary García’s approval.

WORK ON GRADES K-12 SCIENCE STANDARDS ALIGNMENT DOCUMENTS BEGUN

House Bill 911 (2007) required that

Each school district shall align its curricula to meet the state standards for each grade level and subject area so that students who transfer between public schools within the school district receive the same educational opportunity within the same grade or subject area.

Alignment documents for K-8 Math were due to the Math and Science Bureau by August 15, 2008. A similar process will be used for K-12 Science and 9-12 Math (once the revised Standards for Excellence have been approved); these documents will be due in August 2009.

SBA DATA INDICATE MORE STUDENTS ARE PROFICIENT ACROSS CONTENT AREAS

According to data analyzed by the MSB (Pascal), the number of students demonstrating proficiency in all 3 areas of math, science, and reading on the grade 8 SBA rose from 17% in 2007 to 21% in 2008. The percent of 11th graders demonstrating proficiency in all 3 content areas is 24%.

COLLEGE AND CAREER READY POLICY INSTITUTE (CCRPI)

Mary Jo has been assigned to the State Working Group of the CCRPI; the goal of the Policy Institute is to help NM accelerate their efforts to ensure all students graduate from high school ready for college and productive careers. The group is tasked with developing a policy plan around 3 elements: establishing goals and measures, a comprehensive and coherent assessment system, and a system of valid and reliable indicators.

STANDARDS-BASED ASSESSMENT WORK CONTINUES

Mary Jo and Claudia facilitated teacher groups in this year’s Range Finding for the SBA in which samples of student work are used to determine score point criteria on constructed response items. Student results indicate that open ended questions pose a significant challenge for most students.



● Goal 2: Raising public support and awareness of the importance of science and math

NM PROJECT 2012 PRESS CONFERENCE AND DISSEMINATION

On Dec. 4, 2008, a press event was held at Eldorado HS in Albuquerque to announce the release of NM Project 2012. Remarks were made by Sec. García, Sec. Dasenbrock, Senator Bingaman, Rep. Rick Miera, Rep. Janice Arnold-Jones, Tom Bowles, and Franny Dever (representing the Council). Many other members of the Council and supporters of NM Project 2012 attended as well as students from Presidential Awardee Jennifer Coughlin's chemistry class. The Albuquerque Journal ran 2 stories about the news event and 2 subsequent editorials have mentioned NM Project 2012.

Copies of the completed NM Project 2012 were mailed to each district superintendent as well as the Deans of Arts and Sciences and Colleges of Education at each of the NM Institutions of Higher Education that prepare teachers. Copies are being readied for distribution to each legislator once their Capitol mailboxes are established for the 2009 session. Working with NM Economic Development Department, arrangements are being made to disseminate electronic copies to members of the business community.



● Goal 3: Establishing effective collaborations with internal and external partners

BUREAU STAFF WORK WITH OTHER PED BUREAUS ON FAQ DOCUMENT FOR NEW HIGH SCHOOL GRADUATION REQUIREMENTS.

Claudia and Mary Jo are working with representatives of the Humanities, Special Education, and Career, Technical and Workforce Education Bureaus to prepare a document to help schools and families better understand the new graduation requirements which will be in place for students entering grade 9 in 2009. The MSB frequently receives questions from schools and individuals about the expectations for high school math.

BUREAU STAFF WORK WITH ACADEMIC GROWTH AND ANALYSIS BUREAU ON DATA ACCESS

Pascal will be working with the Academic Growth and Analysis Bureau and Kristen Umland from UNM to develop a model for evaluating the effectiveness of the federally funded (Math Science Partnership) summer institute professional development while maintaining the necessary confidentiality of student data.

COLLABORATION WITH INTEL

Mary Jo, Bob Eisenstein, and Russ Fisher-Ives are scheduled to meet with Liz Shipley of Intel to discuss how Intel can support NM Project 2012.

