The New Jersey Mathematics and Science Coalition is designed to

- improve mathematics, science, and technology education in New Jersey and
- increase public awareness of the importance of mathematics and science to the future of our children and our economy

by drawing together all sectors of the state – including education, public policy, business and industry, and the public – in a sustained multi-faceted statewide effort.

Notes from the Executive Director:

Happy spring (I hope) from the New Jersey Mathematics and Science Coalition and welcome to the spring edition of our newsletter. Currently, the Coalition is working on several initiatives, including new STEM related activities for our website, an equity initiative, and dissemination of information with respect to mathematics and science standards revisions in our state. Currently, New Jersey is one of 44 states plus DC that has adopted the Common Core State Standards in Mathematics. This march towards national standards and assessments is one that we continue to watch, partake in, and discuss in the coming year. It is imperative that teachers throughout New Jersey have their voices heard on this issue. Please don’t hesitate to contact me with comments and questions as I welcome your feedback and comments on our newsletter and on our Coalition.

http://sites.google.com/site/njmsec

Executive Director:
Dr. Eric Milou
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The Coalition has the **VISION** that **all** New Jersey students, children and adults, develop the mathematical, scientific and technological skills, knowledge, understandings, and attitudes that they need in order to be productive in their personal, work, and civic lives and thereby ensure that New Jersey has a competent and competitive workforce that will help us meet the challenges of the global economy.

**MATHEMATICS:**

A joint task force representing the Association of Mathematics Teacher Educators (AMTE), the Association of State Supervisors of Mathematics (ASSM), the National Council of Supervisors of Mathematics (NCSM), and the National Council of Teachers of Mathematics was formed to develop actions and resources needed to help teachers implement the Common Core State Standards in Mathematics (CCSSM). They made five priority action recommendations. The two most important of these recommendations for teachers in New Jersey are:

1. Organize and launch a major outreach project, *Advancing the Vision of High Quality Mathematics Education: Supporting Implementation of the Common Core State Standards*, with two primary foci: (a) develop and disseminate a core set of resources (Toolkit) which consolidate and highlight key messages of our organizations with regard to the CCSS; and (b) organize and host regional meetings of leadership teams to review the resources and plan local strategies for utilizing CCSS to elevate mathematics teaching and learning.

2. Convene a group of respected teacher development professionals and scholars to conceptualize and develop a professional development system at the school, district, and state levels that will connect our organizations’ messages with the CCSS (e.g., the *mathematical practices*, the NCTM Process Standards and messages in the Professional Teaching Standards).

*NCTM’s Making It Happen: A Guide to Interpreting and Implementing Common Core State Standards for Mathematics* was released in January to support teachers, districts, and states in implementing CCSSM. For more information on *Making It Happen*, visit [www.nctm.org/mih](http://www.nctm.org/mih).

**MIDGE COZZENS**
NJ MSEC Goals:

∞ **Curriculum Support:** to support district alignment of curricula with the standards and classroom implementation of the standards by teachers

∞ **Professional Development:** to promote high-quality standards-based professional development activities throughout the state.

∞ **Assessment:** to inform educators, policy makers, and the general public about progress in achieving our goals in improving mathematics and science education in New Jersey.

### SCIENCE:

**Implementing the Science Standards in Local Districts:** As many of you know, the 2009 NJ Core Curriculum Content Standards in Science need to be in place in the curriculum documents of all public and charter schools in the state by September 1, 2011. Some districts have updated their curriculum to reflect these standards and others will be working to get this accomplished during the current school year and the summer of 2011. The state has developed wonderful online resources for teachers and administrators to help in the process. The following instructions are designed to help you navigate through these web resources.

The gateway to the resources is [http://www.state.nj.us/education/educators/](http://www.state.nj.us/education/educators/). Once on this site, click on the picture of a globe with the title **Core Curriculum Content Standards** in the small, blue box on the left side of the page. Once you get to the new page, explore some of the resources at the bottom of the page. Click on **Standards Resources** on the right side of the globe, where all the content areas are listed. For example, if you click on **Science** you are directed to a science curriculum and instruction page: [http://www.nj.gov/education/aps/cccs/science/](http://www.nj.gov/education/aps/cccs/science/). The first thing you might want to do is get on the free mailing list established by Michael Heinz, the State Coordinator for Science. Just click on the “Join Our Mailing List” button and sign up. Mike has done a fantastic job pulling together important standards documents.

Click on [2009 Standards](http://www.nj.gov/education/aps/cccs/science/) and you will be taken to a page that has an introduction to the science standards with an explanation of the standards development and the importance of authentic laboratory experiences for students. If you click on the small, beige box containing the word **Standards** on the top left of the page, you are directed to an electronic version of the standards. If you would like to download a copy of the standards as a Word document, click on the **Print/Download Standards Report** directly
above the first standard. *Learning Progressions/Horizental Matrix Report* is another valuable document found next to the Standards Report. This report is extremely useful for teams of teachers in a school, who are working on vertical articulation of the science curriculum. Some of the most valuable resources on this site are the *Classroom Application Documents (CADs)* that can be found by clicking on the grey box on the right side of the Standards introduction page. The documents found here give teachers important information about what should be taught in science in a specific grade level span and the important ideas that students should come away knowing at the end of a unit. These “Enduring Understandings” are sometimes lost in the focus on science facts and memorization that often dominate science curricula in many districts.

For high school science teachers, additional guidelines for Biology, Earth Science and Environmental Science can be found back on the Science Curriculum and Instruction page [http://www.nj.gov/education/aps/cccs/science/](http://www.nj.gov/education/aps/cccs/science/). Take some time to explore all of these valuable resources.

**TOM SMITH**

**Announcement**

The College of New Jersey Department of Mathematics and Statistics is proud to invite you to their first *Sonya Kovalevsky Day*, a day devoted to empowering women in mathematics. Sonya Kovalevsky, a true role model for women, was the first woman to receive her PhD in mathematics. Her accomplishments and contributions to the field paved the way for future women mathematicians. Come join us on Saturday, March 26th, 2011 as we honor and celebrate her life and lasting influence through a series of workshops, panel discussions and presentations by our undergraduate women. We invite teachers to register themselves along with one to six young women and join us on this special day. Register at curtis@tcnj.edu by March 14.
NJMSEC Goals:

Public Policy: to advocate the adoption and implementation of public policies which enhance the chances of success for all students in mathematics, science, and technology.

Public Outreach: to promote discussion, understanding, and support for New Jersey's Core Curriculum Content Standards in mathematics and science among parents and the general public.

THE STATE:

On March 3, 2011, the New Jersey Educator Effectiveness Task Force released its recommendations for refocusing public education in New Jersey on high student achievement. Established by Executive Order No. 42, the nine-member Task Force was charged with studying and developing recommendations to guide the creation of a fair and transparent system of educator evaluations, centering on student learning and achievement and demonstrated practices of effective teachers and administrators. Their recommendations are based on the knowledge that educator effectiveness is the most important in-school factor for improving student achievement.

The Task Force recommends the development of a new teacher evaluation system that is based entirely on student learning; that is, all measures used to assess effectiveness should be linked to achievement. Initially, it would comprise equal parts teacher practice (inputs) and direct measures of student achievement (outputs). Over time, however, the Task Force encourages the state to increase the percentage of the evaluation contributed by measures of student achievement.

The measures of teacher practice should be based on clear performance standards that define effective teaching. The Task Force recommends that New Jersey use the new national core standards, reviewed and adapted as needed, as the basis for teacher evaluations. The Task Force recommends that all districts use one high-quality state-approved observation protocol and at least one additional state-approved tool to assess teacher practice. Because observation can be such a comprehensive tool for gathering information, the Task Force recommends that it alone comprise at least half of the weight within the teacher practice section, accounting for 50%-95% of this component.

The report is available in full at: http://www.state.nj.us/education/educators/effectiveness.pdf