



## CONNvene – Program Summary

### Connecticut's State Mathematics and Science Summit Implementation Program

Governor M. Jodi Rell authorized the CT Academy for Education to submit a proposal on behalf of Connecticut to hold a Science, Technology, Mathematics, and Engineering (STEM) statewide summit on October 26, 2005. **CONNvene: a Platform to Advance a Statewide STEM Dialogue and Strategy** was funded by NASA, U.S. Department of Education, and the National Alliance of State Science & Mathematics Coalitions. The Governor led the day-long Summit and will participate in the year-long study of STEM issues as they relate to education, economic development and quality of life. The CT Academy is serving as CONNvene's facilitator.

Members of CONNvene's Steering Committee include: Betty J. Sternberg, Commissioner of Education; Valerie F. Lewis, Commissioner of Higher Education; Merle Harris, President Charter Oak College; Harry H. Penner, Jr., President and CEO, Nascent BioSciences, LLC and Technology Advisor to Governor and Chairman of Board of Governors of Higher Education; Mary Ann Hanley, Workforce Competitiveness Advisor to Governor; Philip L. Dukes, Counsel for Policy, Office of Governor; Rob Keating, Office of Workforce Competitiveness; Andrew G. De Rocco, Board Chairman, CT Academy, and Richard C. Cole, President & CEO, CT Academy.

### CONNvene OVERVIEW

Economic competitiveness – for an individual, community, company, state or society – is built upon knowledge. Connecticut's economic success, now and in the future, depends on creating and retaining an effective workforce – one educated to thrive in a knowledge- and innovation-based economy. State-level policy makers recognize how critical science, technology, engineering, and mathematics (STEM) education is for CT to remain a competitive economic environment. These policy-makers seek a shared vision and commitment from a diverse array of stakeholders that will lead to an increase in the number of STEM-related graduates who are prepared to join CT's workforce.

Connecticut is a national leader in math and science student achievement. In 2000 the state's public school fourth and eighth graders were third in the nation in the proportion of students who scored at the highest two levels on NAEP (NCES, August 2001). Fourth graders ranked sixth nationally on the same measure in science (NCES, November 2001), and Grade 8 students were second internationally on a science test comparison (NCES, August 1998).

However, significant and persistent achievement gaps exist between CT's suburban and urban students and among racial and ethnic groups. The state's Priority School Districts, those with the greatest academic need, demonstrate that persistent gap. Their students'



## CONNvene – Program Summary

### Connecticut's State Mathematics and Science Summit Implementation Program

academic needs are clear: 70.2 percent of blacks and 65.6 percent of Hispanics across Grades 4, 6 and 8 achieve below state goal on the mathematics portion of the statewide CT Mastery Tests (CMT). Among all students in Grades 4, 6 and 8 in these districts, 54.8 percent scored below goal and 16.8 percent scored at the state-defined “intervention level,” compared to 38.7 percent and 8.9 percent, respectively, statewide.

“Connecticut’s most important educational goal is to close the achievement gaps between subgroups of students. Most of the students in our biggest cities ... are poor, members of minority groups, or both. We have a long way to go before the gaps close significantly, so we need to continue our intense focus on this goal.” - *Education Commissioner Betty J. Sternberg. June 25, 2004.*

CONNvene’s goal is to establish a coordinated and comprehensive plan to measurably improve student interest and achievement in STEM to better meet Connecticut’s 21st Century workforce needs.

#### Key activities include:

1. Hold two planning sessions, one for education and the other of business and government leaders, to identify statewide STEM priority actions. The results of these two meetings will be to develop brief White Papers for distribution to CONNvene invitees, including legislative and educational policy-makers prior to the summit.
2. Governor M. Jodi Rell will declare October 2005 as CT Mathematics & Science Teacher Appreciation Month. *(Both the NCTM and NSTA will be holding regional conventions in Hartford, CT during October 2005.)*
3. Convene an initial daylong meeting at the CT Statehouse, hosted by Governor M. Jodi Rell, to address STEM issues as they relate to current State education and economic development policy development plans.
  - 3.1. Invite at least 150 business, industry, labor, economic development, education and higher education, NASA, NASSMC, public policy, media, and student leaders to participate in the day-long meeting and subsequent follow-up activities;
  - 3.2. Explicate the STEM needs of CT’s large and small employers, including State government, over the next ten years;
  - 3.3. Inform the invitees about the current status of preK-20 student STEM interest and achievement in CT;
  - 3.4. Review the variances between the current status of STEM education and the desired condition; and



## CONNvene – Program Summary

### Connecticut's State Mathematics and Science Summit Implementation Program

- 3.5. Establish a list of priorities for CT's STEM educational needs over the next decade.
4. Organize subcommittees to take up specific issues on the priorities list that will lead to the implementation of a coordinated and comprehensive statewide plan to measurably improve student STEM achievement.

#### CONNvene's results will include:

1. Strategies for the Governor, Legislature, State Boards of Education and Higher Education, local school districts and communities on how to improve interest and achievement in STEM education for all students, with specific emphasis placed on eradicating the achievement gap;
2. Blueprint to focus federal, state and local resources on STEM improvement;
3. Proposal for a coordinated and comprehensive business and industry support program;
4. Considerations for public policy initiatives; and
5. Campaign to engage parents and child caregivers to ensure all Connecticut students receive appropriate STEM educational opportunities, with specific emphasis on reducing the student achievement gap.

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