AMENDED IN ASSEMBLY AUGUST 6, 2012

CALIFORNIA LEGISLATURE—2011–12 REGULAR SESSION

# House Resolution No. 34

**Introduced by Assembly Member Hill**

July 2, 2012

House Resolution No. 34—Relative to science, technology, engineering, and mathematical jobs.

WHEREAS, A July 2011 report from the United States Department of Commerce reveals that over the past 10 years the growth in science, technology, engineering, and mathematical (STEM) jobs was three times faster than the growth in non-STEM jobs; and

WHEREAS, Workers with STEM degrees tend to earn a higher income than workers with non-STEM degrees and their rate of unemployment is significantly lower than other workers; and

WHEREAS, STEM jobs are expected to continue to grow at a faster rate than others in the coming decade; and

WHEREAS, The fast-paced rate of STEM advancement in the United States continues to increase the demand for a highly skilled workforce that possesses scientific and mathematical knowledge required by STEM jobs; and

WHEREAS, The increase in demand for STEM jobs will require those interested to obtain a baccalaureate degree in the academic area of STEM in order to be qualified; and

WHEREAS, California has the most high technology businesses in the nation along with a high concentration of venture capital; thus, the STEM-related industries are major contributors to California's economy; and

WHEREAS, California can claim one patent for every 28 people employed in science and engineering; and

WHEREAS, On May 24, 2012, Superintendent of Public Instruction Tom Torlakson created a STEM task force to engage more students in scientific and technical fields, widely considered a key to the state's economic future; and

WHEREAS, The STEM task force will explore the status of STEM education in California's curriculum, instructional practices, professional development for teachers, student testing, existing infrastructure, and partnerships with the community and business; and

WHEREAS, San Mateo County, specifically its board of supervisors, established the Math and Science Workgroup in 2005 to promote and improve student achievement and teacher excellence in mathematics and science by adapting new strategies to engage and inspire students; and

WHEREAS, A grant of $100,000 from San Mateo County in September 2011 enabled some 700 students on the Peninsula to participate in after school programs to develop STEM skills in the 2011–12 academic year; and

WHEREAS, The San Mateo County Office of Education will open its new, state-of-the-art STEM Center on August 24, 2012, complete with smart whiteboards, communication, and video-editing equipment, to invigorate the engagement of more students—especially girls, women, and underrepresented minorities—into STEM fields. In addition, the STEM Center has an ambitious array of STEM professional development opportunities for teachers of prekindergarten, kindergarten, and grades 1 to 12, inclusive; and

WHEREAS, A ~~2007~~ *2006* study showed that women made up ~~58~~ *60* percent of students enrolled in associate degree college programs; and

WHEREAS, Women now comprise 45 percent of mathematical scientists, and have reached parity in the medical and biological sciences; however, women make up only about 13 percent of engineers; and

WHEREAS, First-year undergraduate women interested in computer science majors dropped 79 percent from 2000 to 2009; and

WHEREAS, When women encounter success stories of other women in the science and mathematics fields, they are more likely to see themselves pursuing a similar career path in the STEM fields; and

WHEREAS, Role models are important to maintain a young woman's interest in STEM academics and in pursuing a STEM career; and

WHEREAS, A recent survey shows that women who participated in a STEM project show a 25 percent increase in interest of pursuing a career relating to STEM; and

WHEREAS, The annual Dare 2B Digital conference for girls 13 to 16 years of age, inclusive, in partnership with technology companies such as Oracle, Google, Hewlett-Packard, Cisco, and Microsoft, attracted more than 400 girls, where they attended workshops led by industry leaders and experts on STEM topics such as robotics, programming, and interactive networking; and

WHEREAS, San Mateo County's 32nd Annual "Expanding Your Horizons in Science and Mathematics" conference was held on March 17, 2012, for young women in high school and college to continue the engagement of girls and women in STEM fields; and

WHEREAS, STEM summer camps, workshops, and after-school programs effectively recruit more women into the STEM community by providing an opportunity for them to encounter role models and work together in a team setting, which research appeals to women; now, therefore, be it

*Resolved by the Assembly of the State of California,* That the Assembly continues to urge the development of summer camps, workshops, and after school programs, and also the extension of current grant and fellowship programs on the state and local levels, to further the advancement of female students and workers in the STEM fields and to encourage women to get involved in the STEM fields; and be it further

*Resolved,* That the Assembly urges the establishment of STEM outreach programs such as Dare 2B Digital, the goal of which is to encourage the recruitment of girls and women to study and work in STEM fields; and be it further

*Resolved,* That the Chief Clerk of the Assembly transmit copies of this resolution to the author for appropriate distribution.

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