

AMENDED IN ASSEMBLY AUGUST 22, 2012

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.

- 1 WHEREAS, A July 2011 report from the United States
2 Department of Commerce reveals that over the past 10 years the
3 growth in science, technology, engineering, and mathematical
4 (STEM) jobs was three times faster than the growth in non-STEM
5 jobs; and
6 WHEREAS, Workers with STEM degrees tend to earn a higher
7 income than workers with non-STEM degrees and their rate of
8 unemployment is significantly lower than other workers; and
9 WHEREAS, STEM jobs are expected to continue to grow at a
10 faster rate than others in the coming decade; and
11 WHEREAS, The fast-paced rate of STEM advancement in the
12 United States continues to increase the demand for a highly skilled
13 workforce that possesses scientific and mathematical knowledge
14 required by STEM jobs; and
15 WHEREAS, The increase in demand for STEM jobs will require
16 those interested to obtain a baccalaureate degree in the academic
17 area of STEM in order to be qualified; and
18 WHEREAS, California has the most high technology businesses
19 in the nation along with a high concentration of venture capital;

1 thus, the STEM-related industries are major contributors to
2 California's economy; and

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

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

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

14 ~~WHEREAS, San Mateo County, specifically its board of~~
15 ~~supervisors, established the Math and Science Workgroup in 2005~~
16 *Local efforts around the state seek to promote and improve student*
17 *achievement and teacher excellence in mathematics and science*
18 *by adapting new strategies to engage and inspire students; and.*
19 *For example, a grant of \$100,000 from San Mateo County in*
20 *September 2011 enabled some 700 students on the peninsula to*
21 *participate in after school programs to develop STEM skills in the*
22 *2011-12 academic year; and*

23 ~~WHEREAS, A grant of \$100,000 from San Mateo County in~~
24 ~~September 2011 enabled some 700 students on the Peninsula to~~
25 ~~participate in after school programs to develop STEM skills in the~~
26 ~~2011-12 academic year; and~~

27 WHEREAS, *The state seeks to promote the establishment of*
28 *STEM centers like the San Mateo County Office of Education will*
29 *open its new, state-of-the-art STEM Center, opening on August*
30 *24, 2012, complete with smart whiteboards, communication, and*
31 *video-editing equipment, to invigorate the engagement of more*
32 *students—especially girls, women, and underrepresented*
33 *minorities—into STEM fields. In addition, the STEM Center has*
34 *an ambitious to provide an array of STEM professional*
35 *development opportunities for teachers of prekindergarten,*
36 *kindergarten, and grades 1 to 12, inclusive; and*

37 WHEREAS, A 2006 study showed that women made up 60
38 percent of students enrolled in associate degree college programs;
39 and

1 WHEREAS, ~~Women now comprise~~ *According to the National*
2 *Science Foundation, in 2006, women earned 45 percent of*
3 ~~mathematical scientists, baccalaureate degrees in mathematics~~
4 and have reached parity in the medical and biological sciences;
5 however, women make up only about 13 percent of engineers; and

6 WHEREAS, First-year undergraduate women interested in
7 computer science majors dropped 79 percent ~~from 2000 to 2009~~
8 *between 2001 and 2008*; and

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

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

16 WHEREAS, ~~A recent survey~~ *Data from preactivity and*
17 *postactivity surveys conducted as part of the California University*
18 *of Pennsylvania STEM initiative* shows that, *from the responding*
19 *middle school participants, young women who participated in a*
20 STEM project show a ~~25 percent~~ *25-percent* increase in interest
21 *of in* pursuing a career relating to STEM; and

22 WHEREAS, The annual Dare 2B Digital conference for girls
23 13 to 16 years of age, inclusive, in partnership with technology
24 companies such as Oracle, Google, Hewlett-Packard, Cisco, and
25 Microsoft, attracted more than 400 girls, where they attended
26 workshops led by industry leaders and experts on STEM topics
27 such as robotics, programming, and interactive networking; and

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

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

38 *Resolved by the Assembly of the State of California,* That the
39 Assembly continues to urge the development of summer camps,
40 workshops, and after school programs, and also the extension of

1 current grant and fellowship programs on the state and local levels,
2 to further the advancement of female students and workers in the
3 STEM fields and to encourage women to get involved in the STEM
4 fields; and be it further

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

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

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