

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

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

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

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

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

15 WHEREAS, A grant of \$100,000 from San Mateo County in
16 September 2011 enabled some 700 students on the Peninsula to
17 participate in after school programs to develop STEM skills in the
18 2011–12 academic year; and

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

28 WHEREAS, A 2007 study showed that women made up 58
29 percent of students enrolled in associate degree college programs;
30 and

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

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

38 WHEREAS, When women encounter success stories of other
39 women in the science and mathematics fields, they are more likely

1 to see themselves pursuing a similar career path in the STEM
2 fields; and

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

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

9 WHEREAS, The annual Dare 2B Digital conference for girls
10 13 to 16 years of age, inclusive, in partnership with technology
11 companies such as Oracle, Google, Hewlett-Packard, Cisco, and
12 Microsoft, attracted more than 400 girls, where they attended
13 workshops led by industry leaders and experts on STEM topics
14 such as robotics, programming, and interactive networking; and

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

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

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

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

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

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