

## SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM) EDUCATION

Adopted by Convention Delegates, April 2011

- WHEREAS, The California State PTA believes that to remain competitive in a global society, the United States has a responsibility to provide educational programs and support services to develop responsible, productive citizens for tomorrow; and
- WHEREAS, The U.S. K-12 education system does not adequately prepare students with skills in science, technology, engineering and mathematics (STEM) to compete for jobs in the 21<sup>st</sup> century global workforce; and
- WHEREAS, Many ethnic minorities and women have historically been underrepresented among those who earn STEM degrees; and
- WHEREAS, A shortage of highly qualified STEM teachers and a lack of teacher training, preparation and professional development in STEM education results in young people lacking the necessary skills in science, technology, engineering and math to work in the new global economy; and
- WHEREAS, Science, technology, engineering and mathematics education is an important national issue; now therefore be it
- RESOLVED,** That the California State PTA, its units, councils and districts work with policymakers, businesses and educators to support efforts to improve STEM education, enabling more students to acquire skills for access to higher education and employment in the 21<sup>st</sup> century workforce; and be it further
- RESOLVED,** That the California State PTA, its units, councils and districts support efforts to identify and eliminate barriers to access to and participation in quality STEM education so that every child, without regard to disability, gender, ethnicity, or socioeconomic status, can succeed, and no subgroup is underrepresented in our state's and nation's STEM workforce; and be it further
- RESOLVED,** That the California State PTA, its units, councils and districts support legislation for recruitment, innovative training, and professional development for STEM educators; and be it further
- RESOLVED,** That the California State PTA, its units, councils and districts encourage the integration of science, technology, engineering and mathematics into everyday activities; and be it further
- RESOLVED,** That the California State PTA, its units, councils and districts increase awareness of opportunities available to students educated in STEM careers; and be it further

**RESOLVED,** That the California State PTA submit this resolution to the National PTA for consideration at the National PTA convention.

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### **BACKGROUND SUMMARY**

Science, technology, engineering and mathematics (STEM) employment opportunities are predicted to grow faster than the average of all other jobs, but the number of U.S. college graduates prepared for STEM careers will not meet the demand. This shortfall is aggravated by two factors: U.S. students, on average, are scoring below many developed nations in scientific knowledge and literacy; and women and certain minorities are underrepresented in STEM education.

The California Task Force on Science, Technology, Engineering and Mathematics Education has created a framework for policy and support of California's schools to enhance California's competitiveness in the global economy. Further, in 2010, the National Science Board identified major areas of need: policies that support rigorous STEM preparation for teachers; the nurture of STEM potential in all demographics of students, especially in economically disadvantaged urban and rural areas; and a supportive culture of parents, educators and students that celebrates innovative thinking and academic excellence.