RESOLUTION IN SUPPORT OF STEM EDUCATION INITIATIVE

WHEREAS, the foundation of America's leadership in the 21st century knowledge based, innovation-driven global economy is built upon a Science, Technology, Engineering and Mathematics (STEM) literate workforce;

WHEREAS, the U.S has one of the lowest rates of STEM degree production in an international comparison; the international average is 26.4% of all degrees; the US rate is 16.8%, while Japan's rate is 64.0%, China's rate is 52.1% and India's rate is 32.5%; [1]

WHEREAS, the number of STEM-qualified, new entrants into the aerospace workforce is projected to be insufficient to fill the workforce pipeline creating a gap; 54% of the aerospace and defense STEM workers are 45 years old or older and 1/3 are eligible to retire today and only 7.5% of students enter baccalaureate programs in STEM fields such as engineering and only 50% of those graduate; [2]

WHEREAS, the vitality of the aerospace industry in the United States is essential to the national security, war on terror, and the economic competitiveness of the nation and the aerospace industry relies upon a highly-skilled, technically qualified workforce to accomplish its mission; the aerospace workforce declined from 800,000 in 1993 to 624,200 in 2010; aerospace industry sales are forecast to be $219.2 billion in 2011; [3]

WHEREAS, key STEM stakeholders have indicated that they want people in the workforce with 7-10 years of real world experience; and that significant real world experience can be provided at the secondary level;

WHEREAS, the Real World Design Challenge provides real world STEM experience for secondary students by providing a real problem, real tools and resources, real roles for students, and an opportunity for students to make real contributions;

[1] Jeffrey J. Kuenz, *CRS Report for Congress: Science, Technology, Engineering and Mathematics (STEM) Education; Background Federal Policy and Legislative Action*, March 2008.
[2] Druyun, *Defense Reform 2001, A Blueprint for Action: Final Report, DFI International* 2001; *Occupational Outlook Handbook*, 2002-03; Chubin, *National Action Council for Minorities in Engineering Testimony to the Government-University-Industry Research Roundtable*, 2002.
[3] *Aerospace Industries Association Year-End Review and Forecast*, AIA Research Center, 2011.

WHEREAS, the Real World Design Challenge has involved 7,672 students from 29 states over the last three years;

WHEREAS, the Real World Design Challenge provides a quality STEM education experience that is *FREE* to students, is provided at no cost to the taxpayers of the states, and brings millions of dollars of STEM education resources to the states;

NOW LET IT BE RESOLVED, that the NLGA encourages member states to investigate partnership with the Real World Design Challenge;

NOW LET IT BE FURTHER RESOLVED, that the NLGA encourages interested states to publicize the Real World Design Challenge, encouraging educators to take advantage of this partnership;

NOW LET IT BE FURTHER RESOLVED, that the NLGA would support, as possible, members and their state departments of education in involving teachers in the Real World Design Challenge.

As introduced on this 24th day of June, 2011.

Sponsored by: Lt. Governor Mead Treadwell (AK)
Lt. Governor Brian Schatz (HI)
Co-Sponsors: Lt. Governor Kim Reynolds (IA)
Lt. Governor Yvonne Prettner Solon (MN)
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