Testimony to the United States Senate Committee on Health, Education, Labor, and Pensions
for the hearing titled "Educating Our Children to Succeed in the Global Economy"

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Thank you for this opportunity to testify on the reauthorization of the Elementary and Secondary Education Act. My name is Morgan Anderson and I am the Northwest Region Higher Education and Government Affairs Manager for Intel. I've worked on education programs and policies for the last 12 years to improve education and student achievement, particularly in the area of STEM. We have a saying at Intel. Innovation Starts with Education. Oregon is home to Intel's R&D Center as President Obama discovered during his visit to our campus in February. In addition to housing 2 fabs and currently constructing a new fab that will become our most advanced microprocessor manufacturing facility, Oregon is Intel's largest and most complex site. We employ 16,000 people in Oregon, with 2,000 of these employees holding a Ph.D. Yet we struggle to find these engineers, not only in Oregon, but in the U.S.

We're not alone. Change the Equation is a non-profit organization that is made up of 110 CEOS that are equally concerned about STEM education in the U.S. Chaired by retired Intel CEO and Chairman of the Board, Craig Barrett, Change the Equation has recently issued STEM Vital Signs for each state. The data is dire. In Oregon, only 37 percent of Oregon 4th graders were proficient on the National Assessment of Education Progress (NAEP), which sets a consistent bar for student performance across the states and tracks international assessments. That is far less than the 77 percent of the state's 4th graders who scored proficient on the Oregon state test. Science scores were even lower for Oregon's 4th graders, with only 34 percent being rated as proficient. Their 8th grade counterparts scored very similar scores, with 37 percent rated as proficient in math and 35 percent in science. These numbers are very similar to the U.S. average. Even the top 3 states, while better, only see a range of 42 – 56 percent of their students' proficient in these subjects. Fortunately, Oregon has joined 41 other states in the Common Core movement and has raised expectations for student proficiency for this school year. Change the Equation also urges Oregon to focus on student achievement gaps and increasing teachers' content knowledge. Fewer than half of Oregon's 8th graders have a teacher with a major or minor in math.

Intel's involvement in education is long-standing, and we believe that students deserve the skills needed to become the next generation of innovators. Intel has invested over $1 billion to education over the last decade and we are actively involved in programs and advocacy to improve education and advance innovation. To help inspire the next generation of scientists and engineers, Intel sponsors two major science competitions. The Intel International Science and Engineering Fair (Intel ISEF) is the world's largest pre-college science competition and brings together over 1,500 young scientists from more than 50 countries. The Intel Science Talent Search is America's oldest and most prestigious pre-college science competition. Alumni of Intel STS have made extraordinary contributions to science including seven Nobel Prizes and three National Medals of Science. We also sponsor many Oregon STEM programs, including the state science fair and the statewide Lego Robotics Tournament. These enrichment programs work. One program we sponsor, Oregon MESA, boasts a graduation rate of over 95 percent with the vast majority of their students pursuing college. Because this program primarily works with under-represented minorities, these statistics show that targeted programs can help close the achievement gap.

Intel fully supports the goals of creating a STEM Master Teacher Corps, including increasing student engagement in STEM, recruiting, training and supporting highly-qualified and highly-effective teachers and closing student achievement gaps. All of these endeavors will help prepare more students to be on track for college success and career readiness. The specific areas that this legislation would fund are aligned with policies and practices that have been proven to be highly effective, including providing funding for mentoring new teachers in STEM content areas, and providing professional development on effective STEM teaching methods. At Intel we understand the importance of investing in teachers and we have trained over 10 million on our Intel Teach Program, with 500,000 teachers trained in the U.S. to help build 21st century skills such as digital literacy, critical thinking and problem solving. With the success Intel has witnessed with science competitions, we are pleased that funding can support STEM-related competitions and hope that science competitions as well as robotics will be highlighted as examples.

Many of today's educational goals and requirements can be most effectively achieved by modernizing our educational practices and systems through technology. In a statement accompanying the release of his FY11 Budget proposal, President Obama asserted that he "…strongly believes that technology, when used creatively and effectively, can transform education and training in the same way that it has transformed the private sector."

We embrace this vision and urge Congress and the Administration to make it a reality by including it within the ESEA reauthorization legislation as a separate, directed funding program focused on improving education through technology. ATTAIN, or Achievement Through Technology and Innovation, would ensure that teachers receive appropriate professional development on technology integration, educational agencies would have leadership capacity around technology and there would be equity in the distribution of resources. In addition, ATTAIN would drive innovation and systemic reform that leverages 21st century technologies, target low-performing schools and ensure students attain technological literacy by the eighth grade.

Secondly, we support meaningful and measureable infusion of technology and related professional development throughout all major ESEA programs, based on the recognition that technology will become the platform and infrastructure of choice for school reform and improvement efforts in the 21st century. Technology infusion should make technology a priority throughout the new ESEA with language reflecting mandatory technology spending. Enterprises in other sectors of our economy dedicate an average of 5 percent of their budgets for technology and related staff training and support, and ESEA should help lead our educational agencies toward this best practice.

The future of not only Oregon, but the US depends on its ability to boost student performance in

STEM so that our students will be college and career ready, and prepared to succeed in the competitive 21st century workforce. We ask the reauthorization of ESEA includes additional support for STEM and encourages technology to be used as a catalyst to improve education. Thank you.