LIEUTENANT GOVERNORS EDUCATION SYMPOSIUM

A Report from the 2007 Lieutenant Governors Education Symposium

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Washington, DC

James B Hunt, Jr Institute for Educational Leadership and Policy

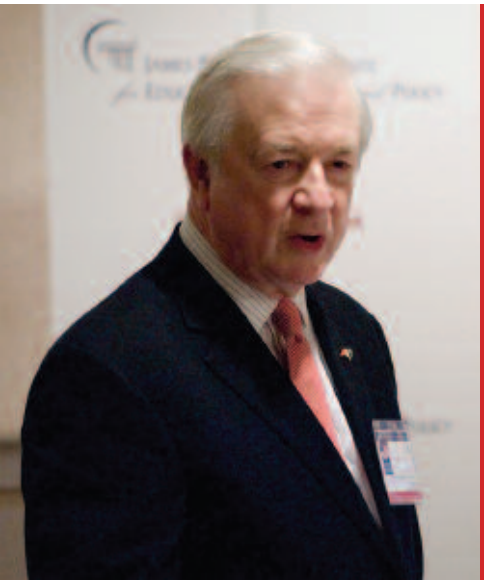
Designing strategy. *Shaping* policy. *Driving* improvement.

INTRODUCTION

In March, the James B. Hunt, Jr. Institute for Educational Leadership and Policy convened lieutenant governors and their policy advisors in Washington, DC, for its 2007 Lieutenant Governors Education Symposium. The event, co-hosted by Michigan Lieutenant Governor John Cherry, Jr. and former North Carolina Governor Jim Hunt, provided an opportunity for a bipartisan group of lieutenant governors to meet with some of the foremost experts in education and public policy to share ideas and discuss critical issues facing our education system. The Symposium included a rich discussion of research and current state efforts related to college and workforce readiness, math and science education in the primary grades, and out-of-school time (OST) services.

In his opening remarks, Governor Hunt referenced Thomas Friedman's book, *The World is Flat*, as a stark reminder that the world we live in is rapidly changing. Globalization has altered the playing field, and communities that have historically been disconnected are now competing for jobs and opportunities. The new global reality is that education has become the most vital of all resources. If the United States is to remain a leader in today's global economy, it must elevate its entire education system.

The first session of the Symposium dealt with the issue of college and workforce readiness, and the declining value of a high school diploma. Once the key to a good job and a successful future, a high school diploma is no longer the credential needed for a life full of opportunity. Education beyond high school is necessary to earn a sufficient wage and support a family; the notion that only a percentage of students need to be educated to a higher level is obsolete. In today's world, all students, regardless of their immediate post-high school plans, need to be **prepared** to successfully participate in a community college, four-year college, or workforce training setting. The knowledge and skills required for all of these opportunities are the same.



"You must have strong infrastructure and then you must have bright people. That's what makes an economy work. But increasingly, the bright people are by far the most important thing."

Governor James B. Hunt, Jr.

During session two, lieutenant governors discussed the increased importance of math and science in today's economy. Employers in fields from healthcare to high-tech are demanding more workers with sophisticated understandings of math and science concepts. Skilled trade jobs, like construction and automotive repair, that traditionally required little background in math and science, now require higher level skills. In order to meet the increased demand, spurred by global competition and the portability of job skills around the world, **we cannot wait until high school to get serious about math and science education**. We must do so beginning in the primary grades. Current research has shown that children can think both concretely and abstractly at much younger ages than we previously recognized, and in order to prepare them for success in upper level courses, early education in math and science needs to be updated to take advantage of their innate abilities and readiness to learn.

The final session focused on OST programming. Historically utilized as a place to keep kids safe before and after school, OST programs are now being challenged to help raise student achievement. Many students, especially under-achievers and those from disadvantaged backgrounds, need more instructional time to meet the new, higher standards. No Child Left Behind (NCLB) acknowledges the importance of additional academic instruction by providing funding for supplemental services outside of the regular school day. This is a good first step, though more needs to be done. The dramatic shift in focus for OST has forced many states to reevaluate how they regulate and support this burgeoning field.

The discussions and ensuing recommendations made throughout the Symposium highlight the importance of embracing change and adapting to the new reality. As leaders who head major initiatives, serve on boards, and run state legislatures, lieutenant governors are positioned to help lead educational reform. Substantive change requires strong leadership, and Governor Hunt urged the lieutenant governors to utilize their "bully pulpit" to shed a bright light on the issues and be passionate education leaders in their states.

READY FOR COLLEGE, READY FOR WORK

Lieutenant Governor John Cherry, Jr.,
State of Michigan

David Armstrong, Jr., Chancellor, Florida's Division of Community Colleges and Workforce Education

Jon Erickson, Vice President of Educational Services, ACT, Inc.

Judith Rizzo, Executive Director and CEO, Hunt Institute – Moderator

Results of a new study by ACT, Inc. provide empirical evidence that high school students need to be educated to a comparable level of readiness whether they plan to enter college or the workforce. Graduates need this level of readiness if they are to succeed in college-level courses without remediation or enter workforce training programs ready to learn job-specific skills.

"From 1940-1970 you could obtain a well-paying job with benefits, retirement, and enough to give your kids a great life full of opportunity. When you graduated from high school you had a choice and it didn't matter which avenue you chose. Today it's a completely different matter."

Lt. Governor John Cherry, Jr. (MI)

WHY IS THIS IMPORTANT?

While a high school diploma was once the key to a good job and a successful future, that is no longer the case. According to a recent report by the Educational Testing Services, jobs that require at least some postsecondary degree will make up more than two-thirds of new jobs. In order to grow economically, the U.S. needs more college graduates than ever before. As the economy becomes increasingly information-based, employers need graduates who are well prepared for intellectually demanding jobs. While the U.S. is still among the world leaders in the proportion of 35-64 year old adults with college degrees, it drops to seventh in education attainment of 25-34 year old adults. This graduate gap is hurting our competitiveness abroad and income growth here at home.

WHAT ARE THE ISSUES?

In most cases, high school graduation requirements are not aligned with what is needed in college. A disconnect exists between state standards and the skills and knowledge necessary to succeed in college and workforce training programs. A national curriculum survey conducted by ACT, Inc., found that colleges generally want incoming students to attain in-depth understanding of a selected number of fundamental skills and knowledge in their high school courses, while high schools tend to provide less in-depth instruction of a broader range of skills and topics.

Lt. Governor Greg Francis (U.S. Virgin Islands)

Not all students are required to take courses in high school that will prepare them for success in college and the workforce. Students generally have multiple course options to choose from and not all will adequately prepare them for postsecondary training. Currently, only 12 states require that all students complete college and work-ready graduation requirements.

Of the high school graduates who do make it to college, an alarming number need to take remedial courses. **Remediation is an extraordinarily inefficient and costly practice.** More than $17 billion is spent each year on remedial classes so students can gain the knowledge and skills they should have acquired in high school. This cost is shared by states, postsecondary institutions, employers, parents and students.

"State standards tend to be very broad and interestingly enough, college and workforce expectations are much narrower in terms of the types of skills and the types of areas they want incoming applicants or students to have."

Jon Erickson, ACT, Inc.

POLICY RECOMMENDATIONS

1. **Align K-12 and postsecondary education.** K-12 and postsecondary education systems have historically acted in isolation. Ensuring that state standards reflect the skills needed for success in college and workforce training programs is imperative if postsecondary aspirations are to become a realistic, attainable goal for all students.

2. **Require that all students take a rigorous core preparatory course program in high school.** Research suggests that a rigorous high school curriculum is one of the most significant factors in determining a student's likelihood of attending and graduating from an institution of higher learning. Unfortunately, many students do not have access to the challenging and relevant coursework they need to graduate prepared for success beyond high school

3. **Provide early college opportunities.** Programs that allow students to earn college-level credit while still enrolled in high school strengthen the transition from high school to college. They allow students to achieve their education goals more quickly, reduce the cost of postsecondary degrees, and provide exposure to college level work that makes the prospect of obtaining a postsecondary degree less daunting. The *Learn and Earn* program in North Carolina is one example of a state's effort to provide early college opportunities. The program provides students with the option of a five-year high school program that enables them to earn a high school diploma and a community college associate degree while simultaneously gaining necessary skills to pursue a career.

4. **Create a culture of evidence.** In order to focus on student learning and achievement, access to high-quality data is essential. Only a handful of states have longitudinal data systems that allow them to track individual students from kindergarten to the workplace. Quality data is critical to ensure policymakers target limited resources where they can have the maximum impact on student achievement. Basing policy decisions on data is an important step to making cost-effective and programmatically sound decisions.

5. **Reward outcomes and performance in higher education.** Financial incentives can be used to encourage public universities and colleges to meet specific educational goals, such as increasing the number of students completing degree programs. The state of South Carolina, for example, has a system for evaluating educational quality and allotting funds to higher education based on institutional performance. Since the implementation of performance funding, South Carolina has reported improvements on a variety of indicators, including graduation rates, minority enrollments, and minority student retention rates.

6. **Get community colleges and universities to work together**. Today's students are extremely mobile, often moving from one postsecondary institution to another. Enabling seamless transfer of course credits from community colleges to four-year institutions makes students' time to degree completion more efficient and less costly. In Florida, students are guaranteed admission into a four-year institution if they successfully complete an associate's degree at a community college.

7. **Involve the community.** In Kalamazoo, Michigan, an exciting and unique community scholarship program is drawing national attention. Thanks to the *Kalamazoo Promise*, potentially every graduate of the Kalamazoo Public School district is guaranteed a full college scholarship. By lowering the cost of postsecondary education, the city of Kalamazoo is increasing the incentives for high school graduation, college attendance, and college completion. The anticipated results include higher lifetime earnings for the community's young people, a better-trained workforce for area businesses, and a school district that has more resources and is more diverse in terms of both race and socioeconomic status. A similar effort was recently announced in El Dorado, Arkansas.

IT'S NOT TOO EARLY: MATH AND SCIENCE IN THE PRIMARY GRADES

Francis (Skip) Fennell, President, National Council of Teachers of Mathematics and Professor of Education at McDaniel College

Samuel Houston, Jr., President and CEO, North Carolina, Science, Mathematics, and Technology Education Center – Moderator

Brian Reiser, Professor of Learning Sciences, Northwestern University

Hung-Hsi Wu, Professor of Mathematics, University of California at Berkeley

Recent reports on the performance of U.S. students in math and science, such as the Trends in International Mathematics and Science Study (TIMSS) and the National Assessment of Education Progress (NAEP), show that our students are not performing up to expectations. U.S. students often know a little about a lot of different topics, but lack the deep understanding about mathematics and science concepts that are increasingly important in today's global society.

In response to this issue, a handful of national organizations have taken up the challenge of improving math and science education in the U.S. The National Council of Teachers of Mathematics (NCTM) recently released curriculum focal points as a guide for states to incorporate the most important concepts of mathematics education when revising state standards and curriculum. Similarly, the National Academy of Sciences recently released a report, *Taking Science to School*, that offers concrete recommendations for developing science knowledge and skills in the early grades. These efforts highlight the growing consensus among educators and the business community that in-depth knowledge of key math and science concepts are gateways to the 21st century workforce.

WHY IS THIS IMPORTANT?

In a knowledge-based economy, innovation and excellence in mathematics and science are integral to a nation's competitiveness. Demands for skills in mathematics and science are continually increasing. Approximately half of America's fastest-growing businesses are high-tech firms. Skilled trade jobs, like construction and automotive repair, that traditionally required little background in math and science, now require higher-level skills. People who can handle a spreadsheet, read technical manuals, and solve complex problems are needed at all levels of industry.

Lt. Governor Bill Halter (AR)

While all politics may be local, job competition is increasingly global. Today's young people will be competing for jobs with people from around the world. Yet, international comparisons of student achievement show that U.S. student's performance in mathematics and science is mediocre at best. On the 2003 TIMSS assessment, U.S. fourth-graders ranked 12th in mathematics out of the 24 countries that participated. In science, U.S. fourth graders ranked sixth out of the 24 countries that participated. Results were similar for eighth grade students.

"We need to excel in math and science.
That's where they are 'eating our lunch' around the world."

Governor James B. Hunt, Jr.

"It is critical that teachers in the early grades understand math concepts in order to be able to explain – not just set the rules and have kids memorize."

Hung-Hsi Wu, UC Berkeley

WHAT ARE THE ISSUES?

Math and science education in the U.S. is often unfocused and overly broad in scope. For example, a study of fourth-grade mathematics curriculum standards found states to have as many as 89 different grade level expectations. Important math and science concepts that need to be linked and developed over time end up receiving superficial coverage.

This issue is further complicated by the inadequate training that a large portion of teachers receive in math and science. In a national survey of science education, few science teachers in grades K-5 reported feeling qualified to teach specific science disciplines and almost three-fourths perceived a substantial need for professional development to deepen their own science content knowledge. If elementary teachers are going to effectively guide students in their exploration of science concepts, they must first have a good understanding of them.

Scientific advances in recent years have drastically altered our understandings of how children think and learn. Science education, especially, has not been updated to reflect this new understanding. Too much emphasis has been placed on the memorization of facts as opposed to the engagement in scientific methodology. Science is a process of asking questions, using a logical approach to solving problems and relying on objective evidence. Few science programs provide inquiry-based or hands-on learning, or take advantage of children's innate abilities to hypothesize and use scientific processes.

Lt. Governor Dennis Daugaard (SD)

(L-to-R) Brian Reiser, Skip Fennell, Hung Hsi-Wu, Sam Houston, and Gov. Jim Hunt

Lt. Governor Jack Dalrymple (ND)

POLICY RECOMMENDATIONS

1. **Narrow the content in mathematics and science education.** Students need the opportunity to build deep knowledge and understanding in a few core areas of math and science, rather than learning cursory knowledge about many topics in each. NCTM provides a guide through the recently published focal points. *Taking Science to School* recommends identification of a core set of ideas and building upon them over a number of years. This philosophy should be reflected in statewide math and science standards.

2. **Align mathematics curriculum and instruction so students are prepared to take algebra.** Algebra is known as a "gateway course." It functions as a prerequisite to all other college-required mathematics courses. Without it, students can not advance in math and science, and will not be able to meet the requirements for college. Students who successfully take algebra I by ninth grade are more likely to attend and graduate from college. If all students are going to be prepared to succeed in algebra, establishing a strong foundation in K-8 mathematics is essential. K-8 mathematics instruction needs to be organized and taught in a way that explicitly prepares students for algebra.

3. **Develop science standards that capitalize children's innate abilities to hypothesize and use scientific processes.** Most current science standards do not reflect what is now known about how children learn science. Children are not concrete and simplistic thinkers. In fact, they can think both concretely and abstractly. Science standards should reflect new understandings of how children think and learn.

4. **Invest in teacher preparation and development.** Sustained in-service professional development can change the culture of instruction and have a tremendous impact on student achievement. It is critical for teachers to have opportunities to deepen their content knowledge and their knowledge of how students learn math and science. State and local school systems can ensure that K-8 teachers experience sustained math and science-specific professional development.

Lt. Governor Patrick Quinn (IL)

"Early education in science is not serving children well, not involving them, and taking advantage of their innate abilities to hypothesize and use scientific processes."

Brian Reiser, Northwestern University

SPOTLIGHT ON OUT-OF-SCHOOL TIME

Peggy Ball, Early Childhood Systems Consultant

Gail Daughtry, Executive Director, North Carolina Center for Afterschool Programs

John Dornan, Executive Director, Public School Forum of North Carolina

Jodi Grant, Executive Director, Afterschool Alliance

Wendy Puriefoy, President, Public Education Network – Moderator

As we approach 2014 – the final date whereby all students are expected to be proficient in math and reading under NCLB – communities across the country are searching for ways to improve student achievement. One promising strategy that has gained considerable support and recognition is the expansion of high-quality out-of-school time (OST) programs. OST refers to the hours in which school-age children are not in school. OST programs generally refer to afterschool, before school, summer school, vacation sessions, and Saturday schools. Afterschool programs are the most common type of OST program.

WHY IS THIS IMPORTANT?

Research shows that high-quality OST programs have a positive effect on student achievement. Individual program success stories, such as the *Young Scholars Program* in North Carolina, have produced solid, measurable results on important indicators such as standardized test scores, school attendance, improvement in regular class grades, and a dramatic reduction in students being held back to repeat a grade. However, more work needs to be done to duplicate the efforts of high-quality OST programs and expand the benefits to those most in need.

An important NCLB provision states that children in schools that fail to help them reach proficiency are eligible to receive supplemental educational services (SES). These services must occur outside the school day and be backed by evidence that the services are effective in raising student achievement. Many children need more time and individual attention than traditional schools can provide to achieve proficiency on today's academic standards. OST can provide the additional time needed and support the learning that takes place during the regular school day. As schools are forced to narrow their focus and concentrate on core academic subjects, OST has the potential to round out a child's overall development.

WHAT ARE THE ISSUES?

OST programs are plagued by a lack of quality standards, a lack of access, and limited funding. The number of children participating in OST programs is growing exponentially. This growth, however, has proceeded with insufficient guidance on the quality standards and program features that will prove most effective in nurturing the educational achievement, emotional development, and health of children. As a result, there is tremendous variability in OST program quality. Many states are struggling with the issue of ensuring program quality in this diverse and relatively new field.

"There is a real need out there for centralized resources and information. While we have all of these various programs, they are working largely in isolation."

John Dornan, North Carolina Public School Forum

Despite the proliferation of OST programs in recent years, many children, especially minorities and those from disadvantaged backgrounds, still lack access. In a national survey of afterschool providers conducted by the Afterschool Alliance, 87 percent of respondents said children in their community lacked adequate access to afterschool programs. Disadvantaged and minority students are disproportionately affected by the shortage. It is clear the current demand for high-quality afterschool programs is outstripping the supply. Seventy-five percent of the afterschool programs surveyed were found to operate at or above maximum capacity.

While the federal government, philanthropies, and locales have directed a considerable level of financial resources to OST in recent years, the field still lacks adequate and equitable funding. OST programs do not have the traditional state funding streams that other educational institutions depend upon. Instead, OST programming brings together disparate funding streams from numerous sources. The problem with this patchwork approach to funding is that equity across programs becomes compromised. When programs are forced to make changes due to budget cuts, the most common response is to increase the fees that families must pay. Increases in fees disproportionately affect the poorest families who often benefit the most from OST program participation.

POLICY RECOMMENDATIONS

1. **Develop an effective governance structure.** Several states have created statewide afterschool networks that bring together OST stakeholders to work collaboratively to ensure consistent and effective OST policies and funding. Designing and managing an effective governance structure can be a challenging political process. In order to be successful, statewide governance structures require strong state level leadership with broad representation and participation.

2. **Develop standards for program quality.** Differences in structure, content, and emphasis in OST programs lead to differences in children's experiences. Some degree of variability is appropriate, but holding programs accountable for basic quality standards is critical to ensuring effective and productive use of limited time and resources. Common themes have emerged from the states and organizations that have tackled the issue of OST standards, including: clarity of mission; family and community involvement; balance of academics and enrichment; safe and healthy environments; stable and qualified staffing; and organization and administration.

3. **Blend funding streams.** OST programs are supported by several federal and philanthropic funding streams. Two of the largest federal programs are the *21st Century Community Learning* grants and the *Child Care and Development Fund* (CCDF). Additionally, philanthropic organizations such as the Mott Foundation, the Wallace Foundation, and the Atlantic Philanthropies are making considerable investments in OST. In order to improve quality and expand access, available funding for OST should be allocated in an efficient and equitable manner. A statewide structure that assists OST programs in developing and distributing funding streams equitably and effectively is critical for program success and expansion to students that need the resources most.

Lt. Governor Anthony Brown (MD)

Lt. Governor Peter Kinder (MO)

Lt. Governor John Bohlinger (MT)

Lt. Governor Patty Judge (IA)

"This is perhaps the best time in history to have been born. It is the first time in the world that we've said we can develop people to the highest standard possible."

Wendy Puriefoy, Public Education Network

CONCLUSION

One of the key themes heard throughout the Symposium was **alignment**. Programs and organizations that have historically acted in isolation **need to work together** to create a cohesive and rigorous education system. Raising academic expectations, improving math and science education, and supporting students during their non-school hours are vital steps to ensuring that all of our children **graduate high school prepared for success**.

(L-to-R) Judith Rizzo; Lt. Gov. Patty Judge (IA); Lt. Governor Dennis Daugaard (SD); Lt. Governor Bill Halter (AR); Lt. Governor Peter Kinder (MO); Lt. Governor John Cherry, Jr. (MI); Lt. Governor Patrick Quinn (IL); Lt. Governor Greg Francis (U.S. VI); Lt. Governor Rick Sheehy (NE); Lt. Governor Jack Dalrymple (ND); Lt. Governor John Bohlinger (MT); Lt. Governor Anthony Brown (MD); and Gov. Jim Hunt

GOVERNORS EDUCATION SYMPOSIUM SUPPORTERS

The Broad Foundation is a national venture philanthropy established by Edythe and Eli Broad, a renowned business leader who founded two Fortune 500 companies, SunAmerica Inc. and KB Home. Based in Los Angeles, The Broad Foundation's mission is to dramatically improve K-12 urban public education through better governance, management, labor relations and competition.

The Atlantic Philanthropies is a private organization that works "to bring about lasting changes in the lives of disadvantaged and vulnerable people." Through its multi-billion-dollar endowment, the Philanthropies provide funding for research, programs, and initiatives in each of the following areas:

- Older adults and aging
- Disadvantaged children and youth programming
- Population health
- Reconciliation and human rights

The Atlantic Philanthropies consists of seven charities and eight service companies, and the organization services seven geographic areas, including Australia, Bermuda, Great Britain, Northern Ireland, Republic of Ireland, South Africa, the U.S., and Vietnam. Headquarters for The Atlantic Philanthropies are in Bermuda.

The State Farm Companies Foundation was established in 1963 as an independent private foundation. The Foundation is primarily committed to education, helping to raise the level of student achievement in our elementary and secondary schools, as well as supporting key higher education initiatives. A separate nonprofit organization funded by the State Farm Mutual Company, the Foundation provides funding for its Education Excellence initiatives that are national in scope:

- K-12 Public Schools
- Service Learning
- Systemic Improvement
- Teacher Excellence

The Foundation also supports higher education initiatives through scholarships and a matching gift program.

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