ALLIANCE FOR EXCELLENT EDUCATION

Testimony of Bob Wise, President of the Alliance for Excellent Education and Former Governor of West Virginia, Before the Joint Interim Committee to Study the Public School Finance System, State of Texas Monday, September 24, 2012

Thank you Senator Shapiro, Representative Aycock, and members of the Joint Interim Committee to Study the Public School Finance System. It is my great pleasure to have received this invitation from the Interim Committee to discuss how digital learning and the effective use of technology can help drive better learning for all students in Texas—regardless of their geography or socioeconomic status—as you study new funding formulas for the Texas school finance system that will allow for flexibility, innovation, and accountability to improve learning.

The world has changed a great deal just since we rang in the millennium on January 1, 2000. Technology is the driving force that makes nearly everything in modern life more efficient, accessible, richer, and faster; but our schools have failed to keep up with innovation that technology helps provide. Students are told to turn off their smart phones, laptops, and other interactive devices when they arrive at school. We must change this mindset to one where we want all of our students to use technology as a part of their learning in conjunction with great teaching.

To continue to make progress as a state and a nation, we must continually improve the way teachers teach and students learn to ensure that every child graduates from

high school with the skills they need to succeed in college and today's highly competitive job market. It is time we stop asking students to "power down" when they enter the classroom and instead "power up" so that technology can join with quality teaching to improve student outcomes and drive the nation's economy today and in the future. Texas has already made great strides in doing so, and now it is time to continue this progress by spreading these practices and encouraging all school districts and all schools to put into place plans for high-quality digital learning. I commend this committee for taking steps to do just that by examining the public school funding system in Texas and how to drive innovation throughout Texas schools to improve learning for each student.

As president of the Alliance for Excellent Education—a Washington, DC-based national policy and advocacy organization that works to improve national, federal, and state policy to ensure that all students can achieve at high academic levels and graduate from high school ready for college and a career—I've traveled the country to see firsthand how technology can improve struggling schools and empower teachers. As educators in Texas can surely attest, digital hardware by itself does not bring about change, but by combining teachers and technology with proper leadership, vision, and planning, schoolhouses become robust and effective learning environments.

Digital learning is any instructional practice that effectively uses technology to strengthen a student's learning experience. It emphasizes high-quality instruction and provides access to challenging content, instant feedback from assessments and data systems, opportunities for learning anytime and anywhere, and individualized instruction to ensure all students reach their full potential to succeed in college and a career. Sometimes you'll hear talk of "blended learning," which combines online

learning with a brick-and-mortar environment; e-learning; mobile learning; and maybe other terms. At the end of the day, the important thing is the systemic use of effective and reliable technology applications to improve learning outcomes.

Like most states, Texas is looking at continuing funding challenges brought about by declining local, state, and federal revenues and tight budgets. At the same time, the state is being challenged to raise student performance for more and more children. I have balanced budgets as a governor and it was never easy. It is going to require thinking outside the box to allocate resources in a way that makes the state dollar more productive and effective.

Texas is being challenged to do more with less, but the state is not alone in this trend in education. Nationally, the economic need to graduate more students with higher standards is not being met. Twenty-five percent of a typical class of ninth graders will not graduate from high school.[1] Based on research from ACT, of those who do make it through high school, only twenty-five percent of them will be prepared to succeed in college. Even more troubling, students of color have a graduation rate of just over 50 percent.[2] These students are not only the nation's children; they are its future workforce. For their sake, as well as the nation's economic future, we cannot afford to fail them.

We know that educational attainment has a direct impact on future earnings and on employment opportunities. Nationwide, a high school dropout is more than twice as likely to be unemployed than someone with an associate's degree, and if that high school dropout can find a job, he or she is going to be earning maybe 60 percent of what that person with the associate's degree is making … and less than half of what a college graduate is earning.[3] Once upon a time there were many

good jobs available that did not require a significant amount of education, but those times have passed.

According to research compiled by Anthony Carnevale from Georgetown University, the percentage of jobs requiring some college education or more was 28 percent in 1973. Today, that number is 60 percent and is expected to increase. By 2018, 62 percent of jobs in Texas will require postsecondary education.[4] Over the same time period, the number of jobs available to high school dropouts has declined tremendously. In 1973, one-third of jobs were available to high school dropouts; today that number has fallen to 11 percent.[5]

Educational attainment also has a direct benefit to the nation and the state of Texas. If Texas's high school graduation rate were to increase to 90 percent, the state would reap huge economic benefits, including as much as $1.1 billion in increased annual earnings, $1.6 billion in increased home sales, $97 million in car sales, and 5,000 new jobs. All told, there would likely be as much as a $1.1 billion increase in Texas's gross state product and $54 million more in state and local tax revenues—and these numbers only represent the likely benefits from increasing the high school graduation rate for the Class of 2011.[6] Imagine the profound impact that increasing the graduation rate every year would have on the people of Texas and the entire nation. The message is clear: the best economic stimulus is a high school diploma.

It is also important to remember that even with that piece of paper, the skills our students will need to be successful are continually shifting. A recent report from the National Research Council emphasizes the importance of critical thinking, problem solving, flexibility, innovation, communication, and collaboration for the

future of our nation. As Texas works to continue to improve learning, it must keep in mind these competencies and how they can best be achieved - both in and out of school, and in formal and informal learning environments.[7]

Another challenge is the need for highly qualified teachers. 17 percent of Texas teachers have less than three years of experience, compared to 13 percent nationwide. Another issue is the need for specialized teachers. In Texas, there are more than 1,100 high schools, but only about 340 teachers are certified to teach physics. As you look at funding systems, it is essential to consider the preservice training, ongoing education, and professional development of teachers to ensure they are prepared to teach in a student-centered, collaborative, digital age. When teachers get that support and training, they are more likely to stay in the profession, because they are able to reach every student and teach the way they've always wanted to teach.

So how do we get there from here? The nation must move school improvement planning processes from "technology optional" to those that are "technology essential." The objective is not about having the latest technology or devices, it's about improving learning by implementing solutions that support teachers and empower students.

In assessing these challenges, I am pleased to have joined with Gov. Jeb Bush in a bipartisan effort to release recommendations and principles that are contained in the "10 Elements of High-Quality Digital Learning." These elements serve as a roadmap to provide districts with the ability to bring the most effective combinations of digital learning to teachers and students and customizing instruction for all kids. The goal was to work with a broad array of experts to

identify the policies and practices that local, state, and national leaders can adopt to create a high-quality online learning landscape. These elements were developed to empower school leaders with succinct conditions to promote innovation, retool schools, build basic skills, as well as increase the critical twenty-first-century skills necessary for success in college and a career.

I often talk about the three Ts—teachers, technology, and time—these three items are essential to developing a comprehensive digital learning strategy and in rethinking education. Imagine an opportunity for students to learn in ways that meet their individual needs and keep them more engaged in school. Imagine an opportunity for a student to progress when they are ready to move on and not be forced to simply move on because of an artificial deadline like an academic calendar. They move on when they are ready, because they mastered the subject.

Teachers across the country are seizing the three Ts to implement reliable common-sense technology solutions in their instruction. It's already happening in Texas and now leaders are working to spread those practices. The funding system should support that kind of teaching and learning.

One of the most important items that all states must deal with in their funding and regulatory systems is moving away from a seat-time based advancement system to one that is competency-based. Students advance to a new unit or subject only when they are ready to do so—when they have mastered the academic material. Basing advancement on how long a student sits in a chair is an outdated way to prepare our future workforce. It worked 100 years ago because we were in a different kind of world. Providing a more personalized learning system tailored more too each individual student will help provide a better educated and prepared workforce.

Technology is an important driver in moving to a competency-based system. But more importantly, teachers must receive better continuing education and training to teach in a student-centered competency based system. Any future funding models for Texas should create the conditions for that kind of learning environment to flourish.

One state to study for examples is New Hampshire who is the first state to eliminate seat-time as the standard basis of measurement and transition to a competency based system.[8] Other states, such as Michigan, have implemented waiver programs that allow seat-time to be suspended and enable policymakers to get data on the effect of transitioning to a competency-based system might have on the whole state, which is a great first step.[9] In Florida, online course providers are paid based on successful completion of courses. Examining the funding implications of moving to a more modern competency-based system must be carefully studied by each state.

Many instructional innovations are already happening in public schools across the country. In North Carolina, Mooresville Graded School District implemented a digital conversion initiative beginning in 2007. While involving a significant shift from print to digital content material and the deployment of an internet-accessible device for every student and teacher, Mooresville's focus centered on changes in teaching and learning.

Mooresville's teachers and administrators participate in extensive, ongoing, and job-embedded professional development using a distributed leadership model. They learn how to maximize the potential of the technology to personalize learning, including utilizing digital content and resources in which students can

become creators of knowledge and products, as well as implementing digital assessments that provide timely feedback to ensure the availability of data for planning and decision-making. Not only is the shift in instructional strategies and learning evident in the schools and classrooms in Mooresville, but the district has made tremendous strides in student achievement. Mooresville is now third out of 115 school districts in North Carolina in student achievement based on state test scores. This represents a dramatic jump from the bottom quarter of all districts just several years ago. The graduation rate has increased 25 percentage points in five years and is now the third-highest cohort rate in North Carolina. Mooresville has accomplished this with one of the lowest per-pupil expenditures in the state, ranking ninety-ninth out of the 115 districts.[10] Now, Mooresville was able to do this without major funding structure changes from the state. And Mooresville is hoping to reap the benefits that Project Red, a research organization, demonstrates in its study of more than 1,000 schools that implemented digital learning. The schools that had truly comprehensive plans saw major cost savings both in the short term and in the long term.[11]

But there are many, many examples of this happening right here in Texas, thanks to the leadership of this state over the years. The Floydada Independent School District. In Floydada, located in the western part of the state, more than 86 percent of its students come from low socioeconomic circumstances. The nearest community college is more than seventy miles away.

In 2004, Floydada began to implement the Technology Immersion Pilot, a 1:1 initiative in which middle school students and their teachers received laptops to facilitate learning. In the following years, Floydada expanded the effort to include high school and elementary school students. They have found that job-embedded,

ongoing, and sustainable professional learning is at the core of the transformation of teaching and learning. Teachers and administrators report that this is not just about the technology; it is about a true change in instructional strategies, access to digital content and courses, and use of data and assessment to better understand the needs of students. Instruction often includes project-based learning and collaboration, as well as students as producers of knowledge and products. Middle school discipline referrals have been cut in half since the program's implementation, and Floydada's high school and middle school students have achieved double-digit gains in all core subject areas.

Floydada has also been able to apply funds to support students in taking online college courses. In School Year 2010–11, seniors accumulated 450 college credits—a savings of $65,000 for the students and their parents. In many cases, taking college courses in high school allows students to see themselves as successful college students—a significant achievement, since more than half of the adults in Floydada do not have a high school degree. Technology has completely changed the teaching and learning experiences for students in Floydada to ensure that they graduate prepared for college and a career.[12]

Another example is in a large district outside of Houston. More than ten years ago, Klein Independent School District began to look at how the district could best integrate technology into the curriculum. The district undertook a planning process that included teachers, parents, and other community stakeholders. The district is working to implement one-to-one laptops across the district; has implemented learning management systems along with systems to integrate student data; and is working tirelessly to provide teachers with the necessary professional development. For example, at Krimmel Middle School, teachers engage in

ongoing, embedded professional develop similar to the lesson study model. Every teacher in the school participates by observing another teacher's lesson and engaging in guided reflection. This provides teachers with opportunities to see technology in use as well as increases cross-grade and cross-curricular collaboration.

Klein ISD has seen achievement gaps close and outcomes in both achievement and college-ready rates increase. At Klein Forest High School, the percentage of students who were college ready increased from 25 percent to 43 percent in seven years. Achievement on state assessments increased by about 20 percentage points for African American, Hispanic, and economically disadvantaged students in both math and English language arts.[13]

Teachers have a critical role to play as the nation continues to progress from yesterday's learning environments to those that are more tailored, flexible, robust, and challenging. That is why, on February 1 of this year, the Alliance and twenty-five core partners held the first-ever Digital Learning Day, to celebrate great teaching fueled by effective use of technology. More than 18,000 teachers representing almost 2 million students participated in the inaugural event. We were pleased to highlight Klein ISD as one of four examples of promising practices in innovation that we highlighted during a national town hall that included United States Secretary of Education Arne Duncan, Federal Communications Chair Julius Genachowski, and Senator Michael Bennet of Colorado in addition to students and teachers from across the country and the globe.

The momentum for Digital Learning Day increased quickly because it was a positive celebration of and for teachers that didn't add new activities to their

already-busy day. Instead, it helped teachers think about new ways of teaching lessons to improve effectiveness and productivity. Digital Learning Day shed light on many teachers who are already using technology that result in more student achievement gains. We are looking forward to seeing even more exciting practices at next year's Digital Learning Day on February 6, 2013.

We are at a crossroads and the next twenty-four months is a critical time to not only keep the wheels of progress turning, but to accelerate the rate of improvement through the effective use of technology. This is the time for those of us, including me, who are experiencing firsthand an emerging and ever-changing world of technology to ensure the nation's education system is agile and flexible enough to offer its youth the high-quality education they deserve. By doing so, this challenging moment can be turned around by embracing common-sense progress in teaching and learning.

As you consider making the move in Texas to a more student-centered learning system, I recommend that you build upon the work being done by this interim committee to begin a full comprehensive planning discussion on how to make a successful transition to a modern education system. You must consider more effective instructional models that include blended learning and access to high-quality online learning as well as effective technology integration, and I encourage you to examine completely overhauling your current funding models—like this committee is already doing—to create a new modern one that both recognizes the importance of funding the local neighborhood public school, the glue in most communities, and also understands that new instructional models require looking at funding in different ways. Texas has already made great strides by allowing a smarter funding model for purchasing instructional materials. That type of

innovation needs to also be used in other areas of education funding. And the state has already shown tremendous leadership in accelerating the pace of technology use, and has a very well-thought-out Long Range Plan for Technology. The state should encourage school districts to begin their own planning process and study ways to allow more flexibility for districts to offer innovative instruction. Old policies need to be revised and new ones must be adopted that promote innovation but also protect taxpayer money and provide real accountability for student learning. Oversight, transparency, and input from parents, teachers, and school leadership are all paramount in moving forward. Consequences for poor instruction, whether from public schools or private online contractors, must be rigorous to prevent fraud, waste, and poor-quality instruction. Competition can be a powerful tool in driving high-quality instruction but competition alone is not enough—we cannot allow even one student to be taught in a poor-quality environment while we wait for the high-quality competition to drive the bad actor out of the market. Parents want assurances that their children are in good learning environments from the beginning and that requires a good oversight and student-outcome accountability systems used in combination with competition.

You must also examine the technology infrastructure available in each school, the broadband capabilities of every community, and the best ways to get an internet device in the hands of every Texas student. Changing the school culture, such as allowing students to bring their own technology to school, should be part of the discussion. Finally, you must recognize that moving to a student-centered, competency-based personalized learning system requires more than just technology—laying a netbook on a textbook is not going to get it done. You need great teachers trained in how to deliver instruction in the new models. That requires sustained and ongoing teacher training and mentoring. Funding must take

that into consideration as a valuable and necessary driver for success. Through comprehensive planning, you can begin to undertake these important tasks.

Thank you again the opportunity to share my thoughts with you on these important topics. I look forward to answering your questions.

Endnotes

[1] U.S. Department of Education, National Center for Education Statistics, *Trends in High School Dropout and Completion Rates in the United States: 1972–2009* (NCES 2012–006) (Washington, DC: U.S. Government Printing Office, 2011).

[2] Alliance for Excellent Education, "Education and the Economy: Boosting the Nation's Economy by Improving High School Graduation Rates Among Students of Color and Native Students" (Washington, DC: Author, 2011).

[3] Bureau of Labor Statistics, Current Population Survey, "Education Pays" (Washington, DC: U.S. Department of Labor, March 2012).

[4] A. Carnevale, N. Smith, and J. Strohl, *Help Wanted: Projecting Jobs and Education Requirements Through 2018* (Washington, DC: Georgetown University Center on Education and the Workforce, June 2010).

[5] Ibid.

[6] Unpublished data from Economic Modeling Specialists, Inc., analyzed by the Alliance for Excellent Education.

[7] National Research Council, Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century. Committee on Defining Deeper Learning and 21st Century Skills, James W. Pellegrino and Margaret L. Hilton, Editors. Board on Testing and Assessment and Board on Science Education, Division of Behavioral and Social Sciences and Education. (Washington, DC: National Academies Press, 2012).

[8]Learn more about the State of New Hampshire at http://www.education.nh.gov/innovations/hs_redesign/index.htm.

[9]Alliance for Excellent Education, "Digital Learning and Technology: Federal Policy Recommendations to Seize the Opportunity—and Promising Practices That Inspire Them" (Washington, DC: Author, 2011).

[10] T. Schwartzbeck and M. A. Wolf, *The Digital Learning Imperative: How Technology and Teaching Meet Today's Education Challenges* (Washington, DC: Alliance for Excellent Education, January 2012).

[11] Visit www.projectred.org to learn more. Greaves, T.; Hayes, J.; Wilson, L.; Gielniak, M.; & Peterson, R., The Technology Factor: Nine Keys to Student Achievement and Cost-Effectiveness, MDR 2010.

[12] Learn more about Floydada at http://powerontexas.com/.

[13] Learn more about Klein ISD at http://powerontexas.com/ and www.digitallearningday.org.