Thank you, Sam (Williams). Pat (Willis) and members of Atlanta Partners for Education – it’s an honor and a pleasure to be here with you today. I want to begin by thanking all of you, business leaders and educators, for coming and for joining forces in Atlanta Partners for Education to make Atlanta’s schools better.

More than 150 years ago, the renowned American educator Horace Mann called education “the great equalizer” and “the balance-wheel of the social machinery.” I doubt that even he could foresee how prophetic his words would turn out to be. Getting an education has always been the single most important thing an individual can do to improve his or her own life, but never before has education has never been so economically critical.

We are surrounded today by a knowledge-based economy that rewards quality education – for individuals, for businesses, and for communities. What drives the best of industry today is innovation, and innovation comes from the best talent. The place that will succeed in attracting and growing business, large and small, is the place with the best ideas, the largest supply of talent, and a quality of life that makes that talent want to stay. The key to all three of those things is education.

We used to think of partnerships between schools and businesses or other community organizations as nice public relations gimmicks out around the edges of education, that provided field trip sites and new uniforms for the marching band. Today, partnerships are moving to the heart of the education process. Businesses have a greater stake than ever before in schools, and schools are learning to take account of influences of the wider community on the development of children and to take advantage of community resources.

A recent Research Atlanta study examined models of school reform, and found that one of the common characteristics of successful reform was networking between schools and outside organizations in the community to bring about change. The old African proverb, “It takes a village to raise a child,” has been worn out, but when it comes to improving education, it really is true. Partnerships must become a vital part of the overall school program if we are to make our schools what they need to be.

In the chemistry labs at Georgia Tech, they will tell you that if you are not part of the solution, you are a precipitate. And if you are a precipitate, that means you sink to the bottom and stay there. All of us are here today because we want to be part of the solution, part of the mix that will create outstanding schools and make Atlanta a great place for its citizens to live and its corporations to do business.

Serious partnerships between businesses and schools begin at the top. They involve corporate executives who help principals and superintendents understand the demands of today’s workplace, and why high standards and academic accountability are essential in
today’s New Economy. They involve principals and superintendents who are looking for a few helpful pointers from corporate executives who run their organizations in a competitive climate where performance is everything.

They involve businesses and schools that realize they share some of the same problems – the difficulty of finding good talent, for example. A study conducted by KPMG Peat Marwick for the Metro Atlanta Chamber indicated about 20,000 unfilled information technology jobs in Georgia, 75 percent of them here in Atlanta. A survey of Georgia’s 180 school systems last month indicated they needed to find 10,200 more teachers before the new school year begins next month, many of them here in metro Atlanta.

Georgia Tech doesn’t have a College of Education, so we are unlikely to supply many of those 10,200 teachers. But we know that all students need a stronger foundation in math, science and computing to succeed in this increasingly technological world. We also know that the most rapid job growth in the coming years will be in fields like science, engineering, health care, and technology, and we understand what it takes for students to succeed in these fields.

The third thing we know is that preparing students to succeed in college begins long before they fill out their first college application. Students must graduate from high school equipped with strong academics and good study skills, or risk failure in post-secondary programs.

The bottom line is that we need K-12 schools to be our partners. We need you to provide strong, challenging academic programs that prepare our students for success in college and the workforce, and we have resources to share with you that will help you in that task. So Georgia Tech works with K-12 educators in a wide variety of partnerships to improve education. And I’ve been asked to tell you about a few of them today as examples of practical ways that partnerships can help our schools.

Earlier this year, the Georgia General Assembly passed Governor Barnes’ Education Reform Act to improve our schools, and an important aspect of it is keeping track of what is happening in our schools. Georgia Tech is a partner in that effort. We are already home to the State Data and Research Center which collects and maintains all kinds of information about Georgia on behalf of the U.S. Census Bureau. Under the Education Reform Act, the State Data Center will expand its operations to include a statewide comprehensive education information system. This timely, seamless flow of education information from public schools, colleges, universities, and technical institutes will provide a more accurate picture of how effective public education is at all levels.

However, most of Georgia Tech’s education partnerships are not focused on collecting data, but on helping our schools improve. We have an office called CEISMC, which stands for the Center for Education Integrating Science, Mathematics and Computing. CEISMC’s goal is to help students in Georgia’s schools receive the best possible education in science, math, and technology to enable them to take their place in the world
of the 21st century. And for the past decade CEISMC has coordinated a long list of partnerships to help Georgia’s K-12 schools.

For example, CEISMC coordinates the Elementary Science Education Partners Program, which matches science and engineering students from several Atlanta colleges and universities with elementary school teachers in the Atlanta Public Schools. The college students spend six hours a week with their partner elementary teachers, planning and preparing science lessons, developing science kits and materials, and team-teaching in the classroom. In return, the students get two hours of academic course credit.

To help math and science teachers in middle and high school, CEISMC has a program called the Georgia Industrial Fellowships for Teachers, or GIFT for short. GIFT teachers spend six to eight weeks in the summer working with a mentor at a corporation, a research university, or a science organization. These work experiences expose GIFT teachers to scientific inquiry and the application of science, math, and technology in the workplace. The teachers also meet together several times during the summer and through the following school year to share experiences, attend workshops, and develop strategies to translate their work experience into the classroom.

GIFT teachers have been summer fellows at Georgia Tech, Emory University, the Medical College of Georgia, Zoo Atlanta, and more than 30 Georgia companies like Equifax, MCI, IBM, Scientific Atlanta, SunTrust Bank, and Robinson Humphrey.

Another CEISMC program that brings the Atlanta Public School system and Georgia Tech together as partners is SummerScape, a two-week summer camp that provides a hands-on curriculum in science, math and technology for middle school students. In addition to promoting these subjects among the students, SummerScape provides professional development for Atlanta teachers.

All SummerScape instructors are Atlanta middle school teachers, who are chosen for their ability to stimulate and motivate students. These teachers go through 50 hours of training and professional development to prepare them for their instructional roles at SummerScape. After the training and two camp sessions of two weeks each, they come away with polished teaching activities and strategies they can use in their classrooms.

SummerScape dovetails with a statewide initiative called PREP, the Post Secondary Readiness Enrichment Program, which was created by the University System of Georgia. PREP targets seventh grade students and their parents, encouraging them to begin thinking about college and helping them understand the academic record students must compile in high school in order to go on to college.

Here in Atlanta, Georgia Tech is a partner with three other University System institutions – Georgia State, Atlanta Metropolitan College, and Perimeter College – and we work together with a dozen middle schools in Atlanta, Fulton and DeKalb to help students begin to envision college as part of their future. In addition to encouraging PREP students to participate in SummerScape, we also sponsor after-school academic clubs, student
competitions, teacher workshops, technology instruction, leadership development, and community service activities.

CEISMC also helps teachers with resources. It is a partner with the Georgia Department of Education in an Internet project called Georgia Learning Connections. Georgia Learning Connections is a website that offers curriculum guides, lesson plans, support materials, and assessment tools for the state’s Quality Core Curriculum. It also has a Teacher Resource Center, which offers a wide variety of educational support materials. CEISMC designed the Georgia Learning Connections website, edits the materials, and houses and maintains the computer hardware.

CEISMC also keeps up its own Busy Teachers’ WebSite. There are lots of good education materials out there on the Internet, but we have yet to meet the school teacher who has endless hours to spend surfing the Net to find them. Busy Teachers’ WebSite does the surfing for you, and presents descriptions and direct links to key curriculum materials from more than 400 educational web sites.

Another important partnership at Georgia Tech is SECME – the Southeastern Consortium of Science, Mathematics and Engineering. Georgia Tech was one of eight partner universities that founded SECME 25 years ago. Our goals are to encourage more minority students to go to college and major in science, math, engineering and technology, and to give them the academic background they need to succeed in college.

Today SECME is the largest pre-college alliance in the country, bringing together 40 universities, 70 industries and government agencies, and 107 school systems representing 20,000 students in 16 states plus the District of Columbia. It now reaches beyond the Southeast, to include schools in New York and Indiana. To date 60,000 high school students have participated in SECME. 90 percent of them have gone on to a four-year college or university, with three-fourths of them majoring in science, math, engineering, or a technology-related field.

SECME also helps K-12 teachers improve their skills and learn to use educational technology effectively. Every summer Georgia Tech hosts several hundred K-12 teachers who come to our campus for the SECME Summer Institute. SECME students also come during the summer to experience college classrooms, labs and dorms, and imagine themselves as college students. They participate in hands-on enrichment activities, including competing in the famous “mouse-trap” car race.

The programs I’ve been describing are broader partnerships with multiple K-12 schools. Georgia Tech also has a very special, one-to-one partnership with Centennial Place Elementary School, which is located about a block from the Tech campus in the new mixed-income neighborhood that replaced the Techwood Homes housing project.

This elementary school features a model math, science and technology curriculum that our CEISMC staff helped to design. We also helped to outfit the school with computers, and a Georgia Tech co-op student is assigned to the school to keep the computers running.
and help students and teachers use them. And as these computer-savvy children move up through the grades, Georgia Tech’s goal is to move with them, first to Inman Middle School, then to Grady High School, continuing to strengthen the science and math curriculum, provide technology, and teach the skills to use it.

The partnership between Georgia Tech and Centennial Place Elementary School also has a fine arts component. It may come as a surprise to you that Georgia Tech is interested in the arts, but we believe that the arts can help make technology human, and technology can help enhance the arts. We have a state-of-the-art theater on our campus called the Robert Ferst Center for the Arts, with a steady flow of outstanding artists coming from around the world to perform.

So we developed a fine arts partnership between the Ferst Center for the Arts and Centennial Elementary School. Last school year, six of the groups that performed at Georgia Tech put on special workshops for the pupils at Centennial School. Each workshop emphasized a special aspect of performing. The Harlem Boys Choir, for example, taught the children about musical pitch; a chamber orchestra brought special instruments the children could play; a dance group explained stage lighting and described the physical conditioning that dance requires.

Concepts from these workshops were integrated into the school curriculum. The mathematical value of musical notes became part of a lesson on fractions; the physics of light and optical illusion were examined in science class; and the children tried out dance movements in physical education classes.

Georgia Tech also provided subsidized tickets for 200 pupils and parents to attend the performances of the six groups that conducted the workshops. And Ferst Center staff taught the children theater and concert etiquette in preparation for attending the performances.

Georgia Tech is also a partner with the Rockdale County Magnet School for Science and Technology in the development of a model curriculum that applies the math and physical science theories taught in high school to telecommunications and information technology. This real-world application exposes students to concepts and research that are usually addressed only at the college level, and introduces them to some of the hottest career opportunities in the technology-driven economy of the future.

In addition to helping develop the curriculum, Georgia Tech faculty will also be available for distance learning activities and campus visits. And we hope to link the Rockdale Magnet School for Science and Technology with a French technological high school located near our Georgia Tech satellite campus in the Lorraine region of France.

These examples demonstrate some of the concrete ways that partnerships can make a difference for our pupils, teachers, and schools. The important thing is for partners to sit down together, look at school’s needs, look at the business’s unique strengths and
resources, and then use a little imagination and creativity in applying the unique strengths of the business to the needs of the school.

Atlanta has been enjoying very strong economic growth in recent years, but we are still a new kid on the high-tech block. We are still in the early stages of developing a high-tech economy. And while we are doing well, we are in hot competition with other cities and regions, some of whom are stronger and more advanced than we are.

Quality education is a critical ingredient for success in today’s New Economy, and strengthening our schools is one of the most important things we can do to promote and sustain Atlanta’s development into a high-tech center. It is too big a task for our schools alone… it really does take the entire community, working together as partners. Today education is everybody’s business. Through your participation in Atlanta Partners for Education, through your partnerships with Atlanta Public Schools, you are building a brighter future for our children, for your businesses, and for our community.