



Chairman Meehan, Chairman Rokita, Ranking Member Clarke, Ranking Member Loeb sack, and Members of the Subcommittees:

It is an honor to testify before you today. My goal is to illustrate how student data can be used effectively to strengthen student achievement and personalize the learning for each individual student while simultaneously maintaining high levels of student privacy.

Although I am now the state and district digital learning director at the Alliance for Excellent Education, I come to you first and foremost as an educator. I've spent my life serving children, first as an elementary and middle school classroom teacher, then as a middle school assistant principal, an elementary principal, and most recently as the director of technology and cyber education in the Quakertown Community School District located in Bucks County, Pennsylvania. In each of these roles, I balanced the use of data and its tie to student achievement, while ensuring privacy on a daily basis.

Although I could share countless stories of how data-driven decision making has forever changed the lives of students, I'll take a moment to give just one example.

I knew Susan (whose name has been changed for protection) as a fourth grader. Susan had struggled tremendously in her previous school and never had much support at home. Dad left early on and mom struggled from drug addiction. It was evident that at home, her education was never a priority. Having bounced from school to school, she had little consistency and rarely had the home support needed to be successful, always playing catch up, with skills sometimes years behind. Life was dealing her a tough hand.

During her first few weeks in my classroom, we were able to collect a tremendous amount of data on her levels of performance. For example, we looked at the various aspects of her reading, from fluency to comprehension. We found that Susan struggled with accurate and fluent word recognition that often originates with a weaknesses in phonological processing.

It was through data collection and analysis that we were able to come to the conclusion of her exact reading needs. Based on Susan's specific needs, we were able to develop a personalized plan for success. For example, we utilized a multi-modal approach, that was digital in nature. These various software programs were overseen by and used in conjunction with dynamic instruction from her highly qualified teacher.

Over time, her achievement data was tracked and her personalized plan modified. Year over year, her performance steadily improved and she was ultimately able to cross the stage at graduation, not only receiving, but truly earning her high school diploma.

As an educator who has witnessed myriad stories like Susan's, I know that her success is attributed to the data-driven, personalized education that she received. There are countless students just like Susan, sitting in virtually every one of our nation's classrooms.

It is critical that we understand the national context for today's hearing. In many ways, the effective use of data is not just an educational strategy, it is an economic strategy. By 2018, two-thirds of the nation's jobs will require at least some postsecondary education, and estimates indicate that the nation will be 3 million college degrees short¹ because too few students graduate from high school on time and prepared for postsecondary education.

Our students need and deserve an effective, world-class education to be competitive in the global economy. In the 21st century, that means using data and technology effectively in the classroom.

Just like doctors evaluate your medical history, current condition, and records from other physicians to diagnose, care, and treat patients, teachers and administrators need access to data in order to best personalize learning for each student.

Today, the Alliance released a paper that I have submitted for the record describing how this is happening across the country. In Quakertown, I was able to witness first-hand the power of data and saw our graduation rate increase 10 percentage points over a two year period.

Data is used at all levels to support student success. Teachers collect and analyze data on a regular basis to inform their instruction. Whether its data on reading comprehension, fluency, or math facts, teachers collect, organize, and analyze data in order to personalize instruction for each student.

At the building level, I used this information as a principal to analyze trends in curriculum, strengths and weaknesses in our academic program, and teacher effectiveness. Tracking this data at the building level allowed me to properly allocate resources and modify schedules, from reading specialists and special education support, to a systemic response to intervention model.

At the district level, our leadership team would analyze districtwide trends to make decisions about curriculum renewal, standardized assessments, professional learning, budgets, and more.

As the director of technology at Quakertown, it was my team's job to oversee the security of such data. Like other districts, we utilized the necessary firewalls, security certificates, and limitations on access to ensure that only those people with a need to know had the needed information. For instance, only two people in the district would have access to all student information; me and the data specialist who would work on the district's Pennsylvania State Reporting System. Teachers were only able to see information that was legally permissible for students who they taught, and they each signed a confidentiality agreement, every year.

We ensured compliance with the Children's Internet Protection Act (CIPA) and the Family Educational Rights and Privacy Act (FERPA). For example, we utilized 128-bit encryption in instances of data transfer outside our firewall, the same level of security used in online banking.

Educators across the country demonstrate every day that they know how to use data responsibly. I offer several recommendations in my written testimony; in closing, I would like to highlight two of these recommendations.

First, educators need support in how to effectively use data to improve instruction while protecting sensitive student data. Funds from Title II of the Elementary and Secondary Education Act should be utilized for this purpose.

My second recommendation is simply a request for caution as you explore policy in this arena. Privacy concerns are real. At the same time, education in the twenty-first century must take advantage of all that technology has to offer. This precise sentiment was expressed yesterday in a bipartisan Op-Ed by two of your colleagues on the Committee, Representatives Polis and Messer, in which they eloquently stated, “*Security and privacy are critical, yet manageable concerns. We should not dismiss the power of using data to improve classroom instruction; simply develop best practices to ensure that data is used responsibly.*”

We must not let fear of data prevent us from realizing the promise of technology. The nation’s students, their parents, and our economy deserve nothing less.

Thank you for the opportunity to share a school and district perspective on this important matter.

ⁱ A. Carnevale, N. Smith, J. Strohl, *Help Wanted: Projections of Jobs and Education Requirements Through 2018* (Washington, DC: Georgetown University Center on Education and the Workforce, 2010).