

## Ranking Member Yvette D. Clarke Opening Statement

Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies and  
the Committee on Education and Workforce's Subcommittee on Early Childhood,  
Elementary, and Secondary Education

### Joint Hearing: "How Data Mining Threatens Student Privacy"

June 25, 2014

Today's hearing reminds me of the work we have done on this Subcommittee in developing authorities for the Department of Homeland Security to create a robust cyber workforce. In developing my bill, "Cybersecurity Boots on the Ground", we thought carefully about how we must learn to improve the readiness and capacity of DHS's Cybersecurity current workforce, but more importantly, how to engineer systems and devices that earn parents, schools, and policy maker's trust and confidence, to train students for future careers. Our goal was to encourage innovation in education to help create "cyber-capable" citizens, and help sustain a "cyber-capable" workforce.

Today's hearing is specifically about the use of technology in learning that could open up countless opportunities for students, from the 'personalization of learning', to the concept of 'learning anytime and anywhere'. From visiting the schools in my district, I have seen how advanced technology is being rapidly deployed in all grades, and can offer benefits that support a number of distinct functions, from data analytics, to student reporting requirements, to basic productivity functions such as email, data storage and document editing.

Advances in information technology have led to many new ways to collect data, analyze, and use data in ever expanding volumes. Big data holds tremendous potential to benefit society and contribute to economic growth. Researchers have told us that it will soon be possible to create and maintain longitudinal data about the abilities and learning styles of millions of students. Early adopters of these technologies have demonstrated their potential to transform and advance educational tools, but these same technologies have also called attention to serious policy questions. In particular, the information sharing, web-hosting, and telecommunication innovations that have enabled these new education technologies raise questions about how best to protect student privacy, and about the security of student information.

In this Committee's work on Cybersecurity legislation, we have seen that rapidly developing technology, like data mining, often outpaces the capacities and legal requirements that institutions and businesses need to manage and make use of 'big-data', and information sharing. However, data mining has emerged as one of the key features of many *homeland security* programs, involving the use of sophisticated data analysis tools to discover previously unknown, valid patterns and relationships in large data sets. In the context of homeland security, data mining is viewed as an essential means to identify terrorist and criminal activities, such as money transfers and communications sources, and to identify and track terrorists themselves, through travel and immigration records.

However, the concept of data mining in education has witnessed dramatic worldwide growth, both in academia and in the business sector, as a process that can provide useful data necessary for decision-making in institutions, and for the development of educational tools. While states and local communities are the core of our education systems, much of the software that supports online learning tools, online courses, and school system productivity tools, is provided by for-profit firms.

This raises complicated questions about who owns the data streams coming off online education platforms and how they are used. Applying privacy safeguards to educational records can create unique tasks. Today, we will hear how the use of school-based student data has gained more attention in recent months, and how it has seen increased scrutiny by parents and advocates, and resulted in new state and local laws.

I know that my colleagues on the Education and Workforce Committee, Mr. Polis and others, are working with a variety of stakeholders to find the right balance for educational settings, and I also know that the technology industry is already engaged - working on best practices and policies, along with a number of expert and academic organizations to move these discussions along.