Building Technology Skills in Secondary Schools Improves College Readiness
By Ray Kelly, President and CEO of Certiport

A vast majority of today's high school graduates throughout the United States have grown up immersed in technology. Students have become experts at texting on their cell phones, playing computer games, and even posting pictures on social networks. Reason would therefore lead educators to believe these students are more prepared than ever before to utilize technology as they enter the workforce or pursue higher education. Unfortunately, being an expert on Facebook does not help college freshman prepare a spreadsheet, and uploading YouTube videos is not particularly useful in completing a term paper.

Even though today's students are often called digital natives, many lack the skills to use the latest application technology to its full potential in an academic setting. Post-secondary institutions are experiencing increasing numbers of incoming freshman who are simply unprepared for college-level work. For instance, in California over 60 percent of students in community colleges need some form of remediation before they are able to embark on a college education (http://gradworks.umi.com/33/69/3369810.html). Nationally, ACT reports that less than 23 percent of ACT-test takers were ready for college-level course work in all four subjects they consider core benchmarks (http://www.act.org/news/data/09/collegeready.html).

Of those students who are deemed ready for college, how many are proficient users of key application technologies? I suspect the number of college-ready students would be even lower if technology skills were added as a core subject. *I believe that time will prove that the illiterate of the future are not those who cannot read or write, but those who cannot efficiently use a computer*.

Assessing technology skills is essential in the Information Age

The Bill and Melinda Gates Foundation has set out to develop a new standard for college readiness, with a long-term goal to ensure 80 percent of high school students graduate college-ready (http://www.gatesfoundation.org/college-ready-education/Pages/default.aspx). The Foundation's initiatives are helping educators around the globe recognize the value of redefining college readiness, including important real-world measures such as technology skills. In 2005, Bill Gates said, "Training the workforce of tomorrow with the high schools of today is like trying to teach kids about today's computers on a 50-year-old mainframe. It's the wrong tool for the times. Our high schools were designed fifty years ago to meet the needs of another age."

Mr. Gates is right—surely it is more efficient to teach students core technology skills and measure them for long-term comprehension and application in the real world. Studies have long shown that students learn better and faster if they practice those skills with technology (www.oten.info/conferences/jukes/ResearchSummary.pdf). As an added benefit, technology competence engages students, improves comprehension and builds self-esteem.

As educators, we can all agree technology skills are essential to succeed in the Information Age. The question is—how can we resolve the issue of technology illiteracy in the school system?

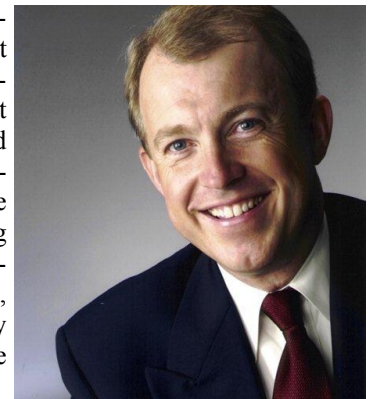**Improving workforce and college readiness with software certifications**

Creating college-ready high school graduates with solid computer skills is a long process that must be reinforced throughout secondary education. Many tactics must be employed, including using technology in teaching, giving students better access to tools and measuring technology skills. I joined Certiport last year because I foresaw certification programs as a real solution to help our school system resolve this issue of technology illiteracy.

Digital literacy certification motivates students while teaching valuable workforce and higher education skills. In addition to teaching reading and writing, secondary schools can teach relevant technical skills and reinforce them with certification to create confident college-ready students. Certiport certifications such as Microsoft Office Specialist (MOS), the Adobe Certified Associate (ACA) and the Internet and Computing Core Certification (IC³) are being implemented in more advanced technology schools, but could be deployed simply and economically all over the country.

Consider the impact of implementing technology-based certifications into Florida's Career and Professional Education. According to Florida's Department of Education 2010 study, CAPE students with certifications graduate at a significantly higher rate (23%) than their peers outside of the career academies. These same students have a higher GPA (17%), and typically enroll in college level courses (61%) because it gives them a tangible, real-world skill to place on their resumes and college applications. With just a few certifications under their belts, high school students attain confidence and self-esteem as they go on to various fields of study.

Lee County School District in Florida is one of the most successful in the country implementing technology certification into school curriculum. According to Jana Hambruch, Coordinator, Industry Certifications, "With technical certification programs, we are building more than just technology acumen. We have watched standardized test scores among students who participate in certification programs soar above the state and district average. We've shown that the rigorous technology education programs motivate students to excel in other core academic areas like reading, math, and science. It's something the student's desire; you can see their excitement the minute they start participating in the industry certification programs.

Business Technology *(from Page 13 Business Technology Skills)*
By Ray Kelly

When students get out in the real world, they attack life differently after receiving industry certifications."

Advanced technology schools are leading the charge, but any secondary school can better prepare their students for college and a career in today's digital world while reaping these enormous benefits of certification.

Basic technology certification for secondary students

Educators who are unfamiliar with technology certification for secondary students may wonder what basic skills are taught through certification. Most high school teachers, and nearly all college professors, require assignments in Microsoft Word, Excel and PowerPoint. If students are unfamiliar with or have limited ability to use the application, the content suffers. A proficient knowledge of these basic applications can be obtained through certification allowing students to focus more on course content.

According to Forrester Research, more than 80 percent of businesses use Microsoft Office. The MOS certification prepares high school students with relevant skills that can be put to use at school or on the job. Microsoft estimates that non-MOS certified users use less than 20 percent of the full functionality of these powerful applications. Many assignments would be significantly easier to complete and more professional in appearance if students knew how to utilize the advanced features of these critical and pervasive application programs. Employees in the workforce can also increase productivity and become a valuable asset to employers by using best practices and becoming advanced Microsoft users.

For students that are looking to determine if a career in the IT Professional industry makes sense for them, there is a new certification designed to test and validate fundamental technology knowledge. The Microsoft Technology Associate (MTA) exam is available to academic institutions in the United States from Certiport. MTA makes it easier for schools to deliver and validate fundamental technology knowledge through a simple, convenient, and affordable suite of entry-level certification exams. While offering students the opportunity to earn a Microsoft certification in the classroom, MTA empowers educators with Internet-based testing and helps institutions stand out as innovative technology curriculum providers.

As pursing higher education becomes more common and the economy waxes and wanes, it is becoming increasingly difficult for high school graduates to find jobs. The Microsoft MOS and MTA certifications, along with other technical certifications, set graduates apart and gives them a competitive edge. Anyone can call themselves a Microsoft Word expert, but holding the MOS title proves graduates have the skills to succeed in the workplace.

Basic technology certification creates competent high school students who understand the most widely used technology programs and use them efficiently. Certification is one giant step to bridge the digital gap in our school system.

Success Story: California high school graduates stand out with certification

A more in-depth case study demonstrates how secondary schools across the country are embracing MOS certification to measure and validate student technology skills.

The Westlake Information Technology Academy (WIT) is a California Partnership Academy that combines high quality academic instruction with work-based learning experiences. As part of the Academy's mission to provide a more specialized and personalized high school experience through this program, every WIT student must achieve an industry certification such as MOS to fulfill state requirements.

Though Carl Perkins grant funding, WIT Academy students have the option to earn up to four MOS certifications: Word, PowerPoint, Excel and Access. Melissa Clark recently finished the school year with three Microsoft Office Specialist certifications. She said her skills and credentials are preparing her for life beyond high school. "I now have the skills to organize data and create compelling PowerPoint presentations so I can be successful in college, and can have a job in the technology-friendly world of medicine," Clark said.

Dr. Laurie Looker, a school-to-career coordinator with the Conejo School District, is responsible for WIT and other Academy and Career Technical Education programs in the district. She believes the ultimate benefit of certification lies in distinguishing Westlake graduates from their peers. "Students who receive certification are leaving school with a valuable skill set that will help them gain employment and prepare them to use the technology that is required in their postsecondary education. Mastering these skills gives them an advantage over non-certified individuals."

Certification gives high school graduates an edge

In today's economy, every graduating senior can use an edge as they enter the workforce or pursue a higher education. Too many educators and institutions are ignoring one of the new essential and core elements of college-readiness: technology skills. Secondary schools must go beyond the three R's to prepare students for a competitive workforce and college atmosphere. By focusing on technology and implementing technical certification, schools will help their students succeed in a world where they will be asked to use technology to study and perform their required duties from day one. Technical certification ensures that students are truly college-ready.