

CONNECTING TECHNOLOGY CAN LEAD TO BETTER PATHWAYS THAT HELP STUDENTS SUCCEED.

WE ARE LIVING IN A WORLD FULL OF EXCITING DEVELOPMENTS in terms of digital content, sophisticated gaming, iPads, social networking, massive open online courses (MOOCs), open educational resources, and open-source software. The hopes for educational technology are high as educational materials transition from print to digital and educational experiences shift from face-to-face interaction to online communications, and from measuring time spent in the classroom toward measuring competencies.

Venture-capital investing in educational technology has ramped up to historic levels, growing at a 57 percent compound annual growth rate since 2005. Private investors are expecting technology to play a much greater, if not disruptive, role in education by the year 2020.

While the promise of technology holds great promise for personalizing learning, the reality of integrating and using it can be complicated. Implementing such change requires more work by faculty than sticking with traditional approaches. Add in the desire to integrate traditional classroom learning with applications on mobile platforms, emerging educational content, and new competency-based learning models, or the desire to integrate with social networks outside of the academy, and getting to a state at which the use of technology actually makes life better for faculty and students becomes daunting. And with content and data coming from different suppliers, the challenges of tying everything together strain the resources of most

IT departments. Unfortunately, as digital technology evolves, the demand on those limited resources increases exponentially.

Think how frustrating life would be if your computer didn't have that Universal Serial Bus (USB) port. All those devices and applications you plug in and use each day — your phone, printer, and iPod, among others — might not work, at least not without a considerable amount of configuring. Now extrapolate that thought and consider the growing nightmare community college IT staff and faculty face when trying to figure out ways to deliver content using a variety of learning-management systems to their students, who in turn use a variety of devices as their learning tools.

"The problem is not that there isn't enough information or systems available to students. The problem is that they often exist in formats that can't be consumed in the most practical way to allow students to be as successful as possible," said Shah Ardalan, president of Lone Star College — University Park in Texas. "Today's students take courses from us and our partner universities, but also from massive open online courses. They take courses online and face to face. Some are traditional courses, some continuing education, and some competency-based. How can we process all these data in a way that the information can easily be owned and accessed by the students, no matter where and how they take classes? To me, this is where interoperability standards become critically important. If there are no standards, then it is almost impossible to assist students in a personal and effective manner."

HOW CAN COMMUNITY COLLEGES AND UNIVERSITIES BRIDGE THE GAP FROM THE REALITY OF TODAY'S FRAGMENTED TECHNOLOGIES TO REALIZING THE POTENTIAL OF TECHNOLOGY TO HELP MORE STUDENTS SUCCEED? THE MISSING LINK IS AN OPEN PLATFORM BASED ON OPEN STANDARDS.

Embracing Interoperability

How can community colleges and universities bridge the gap from the reality of today's fragmented technologies to realizing the potential of technology to help more students succeed? The missing link is an open platform based on open standards. The IMS Global Learning Consortium (IMS), a non-profit member-driven standards organization, provides such a platform, and IMS-enabled products are exploding into the education community through the viral adoption of IMS standards by leading technology suppliers, including several of ACCT's Corporate Council partners. Any community college can move naturally over time towards an open academic enterprise by simply requiring IMS Conformance Certification as part of the procurement process.

One example is Ocean County College, a two-year public institution based in Toms River, New Jersey. OCC offers 12 fully online degree programs and seven certification programs and relies on Pearson's eCollege for its learning management system (LMS), as well as for recruiting and marketing support. Patricia Fenn, Ocean's executive director for e-learning and continuing and professional studies, said the college depends on Pearson, which is an IMS member, to ensure the interoperability of its programs, but she believes the institution will increasingly become reliant on IMS standards as it signs articulation agreements with four-year institutions.

"We've already signed articulation agreements with Bellevue University in Omaha and Saint Joseph's University in Philadelphia, and we have many more such agreements in the works," said Fenn. "The standards become even more important if you're linking one system to another. The value to us is going to increase as those articulation agreements fall into place."

A Collaboration to Improve Efficiency and Learning Experiences

To empower colleges to lead the evolution to the future, IMS created the *Technology in Higher Education in Support of Innovation for Student Success* initiative — THESIS for short. Developed in collaboration with leaders of all types of institutions, THESIS encourages institutions to break the status quo of closed proprietary systems so that digital innovation

can live up to its promises in meeting the needs of faculty, students, administrators, and parents. Community college leaders pledging support for THESIS signify an institutional commitment to evolve to an academic IT enterprise that is based on open standards to enable a multifold improvement in the deployment time, cost, and usability of educational platforms, applications, and content. They also signify a commitment to empowering students in new ways, according to Lone Star College's Ardalan.

"Ideally, the open nature of standards allows students to navigate, simulate, validate, and plan their own personal education and career pathways," he says. "This is not a future vision, but the very reason why Lone Star College System has pledged support for THESIS." The college has also partnered with IMS on the development of the Education and Career Positioning platform (www.EPS4.Me), which Ardalan calls "a perfect example of open and interoperable data at the student level."

Technology providers also tout the benefits of open standards. "By tapping into the amplifying leverage inherent in IMS standards, academic leaders can design and roll out innovations for scaling up educational opportunities while creating economies of scale for their institutions and students — and the governments that support them," said Bill Graves, senior vice president for academic strategy at Ellucian, an ACCT Corporate Council member company. "Ellucian is proud to help develop and adhere to the IMS standards that are the underpinning of the THESIS initiative."

Participation in THESIS is open to all institutions, and the support IMS provides is designed to help colleges make procurements and upgrades that advance the adoption of open standards with relative ease and at no additional cost. The end result? Effective, efficient, and scalable use of technology to improve student success.



Rob Abel is chief executive officer of the IMS Global Learning Consortium. For more information about THESIS, visit www.imsglobal. org/thesis/index.html.