

Opinion: Demanding Educational Software Standards that Work

This year we've been working to add more outside voices to Wired Campus. Below is an opinion piece by Charles F. Leonhardt, principal technologist for Georgetown University and the university's representative to the IMS Global Learning Consortium. We welcome opposing views in the comments section, or by submitting formal responses to wiredcampus@chronicle.com.

Thanks to the widespread adoption of course-management systems and other enterprise-wide academic and administrative systems, campus computing has evolved into an essential university service.

The lines between the administrative and academic sides of institutions are disappearing. Ahead lies the prospect of bringing in new capabilities for enhancing teaching and learning in meaningful ways — collaboration through blogs and wikis, authoring through Google Apps and other cloud-computing systems, richer course content through pervasive multimedia, hands-on learning supported by mobile computing, and improved student performance bolstered by analyzing student activity in course-management systems.

Between that bright future and where we are now lies a formidable barrier: complexity without coherence. Today there is great reluctance to upgrade to new technologies because upgrades can be fraught with technical difficulties. When colleges upgrade one piece of software, it may no longer work seamlessly with other campus systems, or may require home-built patches to keep services running. These links tend to break whenever there is another new software upgrade, and they tend to require manual intervention from skilled staff members just to keep them running. Many larger universities have full-time employees whose main job is simply to extract course information from the student-registration system and make sure it appears properly in the course-management system. This status quo is neither sustainable nor scalable. We won't reach the future if it takes all our energy just to run in place.

If IT is to achieve its potential for fostering and supporting better education, we must lower the complexity and cost of integration. To do that, we need practical, workable interoperability standards for sharing transcript information between K12 and higher education, for moving professors' course content from one course-management system to another, for collecting student work for digital portfolios, and for many more chores. The creation and use of these standards are strategic priorities. We cannot make the progress we need without them.

The IMS Global Learning Consortium is developing a new standard called “Learning Information Services” to provide student, course, and enrollment information from student-information systems to other systems, including course-management systems. So far, support for the new standard has been announced in products released by Inigral (for Schools on Facebook),

Oracle (for the Student Administration Integration Pack), and Unicon (for Sakai). Companies including Angel Learning, Blackboard, Desire2Learn, Moodlerooms, and SunGard have all announced their intention to release products based on the standard.

The forecast of adoptions is very promising. But we have seen this scenario before. The new standard's predecessor, the IMS Enterprise Services specification, was supposed to solve some of the same problems, and yet we still have expensive, brittle, hard-to-maintain connections between our student-information systems and our course-management systems

Vendors know the difference between clients' asking for standards "compatibility" in order to check off a box on an RFP and clients' demanding real, functional, out-of-the-box interoperability — for which a vendor's long-term plan for product development is not sufficiently persuasive. Software companies will not go to the expense of following standards unless they know it will influence our purchasing decisions. That is why we must include true, tested, guaranteed interoperability as a priority in our purchasing decisions, and why we must pressure our current support vendors to provide it as a condition of their continuing good business relations with us.

When Franklin Delano Roosevelt was lobbied by a group of supporters who were urging action on a cause that he strongly supported, he told them, "I agree with you, I want to do it, now make me do it." The vendors supporting LIS understand the importance of enabling real, reliable interoperability. We should make them do it. --*Charles F. Leonhardt*