THE JCONNECTION

Blackboard to Scholar transition headed toward completion

Blackboard is being replaced by Scholar and will no longer be available for course use after August 16, 2010. A large majority of faculty members have already started using Scholar exclusively. Learning Technologies has been working to assist the last group of faculty as they make their transition to Scholar.

During the spring semester, approximately 25 percent of Virginia Tech's teaching faculty and GTAs were still using Blackboard, and in February, Learning Technologies launched a questionnaire to gather data from these instructors regarding the types of assistance they needed to complete their transition. In March,



respondents were contacted with answers to their questions and provided opportunities for assistance. During this process, it was discovered that a number of those still using Blackboard had made plans to transition on their own during the summer and/or were enrolled through the Faculty Development Institute (*www.fdi.vt.edu*) in spring short course or upcoming summer tracks. Additional short courses have since been scheduled throughout the summer to meet the needs of this group. In concert with these efforts, a significant upgrade to Scholar is scheduled for May 15, 2010. Significant improvements will be made to a variety of tools, including Tests and Quizzes, Portfolios, Assignments, the Gradebook, and more, in addition to bug fixes. A summary of changes and improvements can be found at www.ocs. *lt.vt.edu/scholar/codeUpdates/scholarUpdates-5-15-2010.html*. Looking to the future, a user feedback survey was sent to faculty and students in April. The data obtained from this study will be used to develop requirements and new feature specifications for future versions of Scholar.

Those still using Blackboard should note that numerous workshops and other resources are in place to assist instructors with the transition throughout the spring and summer. A complete list of workshops, as well as registration, can be found at *www.fdi.vt.edu*. The most up-to-date information regarding the transition, as well as access to a Blackboard to Scholar "Course Copy Tool," can be found at *http://learn. vt.edu/transition/*. Those with large sets of question pools for online tests and quizzes in Blackboard are encouraged to contact OCS via *http://4help.vt.edu* for assistance as soon as possible.



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Connectivity



While we think of the Internet as being everywhere, unserved and underserved communities abound. Factors affecting access are multidimensional. Rural areas typically lack infrastructure, while in all areas, including urban centers, socioeconomic conditions place the Internet beyond the reach of many. Meanwhile, Internet access is rapidly becoming a prerequisite for participation, even in basic civil activities. Beyond that, 21st-century connectivity means enough speed and bandwidth to enable people and businesses to be creators, not merely consumers, of information. Bringing that connectivity to these unserved and

underserved communities underpins many public service projects at Virginia Tech.

Virginia Tech participates with regional organizations to improve connectivity in the state. The university has helped to develop open-access fiber-optic backbone resources reaching underserved areas across Virginia. Extending the fiber optic network to lesser-served places, including the university's main campus in rural Southwest Virginia, furthers three purposes. First, the network extension enhances the infrastructure for both economic development and education. Second, the university improves its own connectivity to national and international high-speed networks. Finally, some projects also provide the opportunity to create large-scale fiber-optic network test beds, a laboratory for research on network technology.

The recent grant, "Allegheny fiber: extending Virginia's open access fiber backbone to the Ridge and Valley," addresses all three purposes. The grant from the Broadband Technology Opportunities Program (BTOP) is funded by broadband initiatives in the American Recovery and Reinvestment Act of 2009, through the National Telecommunications and Information Administration and the United States Department of Agriculture's Rural Utilities Service.

Work funded by the grant builds on the existing network through central-Southside Virginia. The Virginia Tech Foundation is one partner, along with the Mid-Atlantic Broadband Cooperative (MBC). A 110-mile open access fiber-optic network will be constructed between Blacksburg and Bedford City, crossing six counties in Virginia's Appalachian region and providing direct high-speed connections to the Blacksburg campus and communities all along the fiber path. Improved capacity and speed will enhance the ability to collaborate on cutting-edge scientific research with institutions in the United States and abroad. The project proposes network speeds from 10 Gbps to 200 Gbps and could offer point-to-point, private line services ranging from 10 Mbps through 10 Gbps.

The project also will spur affordable broadband service to local consumers, potentially including up to 98,500 households, nearly 5,400 businesses, and 128 anchor institutions, by enabling more than 30 Internet service providers to connect to the project's open network. Three active interconnection points will be established at strategic locations along the fiber path extending access options to communities throughout the region.

This project complements a second BTOP award to MBC connecting schools and other anchor institutions throughout Southside Virginia to the open-access network. Combined, this infrastructure will dramatically improve connectivity and put the resources of Virginia Tech on net for communities spread over 1,000 miles of fiber statewide.



⁶ Counties; 40 Census Block Communities; Largely Unserved and Underserved; Nodes in Blacksburg, Newport, New Castle, Bedford; Access to fiber along entire path



VT Alerts: the technologies behind the system

VT Alerts uses varied methods to reach the university community quickly. Tens of thousands of messages reach community members in different locations and different situations. If one method is unavailable to a community member, another method likely will deliver the message.

University administrators or police decide when to send alerts, what they say, and which delivery methods to employ.

VT Alerts has eight delivery methods the university homepage, broadcast e-mail to vt.edu accounts, electronic message boards in classrooms, the weather/emergency hotline, campus sirens and loudspeakers, the university switchboard, VT Phone Alerts, and VT Desktop Alerts.

Imagine the time it would take to create messages for each of these eight systems separately. Now remember that these messages are posted only during stressful circumstances when it's easier to make mistakes or create inconsistencies that lead to confusion.

To increase timeliness and consistency and to reduce errors, university officials use a common interface developed by Communications Network Services (CNS) personnel. Today, the common interface can post a message to the university homepage, university e-mail, the electronic message boards, VT Phone Alerts, and VT Desktop Alerts. Work is underway to extend the interface to the weather/emergency hotline and the campus sirens and loudspeakers using text-to-speech technology. Research is progressing to include the campus cable television system, building alarm systems, and social networking media like Facebook and Twitter.

Behind the apparent simplicity and ease of use of this common interface are complex methods to work with the large number of message delivery points. More than 40,000 university e-mail accounts receive alerts in less than five minutes, thanks to work to reduce delivery time. VT Phone Alerts delivers to 80,000 points of contact—about 40,000 faculty, staff, and student subscribers averaging two points of contact each. E-mail is internal to the university, while those 80,000 voice or text message contacts rely on services by telephone carriers. Virginia Tech contracts with a vendor specializing in emergency notification. The vendor receives the messages, "bundles" them according to carrier (one bundle for Verizon customers, another for AT&T customers, and so on), and delivers the bundles to each carrier. The carriers

then deliver the messages to subscribers. Delivery time in the Blacksburg area ranges from rapid receipt up to 20 minutes, depending on the text and voice traffic volume for each of the several carriers.

Electronic message boards in classrooms number about 500. Based on instant messaging technology, the boards typically post messages in under 10 seconds. Usefulness of the message boards depends on students, faculty, and guests having confidence that the signs are working. To verify the display, all viewers are engaged as "quality control agents," if the date and time are not displayed correctly, calls ensure timely maintenance.

What is your part in VT Alerts? Subscribe to VT Phone Alerts, and consider downloading VT Desktop Alerts. Report electronic message boards that don't display the correct date and time.

And remember the alert message is for us all—spread the word when you receive an alert to those people near you.

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