

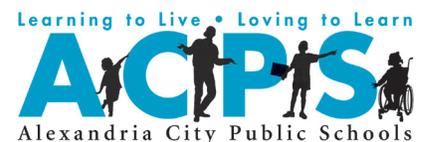
## Maximizing District Investments toward Better Teaching and Learning

When Alexandria Public Schools needed a student-centered learning environment with flexibility, Blackboard Learn was the solution for them. The Blackboard system offers students an interactive learning model that allows content to be used according to a teacher's specific goals. Using Blackboard has enabled the district to maximize their investment in the one-to-one laptop program, an integral program that has led to the accomplishment of their Technology Integration Plan.

The Alexandria City Public Schools (ACPS), a K-12 district located in Alexandria, Virginia, just south of Washington D.C., serves more than 11,000 students in 13 elementary schools, two middle schools, a ninth grade school, a high school and an alternative high school. One of the earliest in Virginia to adopt education technology, the district issued a technology integration plan in 1999 designed to improve collaboration among teachers and maximize student achievement.

Teachers and students in the district high schools now re-

ceive laptop computers, maintaining an overall 3:1 ratio of students to computers for the district. Though ACPS had the resources in place, the district had difficulty in fully taking advantage of its technological potential. In 2005, ACPS implemented Blackboard® software and services to maximize its use of e-Learning technology; to foster more—and more efficient—teacher collaboration; to improve both classroom and online instruction; and to further increase student achievement. The results have been dramatic, changing the face of the district's classrooms.



### Alexandria City Public Schools

- + Public School district in Northern Virginia - just south of Washington D.C.
- + 11,000 Students
- + 1700 Teachers
- + Laptop Program launched in 2003
- + SASI Student Information System
- + Client Since 2005

## One-to-One Laptop Program

The ACPS High School Technology Integration Project (TIP) is an effort by the district to increase student achievement through the full integration of technology as a tool for learning. As part of the project, the district began a one-to-one laptop computer program in 2004, providing laptops for all students in grades 9-12, whether they are at school or at home. Some teachers incorporated the laptops into their lesson plans immediately, but most instructors were unsure how best to utilize this new, constant medium in their teaching. Use of laptops in classrooms was limited mostly to math and science courses, where instruction occurred online already. Teachers in other courses struggled to find methods to use the laptops for complementing their instruction. What was needed was a robust application to tie together the implementation of the laptop program.

This is where Blackboard stepped in, enabling teachers to realize the full potential of the laptop program, offering them exactly what they needed. ACPS implemented its Blackboard course delivery solution in the fall of 2005 and Blackboard Managed Hosting<sup>SM</sup> shortly thereafter. As Blackboard software was implemented across the district, Dr. Elizabeth Hoover, ACPS Instructional Technology Coordinator, saw that it was enabling teachers and

“They had the laptops for a year, and Blackboard software gave them a way to really use them. As a result of implementing the Blackboard system across our district, we have many more teachers using their laptops directly with their students.”

Diane Loomis, Web Services Administrator for ACPS, witnessed a surge in creativity among teachers across the district when Blackboard technology was introduced. “Our Blackboard system enabled teachers to see how the laptops could make a difference in their classrooms,” Loomis said. “The teachers saw that their laptops weren’t just for technical-oriented courses. They could be used in many different ways to deliver information. The laptops are becoming an integral part of classes, regardless of the subject matter and how teachers deliver their content. Blackboard technology can be used to supplement any classroom.”

## Teacher Collaboration and Improved Instruction

As ACPS implemented Blackboard software, collaboration among teachers in the district increased dramatically. Teachers took advantage of its interactive communication tools to form cohorts according to their subject area and share best practices for the classroom. “Using Blackboard software allows our teachers to communicate easily across the district. They find it easy to share and receive feedback from each other,” said Kyle Dunbar, Technology Integration Specialist for the district. The technology also enabled teachers to collaborate across disciplines, for example, allowing teachers working in special subject areas, such as reading, to collaborate and share their instructional ideas with general education teachers district-wide.

As teachers began collaborating using the Blackboard system, they found they were able to discuss instructional techniques and goals more frequently and do so with greater depth and complexity than they had in any context in the past. “When teachers implemented online tools in the classroom, they couldn’t help but to talk about instructional best practices,” Hoover said. She also pointed out that the quality of discussions among teachers when they connect through the Blackboard system is more detailed and involved than their interactions

The screenshot shows the ACPS Staff Development website. The header includes the ACPS logo and navigation links: 'By ACPS', 'T.C. Staff', 'T.C. Students', 'Staff Development', 'Guidance', 'Library', 'Instructional Tech', 'ACPS Resources', 'Help Desk', and 'Contact'. The main content area is titled 'Staff Development' and contains several sections:

- Links:** Electronic Registrar Online (ERO), Technology Integration Education (TIE), National Board for Professional Teaching Standards, USOE Teaching & Teacher Online Workshops, Advancing the American Mind, Math Test Online Courses.
- Message from the Director:** A message from Roger Rudy, Director of Staff Development, with contact information: [rrudy@acps.k12.va.us](mailto:rrudy@acps.k12.va.us) or 703-824-6666.
- Staff Development & Opportunities:** Features the 'electronic registrar' logo and text: 'Electronic Registrar Online (ERO) is used to manage registrations for staff development workshops, courses, and other opportunities. [Log in to the ERO system](#) using your ACPS employee id number as both your user ID and PIN.'
- Additional Opportunities:**
  - Non-ACPS Workshops and Conferences
  - USOE Teacher-to-Teacher Online Workshops
- National Board Certification:** 'National Board for Professional Teaching Standards (NBPTS) Certification'. Text: 'ACPS encourages its exemplary staff members to consider the pursuit of National Board (NB) certification as a challenging and very rewarding professional development experience. The [NB Certification Support System](#) (Support System) describes the school division's two-year program of support for staff members considering the pursuit of NB certification and staff members actively engaged in the certification process. ACPS staff who wish to apply for ACPS support of their NB certification activities must meet specific eligibility requirements. General information about the National Board for Professional Teaching Standards and the National Board certification program is available from the [National Board for Professional Teaching Standards](#) website. Questions regarding the ACPS National Board certification support program should be directed to Roger Rudy, Director of Staff Development, at [rrudy@acps.k12.va.us](mailto:rrudy@acps.k12.va.us) or 703-824-6666.'
- Important Information:** 'Frequently Asked Questions About Staff Development', 'ACPS Opt-Out Program' (with links for 'Opt-Out Facts' and 'Electronic Approval Application'), 'Better Teaching' (with links for 'Newletters' and 'Tips for Teachers Calendars'), 'Virginia Teacher Licensure Renewal Survival Kit'.
- Staff Development Forms:** 'Activity Submission Form', 'Online Training Verification Form', 'Request for Preapproval of Activity for Recertification Points'.
- Tuition Assistance:** 'Tuition Assistance Grants FAQs', 'Tuition Assistance Grant Application', 'Master's Degree Incentive Program Overview', 'Master's Degree Incentive Program Agreement', 'Master's Degree Incentive Program Application'.

students to benefit in remarkable ways from the laptop program. “Teachers were hungry for a way to share their materials online,” explained Hoover.

in other venues, and therefore more beneficial to them. In contrast to their brief chats in the teachers' lounge at the end of the day, teacher's discussions are no longer limited by time or space. Teachers are able to begin and continue discussions at times that are the most convenient for them, with the people who are most helpful, no matter where they are in the district. "Conversations about instructional practices no longer end when teachers leave a meeting - they can easily pick up where they left off on a discussion board and dig deep into the topics at hand," Hoover said.

## Increased Student Participation and Achievement

ACPS has found that Blackboard technology provides teachers with enormous flexibility in structuring their classrooms and lessons to most effectively

The screenshot shows the ACPS Library website. At the top, there is a navigation menu with links for 'My ACPS', 'T.C. Staff', 'T.C. Students', 'Staff Development', 'Guidance', 'Library', 'Instructional Tech', 'ACPS Resources', 'Help Desk', and 'Contact'. Below the navigation, the page is divided into several sections:

- Links:** A sidebar menu with links to 'Alexandria Library', 'Citation Machine', 'Internet Public Library', 'Library's Internet Index', and 'Library of Congress'.
- T.C. Williams Library:** A section with 'LIBRARY HOURS' (Monday - Friday 7:30 a.m. - 5:00 p.m.), a note that students need a signed pass from a faculty member, and 'LIBRARY STAFF' listing librarians like Ms. Davis, Ms. Gibbons, Ms. Anderson, and support staff like Ms. Birch, Ms. Mose, Ms. Roush, Ms. Kilgore.
- Announcements:** A section for 'Lexiled Databases' and 'Safari Montage Video Server (Login Required)'. It also lists 'Virginia Readers' Choice Books' and 'Virginia Readers' Choice Contest Information'.
- Research Aids:** A section for 'TCW Online Databases' and 'Plagiarism - how to avoid it!' with a list of resources like 'Plagiarism: What It Is and How to Avoid It' and 'You Ask, We Answer!'.
- Works Cited - some examples!**: A list of examples including 'Classroom Machine', 'Some Works Cited Examples', 'Book of Connected Works Cited', and 'TCW Online Databases - Some Works Cited Examples'.
- Online Databases (Direct Link):** A section with a note that login information is provided for use when not at school. It lists several databases with their respective usernames and passwords, such as 'ERIC Knowledge Source' (username: VQ0000, password: 2231f) and 'ProQuest Database in Library' (username: lib at school, password: lib@sch00l).
- Periodicals:** A section for 'Current magazines and newspaper articles' with a link to 'Library Checkfile'.
- Dictionary:** A section for 'American Heritage Dictionary'.
- Theoretical:** A section for 'More in the New Theorists'.
- Michels Professional Library:** A section stating that the library is open Monday through Friday from 8:30 a.m. to 4:30 p.m. (except on school holidays) and is located on the first floor of the Burke Administrative Center. It also mentions that the library contains 8,000 materials to support instruction and professional development.
- ACPS Catalog:** A section stating that the catalog includes instructional materials, including videos, DVDs, and professional books available on the ACPS network.

support student achievement. Blackboard technology enables teachers to bring their classrooms online, posting course documents and assignments within their Blackboard course. Students can access materials whenever and wherever they learn best—giving students more opportunity to learn, but also more accountability, as an absence from school is no longer an excuse for missing an assignment. The Blackboard system also allows teachers to assign “bell work,” so students can interact with learning materials as soon as they enter the classroom. This

captures those so many wasted minutes at the beginning of classes and focuses students for the learning that will take place during the day.

While the technology affords a clear advantage to teachers, students benefit from it even more. Blackboard software, in particular, changes the way students interact with their peers in the classroom, markedly transforming the classroom environment. Classes become more interactive and student-centered as opposed to teacher-centered. Blackboard software has also enabled new voices to be heard, as students who previously would not speak in class become vocal online. Through venues such as class Discussion Boards, students feel more comfortable to participate. In this day and age, students tend to interact with technology on a regular basis, and are sometimes more comfortable in an online situation than they are in a physical classroom. Using Blackboard technology brings added familiarity and reassurance to student learning, especially with those students who may not previously have had interest begin actively engaging in the classroom.

## Literacy and Differentiation

One of ACPS' primary instructional goals in its effort to increase student achievement has been to provide differentiated learning opportunities for all students. Like many schools, ACPS encourages instruction to be adjusted so that student's needs are met, from the struggling learner to the most gifted student. Blackboard technology gives ACPS teachers a powerful tool to realize these goals through the use of the Adaptive Release feature. Through the feature, content is released to individual students based on a variety of considerations which are set by the instructor. One sample use includes releasing remedial or advanced content to students based on their score on the last exam, those who score below a certain score would see remedial content, while high scores would have accelerated work to do. Content can also be released to targeted student groups such as English Language Learners (ELL) or advanced placement students to meet their specific learning needs. The Adaptive Release feature enables ACPS to meet its goal of tailoring instruction to meet the needs of every student in the district.

## Efficient Communication across the District

Communicating across a single school can often be a challenge given the hectic schedules of teachers and staff. Communication across a district is frequently an even larger problem. Before its Blackboard implementation, ACPS did not have any structured mechanism in place for principals to communicate with their staff online, or for the central office to communicate throughout the district. The process of posting content on the Internet became slow and inflexible, with large numbers of school emails clogging the servers. Now, with the Blackboard community engagement solution, the district has set up organizations for each school where principals can easily post information for their staff. "After we set up organizations for all of the schools, in which principals post information for their staff, most of them took off with it. They were really excited to communicate with their staff in this way," remarked Diane Loomis, ACPS Web Services Administrator.

## Looking Forward

ACPS now has the technology it needs to realize dramatic improvements across the district—increasing teacher collaboration, augmenting classroom instruction and

fostering student achievement. The district eagerly anticipates discovering additional ways to utilize Blackboard software and services to maximize its technology investments. The Blackboard system is now integral to the accomplishment of the technology integration plan goals. ACPS originally planned for just 30 teachers to try it out within its one-to-one laptop program, but nearly 150 teachers volunteered and immediately saw the technology's potential to help them meet their goals.

Due to the overwhelmingly positive response it has received, ACPS plans to expand its use of Blackboard to all high schools and middle schools in the system—even going so far as enabling elementary school teachers to use Blackboard software at their request. The district also plans to expand its Blackboard use for teacher and student community building. The district is also implementing the Blackboard system in its new-teacher mentor program, specifically employing Blackboard's online discussion tools and the ability to deliver content for new teachers. By allowing teachers to access the support they need at any time, the district hopes to accelerate new teachers' learning curves, leading to better retention and job satisfaction.

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Kyle Dunbar  
*Technology Integration Specialist*