

Fairfax County School Board
Operational Expectation and Goal Monitoring Report

A = acceptable condition U = unacceptable condition

TECHNOLOGY

Period covered: Calendar Year 2008, except as noted

The Superintendent will use technology to support teaching, learning, and the Board's operational expectations and goals. The Superintendent will:

1. Provide a comprehensive and functional technology infrastructure.

Superintendent: A U
School Board: A U

Reasonable Interpretation:

A robust infrastructure is critical to the successful operation of the school division. The technology in the classroom no longer consists simply of stand-alone computers. Every classroom must be connected to the wide area network in order to access important instructional applications and on-line materials. The business functions of the school division rely on access to the internet and the FCPS intranet as well as the major systems located at the Wilton Woods network operations center.

There are two critical elements to ensuring a robust infrastructure. First, the wide area network must provide reliable access for all students and staff and must be available 24 hours a day, 7 days a week. Secondly, when a problem occurs, the support structure must be in place to ensure that incidents are responded to quickly and effectively.

Indicator 1.a.

The FCPS Wide Area Network (WAN) services, including the infrastructure, equipment and circuits, will be available 99 percent of the time, 24 hours per day, 7 days per week, 365 days per year.

Indicator 1.b.

95 percent of Technology Incidents will be responded to according to established Service Level Agreements (SLA's) outlined in the table below:

Priority Level	Respond By:	Close by:
Low – Planned	3 Business Days	30 Business Days
Medium – Routine	12 Business Hours	15 Business Days
High – Serious	6 Business Hours	3 Business Days
Critical – Emergency	2 Hours	24 Hours

The definitions of the priority levels are as follows:

Low/Planned - Events that are coordinated with the school/site to be done at a future defined time more than three weeks in advance.

Medium/Routine - Incidents that are failures which while inconvenient do not cause disruption for multiple users; users are able to perform the same work somewhere else

at the location; is not FCPS mission critical (e.g. individual workstation boots to blue screen, user cannot access mail, single computer cannot access internet).

High/Serious - Incidents that are failures, which may disrupt service for multiple rooms/offices/users at a site; normal work cannot be performed at another location at the site, applications and work affected may or may not be FCPS mission critical (e.g. one wiring closet down impacting a wing of the school, computer lab without network connectivity).

Critical/Emergency - Incidents that are failures which affect multiple users and/or multiple instructional applications at multiple sites; failure of a mission critical nature (e.g. one or more exchange servers are unavailable, county-wide virus outbreak, FCPS 24/7 down).

Superintendent Statement of Condition:

Indicator 1.a.

The Wide Area Network (WAN) is responsible for connecting all FCPS facilities to a backbone core so that FCPS users can utilize network and Internet resources. The health of such a network is vital to instructional as well as business functions of the organization. FCPS provides WAN services to 234 locations across Fairfax County. The service, Transparent LAN Services (TLS), is being provided by Verizon, which in turn also provides monitoring and maintenance services. All middle and high/secondary schools are provided with 100 Mb links while elementary school locations are provided with 10 Mb links. The need continues for more reliable bandwidth as we see the increase demand for web resources, including on-line applications, to be used primarily for instruction. Examples of such applications are SOL on-line testing, Discovery Education *Streaming* and FCPS 24/7 Learning. To provide availability measurements, IT uses a monitoring and reporting tool called Nagios. Nagios is an open source network monitoring program that assists IT with the daily monitoring and maintenance of the WAN. To measure FCPS WAN availability, the international standard, Information Technology Infrastructure Library (ITIL®) availability measurement is employed which is calculated as follows:

$$(Agreed\ service\ time - Downtime) / (Agreed\ service\ time) \times 100$$

As part of the School Board system measurements, IT has been tasked with providing availability measurements for two critical services: public web service and WAN service availability. The minimum annual accepted availability measurement for both services is 99.0%.

WAN services refer to the infrastructure and equipment that comprise the Wide Area Networks in FCPS. This figure is an average of all WAN circuits connecting schools and administrative offices to the wide area network.

Based upon these calculations and infrastructure/system precautions in place, an overall annual (24/7/365) availability measurement of 99.88% uptime for this service was obtained between January 1, 2008 and December 31, 2008, meeting the FCPS metric for indicator 1.a.

Indicator 1.b.

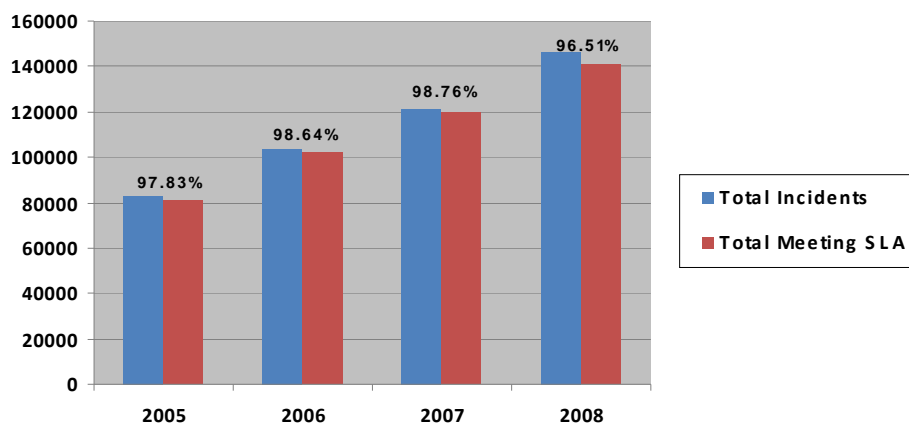
FCPS Information Technology has aligned its technology support model with industry standard best practices identified in ITIL® which includes the development of repeatable, documented and measurable processes to maximize efficiencies and improve customer service. The technology support model is based on a collaborative and integrated team approach; including school based technology personnel as well as central office IT support partners. These teams provide focused, direct technology support to every school, center, and administrative office in FCPS to ensure the technology is up and running and available when and where it is needed. When the technology is not working or available as expected, these teams work together for prompt resolution according to established Service Level Agreements (SLAs).

These formal agreements define how support entities interact with one another and how timely support is provided to customers. They include escalation procedures that are followed when response and resolution times exceed expectations.

All technology support incidents are managed and tracked in an incident management system from initiation through resolution according to agreed-upon business rules and service level agreements. In 2008, Information Technology upgraded its incident management system to RequestIT, a comprehensive ITIL® compliant service management system. This upgrade has allowed all IT service delivery and service support activities to be managed within the central application and has provided end-users a self-service capability to report incidents and to request services on-line.

The chart below shows the total number of incidents and the number/percentage of technology incidents that met established SLAs since 2005. In 2008, FCPS met indicator 1.b. with 96.51% of all incidents responded to according to established service level agreements.

Total Incidents Meeting Established Service Level Agreements



Board Comments:

2. Provide technology capabilities that are useful for staff members and students.

Superintendent: A U
School Board: A U

Reasonable Interpretation:

Technology is integrated into the curriculum at all levels, K-12, as well as across all subject areas. FCPS must ensure that computers are available in sufficient numbers, and those computers must be relatively current, in order to be useful to students. Aging computers have a higher incidence of breaking down, and often cannot run the latest instructional software applications.

Software applications are also vital to students and teachers in the instructional program. Usefulness of applications can be measured by usage statistics and teacher survey information. In addition, FCPS Online Campus, provided through FCPS 24/7, uses technology to expand the boundaries of space and time. Online courses are identical in content to those offered in the traditional classroom and provide students additional useful opportunities for learning.

Indicator 2.a.

FCPS will maintain a student to standard computer (5 years old or newer) ratio of at least 2.5 to 1.

Indicator 2.b.

FCPS will report on how frequently teachers report using technology productivity tools and how frequently teachers report using technology to support student learning based on an annual survey. Focus groups will also be utilized to seek input from teachers on the usefulness of technology.

Indicator 2.c.

FCPS will report on number of courses offered through the FCPS Online Campus and the number of students enrolled annually.

Superintendent Statement of Condition:

Indicator 2.a.

FCPS has a computer inventory of more than 98,000 desktop and laptop computers. These computers are classified as standard (five years or newer), limited (six to ten years old) and legacy (more than 10 years old).

FCPS has created a process of maintaining an accurate computer hardware inventory that is used to support a systematic computer replacement program. Funding for computer replacements is used to replace computers in the legacy and limited

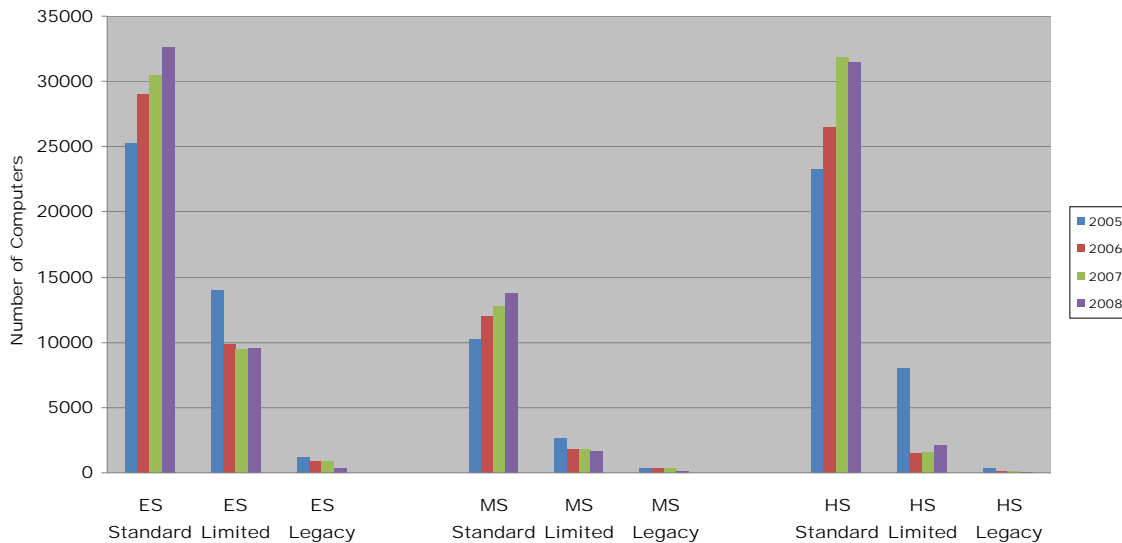
categories with the goal of a five year refreshment cycle and all computers in the standard category. This would ensure that all computers have the ability to deliver current instructional and administrative software in a secured operating environment.

While at this point it is cost prohibitive to establish and maintain the desired five-year life cycle, the following charts illustrate the progress FCPS has made towards increasing the number of standard computers available to FCPS students and teachers. Eighty-six percent of FCPS computers now fall into the standard computer category. FCPS meets indicator 2.a. in 2008 with a student to standard computer ratio of 2.2 to 1.

A large number of computers in the standard category will move to the limited category within the next two years resulting in a significant drop in the percentage of standard computers. In addition, a significant reduction in funding for computer replacement is anticipated in the FY2010 budget. As a result, it is unlikely that FCPS will be able to continue to meet this indicator in the coming years without an increase in new computer and/or computer replacement funding.

See Appendix A for a school-by-school computer inventory breakdown.

Computer Inventor by Category

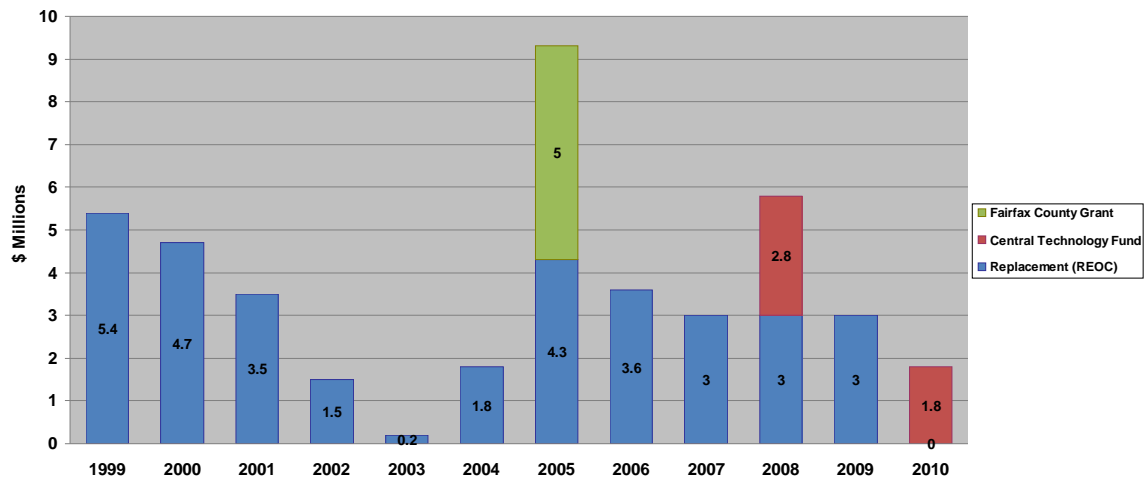


Student to Standard Computer Ratio			
2005	Standard Computers	Students	Ratio
Elementary	25,266	84,811	3.4
Middle	10,292	24,887	2.4
High	23,120	51,995	2.2
Total	58,678	161,693	2.8
2006			
Elementary	28,731	84,364	2.9
Middle	12,133	25,995	2.1
High	26,935	52,247	1.9
Total	67,799	162,606	2.4
2007			
Elementary	30,437	86,017	2.8
Middle	12,725	26,152	2.1
High	31,824	52,183	1.6
Total	74,986	164,352	2.2
2008			
Elementary	32611	88249	2.7
Middle	13758	26655	1.9
High	31429	52877	1.7
Total	77798	167781	2.2

Computer Replacement Funding

Replacement computer funding has varied widely over the past 10 years as shown in the following chart. The chart includes funding from three sources, FCPS Replacement Equipment (REOC) Fund, a one time grant from Fairfax County in FY 2005, and the newly created Central Technology Fund. In FY 2007 the School Board approved a plan to create a Central Technology Fund from a small percentage of the existing equipment allocation allotted to schools undergoing renovation. The goal is to bring as many schools as possible up to minimum standards for computers and data projectors, in an equitable manner. Approximately \$1.8 M will be available from the Central Technology Fund in FY 2010. Elimination of the computer replacement funding (Tier 3 Budget Reduction Item) in FY2010 and will significantly limit the ability of FCPS to meet this operational expectation to maintain a 2.5 to 1 student to standard computer ratio.

Computer Replacement Funding



Note: Sustained annual funding of \$23 million would be required to maintain a five year refreshment cycle of all FCPS computers. In FY 2008, six million dollars was allocated leaving an unfunded balance of \$17 million. In FY 2009, \$3 million was allocated leaving an unfunded balance of \$20 million. For FY 2010, budget estimates indicate that replacement funding will be very limited (a Tier 3 budget cut) which will leave a balance of close to \$23 million for computer replacement funding.

Indicator 2.b.

In order to ensure that technology is useful and adding value to the overall goals of FCPS, IT regularly solicits feedback and information from teachers at various stages during the planning and implementation of major technology initiatives. User advisory focus groups are often formed during the early stages of planning a technology initiative. This year the User Advisory Group for the SASI replacement project, with representatives from across the enterprise, was invited to attend the vendor presentations during the selection process for the new student information system. In the fall, smaller focus groups, including elementary principals and secondary counselors, attended the requirements analysis and validation sessions with the selected vendor and the core project team. The User Advisory Group designees participated as subject matter experts in the review of the new student information system's functionality within their area of expertise, and assisted in the vendor's understanding of the requirements. Their expert input is essential to ensure that the final product meets FCPS's required specifications.

During the pilot stage of a technology implementation, the users of the system are surveyed through focus groups and other means to obtain their input on the features, functionality and usefulness of the system allowing for adjustments to be made as necessary prior to full implementation. During the past year, users provided invaluable feedback on eCART, IT Service Catalog, Remedy (Request IT), FCPS 24/7 Collaboration Tools (Wiki's and Blogs), On-line SOL testing, On-line IEP (SEA-STARs), and Keep In Touch replacement.

Teachers are also surveyed annually on their use of technology. In 2008, Information Technology surveyed all general education and special education classroom teachers, as well as teacher aids, on their use of technology to support teaching and learning. 2,843 teachers responded to the survey. This is equal to a 17.8 percent response rate, which is a significant increase in respondents from the previous year (12.0 percent).

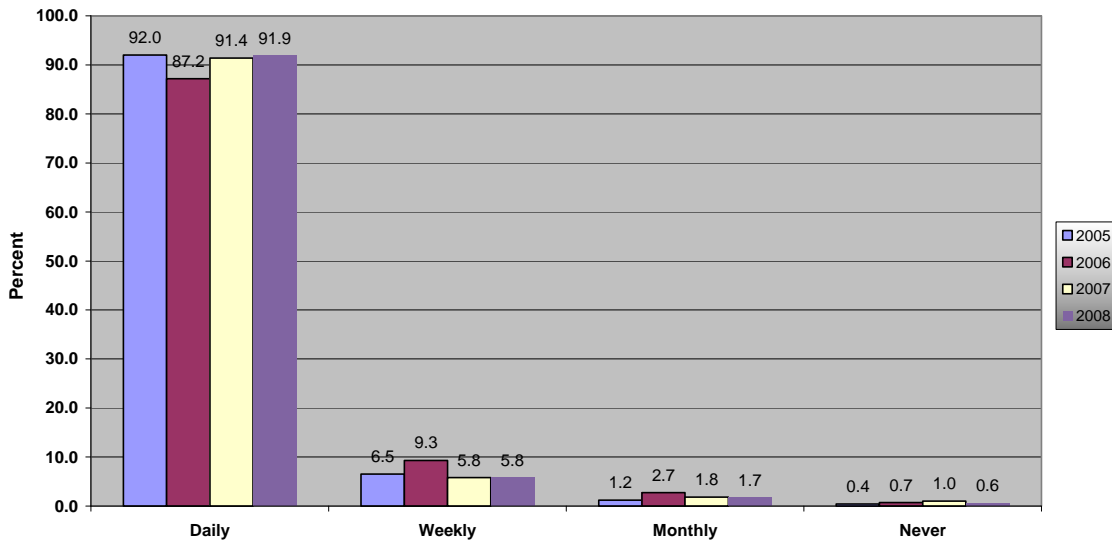
The charts below show 91.9 percent of teachers who responded to the 2008 survey indicated that they utilized technology productivity tools every day in their jobs. In addition, 92.8 percent of those responding said they used technology to support student learning on a weekly basis, and 72.2 percent indicated they used it daily in support of student learning. Both figures represent an increase in usage from last year and indicate teachers' growing reliance on technology in the classroom.

Teachers were also surveyed on the usefulness of specific technology tools for teaching and learning. 98.0 percent of teachers indicated the most useful tool is the teacher laptop, followed by wireless technology, a classroom presentation station and classroom computers for students. More than 89.8 percent of teachers feel wireless mobile laptop labs, computer labs and interactive whiteboards are useful tools for teaching and learning.

Additionally, 91.3 percent of the teachers surveyed indicated that the personal productivity and instructional technology tools provided to them meet their needs and the needs for teaching and learning. 93.6 percent of elementary teachers reported that the digital camera is useful in the classroom for teaching and learning, and 62.4 percent use Discovery Education *streaming* as a tool for teaching and learning in the classroom on a daily, weekly, or monthly basis. In addition, 92.8 percent or higher of teachers in the middle, secondary, and high school programs reported that FCPS 24/7 (Blackboard) was used as a tool for teaching and learning in the classroom. These percentages and the charts below show that teachers overwhelmingly embrace technology as a tool for teaching and learning in FCPS.

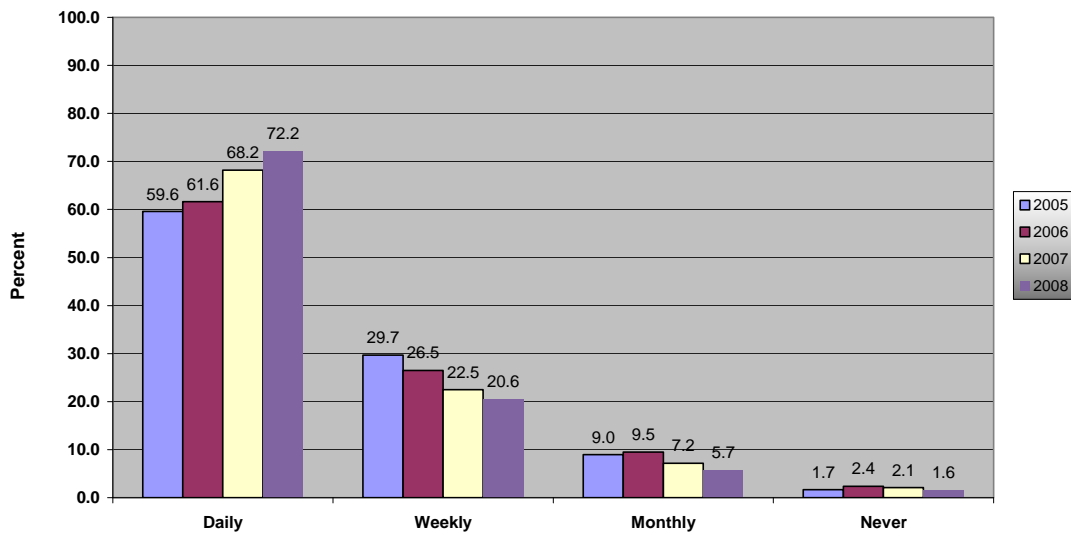
Use of Classroom Technology Instructional Survey Results

How frequently do you use technology productivity tools? (e.g. Microsoft Office applications)



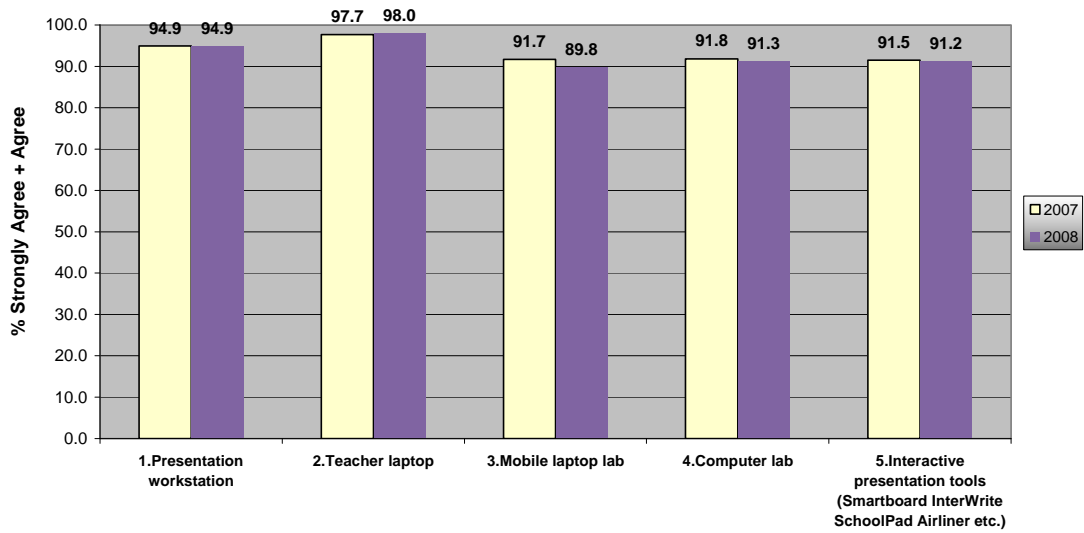
Use of Classroom Technology Instructional Survey Results

How frequently do you use technology tools for teaching and learning?



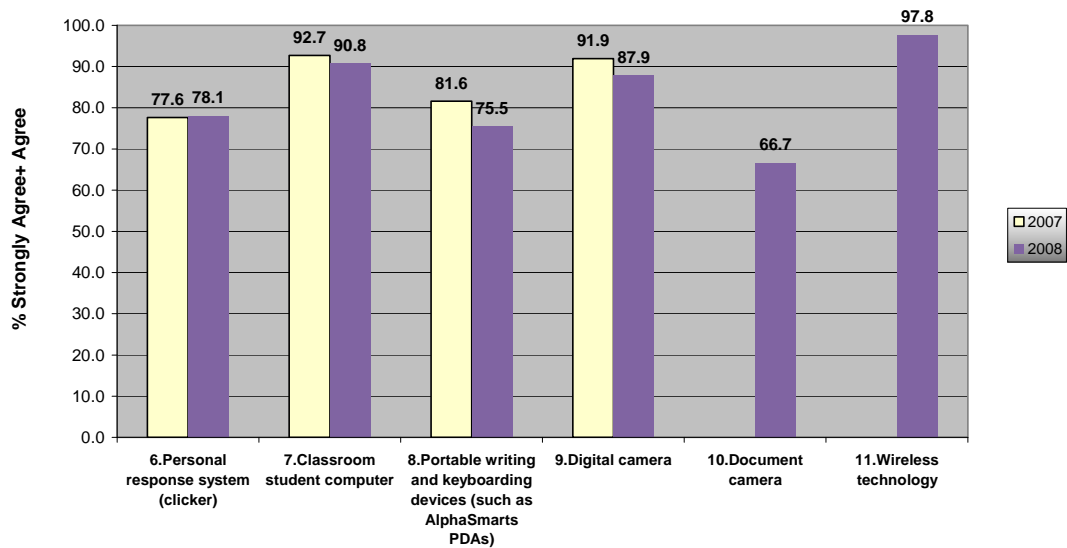
Use of Classroom Technology Instructional Technology Results

These tools are useful in my classroom for teaching and learning.



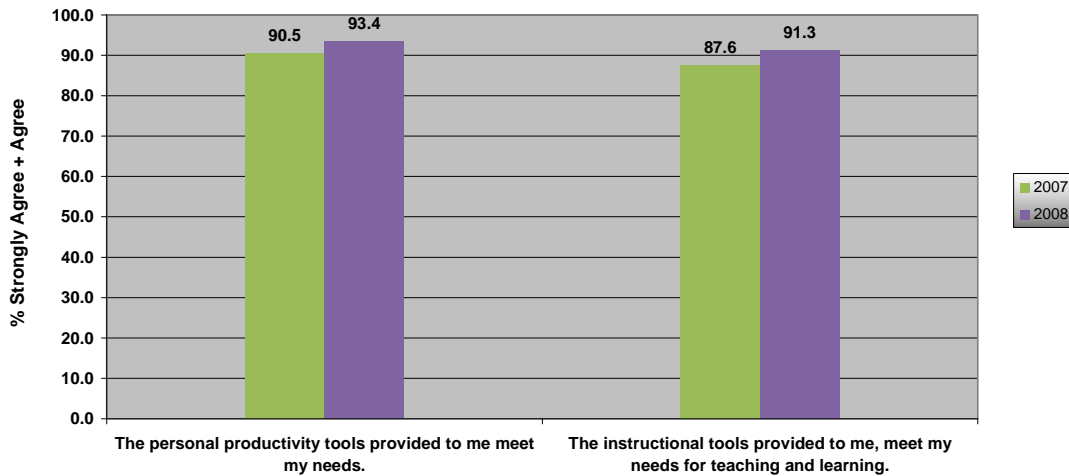
Use of Classroom Technology Instructional Technology Results

These tools are useful in my classroom for teaching and learning.



Technology Availability, Support and Training Instructional Survey Results

Please indicate your level of agreement with each of the following statements.



Indicator 2.c.

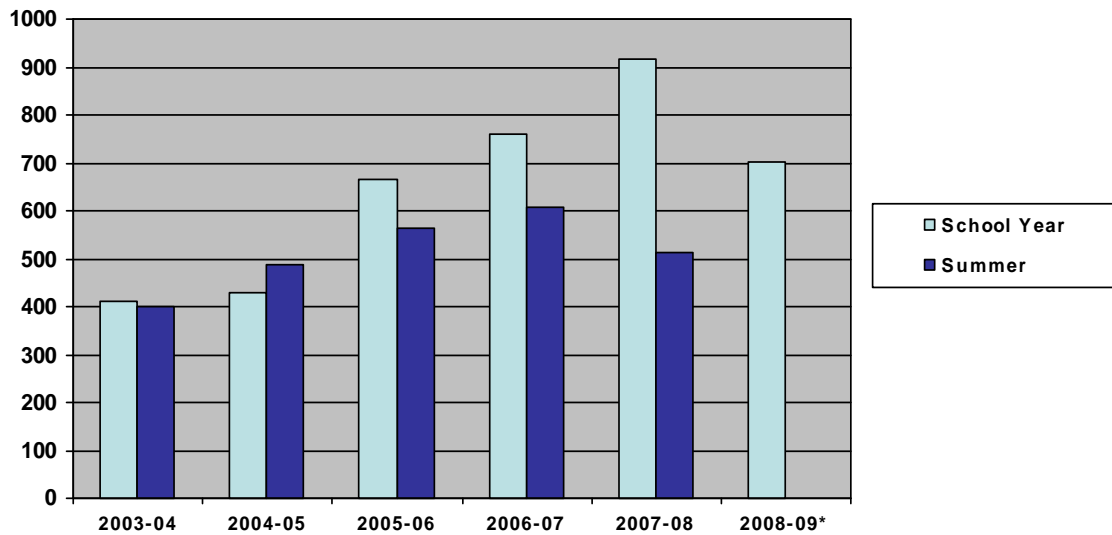
The FCPS Online Campus provides high school courses through the Internet. These courses are built to teach the same curriculum available in regular face-to-face courses. The Online Campus addresses the needs and characteristics of a number of student groups including traditional high school students, AP students, special education high school and middle school including autistic students, English for speakers of other languages, alternative education, homebound, home schooled, transfer students, out-of-system students including students in foreign countries, and pregnant students.

In school year 2007-2008, the Online Campus offered 47 courses and served 915 students. With the redesign of summer school in 2007, the Online Campus offered 15 courses with 514 students enrolled. School-year enrollment continues to grow. This school year as of December, 2008, the Online Campus has served 703 students in the following 51 courses:

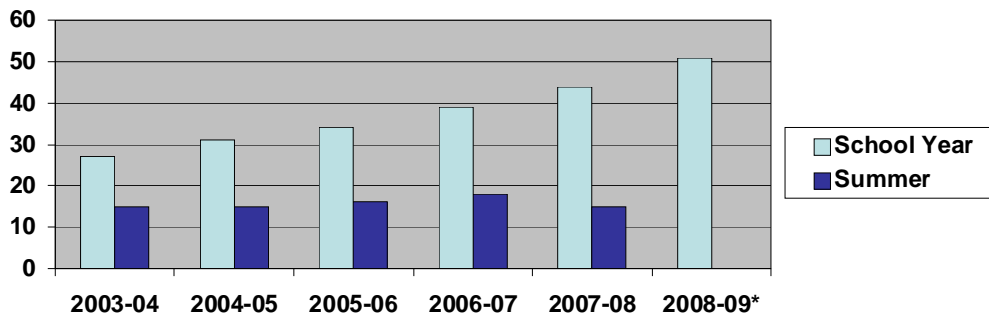
<p><u>English</u> Creative Writing I and II English 9 English 10 English 11 English 12 AP English Language Composition AP English Literature Composition</p>	<p><u>Mathematics</u> Algebra I Algebra II Geometry Geometry Honors Trigonometry Precalculus AP Calculus AB AP Statistics</p>	<p><u>Science</u> Biology I AP Biology Chemistry I AP Chemistry Geosystems Oceanography Physics I AP Physics B</p>
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<p><u>Foreign Language</u> AP French Language AP French Literature Spanish I Spanish 2 Spanish 3 AP Spanish Language</p> <p><u>Health and Physical Education</u> Health and PE 9 Health and PE10</p>	<p><u>Social Studies</u> AP Macroeconomics AP Microeconomics AP Psychology AP US Government & Politics AP US History Psychology Virginia and US Government Virginia and United States History World History and Geography I World History and Geography II</p>	<p><u>Career & Technical Education</u> Accounting I Advanced Accounting Aerospace Science 1 Finance Life Planning Cisco 1 (Part A and Part B) Network Administration Oracle</p>
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On-Line Campus - # Students Served



On-Line Campus - # Courses Offered



* School Year as of December 2008.

Board Comments: Operational Expectation 2, indicator 2.a. (student to standard computer ratio) would be monitored for progress, but the Board would not hold the Superintendent accountable for meeting the standard.

3. Use technology to support diverse learning techniques and styles.

Superintendent: A U
 School Board: A U

Reasonable Interpretation:

FCPS must provide technology for students with disabilities that will allow them to participate in the education process. Assistive technology can allow many students with disabilities the capacity to participate in an inclusive environment in the general education setting. For students with more severe disabilities, assistive devices can allow them to communicate with their teachers, other students, family and friends which would be impossible without the technology.

For the general education students, offering multimedia technology capabilities benefits students with diverse learning styles. In today's world where multimedia and visual stimulations are pervasive, many students benefit in their learning when video segments can be appropriately integrated into the instructional day. Video streaming capabilities, tied to the FCPS Program of Studies and Virginia Standards of Learning provides the visual learner with reinforcement of essential learning concepts.

Indicator 3.a.

FCPS will provide and maintain targeted and appropriate assistive technology (e.g. augmentative communication devices, adaptive access peripherals and software) to 100 percent of students with disabilities who are determined to require assistive technology support through the annual IEP process.

Indicator 3.b.

FCPS will provide to all schools a multimedia on-demand video streaming instructional tool, supporting diverse learning techniques and styles, and will report on the usage of this tool.

Superintendent Statement of Condition:**Indicator 3.a.**

Fairfax County Public Schools is a national leader in the integration of assistive technology for students with disabilities. This service includes a comprehensive assessment component to determine which specific hardware, software, and/or adaptations a student might require. For example, a student who is non-verbal might require an augmentative and alternative communication device to effectively enable participation in all aspects of school curriculum and life.

The number of students with disabilities receiving assistive technology services over the last three years has grown 13%. During this time 100% of the students with disabilities determined to require assistive technology as identified in their IEPs received the services. To date in 2008/2009 school year, there are 3,634 students with disabilities requiring assistive technology services according to their IEP plus an additional 16 students who are served under a 504 plan. As many as 800 new students are referred for an assessment each year, so it is projected that final number of students receiving AT services will increase during the year. See appendix A for a school by school accounting of the number of students with disabilities who receive assistive technology services.

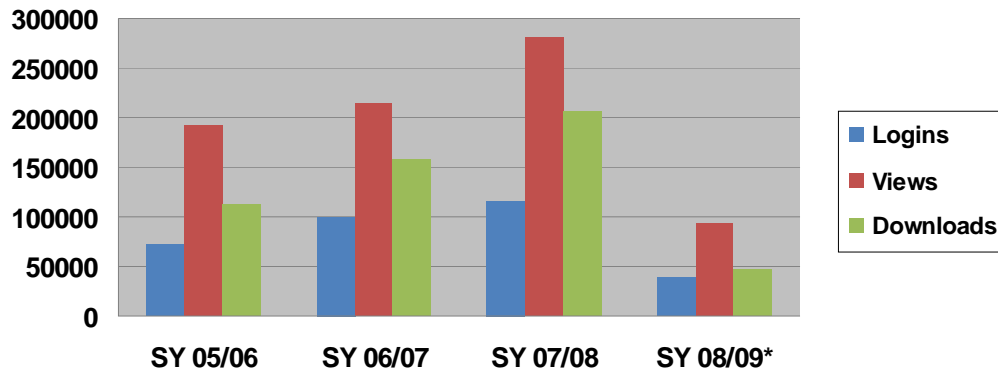
Indicator 3.b.

FCPS provides **Discovery Education streaming** (formerly called *Unitedstreaming*), a subscription-based Internet-delivered video streaming instructional application offered through Discovery Education, to all schools. Discovery Education *streaming* offers streamed video clips of education programs (over 5,000 full-length streamed videos, edited into 50,000 titled segments) correlated to and searchable by Virginia SOL. The site also contains additional learning resources including teacher guides, writing prompts, and a library of over 3,000 images.

Discovery Education *streaming* allows instructors to present educational information in a variety of formats to accommodate different learning styles. Segments can be downloaded and hyperlinked into PowerPoint presentations or saved to a CD for viewing off-line; many are closed-captioned, which is particularly helpful to teachers of special student populations. The visual nature of the clips works well with all student populations to reinforce spoken concepts in class.

Utilization of this instructional tool continues to grow. The number of views and downloads increased more than 30% last school year as compared to the previous year. See Appendix A for school-by-school Discovery Education *streaming* Usage information.

Discovery Education *Streaming*



* School Year as of December 2008.

Board Comments:

4. Provide a means for interactive communication between the school system, parents, students, and the community.

Superintendent:	A	<input checked="" type="checkbox"/>	U	<input type="checkbox"/>
School Board:	A	<input checked="" type="checkbox"/>	U	<input type="checkbox"/>

Reasonable Interpretation:

It is important that parents, teachers and students have strong communications ties to ensure the best academic success for our students. Communications links must be available 24 hours a day, 7 days a week. FCPS provides a valuable resource tool to foster communication with our FCPS 24/7 Learning system. The FCPS 24/7 learning system provides the capability to post homework assignments, participate in secure discussion boards, share on-line instructional resources, post announcements, share calendar information on upcoming events, and much more. FCPS should continue to encourage active use of this powerful communication tool by all schools.

In addition, electronic mail is a critical tool for interactive communication between the school system and the community. All employees regardless of position must have e-mail capabilities.

Indicator 4.a.

FCPS will report on utilization of FCPS 24-7 learning, by school, supporting interactive communication between students, parents, and teachers.

Indicator 4.b.

FCPS will report on monthly utilization of total email traffic, including the counts for both internal and external messages.

Superintendent Statement of Condition:

Indicator 4.a.

Calendar year 2008 was marked by significant expansion in the functionality available to the FCPS community in FCPS 24-7 Learning. Use of FCPS 24-7 Learning during school hours continued at a similar rate to 2007. Change in usage patterns were evidenced as higher level of activity was experienced in evening hours. This out-of-school increase is indicative of deeper penetration in use at home, from libraries and other locations with publicly accessible internet. Most significantly, the FCPS Electronic Curriculum Assessment Resource Tool (FCPS eCART) was made available to all FCPS schools and centers on August 1, 2008. This availability marked a significant milestone in how teachers, students, and school leaders access resources, formative assessment tools, and data.

In 2008, there was an overall increase in activity within the available classroom sites. There have been increases in teachers teaming to provide grade or subject level class sites to students. At the elementary level, this teaming easily supports flexible grouping and allows teachers supporting such groups to reach their students easily. Between 7:00 am and 3:00 pm, there continues to be more than 4,000 “hits” in FCPS 24-7 Learning every minute of the day.

Use of web 2.0 technologies such as Wikis and Blogs has continued to increase. More than 9,000,000 page visits were recorded for these tools, representing 3.8% of the total traffic in FCPS 24-7 Learning. Discussion board postings increased from approximately 1000 to over 1150 each day.

Most schools have aggressively supported providing parents with their own accounts to access their students’ class sites and other tools, such as weCare@school and Family Connection. Parent accounts have increased by 96% this calendar year with more than 51,400 unique parent accounts. Over 45% of our students’ online class sites are available to one or more parents. This is an increase in access of 79% since December 2007. In response to the publication of FCPS Regulation 3207, Classroom Use of FCPS 24-7 Learning, all teachers are expected to have links to their FCPS email available to students and parents in their online class sites.

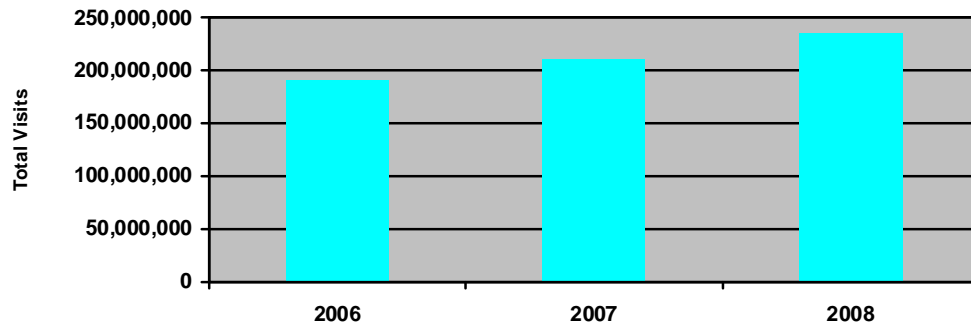
Parents have logged in to FCPS 24-7 Learning over 247,000 times this calendar year. Beyond visiting their students’ online class sites, parents have updated their children’s emergency care information 12,800 times. This represents a 182% increase from 2007. Additionally, parents of High School students find that the post secondary and career planning tools available in the Family Connection “Counselor’s Office” application are extremely valuable. In addition to the 42,414 high school students from the classes of 2009 – 2012 that are using the tool, parents have visited the Family Connection site via the link in FCPS 24-7 Learning 6,448 times. The access provided to parents to their students’ planning tools provide a strong integration of the school, student, and parents in each student’s planning for the future.

The most exciting capability added to FCPS 24-7 Learning has been access for all teachers, school leaders, and students to the capabilities of FCPS eCART. All teachers in FCPS were given access to this integrated suite of capabilities on August 1, 2008. All schools have been provided basic training in the use of eCART and the level of adoption in 5 months has exceeded expectations. 24,796 formative assessments have been administered to FCPS students a total of over 381,000 times. The majority of these formative assessments, over 21,000, were private assessments developed and administered by individual teachers. Additionally, more than 2,700 private assessments created by teachers have been shared within their schools as school public assessments for use by all other teachers in their schools. This content sharing and accompanying reduction in redundant development work by teachers is invaluable. Additionally, the access to online performance reports for every assessment administered has provided teachers with easy to use graphical presentations of results for use individually or as part of professional learning community discussions.

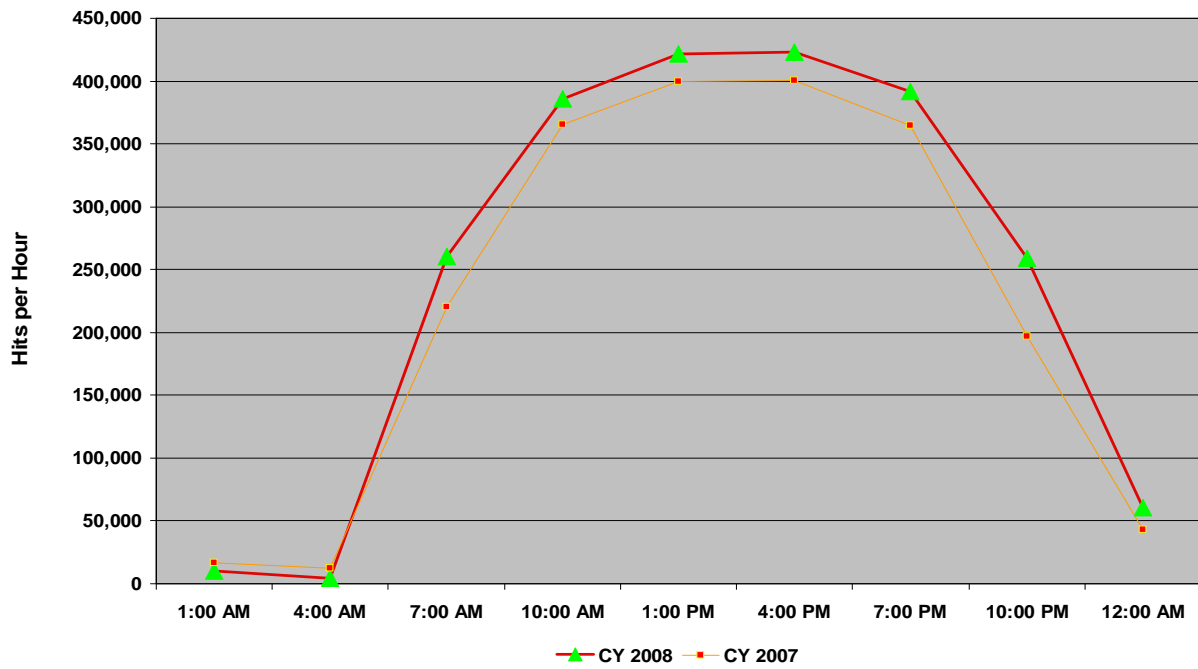
FCPS eCART, as provided to our schools, exceeded the capabilities envisioned in the 2005 Business Plan. Concurrent with the deployment of the initial capabilities, effort was begun to expand eCART capabilities to include teacher observable assessments. The first step in this pursuit was for the Kindergarten Mathematics Reasoning Assessment (MRA). This capability has been developed and is scheduled to enter pilot testing during the first quarter of 2009.

The following charts provide information about FCPS 24-7 usage for the past three years. See Appendix A for school-by-school details about the number of FCPS 24-7 Learning visits-to-student ratio and parent account adoption data.

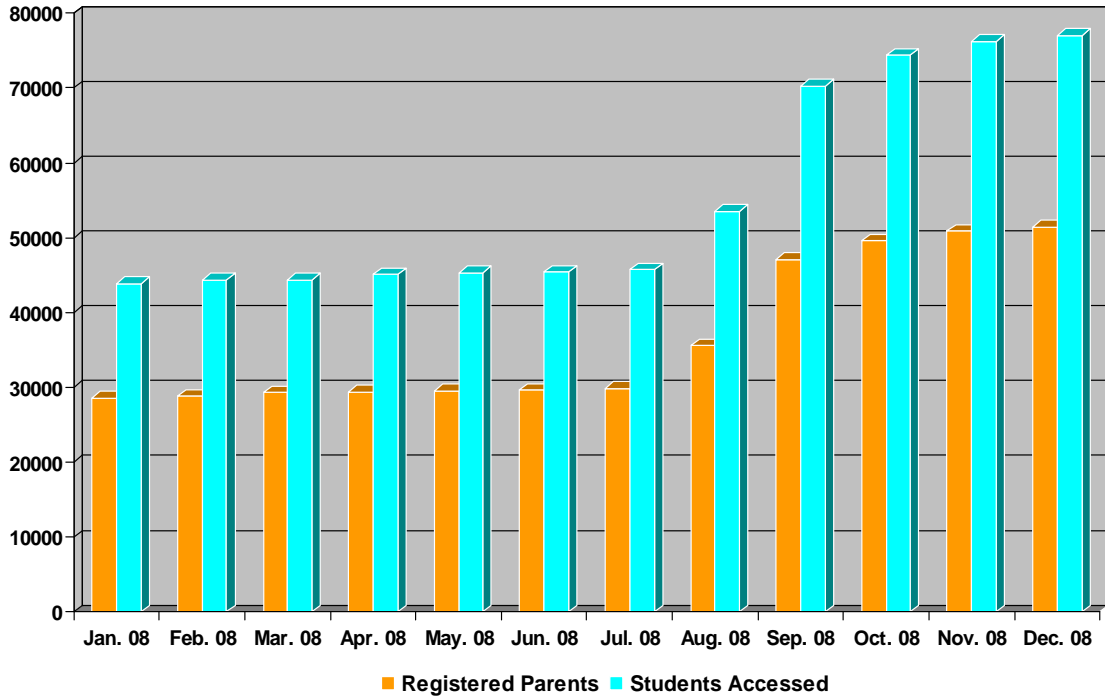
FCPS 24-7 Usage Trends



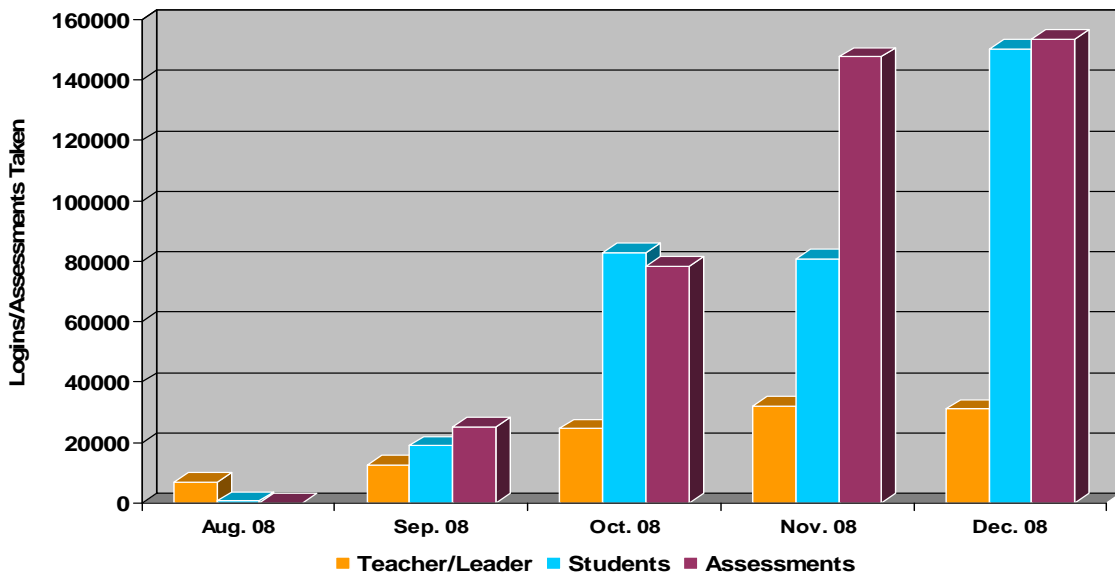
Average Daily Use CY 07 and 08



Parent Accounts for FCPS 24-7 Learning



eCART ASPIRE Activity 2008



Indicator 4.b.

The proliferation and reliance upon e-mail in the world marketplace in the last five years is remarkable. For FCPS, a robust and reliable e-mail system enables and eases communications between users – both internal and external to the system. Increased e-mail usage can be attributed to a number of factors. One primary reason is the need for teachers to effectively and efficiently communicate with parents on student's progress and performance.

The FCPS e-mail system is comprised of mailbox servers, a Storage Area Network (SAN) used for storage of mailbox contents, and an enterprise class tape library used to provide backup capabilities and long term data storage. The e-mail system, which holds over 43,000 user and resource mailboxes, runs Microsoft Exchange 2003 and is one of the largest implementations of Microsoft Exchange on the East Coast.

To provide e-mail traffic reporting, IT utilizes a reporting tool for Exchange called Promodag. Exchange Administrators run monthly reports on e-mail usage, as well as other key indicators such as a spam activity, to monitor and, if necessary, make system adjustments and enhancements.

Total e-mail messages sent and received from January 1, 2008, to December 31, 2008, was 201,143,702.

Exchange Totals				
		Total Internal Messages	Total External Messages	Total Enterprise Messages
		(internal FCPS)	(inbound & outbound excluding blocked spam)	
Jan	2008	6,001,071	1,855,155	7,856,226
Feb	2008	15,738,669	3,050,326	18,788,995
March	2008	22,452,598	3,840,896	26,293,494
April	2008	17,025,522	2,435,806	19,461,328
May	2008	16,416,351	5,067,361	21,483,712
June	2008	11,455,018	3,537,947	14,992,965
July	2008	4,603,331	2,363,990	6,967,321
August	2008	8,372,101	2,653,992	11,026,093
September	2008	17,754,851	4,669,804	22,424,655
October	2008	15,095,581	5,328,886	20,424,467
November	2008	14,006,117	5,266,184	19,272,301
December	2008	8,116,312	4,035,833	12,152,145
2008 Exchange Totals		157,037,522	44,106,180	201,143,702

5. Provide information electronically about school and division programs and academic progress.

Superintendent: A U
School Board: A U

Reasonable Interpretation:

Parents, students and community members need access to information about FCPS. With a diverse community, it is important that FCPS provide information electronically through multiple venues and in multiple languages. Many constituents prefer to receive information via e-mail. Others wish to access information via a rich internet presence. While others, especially those who may not have easy access to the internet, benefit from information via television. FCPS must provide a variety of technology tools to facilitate sharing of information electronically about school and division programs and academic progress. Please note that there is a corresponding goal in the community relations operational goals which addresses effective communications.

School Profiles available on the FCPS public website provide valuable information on programs and academic progress. (See also indicator 6.a.) In addition to providing school and division-wide information about FCPS programs and academic progress, technology is also critical to providing parents with academic progress of individual students. Secondary teachers utilize an electronic gradebook, IGPro, which is integrated with SASI to provide academic progress information to parents and students.

Indicator 5.a.

FCPS will provide the Keep In Touch System for broadcasting electronic messages to parents and community members and will report on the number of subscribers, the number of schools with local customized Keep In Touch Systems, and the number of messages broadcast annually.

Indicator 5.b.

FCPS will provide public information and instructional television programming, and will report on the number of *SchoolScene*, *InSight*, and *In Other Words* programs to provide news and information about the schools, emergency messages and curriculum programming produced and aired annually on Channel 21.

Indicator 5.c.

FCPS will report on the number of times FCPS Public Service Announcements air by cable providers annually.

Indicator 5.d.

The FCPS Public Website www.fcps.edu will be available 99 percent of the time, 24 hours per day, 7 days per week, 365 days per year.

Indicator 5.e.

FCPS will report on the number of secondary teachers who use IGPro electronic gradebooks to provide student academic progress.

Indicator 5.f.

The online school public profiles will be updated according to the established service levels outlined below at least 85% of the time. The 85% takes into account publishing delays caused by circumstances outside of FCPS control (e.g. problems with external sources of data such as file redesigns, data quality). Timeframes for updating the data will be published on the school public profiles website.

Superintendent Statement of Condition:

Indicator 5.a.

During school year 2007-2008, FCPS experienced significant problems with the services provided by the vendor for the Keep In Touch (KIT) communication system with respect to timely and accurate e-mail notifications. As a result, staff released a request for proposal, conducted a rigorous evaluation, and selected Blackboard Connect, Inc. as the new vendor for the KIT service. Blackboard Connect is a leader in mass communication systems with over 17,000 schools and districts as clients—including many of the largest school districts. Blackboard Connect has the capacity to send over 1 million e-mails per hour and 3-million, 60-seconds voice calls per hour.

FCPS implemented the new KIT service with Blackboard Connect beginning in July 2008. The new KIT is available to all schools and includes contact information for all students and employees. KIT contact information is automatically updated nightly based on the parent/guardian information in the FCPS student information system and on employee information in the human resources information system. In addition to e-mail notification, the district and schools can also send voice communications. As an example of KIT’s capabilities, in October FCPS called the households of 34,988 ESOL students in eight different languages based on the language spoken in the home to invite parents to the regional ESOL workshops. This communication contributed directly to the high participation at those events.

Basic statistics for the initial use of the new KIT are listed below. Appendix A includes data on the number of messages sent by each school for the period of July-December 2008.

July – December 2008

Total Messages Sent	4,259
Total E-Mails Sent	5,499,099
Total Phones Called	549,519

At the time of contract award, Blackboard Connect did not provide a subscription capability, which would be necessary for community members to subscribe to, and receive, messages from FCPS. Blackboard Connect agreed to develop a subscription capability in addition to the other services provided. The subscription capability was made available to the community on December 31, 2008 at: www.fcps.edu/kit.

Note that the capability for schools to use voice messages via KIT is on the Tier 2 budget reduction list for FY 2010. If this cut were made, schools would be limited to e-mail messages only beginning in July 2009.

See Appendix A for a school by school listing of Keep In Touch utilization.

Indicator 5.b.

In calendar year 2008, FCPS produced 515 individual public information and instructional video segments, as well as 125 full-length television programs. The total includes programs that provided news and information, such as:

- Live coverage of FCPS School Board meetings – 33 meetings
- *SchoolScene* - 22 half-hour programs
- *Insight* – 22 half-hour programs
- *In Other Words* - 15 half-hour programs (three programs each in Arabic, Farsi, Korean, Spanish and Vietnamese)

Also included in the total are curriculum-based programs and segments, such as:

- *Meet the Author* – 7 half-hour programs, with “live” student phone calls and selected student emails
- Mount Vernon series – 3 programs (*The Real Martha Washington, Shaping the Presidency, Primarily George*)
- *Flight School* series – 2 programs (*Blast Off!* and *From Above*)

In addition to these production totals, videostreaming support was provided through the encoding of approximately 330 pieces of video in support of public information, instruction and staff development.

Indicator 5.c.

The FCPS "smart" PSA campaign is a bold and creative effort that informs cable television viewers about FCPS efforts and initiatives through public service announcements (PSAs.) The "smart" campaign addresses many critical issues facing children, families, schools, businesses, and the general community. Through the messages conveyed in these PSAs, and with the financial and in-kind support of Cox Communications and Comcast Cablevision, FCPS is able to reach over 250,000 homes in Fairfax County. "smart" PSAs are aired on over 40 cable channels and on the school system's flagship station Red Apple 21.

The 30-second video clips help simplify information about the academic and business aspects of FCPS. They feature teacher excellence, highlight vital school-business partnerships, and explain safety, security and student health issues. FCPS encourages businesses and organizations to partner in the production of these PSAs to highlight their efforts in supporting our students and teachers.

Since 2005, 36,214 PSAs have aired on over 40 cable channels valued at \$1,810,750 in air time.

Year	Number of PSA Spots Aired	PSA Value
2008	8,437	\$421,850
2007	10,033	\$501,650
2006	8,767	\$438,400
2005	8,977	\$448,850

Indicator 5.d.

A well-designed and highly available website is an essential part of the success and future of an organization. Often, the FCPS public website is the first introduction a customer (such as a parent, student, potential employee, or vendor) will have with the organization. It is vital that the web presence be available and reliable to provide internal and external users with the information and services they need when interacting with FCPS.

The FCPS public web presence is comprised of web servers and related SAN designed and engineered in a redundant fashion to provide a high degree of availability. The FCPS public web infrastructure provides web space for all FCPS schools and administrative offices to publish information consumed by FCPS users, parents and citizens alike.

To provide FCPS public website availability measurements, a reporting tool for system uptime, called ActiveExperts, is utilized. This application is regularly used by the IT Network Operations Center to monitor and report on enterprise systems. To measure FCPS WAN availability, the international standard, Information Technology Infrastructure Library (ITIL®) availability measurement is employed which is calculated as follows:

$$(Agreed\ service\ time - Downtime) / (Agreed\ service\ time) \times 100$$

Based upon these calculations and infrastructure/system precautions in place, an overall annual (24/7/365) availability measurement of 99.75% uptime for this service was obtained between January 1, 2008, and December 31, 2008, meeting the FCPS metric for indicator 5.d.

Indicator 5.e.

InteGrade Pro is the electronic gradebook used by middle and high school teachers. By electronically managing students' scores, assignments, and calculated grades, it provides teachers with the ability to track student performance throughout the duration of a course. IGpro also provides teachers with the ability to communicate a student's academic progress to parents during the grading period. Progress reports can be printed and sent home with students or can be sent to parents via e-mail from InteGrade Pro. InteGrade Pro transmits period and final grades back to SASI for report card printing.

Currently 5861 middle and high school teachers use the InteGrade Pro electronic gradebooks. See Appendix A for a school by school breakdown of teachers with InteGrade Pro gradebooks.

While this tool provides basic grading functionality for secondary teachers, there are significant limitations. For example, parent access is not available and it does not provide an elementary school gradebook. InteGrade Pro is part of the out-dated SASI suite of products that will be replaced with a new student information system.

Indicator 5.f.

The online school public profiles were updated according to the established service levels 100% of the time in 2008, meeting the requirements for Indicator 5.f. The details for each profile data tab are outlined in the table below.

Public Profile Tabs	*Update Timeframe	Source of Data	Date Published
Overview and School Summary	Annually- prior to beginning of SY	SASI/School Admin.	Sept. 2008
Accreditation	** Annually - December	VDOE	Dec.18, 2008
Demographics/Mobility	Annually - September	SASI	Sept. 23, 2008
Staffing	Annually – December	Lawson	Dec. 18, 2008
Test Results HS AP	Late October	College Board	Oct. 31, 2008
Test Results HS IB	Late October	International Baccalaureate	Oct. 31, 2008
Test Results HS SAT	Late October	College Board	Oct. 24, 2008
Test Results MS SOL	** September	VDOE	Sept. 27, 2008
Test Results HS SOL	** September	VDOE	Sept. 27, 2008
Test Results ES SOL	** September	VDOE	Sept. 27, 2008
Test Results ES DRA	Late August	Pearson	Aug. 19, 2008
Safe and Secure	** Annually – February	VDOE	Feb.29, 2008
Technology: In School Technology Inventory	Twice annually – July, Jan.	ACIS	Jan.29, 2008 July 28, 2008
Technology: In School Technology Infrastructure	Annually - July	NSS	July 28, 2008
Technology: Application Use: On Demand Video Classroom Instructional Tool	Twice annually – July, Jan.	Discovery Software	Jan.29, 2008 July 28, 2008
Technology: Application Use: Online SOL Testing	Annually - July	VDOE	July 28, 2008

Public Profile Tabs:	*Update Timeframe	Source of Data	Date Published
Technology: Application Use: FCPS 24/7	Twice annually – July, Jan.	Blackboard	Jan.29, 2008 July 28, 2008
Membership: Current Membership, Cluster, Division	Monthly	IT/Decision Support	New – Initially published Oct. 22, 2008
Membership: Membership History, Changes By Cluster	Monthly	IT/Decision Support	New – Initially published Oct. 22, 2008
Virginia Wellness	Annually-July	IT/Decision Support	New – Initially published Oct. 22, 2008

* The timeframes provided are a general guideline and depend upon the timeliness and accuracy of data received from outside sources.

** The first file from the state will be published as preliminary data and then every 45 days after that the data will be refreshed until the entire file has been received, and published as final.

Note that the funding for the school public profiles is on the Tier 2 cut list and has been eliminated in the Superintendent’s Proposed Budget for FY 2010. If this reduction is approved, the school profiles will no longer be updated beginning in July 2009 and this indicator will not be met next year.

Board Comments:

6. Provide a system to access relevant and current data by appropriate users.

Superintendent: A U
School Board: A U

Reasonable Interpretation:

The effective use of data for instructional decision making can improve performance and academic achievement of all students. Having a tool deployed across the organization enables users to have instant access to much of the data they need without waiting for staff members to deliver customized reports. The FCPS Educational Decision Support Library (EDSL) is an enterprise-wide decision support system that provides a central location (data warehouse) for informed instructional decision making for FCPS teachers, principals and district administrators. EDSL provides an easily accessible and user-friendly web-based “one-stop-shop” to system-wide data to support educational decision-making at the local school level, cluster level, and the division level. EDSL delivers Standards of Learning data linked with demographic information, student enrollment and attendance, additional standardized test results, course marks and educational status such as limited English proficiency levels and special education status, to assist teachers and schools in meeting local, state and federal NCLB

guidelines. School-based leaders can leverage the information to assess existing instructional programs, communicate effectiveness with local school communities, and plan for the future. Via the school profiles on the public website, www.fcps.edu, EDSL data can also be shared electronically with the public, providing useful information on each of the schools in the areas of academic achievement, demographics, staffing, and discipline.

FCPS must maintain and enhance the EDSL system to support the changing needs of the school division.

Indicator 6.a.

FCPS will report on public utilization of EDSL via the school profiles on www.fcps.edu by counting page views within the profiles.

Indicator 6.b.

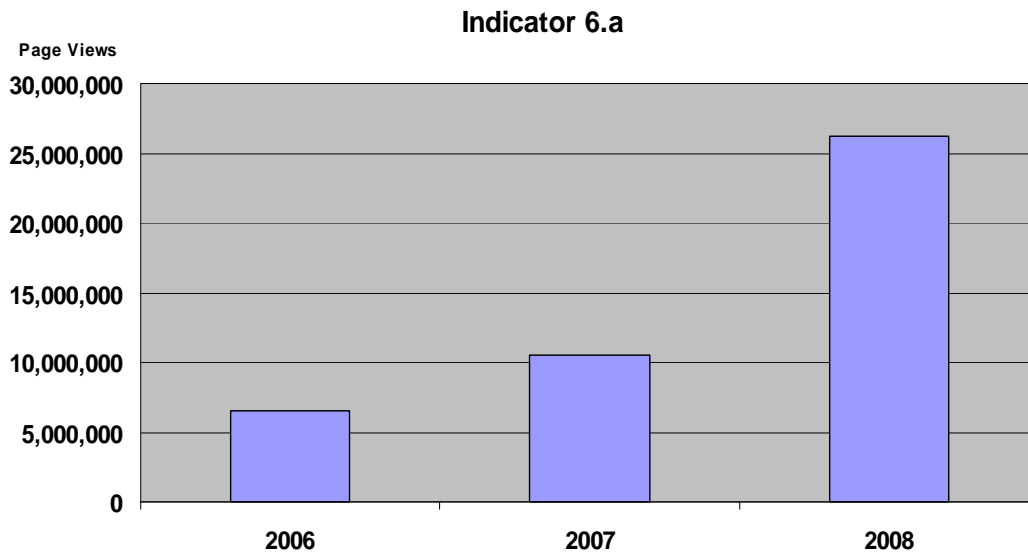
FCPS will report on FCPS utilization of EDSL via the EDSL portal by counting the number of reports opened by users.

Superintendent Statement of Condition:

Indicator 6.a.

The following chart reports on public utilization of EDSL via the school profiles on www.fcps.edu by counting page views within the profiles.

EDSL Public Access



	2006	2007	2008
Number of Page Views	6,528,782	10,476,996	26,257,073
Number of Visitors	293,919	322,238	221,395

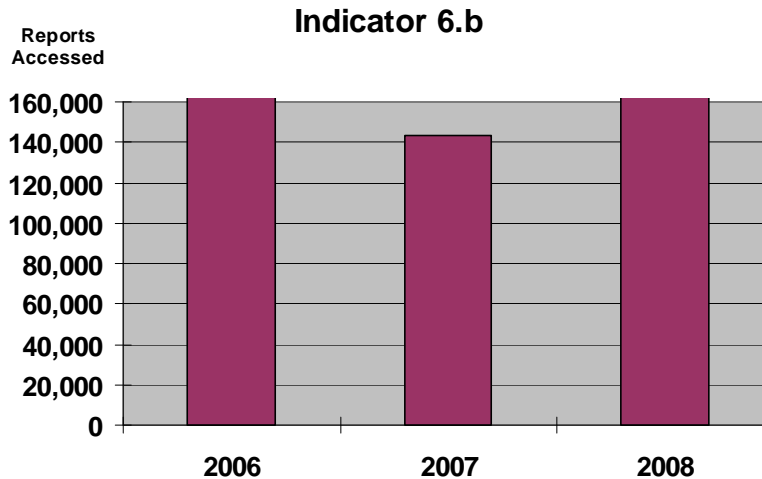
The chart and table for Indicator 6.a illustrate the level of EDSL usage via the public school profiles. The data indicate that in calendar year 2008, 221,395 visitors viewed 26,257,073 web pages within the EDSL public school profiles. The total pages viewed in 2008 increased by 151% over the total pages viewed in 2007.

Note that the EDSL public school profiles are included in the proposed Tier 2 budget cuts and are eliminated in the Superintendent's Proposed FY 2010 budget.

Indicator 6.b.

The following chart reports on FCPS utilization of EDSL via the EDSL portal by counting the number of reports opened by users.

EDSL Client Access



	2006	2007	2008
Number of Reports Accessed	167,686	143,642	162,294
Number of Users	3,451	4,020	4,101

The chart and table for Indicator 6.b illustrate the level of EDSL usage via the client application available to FCPS staff and school administrators. The data indicate that in calendar year 2008, 4,101 school administrators and staff accessed 162,294 EDSL reports. With the growing use of the public access profiles, many EDSL users now access the school profiles for “quick” reports, and utilize the EDSL Client Access for more in-depth analysis.

Board Comments:

Summary Statement of the Superintendent:

Fairfax County Public Schools can be proud of the investments it has made in technology to support its students, teachers, staff, parents and community. The state of the technology infrastructure is sound with a robust network and an efficient support model to respond to technology incidents. Information Technology strives to provide technology tools that are useful for students and staff. IT provides opportunities for regular feedback via focus groups and surveys. For students who need an option to the traditional classroom instruction, the on-line campus with 51 courses provides an excellent alternative. While the current student-to-standard computer ratio is 2.2, continued investment in replacement equipment will be required to maintain this ratio.

FCPS excels in supporting diverse learning styles. All of the special education students needing assistive technology receive such equipment and services. As all students benefit from instruction in multiple formats, the Discovery Education *streaming* multi-media instructional tool, now available in all schools, provides a valuable learning resource for teachers and students.

FCPS strives to have productive means for communication. The FCPS 24-7 learning tool has been enhanced through the addition of Wikis and blogs, implementation of eCART, and the expansion of parent accounts to all schools. E-mail usage continues to grow, providing efficient two-way communication. FCPS successfully shares valuable information about programs, services, and important events through multiple venues – Keep In Touch, television, public service announcements and the web. The award-winning EDSL system provides valuable information for the public as well as FCPS staff on the academic achievement of our students.

A Request for Proposal (RFP) to replace the student information system was released in December, 2007 and in February, 2008 eleven proposals were received from the major vendors. The selection committee performed a rigorous review of the proposals and a selection was made based on explicit evaluation criteria including qualification of the firm, responses to requirements for tasks to be performed, technical requirements, functional requirements and the reasonableness of the cost proposal. In September 2008, the FCPS School Board voted to execute a contract with Edupoint Educational Systems. A five-year phased implementation of the new student information system is underway.

There are several Tier 2 and 3 budget reductions for FY 2010 which will have a significant impact on the technology monitoring report indicators for the next year. Lack of replacement equipment will negatively impact Indicator 2.a. and elimination of the School Profile funding will negatively impact Indicators 5.f. and 6.a.

Summary Statement of the Board:

The motion to accept the Information Technology Operational Expectations monitoring report and find that each indicator is acceptable and to commend the Information Technology Department for exemplary work **passed 9-0** with Ms. Bradsher, Mr. Gibson, Mrs. Kory, Mr. Niedzielski-Eichner, Mr. Raney, Mrs. Smith, Mr. Storck, Mrs. Strauss, and Mrs. Wilson voting “aye,” and Mr. Center, Ms. Hone, and Mr. Moon absent.

Areas for Improvement:

Areas of Commendation:

Date for Re-Monitoring: February 2010