



STATEWIDE WEB-BASED STANDARDS OF LEARNING TECHNOLOGY INITIATIVE

PRESENTED TO

THE GOVERNOR AND
THE GENERAL ASSEMBLY

SEPTEMBER 1, 2009



COMMONWEALTH of VIRGINIA

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Superintendent of Public Instruction

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August 31, 2009

The Honorable Lacey E. Putney, Chairman
House Appropriations Committee
Post Office Box 127
Bedford, Virginia 24523

The Honorable Robert Tata, Chairman
House Education Committee
4536 Gleneagle Drive
Virginia Beach, Virginia 23462

The Honorable Charles J. Colgan, Sr., Chairman
Senate Finance Committee
10677 Aviation Lane
Manassas, Virginia 20110-2701

The Honorable R. Edward Houck, Chairman
Senate Education and Health Committee
Post Office Box 7
Spotsylvania, Virginia 22553-0007

Dear Delegates Putney and Tata and Senators Colgan and Houck:

I am pleased to transmit the status report, *Statewide Web-Based Standards of Learning Technology Initiative*, as required by Chapter 781 Item 140 C.14.h. of the 2009 Acts of Assembly.

This attached report details the progress to date of this initiative. The Department of Education and the Virginia Information Technologies Agency have worked together on this status report and the implementation of this project.

If you have questions or require additional information, please do not hesitate to contact Tammy McGraw, director of educational technology, at (804) 225-4429 or tammy.mcgraw@doe.virginia.gov.

Sincerely,

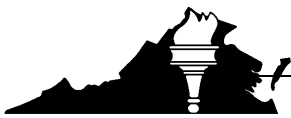
A handwritten signature in cursive script that reads "Patricia I. Wright".

Patricia I. Wright

PIW/TM/slm

Attachment

c: The Honorable Timothy M. Kaine
The Honorable Thomas R. Morris



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EXECUTIVE SUMMARY

The 2008-09 school year was the ninth year of implementation for Virginia's Web-Based Standards of Learning (SOL) Technology Initiative. Its goal is to use Web-based systems to improve SOL instructional, remedial, and testing capabilities in high schools, middle schools, and elementary schools. The initiative has four objectives:

1. Provide at least one computer for every five students
2. Create Internet-ready local area network capabilities in every school
3. Assure adequate high-speed, high-bandwidth capabilities for instructional, remedial, and testing needs
4. Establish a statewide Web-based SOL test-delivery system

Financial Support for the Initiative

Funding for year nine (2008-09) was generated by proceeds from the Series IX Technology Equipment Notes, sold by the Virginia Public School Authority (VPSA) in May 2009. As a result, divisions had access to approximately \$59,274,000 to improve technology infrastructure. These funds increased the total statewide investment in technology infrastructure for the initiative to more than \$524,772,000.

Achieving Readiness for the Web-Based SOL Technology Initiative

The Commonwealth launched the initiative in July 2000 and introduced preliminary architectural guidelines for high schools in January 2001, followed by permanent guidelines in July 2001. In 2004, the certification procedures were revised to include middle and elementary schools, higher minimum specifications for newly purchased technology equipment, a more manageable process for determining a division's technical capacity to administer online SOL tests, and the flexibility to certify multiple school levels simultaneously. In 2008, a superintendent's memo communicating educational technology guidelines to school divisions was issued. Guidelines for school certification were included within these guidelines. The memo can be found at http://www.doe.virginia.gov/info_centers/superintendents_memos/2008/06_jun/inf137.html.

School Division Participation

All 132 divisions use state funding to upgrade technical infrastructure, improve student-to-computer ratio, and achieve School Readiness Certification. While a number of school divisions still administer paper/pencil tests, all divisions have participated in online SOL testing since fall 2005.



Increased Availability of Online Testing

Over the course of the initiative, the number of different SOL tests offered online increased each year through spring 2007. By spring 2008, all SOL tests were available to be administered online with the exception of the Plain English Mathematics test at grades three, four, and five and the English Writing tests. The Plain English Mathematics test at the lower grades was administered in only one mode because of the small number of students taking that test. To meet the needs of all students, this test will continue to be administered in paper-and-pencil forms for the near future. The English Writing tests—for grade five, grade eight, and end-of-course levels—also were administered only in paper-and-pencil forms. The writing test requires students to complete a multiple-choice section of the test on one day and write a short paper in response to a writing prompt on another day. Administering the English Writing test as an online test will require significant changes in how the test is developed and administered. Initial planning for this eventual transition has been started by the Division of Student Assessment and School Improvement.



FINANCE

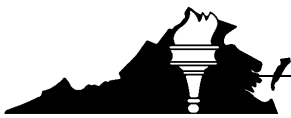
Financial support for year nine of Virginia’s Web-Based SOL Technology Initiative was generated by the Virginia Public School Authority’s sale of Series IX Technology Equipment Notes in May 2009. The proceeds resulted in approximately \$59,274,000 for school divisions to improve technology infrastructure. The additional funds increased the total statewide investment in technology infrastructure for the initiative to more than \$524,772,000.

Table 1 summarizes the annual investments to date based on an allocation of \$26,000 per school and \$50,000 per school division. This formula has remained constant since the start of the initiative.

Table 1. Annual Investment in the Web-Based Standards of Learning (SOL) Technology Initiative

Series #	Date of Issuance	Total Dollars Available to School Divisions
I	May 2001	\$57,248,000
II	May 2002	\$58,286,000
III	May 2003	\$58,390,000
IV	May 2004	\$58,728,000
V	May 2005	\$58,330,000
VI	May 2006	\$58,624,000
VII	May 2007	\$58,728,000
VIII	May 2008	\$59,170,000
IX	May 2009	\$59,274,000

All Web-Based SOL Technology Initiative funds awarded to school divisions are reimbursements for eligible technology expenditures. To be eligible, the appropriate division personnel must certify to the VDOE that all expenditures meet the criteria of one



or more of the four categories detailed in Table 2. This certification of expenditures is part of the Request for Reimbursement forms completed by divisions.

Table 2. Categories for Reimbursements

Category	Definition of Category
1. Classroom Multimedia Network Computers	Requests in this category include only the cost of the new computer system itself (e.g., monitor, CPU, keyboard, mouse, operating system software).
2. Internet-Ready Local Area Network (LAN) Capability	Requests in this category include costs related to networking, retrofitting, upgrading school buildings, and operating software related to Internet-ready local area network capability (e.g., wiring, servers, power upgrades).
3. High-Speed Access to the Internet	Requests in this category include costs related to networking, retrofitting, upgrading school buildings, and operating software related to providing high-speed Internet access (e.g., wiring, servers, power upgrades).
4. Instructional Software	Requests in this category shall not exceed 1/13 th of the amount spent on hardware in categories 1 through 3. Purchased software must have a useful life of at least one year and be included in the division's approved technology plan; this does not include software such as student information systems, network operating systems, and desktop operating system upgrades.

From the time technology equipment notes are issued, school divisions have approximately 18 months to complete eligible purchases and apply for reimbursements. Within that same time period, divisions are required to appropriate and utilize local matching funds for technology that total 20 percent of the annual allocation from the General Assembly; one-quarter of the 20 percent match must be dedicated to instructional technology training for division teachers.

Each year, the VDOE provides information to divisions regarding their funding allocations and the reimbursement process for eligible expenditures. Appendix A is the April 10, 2009, superintendent's memo with details of the Series IX technology equipment notes. It can also be found at:

http://www.doe.virginia.gov/info_centers/administrators/superintendents_memos/2009/096-09.shtml.



CERTIFICATION

The legislation creating the initiative stated that all Virginia public schools must become technologically capable of utilizing Web-based systems for instruction, remediation, and assessment. As the state agency responsible for implementing this legislation, the VDOE developed a process enabling divisions to certify schools that meet the minimum technological requirements.

The original legislation required divisions to certify high schools first, followed by middle schools, and finally elementary schools. Because of the focus on high schools, the process initially was called High School Readiness Certification. The process eventually was expanded to account for the technical capability at all school levels (elementary, middle, and high schools) and was renamed School Readiness Certification. The current School Readiness Certification process consists of three different levels:

- **Stage 1 Certification** allows divisions to self-certify when their schools meet the required specifications in the areas of (1) awareness and planning; (2) infrastructure; (3) computers and printers; and (4) wide area networks, local area networks, and network equipment and servers.
- **Stage 2 Certification** requires divisions to estimate the maximum volume of online SOL tests to be administered concurrently throughout the division. The division then verifies the technical capability of its infrastructure to support that volume. Utilizing the available financial resources (see Finance section), the divisions must upgrade their technology to support the necessary number of concurrent online tests across their division.
- **Stage 3 Certification** consists of a checklist of technology and assessment tasks to be completed prior to all online SOL test administrations. This certification is known more commonly as the *96-Hour Checklist*. The VDOE strongly encourages divisions to reference the checklist as a final readiness check 96 hours before starting each online SOL test administration. As a result, Stage 3 is the only certification level not required to be submitted with signatures to the VDOE.

Due to the nature of technology infrastructure and bandwidth, the School Readiness Certification is a cumulative process. All Virginia school divisions have fully certified their high schools at the three stages. As a result, the focus has shifted to middle and elementary schools. As divisions extend their technical capability downward to the middle school level, the overall infrastructure throughout each division must support both high school and middle school online activities. After achieving middle school certification, the technical capability must then be expanded to support elementary schools.



Some divisions are certifying their remaining schools simultaneously, with the understanding that middle schools must be certified before elementary schools. The School Readiness Certification includes most elements of the previous High School Readiness Certification process and a few significant changes.

First, the Stage 1 Readiness Checklist denotes higher minimum specifications for newly purchased technology equipment. Examples include faster minimum processor speeds and increased workstation memory.

Second, Stage 2 Certification requires a process for divisions to verify the technical capacity of their infrastructures. Divisions previously utilized the Load Test™ software application, developed by Pearson Educational Measurement. This application simulated the typical network load produced by a high school online test administration. While this software worked effectively for a small number of schools, it was unmanageable for simulating a typical network load produced by simultaneous online testing at multiple sites. The VDOE partnered with Pearson Educational Measurement to develop the Stage 2 Bandwidth Estimator Worksheet, which compiles data such as available bandwidth, bandwidth utilization, and number of computers used simultaneously for testing. These data are combined with the requirements for TestNav™, the online test-delivery software. Data calculations based on the worksheets determine if the existing technical resources can adequately conduct the specified level of simultaneous online testing. Beyond the certification process, divisions use the Stage 2 Bandwidth Estimator Worksheet to predict how network changes may affect the performance of online SOL testing.

Third, two procedural changes were implemented in the School Readiness Certification process. Divisions now complete their Stage 1 and Stage 2 certifications within the same document, thus streamlining the process and reducing paperwork. In addition, divisions now have the flexibility to certify multiple school levels at the same time. For example, a division that has achieved High School Readiness Certification may certify middle and elementary schools simultaneously if those schools are prepared. The division also can follow the original process of certifying middle schools first, followed by elementary schools. The VDOE added this flexibility to meet the varying needs of divisions.

Regardless of certification levels, the process still requires collaboration among various division personnel. The director of testing, director of technology, and Web-Based SOL Technology Initiative project manager play important roles in providing the information needed to complete the process. The division superintendent must approve and sign the final documentation before submitting it to the VDOE.

Since publication of the new School Readiness Certification process, 126 school divisions (95 percent) have achieved Middle School Readiness Certification; 93 of these (74 percent of the 126 divisions, or 70 percent of all divisions) have achieved Elementary School Readiness Certification. The deadline for divisions to certify middle schools was spring 2006; elementary schools were to be certified by spring 2009. As of January 15,



2009, the divisions listed in Table 3 had certified all their middle schools. As of July 9, 2009, the divisions listed in Table 4 had certified all their elementary schools.

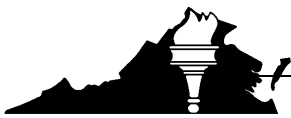


Table 3. School Divisions with Middle School Readiness Certification (126)

Accomack	Franklin County	Page
Albemarle	Frederick	Patrick
Alexandria	Fredericksburg	Petersburg
Alleghany	Galax	Pittsylvania
Amelia	Giles	Poquoson
Amherst	Gloucester	Portsmouth
Appomattox	Goochland	Powhatan
Arlington	Grayson	Prince Edward
Augusta	Greene	Prince George
Bedford	Greensville	Pulaski
Bland	Halifax	Radford
Botetourt	Hampton	Rappahannock
Bristol	Hanover	Richmond City
Brunswick	Harrisonburg	Richmond County
Buchanan	Henry	Roanoke County
Buckingham	Highland	Rockbridge
Buena Vista	Hopewell	Rockingham
Campbell	Isle of Wight	Russell
Caroline	King and Queen	Salem
Carroll	King George	Scott
Charles City	King William	Shenandoah
Charlotte	Lancaster	Smyth
Charlottesville	Lee	Southampton
Chesapeake	Lexington	Spotsylvania
Chesterfield	Louisa	Stafford
Clarke	Lunenburg	Staunton
Colonial Beach	Lynchburg	Suffolk
Colonial Heights	Madison	Surry
Covington	Manassas	Sussex
Craig	Manassas Park	Tazewell
Culpeper	Martinsville	Virginia Beach
Cumberland	Mathews	VSDB Staunton
Danville	Mecklenburg	Warren
Dickenson	Middlesex	Washington
Dinwiddie	Montgomery	Waynesboro
Essex	New Kent	Westmoreland
Fairfax County	Newport News	West Point
Falls Church	Norfolk	Williamsburg/James City
Fauquier	Northampton	Winchester
Floyd	Northumberland	Wise
Fluvanna	Nottoway	Wythe
Franklin City	Orange	York

**Table 4. School Divisions with Elementary School Readiness Certification
(93)**

Accomack	Frederick	Portsmouth
Alleghany	Fredericksburg	Powhatan
Amelia	Giles	Prince Edward
Amherst	Gloucester	Prince George
Appomattox	Goochland	Radford
Arlington	Greene	Richmond County
Augusta	Greensville	Roanoke County
Bath	Halifax	Rockbridge
Bland	Harrisonburg	Rockingham
Botetourt	Henry	Russell
Bristol	Highland	Salem
Brunswick	Isle of Wight	Scott
Buchanan	King and Queen	Shenandoah
Buckingham	King George	Smyth
Campbell	Lancaster	Southampton
Caroline	Lee	Spotsylvania
Charles City	Lexington	Stafford
Charlotte	Louisa	Staunton
Chesapeake	Lynchburg	Suffolk
Chesterfield	Madison	Surry
Colonial Beach	Manassas Park	Sussex
Covington	Martinsville	Tazewell
Craig	Mathews	VSDB - Staunton
Culpeper	Mecklenburg	Warren
Cumberland	Middlesex	Washington
Dickenson	Nelson	Waynesboro
Essex	Northampton	Westmoreland
Fairfax	Northumberland	West Point
Falls Church	Page	Winchester
Franklin City	Patrick	Wise
Franklin County	Poquoson	Wythe



TECHNOLOGY

The goal of the initiative is for divisions to use Web-based systems to improve the SOL instructional, remedial, and testing capabilities in their schools. Much of the required technology centers on infrastructure, specifically available bandwidth, consistency, and reliability of networks.

The 2008-09 academic year was the sixth year school divisions had access to the proctor-caching software for online SOL testing. This software maximizes a school's available bandwidth to the Internet by allowing the secure download of SOL test content prior to the actual test administration. Although students must log in and authenticate with Pearson servers via the Internet, proctor-caching software reduces the demand for bandwidth by enabling students to retrieve test content from a location within the school's network. As a result, students do not need the bandwidth to download content at the time of testing.

The VDOE continued emphasizing the performance benefits of the proctor-caching software and urged all divisions to either implement the software as part of a standard online testing configuration or ensure that other caching software or caching appliances in their networks provide the same benefits when downloading secure, encrypted SOL test content. The VDOE and Pearson provide training and support documentation for divisions that may experience staff turnover or could benefit from a review of how to configure and utilize the caching technology.

Even with full utilization of this software, unpredictable network slowdowns or complete network failures are possible when administering a statewide Web-based assessment program over the Internet. The disruptions experienced in spring 2007 were the types of problems that can occur with no advance notice. Although full protection is not possible, the VDOE and Pearson have collaborated over the last year to prevent interruptions and data loss during SOL test administrations.

The online system used to administer Virginia's SOL testing program is part of the PearsonAccess system maintained by Pearson. All online test administration activities conducted by division staff occur within PearsonAccess. Students taking online SOL tests interact with a client application called TestNav™, which communicates with PearsonAccess to receive and display SOL test content and then transfers student responses back to PearsonAccess for scoring. Communication between PearsonAccess and the TestNav™ client software installed on school computers occurs over the Internet. Successful administration of online SOL tests depends on the consistent performance of PearsonAccess, TestNav™, and each school's computers and technology infrastructure. Reliable Internet connectivity between Pearson and the individual schools is also necessary.



As part of the collaborative efforts by the VDOE and Pearson, the following actions, that were implemented previously, continued to create positive change during the 2008-09 school year:

- Pearson, with representatives from its various third-party technology vendors, conducted a large-scale review of system architecture. The review addressed all aspects of PearsonAccess, such as Web servers, application servers, database servers, network operating systems, and network hardware.
- The Basic Early Warning System (EWS) and Enhanced Early Warning System (EEWS) were integrated into a single improved solution called the Early Warning System (EWS). The new EWS significantly reduced the potential for students to be interrupted by on-screen messages during testing in the event of network connectivity problems.
- Pearson revised its TestNav™ software so the implementation and configuration of the EWS feature is a required installation step rather than an option. This prevented divisions from conducting online SOL testing without the EWS feature enabled.
- Pearson revised the user interface to produce more efficient system transactions and reduce overall response times for users. The most significant reductions were experienced by large school divisions with high numbers of student test records.
- System monitoring tools were expanded, and new monitoring components were added to provide a continuous and comprehensive view of PearsonAccess. These new and expanded tools improved Pearson's ability to recognize and respond to system issues proactively.
- Various Pearson staff members responsible for system monitoring were relocated to a newly expanded and permanent operations center in the Pearson facility. This single location significantly improved communications, increased efficiency of response, and improved visibility across all real-time system monitoring.

For purposes of tracking student data, the VDOE utilizes a unique state testing identifier (STI) in its Educational Information Management System (EIMS). The STI is a unique 10-digit number assigned to each Virginia public school student. If a student leaves the state and then returns to re-enroll, the student's original STI is reactivated. The VDOE requires inclusion of a valid STI on any assessment record submitted for online or paper/pencil tests. To guarantee each test record's authenticity, a student's last name, first name, gender, birthday, and STI must match exactly when the record is processed. If any of these fields differ, the record is flagged, and division staff must resolve the discrepancy before the test score will be reported. This ensures the accuracy and integrity of student data while enhancing the use of longitudinal assessment data in the instructional decision-making process.



The spring 2009 online test administration presented the highest volume of concurrent online SOL tests administered to date. At the highest volume, the PearsonAccess System supported the online delivery of more than 143,500 SOL tests in a single day; the highest number administered during a single week occurred in May 2009, when more than 615,000 SOL tests were completed online. More than 25,000 simultaneous SOL tests were administered online successfully on multiple occasions during spring 2009.



WEB-BASED ASSESSMENTS

The VDOE gradually increased the number of end-of-course (EOC) tests available online from fall 2001 through spring 2004. In 2005-06, the VDOE introduced online assessments in middle schools; in 2006-07, the agency expanded online testing at the middle schools and introduced the initiative in elementary schools (see Table 5).

Table 5. History of the Online SOL Test Implementation

Standards of Learning Test	Online Implementation Date
End-of-Course SOL Tests	
Algebra I	Fall 2001
Earth Science	Fall 2001
English: Reading	Fall 2001
Algebra II	Spring 2002
Biology	Spring 2002
Virginia & U.S. History	Fall 2002
World History I	Fall 2002
World History II	Fall 2002
Chemistry	Spring 2003
World Geography	Spring 2003
Geometry	Spring 2004
Middle School SOL Tests	
Grade 8 Science	Spring 2005
U.S. History to 1877	Spring 2005
U.S. History: 1877 to Present	Spring 2005
Civics & Economics	Spring 2005
Grade 8 Mathematics	Spring 2006
Grade 8 Reading	Spring 2006
Grade 7 Mathematics	Spring 2006
Grade 7 Reading	Spring 2006
Grade 6 Mathematics	Spring 2006
Grade 6 Reading	Spring 2006
Grade 8 Plain English Mathematics	Spring 2007
Grade 7 Reading	Spring 2007
Grade 7 Plain English Mathematics	Spring 2007
Grade 7 Mathematics	Spring 2007
Grade 6 Reading	Spring 2007
Grade 6 Plain English Mathematics	Spring 2007
Grade 6 Mathematics	Spring 2007
Elementary School SOL Tests	
Grade 5 Mathematics	Spring 2006
Grade 5 Reading	Spring 2006



Standards of Learning Test	Online Implementation Date
Grade 4 Mathematics	Spring 2006
Grade 4 Reading	Spring 2006
Grade 3 Mathematics	Spring 2006
Grade 3 Reading	Spring 2006
Grade 5 Science	Spring 2007
Grade 5 Reading	Spring 2007
Grade 5 Mathematics	Spring 2007
Grade 4 Reading	Spring 2007
Grade 4 Mathematics	Spring 2007
Grade 3 Science	Spring 2007
Grade 3 Reading	Spring 2007
Grade 3 Mathematics	Spring 2007
Grade 3 History & Social Science	Spring 2007
Virginia Studies	Spring 2007

Participation in Online Testing

In fall 2005, the number of divisions administering online SOL tests increased to include all 132 school divisions (see Figure 1). In addition, many divisions administered more online SOL tests (see Figure 2). Divisions still have the option of using paper/pencil tests, but the VDOE encourages them to administer tests online whenever possible. For students taking SOL tests in their senior year to earn sufficient verified credits for a diploma, online tests offer a much quicker return for results.

No divisions or schools have attempted online SOL testing and later decided to return to the traditional paper/pencil format.



Figure 1: Number of School Divisions Administering Online SOL Tests

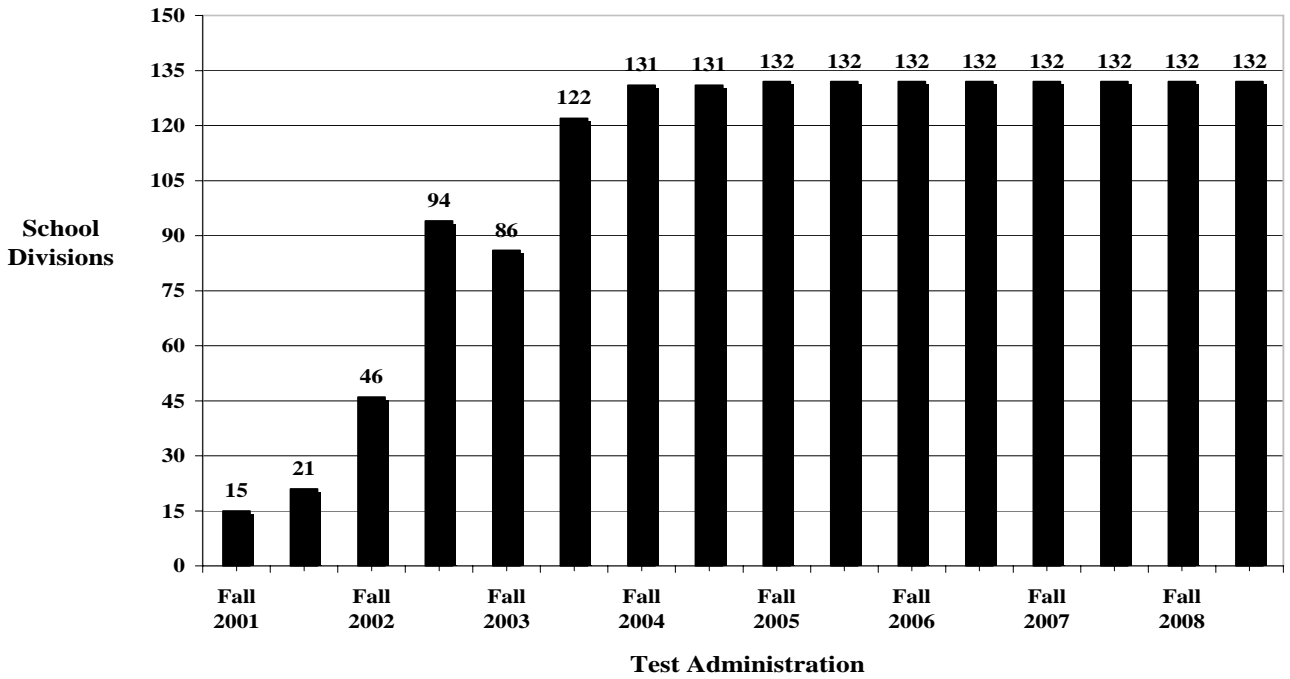
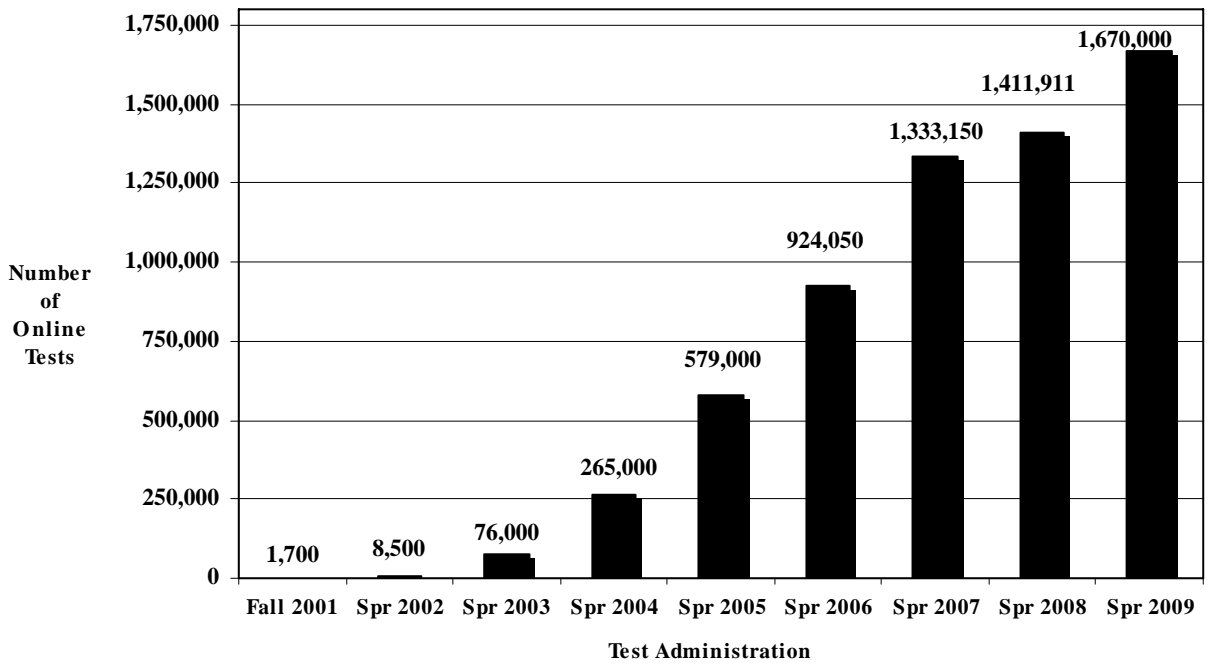
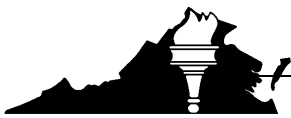


Figure 2: Number of Online SOL Tests Administered





Supporting Online Testing Participants

Pearson and the VDOE staff collaboratively provide support and training to division staff. A shared effort is necessary as training needs span various topics, such as the PearsonAccess system, SOL testing procedures, SOL assessment data, and state and federal assessment policies. Modes of delivery include Web-based training, face-to-face training at regional meetings and conferences, and written documentation.

Customer support, or the support of division staff, is another shared effort among Pearson and the VDOE staffs, who receive questions and requests for assistance in the form of telephone calls, e-mails, and interactions during face-to-face meetings. Divisions are provided with a toll-free telephone number and e-mail address to contact Pearson. All inquiries received by Pearson are entered into the Service Center database and assigned a case number for tracking purposes. Inquiries to the Service Center may be addressed by level 1 or 2 support or through escalation to members of the Virginia program team. The VDOE staff is accessible by telephone and e-mail, and inquiries are distributed to individual staff members for resolution.

A number of changes were implemented after the spring 2007 test administration and have continued to affect change for all divisions administering online assessments:

- Pearson initiated additional training regarding online-test-delivery technology. The topics targeted division technology staff and included areas such as PearsonAccess, TestNav[™], proctor caching, EWS, and optimal configurations of local hardware and software to deliver online tests.
- Subsequent training addressed the processes for entering participation counts; a review of procedures; amounts and types of test materials to be shipped; tracking initial orders, additional orders, and return shipments; reporting shipment issues (such as damaged or missing materials); and steps for accessing on-screen PearsonAccess reports to view historical data about previously ordered materials.
- PearsonAccess increased the types and availability of training and resource materials. Whenever possible, content was delivered via Web-based training, written guidance documents, or face-to-face presentations at regional meetings and conferences. All Web-based training sessions were recorded, produced as stand-alone training modules, and posted for download in PearsonAccess. More than 15 different training resources currently are available to division staff.
- The Virginia Assessment System status page was redesigned to highlight more clearly revised messages. The objectives of the status page were reiterated with each Division Director of Testing (DDOT) in training and regional meetings.
- The VDOE deployed a new Web-based DDOT resource. The password-protected DDOT page represents a single online location for announcements; schedules; and archived resources, such as e-mails sent by the VDOE and Pearson and



official testing memos issued by the VDOE.

- Pearson and the VDOE increased monitoring of all Service Center inquiries and responses. Pearson's and the VDOE's oversight ensures accurate and timely Service Center responses, identifies additional training needs, and recognizes potential system or policy issues.
- Pearson and the VDOE implemented a shared review of preauthored Service Center responses, called knowledge base articles. Pearson and the VDOE staff review and approve the accuracy of these articles before they are published. They also identify topics to be addressed and initiate the authoring of new knowledge base articles.

Increased Availability of Online Testing

With the planned growth of the Web-Based SOL Technology Initiative, the number of available online tests continues to increase. In 2006 and 2007, all middle school tests, except the grade eight cumulative History and Social Science test and the English: Writing tests, were available online. The grade eight cumulative History and Social Science test has been phased out and will no longer be administered; in its place, school divisions will administer the various content-specific history tests (online or paper/pencil).

The VDOE has started the process of transitioning the English: Writing test to an online environment. This test is administered in fifth and eighth grades and end-of-course (EOC) levels. A passing score on the EOC English: Writing test, or an equivalent substitute test, is required for graduation.

The type of technology and amount of hardware necessary must be considered since the direct writing portion of the English: Writing test currently is administered to all students in a division in a single day. Most divisions, however, do not possess enough computer workstations to test all their students in one day. As a result, divisions need options other than simply increasing the number of available workstations; possibilities include increasing the number of available writing prompts or introducing other challenges related to the scoring, equating, and scaling of student test results.



Appendix A



APPENDIX A

Superintendent's Memo #096-09



COMMONWEALTH of VIRGINIA
Department of Education

April 10, 2009

TO: Division Superintendents

FROM: Patricia I. Wright, Superintendent of Public Instruction

SUBJECT: Virginia Public School Authority (VPSA) Educational Technology Notes Series V, Series VI, Series VII, Series VIII, Series IX and Series X

The Virginia Public School Authority (VPSA) is conducting the ninth sale of equipment notes, Series IX. The proceeds from these notes provide the next installment of funds in the educational technology grant program, which provides support for school divisions to develop and implement the Standards of Learning (SOL) Web-based Technology Initiative. Funding for this program is targeted to achieve the following four goals:

1. Provide student access to computers at a ratio of one computer for every five students;
2. Create Internet-ready local area network capability in every school;
3. Assure adequate high-speed, high-bandwidth capability for instructional, remedial, and testing needs; and
4. Establish a statewide Standards of Learning test delivery system.

The VPSA is planning to sell the spring 2009 Educational Technology Notes, Series IX, on April 29, 2009, and to close on the notes deal on May 21, 2009. Proceeds of the Series IX notes will be made available for reimbursement of qualifying expenditures to localities following the scheduled closing on May 21, 2009.

There are a limited number of business days between the notes issuance date and the end of fiscal year 2009. Therefore, to ensure sufficient time to process the requests for payment, reimbursements that need to be received by school divisions by June 30, 2009,



must be received by the Department of Education electronically and the original signature page sent to the department by June 15, 2009. Please note that no requests for reimbursement may be processed until the note proceeds have officially been issued.

[Attachment A](#) to this memorandum lists the estimated local grant allocations for the Series IX VPSA note issue. These estimated allocations are based on the General Assembly's amendments, adopted on February 28, 2009, to the 2008-2010 biennial budget. Grants to school divisions for the Series IX notes are based on \$26,000 per eligible school and \$50,000 per school division. Eligible schools include those reporting fall membership as of September 30, 2008, as well as division and regional vocational, special education, and alternative education centers, academic year Governor's Schools, and the Virginia School for the Deaf and the Blind in the City of Staunton. Localities are required to provide a match of funds equal to 20 percent of the total grant amounts provided to the school division. At least 25 percent of the local match must be used for teacher training in the use of this technology. Regional centers and the school for the deaf and blind are not required to provide a 20 percent match to their grant amount.

Consistent with previous VPSA notes, payments to school divisions and regional centers will be on a reimbursement basis only. School divisions and regional centers must first complete payments for the qualifying equipment purchased and then file a Series IX reimbursement request with the Department of Education. School divisions and regional centers that adopted a reimbursement resolution and made expenditures prior to the issuance of the Series IX notes are required to certify that all reimbursements are qualifying reimbursements. School divisions and regional centers may not be reimbursed for qualifying expenditures incurred more than 60 days prior to the adoption of a reimbursement resolution. Please note that reimbursements for the Series IX issue for regional vocational, regional special education, Governor's Schools, and regional alternative education centers may be made directly to the regional centers through separate reimbursement accounts set up specifically for regional centers. School divisions will not be required to deposit the regional centers' share of the note proceeds in their account and then pass those proceeds on to the regional center.

The Series IX reimbursement request form is a downloadable Excel template. This file is available on the Department of Education's Web site at:

<http://www.doe.virginia.gov/VDOE/Technology/soltech/docs/ReimburseSpr09Series9.xls>

The Series IX reimbursement form includes certification provisions that incorporate federal and state requirements regarding capital expenditures that qualify for reimbursement. School divisions are primarily responsible for determining whether requests for reimbursement are permissible under federal and state requirements. School division officials should carefully read and initial the certification provisions to ensure that none of their reimbursement requests violate any of the stated provisions.



Divisions are not required to submit copies of supporting reimbursement documentation to the Department of Education because the reimbursement request form incorporates the certification provisions. However, copies of all supporting documents (invoices, work orders, statements, etc.) for which reimbursement is to be made must be retained by the school division for at least five years in the event an audit is required. All reimbursement requests for the VPSA Series IX notes issue must be made using the above-referenced Series IX form. The Department of Education will review the reimbursement request and, when approved, file the request on behalf of the school division (or regional program) with the Virginia State Non-Arbitrage Program (SNAP), which serves as the investment and account manager for the note proceeds. Please note that no reimbursement requests for the Series IX notes will be approved until all of the division's grant allocations from notes Series V (Spring 2005), Series VI (Spring 2006), Series VII (Spring 2007) and Series VIII (Spring 2008) are spent. Please see Attachments [B](#), [C](#), [D](#) and [E](#) to this memorandum that provide the Series V, VI, VII and VIII allocation balances, respectively, for each school division and regional program.

To improve information security, the department changed the reimbursement process for the VPSA Technology Notes beginning with the spring 2005 issuance. Earlier versions of the VPSA Technology reimbursement form provided a section for localities to enter their bank routing number and account number each time they requested a reimbursement. This section has been removed and all school divisions and regional programs will need to provide their bank routing number and account number directly to the State Non-Arbitrage Program (SNAP) before SNAP executes the actual payment of Notes proceeds to the school division or regional program.

[Attachment H](#) to this memo provides the SNAP VPSA Technology Notes Withdrawal Instructions form. If you need to make changes to wire instructions previously submitted to SNAP, please complete and sign Attachment H and return the form to SNAP prior to requesting any further reimbursements. The completed form should be faxed to Nelson Bush or Brad Lamb, SNAP representatives, at 1-800-252-9551. If you have not completed this form, the Department of Education will hold all requests for reimbursements until SNAP confirms receipt of your certified bank account information. SNAP will maintain all bank information and, if needed, will assist divisions who need to amend such information. If you have any questions regarding Attachment H, please contact Nelson Bush or Brad Lamb of SNAP at 1-800-570-SNAP.

Proceeds from the Series V, VI, VII, VIII and IX issues may not be used for middle schools until all high schools in your division have achieved Stage 2 High School Readiness Certification. See [Administrative Supts. Memo No. 27](#), dated May 17, 2002, for additional information on certification procedures. Also, the proceeds of the Series V, VI, VII, VIII and IX notes may not be used for elementary schools until all middle schools in your division have achieved Stage 2 Middle School Readiness Certification. Procedures for achieving all levels of school readiness certification are explained in the following document:



http://www.doe.virginia.gov/VDOE/Technology/soltech/docs/School_Readiness_Doc.pdf

The School Readiness Certification workbook is a downloadable Excel template. This file is available on the Department of Education's Web site at:

http://www.doe.virginia.gov/VDOE/Technology/soltech/docs/School_Readiness_Cert.xls

If expenditures for middle or elementary schools are submitted prior to achieving the appropriate certifications, those expenditures cannot be reimbursed until after the readiness certifications have been achieved.

Please submit all Series IX requests for reimbursement using the Series IX reimbursement request form referenced above. E-mail your completed request to Richard Schley at VPSA@doe.virginia.gov. In addition, please mail a signed copy of the reimbursement form to the following address:

Richard Schley
Office of Educational Technology
Virginia Department of Education
James Monroe Building 22nd Floor
101 North 14th Street
Richmond, VA 23219

No requests for reimbursement will be processed until the Department of Education has received both the electronic Series IX reimbursement request form and your signed hardcopy Series IX form with each certification initialed.

Educational Technology Notes, Series VIII (Spring 2008):

As initially announced in [Administrative Supts. Memo No. 11](#), dated April 11, 2008, the Series VIII notes were sold by the VPSA in May 2008. Proceeds of the Series VIII notes were available to school divisions for reimbursement of qualifying expenditures on and after the closing date of May 22, 2008. For grant allocations of Series VIII VPSA notes, see Attachment A to [Administrative Supts. Memo No. 11](#), dated April 11, 2008. All reimbursement forms for the Series VIII issue must be submitted to the department as soon as possible. No reimbursement requests for the Series IX notes will be approved until the division's Educational Technology Notes Series V, VI, VII and VIII note proceeds are spent. Attachment E to this memorandum provides the status of the Series VIII grant balances.

For divisions and regional programs that have not completed reimbursement of expenditures from the Series VIII VPSA notes, the procedures outlined in [Administrative Supts. Memo No. 11](#), dated April 11, 2008, should be followed, and the Series VIII reimbursement request form should be used. The Series VIII reimbursement request form is a downloadable Excel template available on the Department of Education's Web site



located at:

<http://www.doe.virginia.gov/VDOE/Technology/soltech/docs/ReimburseSpr08Series8.xls>

Educational Technology Notes, Series VII (Spring 2007):

As initially announced in [Administrative Supts. Memo No. 14](#), dated April 20, 2007, the Series VII notes were sold by the VPSA in May 2007. Proceeds of the Series VII notes were available to school divisions for reimbursement of qualifying expenditures on and after the closing date of May 24, 2007. For grant allocations of Series VII VPSA notes, see Attachment A to [Administrative Supts. Memo No. 14](#), dated April 20, 2007. All reimbursement forms for the Series VII issue must be submitted to the department as soon as possible. No reimbursement requests for the Series IX notes will be approved until the division's Educational Technology Notes Series V, VI, VII and VIII note proceeds are spent. Attachment D to this memorandum provides the status of the Series VII grant balances.

For divisions and regional programs that have not completed reimbursement of expenditures from the Series VII VPSA notes, the procedures outlined in [Administrative Supts. Memo No. 14](#), dated April 20, 2007, should be followed, and the Series VII reimbursement request form should be used. The Series VII reimbursement request form is a downloadable Excel template available on the Department of Education's Web site located at:

<http://www.doe.virginia.gov/VDOE/Technology/soltech/docs/ReimburseSpr07Series7.xls>

Educational Technology Notes, Series VI (Spring 2006):

As initially announced in [Administrative Supts. Memo No. 18](#), dated May 12, 2006, the Series VI notes were sold by the VPSA in May 2006. Proceeds of the Series VI notes were available to school divisions for reimbursement of qualifying expenditures on and after the closing date of May 25, 2006. For grant allocations of Series VI VPSA notes, see Attachment A to [Administrative Supts. Memo No. 18](#), dated May 12, 2006. All reimbursement forms for the Series VI issue must be submitted to the department as soon as possible. Richard Schley will be contacting school divisions with Series VI balances remaining in order to facilitate timely draw down of these funds. No reimbursement requests for the Series IX notes will be approved until the division's Educational Technology Notes Series V, VI, VII and VIII note proceeds are spent. Attachment C to this memorandum provides the status of the Series VI grant balances.

For divisions and regional programs that have not completed reimbursement of expenditures from the Series VI VPSA notes, the procedures outlined in [Administrative Supts. Memo No. 18](#), dated May 12, 2006, should be followed, and the Series VI reimbursement request form should be used. The Series VI reimbursement request form



is a downloadable Excel template available on the Department of Education's Web site located at:

<http://www.doe.virginia.gov/VDOE/Technology/soltech/docs/ReimburseSpr06Series6.xls>

Educational Technology Notes, Series V (Spring 2005):

As initially announced in [Administrative Supts. Memo No. 15](#), dated April 1, 2005, the Series V notes were sold by the VPSA in May 2005. Proceeds of the Series V notes were available to school divisions for reimbursement of qualifying expenditures on and after the closing date of May 25, 2005. For grant allocations of Series V VPSA notes, see Attachment A to [Administrative Supts. Memo No. 15](#), dated April 1, 2005. All reimbursement forms for the Series V issue must be submitted to the department as soon as possible. Richard Schley will be contacting school divisions with Series V balances remaining in order to facilitate timely draw down of these funds. No reimbursement requests for the Series IX notes will be approved until the division's Educational Technology Notes Series V, VI, VII and VIII note proceeds are spent. Attachment B to this memorandum provides the status of the Series V grant balances.

For divisions and regional programs that have not completed reimbursement of expenditures from the Series V VPSA notes, the procedures outlined in [Administrative Supts. Memo No. 15](#), dated April 1, 2005, should be followed, and the Series V reimbursement request form should be used. The Series V reimbursement request form is a downloadable Excel template available on the Department of Education's Web site located at:

<http://www.doe.virginia.gov/VDOE/Technology/soltech/docs/ReimburseSpr05Series5.xls>

Educational Technology Notes, Series X (Spring 2010):

The 2008-2010 biennial budget (House Bill 1600/Senate Bill 850, adopted by the 2009 General Assembly on February 28, 2009) includes funding to continue the educational technology notes program in fiscal year 2010 with debt service paid through the Literary Fund. The General Assembly-adopted budget includes Virginia Public Schools Authority (VPSA) equipment notes totaling approximately \$59.9 million in fiscal year 2010 to be issued in the spring of 2010.

The fiscal year 2010 budget maintains grant amounts at \$26,000 per eligible school (for K-12 schools reporting fall membership and for various division and regional programs) and \$50,000 per school division. A required local match is maintained at 20 percent of the state grant amount, and 25 percent of the required local match must be used for teacher training. The continuation of the VPSA initiative is intended to increase school divisions' capability for Web-based instruction, remediation, and testing of the Standards of Learning.



The fiscal year 2010 budget also updates the number of schools eligible for funding under the VPSA technology grants. Funding to school divisions for the VPSA technology grant program was increased by \$624,000 in fiscal year 2010 based on an anticipated increase in the number of reported schools in fiscal year 2010. [Attachment F](#) to this memorandum lists the estimated local grant allocations for the Series X note issue.

School divisions that have spent all of their Series V, Series VI, Series VII, Series VIII and Series IX note proceeds and that have adopted a reimbursement resolution for the Series X (Spring 2010) notes issue may make purchases in support of the Web-based SOL Technology Initiative to be reimbursed from Series X proceeds; however, please be aware that the note proceeds will not be available for reimbursement until after the closing of the notes sale, which will likely be in late spring 2010. Please be aware that, prior to incurring any costs, the local school board must state its intention to use the proceeds of the equipment notes to reimburse qualifying expenditures. This must be done through a reimbursement resolution adopted by the local school board. A sample resolution is provided as [Attachment G](#) to this memorandum. Please note that divisions may not reimburse themselves for project-related expenditures incurred more than 60 days prior to the adoption of the resolution.

If you have questions relating to the financing or determination of qualifying reimbursements, please call the budget staff at (804) 225-2025. If you have questions relating to qualifying equipment that may be purchased from the VPSA note proceeds (i.e., hardware, software), please call Richard Schley in the Office of Instructional Technology at (804) 371-6882.

PIW / bkl

Attachments

- a. [Series IX VPSA Notes Issue Local Grant Allocation](#) (PDF)
- b. [Series V VPSA Notes Issue Local Grant Balances](#) (PDF)
- c. [Series VI VPSA Notes Issue Local Grant Balances](#) (PDF)
- d. [Series VII VPSA Notes Issue Local Grant Balances](#) (PDF)
- e. [Series VIII VPSA Notes Issue Local Grant Balances](#) (PDF)
- f. [Series X VPSA Notes Issue Estimated Local Grant Allocation](#) (PDF)
- g. [Sample Reimbursement Resolution](#) (PDF)
- h. [SNAP VPSA Technology Notes Withdrawal Instructions](#) (PDF)