Report by the
Department of Education and
Virginia Information Technologies Agency

A Statewide Web-based Standards of Learning Technology Initiative

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To the Chairmen of the Senate Finance and
House Appropriations Committee

COMMONWEALTH OF VIRGINIA
RICHMOND
SEPTEMBER 1, 2006

COMMONWEALTH of VIRGINIA

DEPARTMENT OF EDUCATION
P.O. Box 2120
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September 13, 2006

The Honorable Timothy M. Kaine
Governor of Virginia
Patrick Henry Building, 3rd Floor
111 East Broad Street
Richmond, Virginia 23219

Dear Governor Kaine:

I am pleased to transmit the attached status report, *A Web-based Standards of Learning Technology Initiative*, as required by Item 135 C.14.h. of the 2006 Appropriations Act (Special Session I, 2006).

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

Sincerely,

Billy K. Cannaday, Jr.

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BKCJr/slm

Attachment

cc: The Honorable John H. Chichester, Senate Finance Committee
The Honorable Vincent F. Callahan, Jr., House Appropriations Committee

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The Senate of Virginia
General Assembly Building, Room 626
Richmond, Virginia 23219

The Honorable Vincent F. Callahan, Jr.
Chairman, House Appropriations Committee
The House of Delegates of Virginia
General Assembly Building, Room 947
Richmond, Virginia 23219

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Annual Report
September 2006

Executive Summary

Web-based Standards of Learning Technology Initiative

Executive Summary

Virginia's Web-based Standards of Learning (SOL) Technology Initiative is beginning its seventh year of implementation. Its goal is for 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

As detailed in previous annual reports, the Virginia Department of Education (DOE), with assistance from the Virginia Information Technologies Agency (VITA), implemented a formal project management structure at the outset to ensure successful project completion. The DOE still employs that structure while guiding school divisions toward completion of the four objectives.

Financial Support for the Initiative

Funding for year six was generated by proceeds from the Series VI Technology Equipment Notes, sold by the Virginia Public School Authority (VPSA) in May 2006. As a result, school divisions had access to approximately $58,600,000 to improve technology infrastructure. These funds increased the total statewide investment in technology infrastructure for the initiative to more than $347,600,000.

Table 1 shows a summary of 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	Percent Expended by School Divisions (as of August 2006)
I	May 2001	$57,248,000	100%
II	May 2002	$58,286,000	100%
III	May 2003	$58,390,000	100%
IV	May 2004	$58,728,000	98.9%
V	May 2005	$58,330,000	82.0%
VI	May 2006	$58,624,000	30.8%

Achieving Readiness for the Web-based SOL Technology Initiative

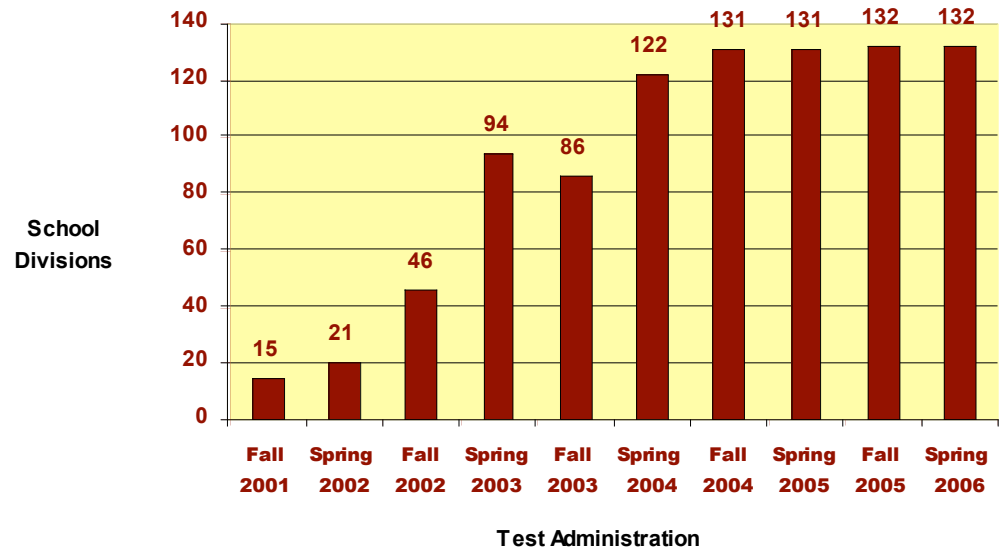
The Commonwealth launched the initiative in July 2000 and introduced preliminary architectural guidelines for high schools in January 2001 followed by permanent guidelines in July 2001. In 2004, the certification procedures were revised to include middle and elementary schools, higher minimum specifications 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.

All 132 Virginia school divisions have achieved the first two stages of High School Readiness Certification. As of August 2006, 97 divisions (73 percent) have attained Middle School Readiness Certification; 42 of these (32 percent of all divisions) have realized Elementary School Readiness Certification. The specific divisions with Middle School and Elementary School Readiness Certification are listed in Chapter 2.

School Division Participation

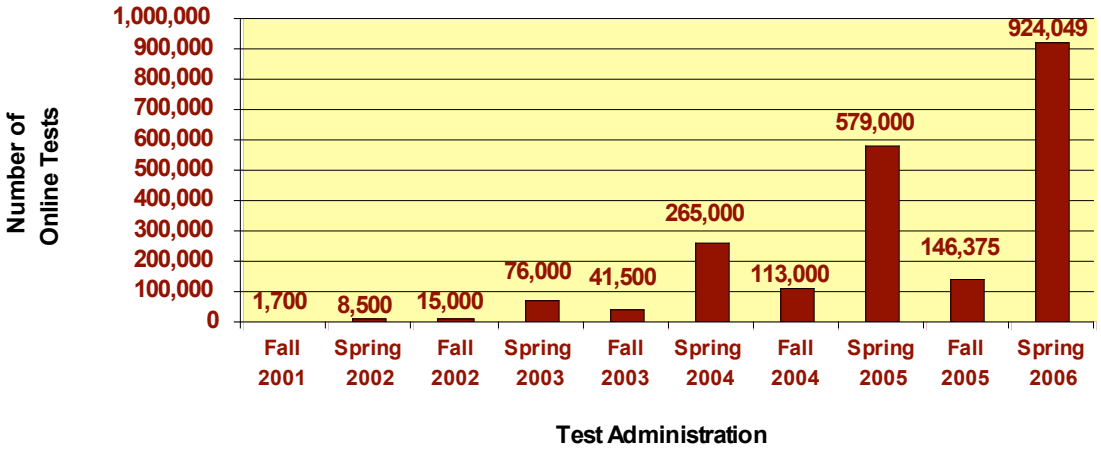
All 132 divisions use state funding to upgrade technical infrastructure, improve student-to-computer ratio, and achieve School Readiness Certification. All divisions participated in the 2006 SOL online testing. Since the first online test administration in fall 2001, the number of divisions participating in End-of-Course (EOC) online SOL testing has increased (see Figure 1).

Figure 1. Number of School Divisions Administering Online SOL Tests



In spring 2006, divisions administered significantly more online SOL tests (see Figure 2). While divisions still have the option of using paper/pencil tests, the DOE encourages them to administer their SOL tests online. Divisions that implement online SOL testing typically request permission to administer additional online tests at the next opportunity.

Figure 2. Number of Online SOL Tests Administered



Increased Availability of Online Testing

Over the course of the initiative, the number of online tests has continually increased (see Table 2). In spring 2006, all middle school tests except the eighth-grade History and Social Science Test were available online. The History and Social Science Test will not be posted online due to the declining number of school divisions administering it.

Table 2. Schedule of Online Test Administration

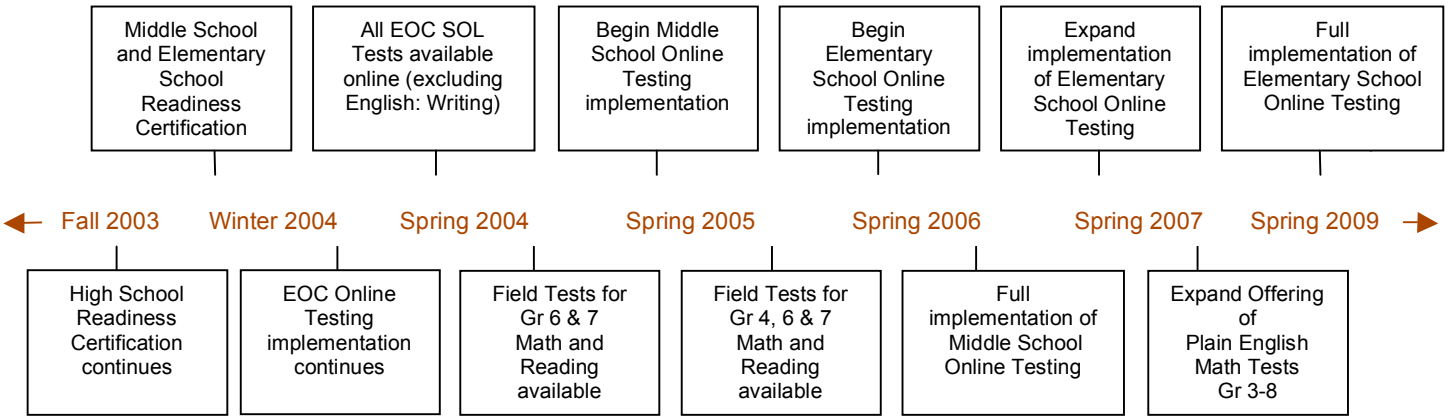
Standards of Learning Test	Online Implementation Date
End-of-Course SOL Tests	
Algebra I	Fall 2001
Earth Science	Fall 2001
English: Reading	Fall 2001
Algebra II	Spring 2002
Biology	Spring 2002
Virginia & U.S. History	Fall 2002
World History I	Fall 2002
World History II	Fall 2002
Chemistry	Spring 2003
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

The DOE has developed new tests to meet the No Child Left Behind (NCLB) mandate of conducting annual reading and mathematics assessments for all students in grades three through eight. Expanding on last year's online test offerings, the DOE placed online the new Mathematics and Reading tests for grades three through eight in spring 2006.

Future Activities

Implementation of the Web-based SOL Technology Initiative continues to progress as initially planned. Figure 3 shows a high-level timeline of the initiative as planned through spring 2009.

Figure 3. High-Level Timeline of the Web-based SOL Technology Initiative through Spring 2009



Feedback from school division personnel indicates the volume of online SOL tests will continue to increase in the coming year. The DOE will support and monitor the School Readiness Certification process as divisions prepare middle and elementary schools for technical certification.

Report Format

The remainder of this report addresses specific elements of the initiative implementation. Each chapter provides additional details regarding information presented in the Executive Summary.

Annual Report
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Chapter 1
Finance

CHAPTER 1

FINANCE

Financial support for year six of Virginia's Web-based SOL Technology Initiative was generated by the Virginia Public School Authority's sale of Series VI Technology Equipment Notes in May 2006. The proceeds resulted in approximately $58,600,000 for school divisions to improve technology infrastructure. The additional funds increased the total statewide investment in technology infrastructure for the initiative to more than $347,600,000.

Table 3 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 3. Annual Investment in the Web-based Standards of Learning (SOL) Technology Initiative

Series #	Date of Issuance	Total Dollars Available to School Divisions	Percent Expended by School Divisions (as of August 2006)
I	May 2001	$57,248,000	100%
II	May 2002	$58,286,000	100%
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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 DOE that all expenditures meet the criteria of one or more of the four categories detailed in Table 4. This certification of expenditures is part of the Request for Reimbursement forms completed by divisions.

Table 4. Categories for Reimbursements

Category	Definition of Category
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).
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).
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 access to the Internet (e.g., wiring, servers, power upgrades).
Instructional Software	Requests in this category shall not exceed 1/13th of the amount spent on hardware in categories 1 through 3. Software purchased must have a useful life of at least one year and be included in the division's approved technology plan; software such as student information systems, network operating systems, and desktop operating system upgrades are not included.

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 DOE provides information to divisions regarding their funding allocations and the reimbursement process for eligible expenditures. On May 12, 2006, the DOE published a superintendent's memo with details of the Series VI technology equipment notes: http://www.doe.virginia.gov/VDOE/suptsmemos/2006/adm018.html.

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Chapter 2
Certification

CHAPTER 2

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 DOE developed a process enabling divisions to certify schools that meet the minimum technological requirements.

The original legislation required divisions to certify their high schools first, followed by their middle schools, and finally their elementary schools. Because of the initial focus on high schools, the process was first 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 Chapter 1), 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 DOE strongly encourages divisions to reference the checklist as a final readiness check 96 hours (four days) 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 DOE.

Due to the nature of technology infrastructure and bandwidth, the School Readiness Certification is a cumulative process. Each division initiated the process by certifying their high schools. As divisions extend their technical capability downward to the middle school level, the overall infrastructure throughout each division must be built to support both high school and middle school online activities. After achieving middle school certification, the technical capability must be expanded to then support the elementary schools in addition to the middle and high schools.

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 during the past year.

Some divisions are certifying all school levels simultaneously, with the understanding that high schools must be certified first, then middle schools, and finally 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 new process for divisions to verify the technical capacity of their infrastructure. 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 DOE 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 have been 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 can follow the original process of certifying middle schools first, followed by elementary schools. The DOE added this flexibility to meet the varying needs of divisions.

Regardless of certification levels, the process still requires collaboration from 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 DOE.

Since publication of the new School Readiness Certification process, 97 school divisions (73 percent) have achieved Middle School Readiness Certification; 42 of these (43 percent of the 97 divisions, or 32 percent of all divisions) have achieved Elementary School Readiness Certification. The deadline for divisions to certify middle schools was spring 2006; elementary schools must be certified by spring 2009. As of August 7, 2006, the divisions listed in Tables 5 and 6 had certified all their middle and elementary schools.

Table 5. School Divisions with Middle School Readiness Certification (97)

Accomack	Franklin City	Northumberland
Albemarle	Franklin County	Nottoway
Alleghany	Frederick	Orange
Amelia	Fredericksburg	Page
Amherst	Galax	Poquoson
Appomattox	Giles	Portsmouth
Bedford	Gloucester	Powhatan
Bland	Goochland	Prince Edward
Botetourt	Greene	Prince George
Bristol	Halifax	Pulaski
Brunswick	Hampton	Radford
Buchanan	Harrisonburg	Richmond City
Buckingham	Henry	Richmond County
Buena Vista	Hopewell	Rockingham
Campbell	Isle of Wight	Russell
Caroline	King George	Salem
Carroll	King William	Scott
Charles City	Lancaster	Shenandoah
Charlotte	Lee	Southampton
Charlottesville	Louisa	Spotsylvania
Chesapeake	Lynchburg	Staunton
Chesterfield	Madison	Suffolk
Colonial Beach	Manassas	Surry
Colonial Heights	Manassas Park	Tazewell
Covington	Martinsville	Virginia Beach
Culpeper	Mathews	Warren
Danville	Mecklenburg	Westmoreland
Dickenson	Middlesex	Williamsburg/James City
Dinwiddie	Montgomery	Winchester
Essex	New Kent	Wise
Fairfax County	Newport News	Wythe
Fauquier	Norfolk	
Floyd	Northampton	

Table 6. School Divisions with Elementary School Readiness Certification (42)

Accomack	Giles	Prince Edward
Appomattox	Goochland	Radford
Brunswick	Halifax	Richmond County
Bland	Harrisonburg	Russell
Bristol	Henry	Scott
Brunswick	King George	Shenandoah
Campbell	Lancaster	Spotsylvania
Caroline	Lee	Suffolk
Charles City	Louisa	Tazewell
Charlotte	Madison	Warren
Dickenson	Martinsville	Wise
Franklin City	Mathews	Wythe
Franklin County	Northumberland	
Frederick	Page	
Fredericksburg	Poquoson	

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Chapter 3
Technology

CHAPTER 3

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 2005-2006 academic year was the third full year school divisions had access to the proctor-caching software with online SOL testing. The DOE continued emphasizing the performance benefits of the proctor-caching software and urged all divisions to implement it as part of their standard online testing configurations. Most divisions now use the software on a regular basis.

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. Although full protection is not possible, the DOE has worked diligently to prevent data loss during online testing. The first effort was the Early Warning System (EWS), piloted in spring 2004.

Built into the TestNav application, the EWS alerted students to contact the test administrator when an Internet interruption occurred. The EWS displayed an electronic copy of the student's test answers and information about which answers had been transmitted and saved. The administrator could print the student's responses and attempt to reestablish an Internet connection. If the problem was localized to one computer, the student could log into another computer, reenter answers from the printed page, and continue taking the test. If the problem was more widespread, such as a failure of the school's Internet connection, the EWS enabled test administrators to print or record all students' responses. Based on the anticipated downtime, administrators could decide how to proceed.

In spring 2005, Pearson Educational Measurement and the DOE piloted the Enhanced Early Warning System (EEWS), an upgraded version of the EWS. In the event of a network failure, the EEWS saves answers to a student's workstation. When the connection is reestablished, the responses are transmitted to the eMeasurement servers for scoring. School divisions piloting EEWS in spring 2005 were pleased with the results; the DOE fully deployed the system in spring 2006.

The spring 2006 online test administration presented the highest volume of concurrent tests to date within the eMeasurement System. No degradation of system performance was observed during peak testing times. At the highest volume, the eMeasurement System delivered more than 69,000 tests in a single day. The highest number of online tests occurred during a single week in May 2006, when 280,945 tests were administered. At least 20,000 simultaneous tests were administered on multiple

occasions with no observable impact on the system-monitoring utilities. The statistics are encouraging and reflect the eMeasurement System's ability to handle the increased volume of online testing expected in spring 2007.

During the 2005-2006 school year, the DOE implemented a unique statewide testing identifier (STI) in its Educational Information Management System (EIMS). The DOE required that the STI be provided on all assessment records submitted for both online and paper/pencil tests. This further ensured the accuracy and integrity of student data while enhancing the use of longitudinal assessment data in the instructional decision-making process.

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Chapter 4
Web-based Assessments

CHAPTER 4

WEB-BASED ASSESSMENTS

The DOE gradually increased the number of End-of-Course (EOC) tests available online from fall 2001 through spring 2004. In 2005, the DOE introduced online assessments in the middle schools and in 2006, the agency expanded online testing at the middle schools and introduced the initiative at the elementary school levels (see Table 7).

Table 7. 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
Elementary School SOL Tests	
Grade 5 Mathematics	Spring 2006
Grade 5 Reading	Spring 2006
Grade 4 Mathematics	Spring 2006
Grade 4 Reading	Spring 2006
Grade 3 Mathematics	Spring 2006
Grade 3 Reading	Spring 2006

Participation in Online Testing

In spring 2006, the number of divisions administering online SOL tests increased to include all 132 (see Figure 4). In addition, many divisions administered more online SOL tests (see Figure 5). Divisions still have the option of using paper/pencil tests, but the DOE encourages them to administer their SOL tests online. Divisions that implement online SOL testing typically request permission to administer additional online tests at the next opportunity. No school divisions have attempted online SOL testing and later decided to return to the traditional paper/pencil format.

Figure 4. Number of School Divisions Administering Online SOL Tests

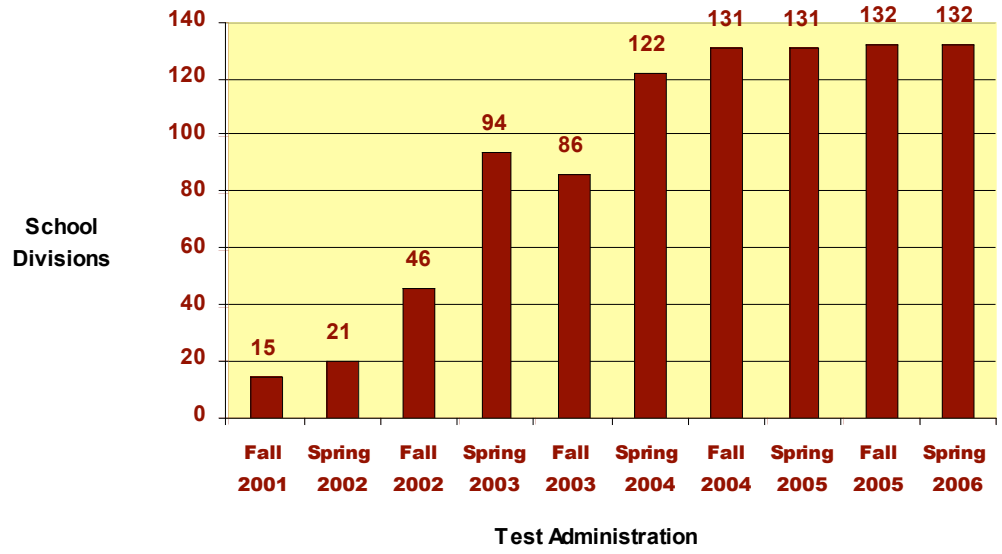
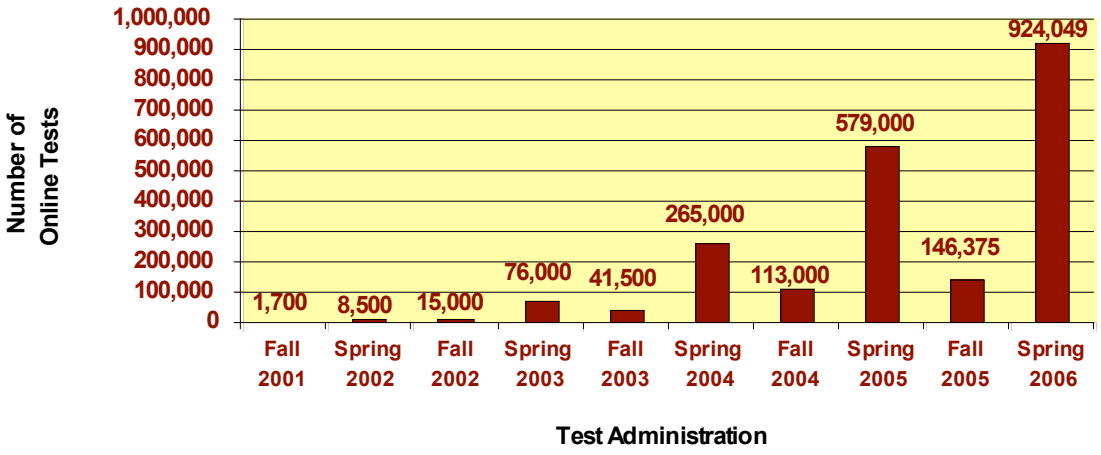


Figure 5. Number of Online SOL Tests Administered



Supporting Online Testing Participants

With the increase in participating divisions and online SOL testing, the DOE and Pearson Educational Measurement continually have reevaluated technical assistance needs. Above all, the most needed training topics relate to the eMeasurement System and online assessment policies and procedures.

Since the beginning of the initiative, the DOE has provided hands-on training for division personnel prior to each scheduled SOL test administration (fall, spring, and summer). Even divisions that previously have administered online SOL tests will request to participate. The DOE staff members conduct the approximate 3.5-hour sessions regionally throughout the state. The sessions include a slide presentation and an extensive opportunity for participants to use computers, guided by a trainer and training workbook. Each participant receives handouts of the slide presentation, training workbook, copies of *eMeasurement User's Guide* and *End-of-Course Web-based Testing Manual*, and a comprehensive set of checklists to be accomplished during the test administration. Other DOE training materials address various assessment policies and procedures, including the documents *Mark Test Complete Guidelines*, *Online Reporting: Getting your Online Test Scores*, and *Online Resources*. All resources, including PowerPoint presentations, are available online at http://etest.ncs.com/Customers/Virginia/vasol/resources.htm.

In addition, the DOE offers a training session specifically for the division staff responsible for technical aspects of administering online tests. Training topics include hardware and software configurations, bandwidth management, and network configurations. During these sessions, technology staff members watch a slide presentation and configure workstations for various types of online testing scenarios. Participants receive the *eMeasurement Infrastructure Guidelines* and *Proctor Caching Guidelines* along with handouts provided during the assessment training (e.g., training workbook, *eMeasurement User's Guide*).

The documents for each test administration are updated and posted on the Internet. The DOE uses a central e-mail address (esol@doe.virginia.gov) to notify division personnel, specifically the director of testing and director of technology or project manager, about the posted documents. This has helped reduce the volume of phone calls requesting information.

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 spring 2006, all middle school tests were available online except eighth-grade History and Social Science. Due to the declining number of school divisions administering this test, it will not be made available online.

The DOE developed new tests to meet the No Child Left Behind (NCLB) mandate of conducting annual reading and mathematics assessments for all students in

grades three through eight. Expanding on last year's online test offerings, the DOE made the new Mathematics and Reading tests for grades three through eight available online in spring 2006.

Table 8 indicates the additional SOL tests being made available for the 2007 online test administration.

Table 8. Planned Schedule for Online Test Implementation

Standards of Learning Test	Online Implementation Date
Elementary School SOL Tests	
Grade 3 History	Spring 2007
Grade 3 Science	Spring 2007
Grade 5 History	Spring 2007
Grade 5 Science	Spring 2007

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Chapter 5
Instructional Software

CHAPTER 5

INSTRUCTIONAL SOFTWARE

The goal of the initiative is to use Web-enabled systems to improve instruction, remediation, and testing capabilities in Virginia schools. One of the objectives is to make up-to-date instructional and remedial software applications available for teachers and students.

As part of the initiative, the DOE hosts a Web page of instructional software reviews written by Virginia teachers, who have selected the software for their divisions to purchase. The reviews are posted at http://www.doe.virginia.gov/VDOE/Technology/softwarereview.html.

During the past year, divisions continued using the Electronic Practice Assessment Tool (ePAT), a stand-alone version of the TestNav™ application into which Pearson Educational Measurement has loaded previously released SOL test items. The benefits of ePAT are twofold. First, students can study subject-area content by reviewing and answering previously released SOL test items. Second, students become familiar with the test items in the same type of environment as the online SOL tests. ePAT incorporates the same tools, reflecting the look and feel of live SOL testing. Students peruse the multiple-choice test items and click on a tool bar to select answers. A separate browser window displays all answer choices, indicates the correct answer, and explains why each is correct or incorrect. The student then proceeds to the next question.

School divisions also use the application as a remediation tool for students who need to retake a recently failed test. The software has been used widely as one of the remediation tools in the Project Graduation program. The application is available for free download at http://etest.ncs.com/Customers/Virginia/pat_home.htm.

The DOE also assists divisions with educational software procurement. In collaboration with the WHRO Ed Tech Consortium, the DOE works with the MiCTA Service Corporation (MSC)/American TelEd Communication Alliance (AT Alliance) to secure reduced prices on software approved by the state Board of Education for remediation and instruction.

Several online workshops are planned for presentation during the 2006-2007 school year. The sessions will focus on SOL-aligned electronic resources and activities for instruction and remediation.

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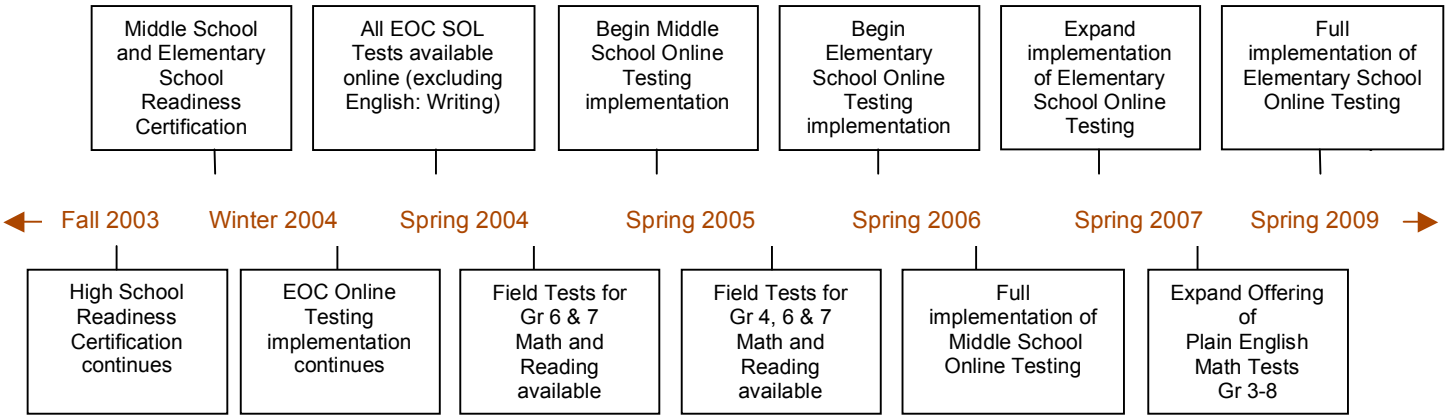
Chapter 6
Future Activities

CHAPTER 6

FUTURE ACTIVITIES

Implementation of the Web-based SOL Technology Initiative continues to progress as initially planned. Figure 6 shows a timeline of activities planned through spring 2009.

Figure 6. High-Level Timeline of the Web-based SOL Technology Initiative through Spring 2009



Spring 2004 was the deadline for (1) all Virginia high schools to be capable of conducting online SOL testing and (2) all EOC SOL tests to be available online. By that time, all school divisions had attained Stage 1 High School Readiness Certification, and 98 percent had completed Stage 2 certification. The 11 EOC SOL tests were available online to school divisions during the spring 2004 test administration.

The next significant milestone was spring 2006, by which time all middle schools were to be capable of administering online tests and all middle school tests were to be available online. In spring 2005, the DOE offered divisions their first opportunity to administer live SOL tests at middle schools. In spring 2006, all middle school SOL tests, with the exception of eighth-grade History and Social Science, were available for online administration.

Spring 2006 also marked the first time school divisions could administer online elementary school tests. The new mathematics and reading grade-level assessments required by NCLB were offered online in grades three through eight. Thirty-four divisions administered online assessments at grade five or below in spring 2006. The number of online elementary school tests is expected to increase in spring 2007.

In addition to expanded online test offerings in the 2006-2007 academic year, the DOE will complete the transition to a new statewide assessment contract, which will include greater reliability on technology for paper/pencil and online test administration. For example, assessment data for all student records will be entered into a Web-based test administration system regardless of whether the students are tested online or by paper/pencil. Divisions will be able to upload student data electronically, which will readily facilitate data transfer from local student information systems to the assessment system. With this Web-based administration system, divisions no longer will need to record student demographic information manually on a paper/pencil answer document with a number-two pencil.

Once student assessment data has been entered into the new Web-based test administration system, division personnel may review and revise the data before, during, and after testing by accessing a Web-based system. These options were not previously available with paper/pencil assessments.

The new assessment contract will implement technology that enhances access to assessment data and scoring after testing. The new system will significantly reduce elapsed time between administering paper/pencil tests and receiving the associated score reports. All information will be downloadable from a secure Web-based system after completion of the tests and scoring.

The Web-based SOL Technology Initiative project team will continue to collaborate with the project team responsible for developing and implementing the Educational Information Management System (EIMS). Joint meetings have helped both project teams establish and deploy standardized data definitions for all student information. This shared awareness enables the DOE to deliver a consistent, unified message to school divisions.