This report, based on a survey completed by testing directors in states that are members of the Southern Regional Education Board (SREB), describes the status of online testing in SREB states. Overall, SREB states are paying limited attention to online testing. Only Virginia is moving systematically to implement online testing. By spring 2004, all Virginia high schools must be able to use online testing. Several SREB states, including Delaware and Kentucky, are conducting pilot tests to study the potential of online testing. Texas has one online assessment, algebra. Mississippi uses some online testing for students who need to make up examinations, and Maryland and North Carolina are using computerized adaptive testing that is designed to meet the needs of disabled students. Some states outside the SREB region are addressing online testing, with Idaho, Indiana, and Oregon leading in this effort. The experience of Virginia shows steady progress toward the goal of having all students able to take the state's Standards of Learning tests online by spring 2004. A summary of state responses to questions about online testing is included. (SLD)
Status of Online Testing in SREB States

William R. Thomas

March 2003

Southern Regional Education Board

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Status of Online Testing in the SREB States

Most educational leaders agree that the idea of replacing paper-and-pencil accountability tests with online tests holds considerable promise. Even so, only a few SREB states and other states nationally are developing programs to use online testing. What is the potential value of online testing? Why are states reluctant to pursue its use more aggressively? States need to consider these questions as they look to improve the ways they measure students’ academic success.

What is the potential value of online testing in replacing pencil-and-paper high-stakes tests and accountability assessments?

Online testing offers several benefits:

- **Rapid reporting to schools** — One major disadvantage to pencil-and-paper testing is the time required to process the results and report them to schools. Decision-makers need to know the results of high-stakes tests quickly. Online testing offers results substantially faster than does the traditional testing method.

- **Ease of use by students** — Students are accustomed to using computers for many purposes. Several states have found that students prefer taking online tests rather than filling in circles on papers. Students say the online tests are more “user-friendly.”

- **Improvements in the state and local management of the testing program** — It is time-consuming and laborious to monitor, distribute, collect and store large volumes of pencil-and-paper tests. Once in place, an online testing program eliminates many of these logistical issues.

- **Improvements in test security through encryption and other procedures** — Carefully planned online testing can be far more secure than traditional testing.

- **Alternative forms of tests for disabled students and other student populations** — Online testing can improve the way that disabled students receive and respond to test questions. Online testing also can be modified to meet the needs of English as a Second Language students and students with unique test-taking needs.

- **Potential cost savings after the first few years** — Printing, distributing and managing large quantities of tests are expensive. Online testing eliminates much of these costs, but installing and managing an online testing program also are costly. There has been too little experience with online testing to determine its initial and ongoing costs.
Why are states reluctant to use online testing as part of their accountability systems?

There often is no single answer to this question. States cite several concerns:

- **Lack of information about how online testing works and what it takes to make it succeed** — While some states are planning or pilot-testing programs, no state has used online testing long enough to serve as a model.

- **The apparent complexity of online testing** — Successful online testing requires a coordinated effort by personnel who work with testing, technical and training support, and management.

- **Security and confidentiality** — Security is not a problem if states work closely with testing and technical organizations.

- **Cost** — There are significant costs involved in implementing online testing systems and maintaining them in the early years.

- **Technology's ability to deliver testing successfully** — Several states, including Virginia, have shown that well-planned and well-implemented technology is more than adequate to provide online testing successfully.

- **Test questions must be multiple-choice or single-response (including true-and-false) questions** — While it is true that online tests are limited to these types of questions, most high-stakes tests focus on such questions anyway.

What is the status of online testing?

SREB states are paying limited attention to online testing. One SREB state, Virginia, is moving systematically to implement online testing. By spring 2004 all Virginia high schools must be able to use online testing. Several SREB states — including Delaware and Kentucky — are conducting pilot tests to study the potential of online testing. Texas has one online assessment (algebra). Mississippi uses some online testing for students who need to make up exams. Maryland and North Carolina are using “computer-adaptive testing” that is designed to meet the unique needs of disabled students.

Some states outside of the SREB region — including Idaho, Indiana and Oregon — are addressing online testing, and South Dakota recently stopped its exploration of online testing. In fall 2002 thousands of second- through 10th-graders in Idaho took the new standards-based state tests online. Idaho promotes this approach to provide “an assessment system that would provide data — first and foremost — to improve instruction, which, in turn, would improve accountability.” Indiana says online testing has shortened by 45 percent the turnaround time for receiving results. Indiana also is testing software that grades essays online. Oregon has piloted tested online testing with more than 6,000 third- through 10th-graders. Oregon's online testing
is unique because it “adapts” to the student’s responses: The difficulty of subsequent questions is based on whether the student answers a question correctly or incorrectly. This method helps teachers design instruction to meet students’ individual needs. South Dakota, until recently, was a leader in online testing, but the state moved from a norm-referenced test (the Stanford Achievement Test) to a criterion-referenced test (the Dakota Test of Educational Progress) that is not available online. All students will use pencils and paper when they take the Dakota Test of Educational Progress this spring. The state expects to resume online testing eventually.

A summary of SREB states’ actions related to online testing appears at the end of this report.

What is Virginia’s experience with online testing?

In 2000 Virginia began funding the Virginia Standards of Learning Technology Initiative, a large-scale project to help school divisions improve student achievement through the use of statewide, Web-based resources. The initiative, which is beginning with Virginia’s high schools, includes funding to achieve three goals:

1. provide one computer for every five students;
2. make every school capable of using an Internet-ready local area network; and
3. ensure high-speed, high-bandwidth capabilities for instructional, remedial and testing needs.

Achieving these goals will mean that all high school seniors can take their Standards of Learning tests online by spring 2004. More information about this initiative is available online: http://141.104.22.210/VDOE/Technology/soltech/LegislativeDocs/item143.htm.

By fall 2002 more than 30 school divisions had administered online Standards of Learning tests at one or more high schools. Overall, more than 15,000 tests in eight subject areas were taken online. In the 2002-2003 school year, 94 of the 132 divisions planned to administer online tests. The program still is in the test phase, but all aspects thus far have been successful. Department of Education staff, contractors and school personnel have worked together in implementing this program and addressing difficulties.

Virginia officials say that the online testing program also will have the following benefits:

- improved Internet access for teachers;
- greater ability to share instructional resources;
- opportunities to integrate technology into instruction; and
- increased communication among colleagues.

The Virginia Department of Education Web site (www.pen.k12.va.us) provides many informative documents, including two important ones related to online testing: Web-based Standards of Learning Initiative: Project Plan (released September 2000) and the SOL Technology Initiative: Report on the Demonstration Phase (July 2001).
# Educational Technology Cooperative
## Online Testing Survey Results
### March 2003

<table>
<thead>
<tr>
<th>State</th>
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<tbody>
<tr>
<td>Alabama</td>
<td>No.</td>
<td>Alabama will pilot-test an online version of the Alabama Alternate Assessment this spring. Alabama also is pilot-testing DIBELS, an online reading assessment, in kindergarten through third grade.</td>
<td>Gloria Turner, administrator of student assessment <a href="mailto:guerner@alsde.edu">guerner@alsde.edu</a></td>
</tr>
<tr>
<td>Arkansas</td>
<td>No.</td>
<td>Online testing is unlikely to be a priority in the near future.</td>
<td>Charles Watson, coordinator, State Board/Special Projects, Arkansas Department of Education <a href="mailto:cwatson@arkedk12.ar.us">cwatson@arkedk12.ar.us</a></td>
</tr>
<tr>
<td>Delaware</td>
<td>Yes.</td>
<td>Delaware pilot-tested its online tests in eighth-grade reading, eighth-grade math and fifth-grade reading in November 2002. If the results are positive, Delaware will consider using online testing for retests during the summer.</td>
<td>Wendy Roberts, director of assessment and analysis <a href="mailto:wroberts@doe.k12.de.us">wroberts@doe.k12.de.us</a></td>
</tr>
<tr>
<td>Florida</td>
<td>No.</td>
<td>The state is exploring the use of online testing for Exceptional Student Education (ESE) accommodations to meet the needs of disabled students and for graduation tests.</td>
<td>Cornelia Orr, program director, Assessment, Testing and Evaluation <a href="mailto:cornelia.orr@fldoe.org">cornelia.orr@fldoe.org</a></td>
</tr>
<tr>
<td>Georgia</td>
<td></td>
<td>Georgia is using its Web-based test-item bank (Criterion-Referenced Competency Test) for instruction. The CRCT is a part of the accountability system, because results on state tests are used to measure student achievement.</td>
<td>David Harmon, division director of research, evaluation and testing <a href="mailto:dharmon@doe.k12.ga.us">dharmon@doe.k12.ga.us</a></td>
</tr>
<tr>
<td>Kentucky</td>
<td></td>
<td>Kentucky is testing a delivery system for a form of the Kentucky Core Content Test. This online version, which is being administered to students with disabilities, uses text readers in normal instructional activities to access instructional materials. If pilot-phase funding is secured, Kentucky may implement the program in spring 2003.</td>
<td>C. Scott Trimble, associate commissioner, Office of Assessment and Accountability <a href="mailto:strimble@kde.state.ky.us">strimble@kde.state.ky.us</a></td>
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## Educational Technology Cooperative
### Online Testing Survey Results (continued)
#### March 2003

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</thead>
<tbody>
<tr>
<td>Louisiana</td>
<td>No.</td>
<td>None.</td>
<td>Scott Norton, director, Division of Student Standards and Assessment <a href="mailto:snorton@doe.state.la.us">snorton@doe.state.la.us</a></td>
</tr>
<tr>
<td>Maryland</td>
<td>The Maryland Accountability System provides an online version of the Maryland Functional Tests, which students are required to pass in order to graduate. For several years the Maryland Department of Education has had computer-adaptive versions of the Maryland Functional Tests in reading and math. Until 2002-2003, these tests were taken by students at stand-alone computer stations. Beginning in the 2002-2003 school year, Maryland students can take an online form of the Maryland Functional Tests via a secure Internet connection.</td>
<td>Martin Kehe, operational manager, Assessment Branch, Maryland Department of Education <a href="mailto:mkehe@msde.state.md.us">mkehe@msde.state.md.us</a></td>
<td></td>
</tr>
<tr>
<td>Mississippi</td>
<td>Mississippi has limited involvement with online testing.</td>
<td>Mississippi allows online testing only when students must take makeup exams of high-stakes tests and need the results quickly in order to graduate on time.</td>
<td>Kris Kaase, director, student assessment <a href="mailto:kkaase@mde.k12.ms.us">kkaase@mde.k12.ms.us</a></td>
</tr>
<tr>
<td>North Carolina</td>
<td>North Carolina is working on the North Carolina Computerized Adaptive Testing System (NCCATS), an online version of a paper-and-pencil test. NCCATS has had some success but is not ready for full implementation. NCCATS was designed to give disabled students access to test items and scale score results. The system is not Internet-based. An initial study of online testing was insufficient in scope; a more inclusive study will be done in spring 2003.</td>
<td>Mildred Bazemore, section chief for testing <a href="mailto:mbazemore@dpi.state.nc.us">mbazemore@dpi.state.nc.us</a></td>
<td></td>
</tr>
<tr>
<td>Oklahoma</td>
<td>No.</td>
<td>There are ongoing, informal discussions about online testing.</td>
<td>Kay Ruelle, team leader, Student Research, Testing and Planning <a href="mailto:kay-ruelle@sde.state.ok.us">kay-ruelle@sde.state.ok.us</a></td>
</tr>
<tr>
<td>South Carolina</td>
<td>No.</td>
<td>South Carolina is beginning to consider online testing for initiatives that are not part of the accountability system.</td>
<td>Teresa Siskind, director, Office of Assessment <a href="mailto:TSiskind@sde.state.sc.us">TSiskind@sde.state.sc.us</a></td>
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<tr>
<td>State</td>
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<tr>
<td>Tennessee</td>
<td>No.</td>
<td>None.</td>
<td>Benjamin Brown, executive director, Evaluation and Assessment <a href="mailto:Ben.Brown@state.tn.us">Ben.Brown@state.tn.us</a></td>
</tr>
<tr>
<td>Texas</td>
<td>There is an online version of the end-of-course test in algebra.</td>
<td>Texas is planning to offer additional assessments online.</td>
<td>Ann Smisko, associate commissioner, Curriculum, Assessment and Technology <a href="mailto:asmisko@tea.state.tx.us">asmisko@tea.state.tx.us</a></td>
</tr>
<tr>
<td>Virginia</td>
<td>Virginia is implementing the Standards of Learning (SOL) Technology Initiative.</td>
<td>This Web-enabled initiative is intended to improve all high schools' capabilities in Standards of Learning (SOL) instruction, remediation and testing. Legislation requires all high schools to be able to use online testing by 2004.</td>
<td>Shelly Loving-Ryder, assistant superintendent for assessment and reporting <a href="mailto:sryder@mail.vakl2ed.edu">sryder@mail.vakl2ed.edu</a></td>
</tr>
<tr>
<td>West Virginia</td>
<td>No.</td>
<td>West Virginia is exploring issues related to online testing and is consulting with testing contractors.</td>
<td>Jan Barth, executive director, Student Services and Assessment <a href="mailto:jbarth@access.k12.wv.us">jbarth@access.k12.wv.us</a></td>
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