

**Session Focal Points**  
North Carolina Online Assessments  
Northwest Regional Meeting, North Wilkesboro, NC, October 12, 2007  
Presenter: Scott Ragsdale  
<http://cskills.ncsu.edu/nccs/presentations/>

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### *Session Purpose*

Cover information on online assessments currently implemented in North Carolina. Topics include:

- North Carolina Online Test of Computer Skills
- North Carolina EOC Online Assessments

<b>North Carolina Online Test of Computer Skills</b>
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### Notable Data from Fall 2006

- 205 students tested in one day at one school [2005-06: 139]
- 52 schools tested 100 or more students in one day (2005-06: 7)
- 5,068 maximum testing sessions used in a single day (2005-06: 3,063)
- 23 days of testing in which volume of used sessions was 3,000 or more
- ~133,980 total students tested
- ~106,035 8th grade students tested
- ~2,228 different test administrators with 52 logging in 300 or more students
- ~3,446 students had the Computer Reads Aloud option

### 2007-08 School Year Schedule

- First Semester [Fall 2007]
  - ✓ September 17, 2007 – January 11, 2008
- Second Semester [Spring 2008]
  - ✓ March 10, 2008 – June 20, 2008
- Summer 2008
  - ✓ TBD

### NCDesk

- New version is available for 2007-08 school year
  - ✓ Windows computers – updated August 24, 2007
  - ✓ Macintosh OS X computers – updated August 29, 2007
- Local dictionary
  - ✓ Two separate spell check dictionaries
  - ✓ Original dictionary functional during test mode
  - ✓ New additional local dictionary improves spell check ability of the NCDesk editor when being used in non-test mode
  - ✓ <http://ncdesk.ncsu.edu/ncdesk/technote/dictionaries.asp>
- Test Simulation
  - ✓ New Items
  - ✓ Number of items in each section increased from 5 to 10
  - ✓ 3 sections, 10 items each section, 30 items total
  - ✓ Item/task expectations will be released in the near future
- Supports Windows Vista
  - ✓ Two versions of Java Runtime Environment [JRE]
  - ✓ Java 5.0\_08 – required for Windows 98 [may be problems with Windows 98 running on Java 6.0\_02]
  - ✓ Java 6.0\_02 – required for Windows Vista [Vista will not run on Java 5.0\_08]
  - ✓ Full client details can be found at: <http://cskills.ncsu.edu/ncdesk/technote/client.asp>
- Automatic font verification upon launch
  - ✓ Identifies if client computer is missing any of the four required fonts for testing
  - ✓ Times New Roman, Courier New, Arial, Verdana
  - ✓ NCDesk will prompt user with a warning message if one or more of the required fonts are missing
  - ✓ Application can still be used for non-testing purposes without required font(s)

- Audio verification within NCDesk
  - ✓ Verifies that audio can be played on client computer, but...
  - ✓ Does not verify bandwidth capacity of a network or capability to deliver audio files across a network
  - ✓ Note: Audio files have been reduced in size from 96-bit compression [compression size delivered in the 2006-07 school year] to 32-bit compression to reduce, NOT ELIMINATE, the demand on bandwidth when administering a test using the Computer Reads Test Aloud accommodation
- Auto-update message
- Confirmation check box on test start page

## Reporting

- Reporting schedule mirrors 2006-07 school year
- CSV files with student Pass/Fail status and scale score results continue to be produced and delivered from NCRegistration
- Individual Student Reports (ISRs) and labels will no longer be available via NCRegistration
- Starting with the 2007-08 school year, results for the North Carolina Online Test of Computer Skills will be delivered in a WINSCAN format
- ISR design may incorporate student-level feedback by strand [or equivalent] during the 2007-08 school year
- LEAs will be able to generate ISRs using the INDIVRPT32 Individual Student Report software

## 2006-07 Reminders

- SIQs must be filled out at least one day prior to testing
  - ✓ If SIQs are not complete, the students will not appear in the testing application
- Once a student begins testing, SIQ can no longer be edited
- Tests must be started and completed on the same day unless student is registered as multiple test sessions
  - ✓ Forced completion of tests on a nightly basis

## Test Information

Strand	Percent of Test Items
Societal/Ethical Issues	12-14%
Database	22-25%
Spreadsheet	22-25%
Keyboard Utilization/WP/DTP	18-20%
Multimedia/Presentation	10-12%
Telecommunications/Internet	10-12%

## Resources

- <http://cskills.ncsu.edu/nccs>  
Link to home page of the North Carolina Online Test of Computer Skills
- <http://ncdesk.ncsu.edu/ncdesk>  
Direct link to the home page for the NCDesk application suite
- <http://cskills.ncsu.edu/ncdesk/technote/>  
Direct link to the home page for the NCDesk technical notes
- <http://www.ncpublicschools.org/curriculum/computerskills>  
Link to Computer/Technology Skills Standard Course of Study on the North Carolina Department of Public Instruction website
- <http://community.learnnc.org/dpi/tech>  
Link to Computer/Technology Skills page for Curriculum and School Reform on the North Carolina Department of Public Instruction website
- <http://www.ncpublicschools.org/accountability/testing/computerskills>  
Link to computer skills testing information on the North Carolina Department of Public Instruction website
- <http://tps.dpi.state.nc.us/>  
Link to Technology Implementation & Planning Services page on the North Carolina Department of Public Instruction website
- <http://www.ncpublicschools.org/techservices>  
Link to Technology Services page on the North Carolina Department of Public Instruction website

## North Carolina EOC Online Assessments

### NCTest

- NCTest is a web browser-based testing system that relies on Adobe/Macromedia Flash to display test content. Except for the North Carolina Online Test of Computer Skills, the NCTest web application will be used to deliver online assessments for the North Carolina Testing Program for the 2007-08 school year
- <http://cuacs8.mck.ncsu.edu/nctest/>
- Tests that can be accessed with NCTest: *NCEXTEND2*, English I, Civics & Economics, US History, Algebra I, Algebra II, Geometry, Biology, Physical Science, Chemistry, Physics

### General Information

- All EOC tests are available in an online format, but are NOT required to be administered online, with the exception of...
- Physics – Physics is ONLY available in an online format
  - ✓ Why? Physics includes innovative/interactive, performance-based items [virtual simulations] within the assessment
- Sufficient traditional materials printed for all students statewide
- Scrap paper is required
- A Flash-based scientific calculator will be provided within the test interface for tests where calculators are appropriate. Physical calculators are also required and procedures for using located in the appropriate Test Administrator's Manual must be followed
- Students MUST NOT open another web browser, local application, or other Internet-based service application (Instant Messenger, etc.) while taking an online EOC assessment
- For Physics ONLY: If necessary, test takers can receive assistance with getting the simulations to work, but not working the simulations
- For Physics ONLY: Flash-based virtual Reference Tables for Physics are provided within the test interface for physics. Physical copies of the reference tables are also required

### EOC Online Technology

- Br Browser-based online assessment - should work with recent versions of Internet Explorer and Firefox (these browsers have been used during development work)
- Adobe/Macromedia Flash 9 or better required
  - ✓ FlashPaper for standard item presentation
  - ✓ Flash content for interactive items
- JavaScript must be allowed in browsers used to access the test(s)
- Session state cookies must be allowed in browser used to access the test(s)
- LEAs/schools must allow all web traffic from data.ncsu.edu (standard and secure)
- Pop-up windows have to be allowed from data.ncsu.edu in order to force the browser into full-screen mode
- Pop-up windows must be allowed to open in a new window. Pop-up windows must NOT open in a tabbed window
- Test takers WILL NOT have to move to windows outside of the test administration window
- Bandwidth Footprint (at this time):
- At this time there are no detailed metrics established for footprint analysis. We will be reporting these when available.
  - ✓ However, at this time, the downstream estimate for simple questions is 40-50 Kb per question. Questions with larger graphics or text passages and questions (e.g., English), can be 100 Kb or higher. Interactive items downstream estimate is between 20-70Kb. Upstream footprint for most test questions is very small, but interactive items could equal the amount of the download or greater.
- Soft section breaks
  - ✓ This is unlike the North Carolina Online Test of Computer Skills which has "hard" section breaks
  - ✓ Test takers can navigate throughout the entire test until completed
- Innovative/Interactive performance-based items [virtual simulations] are used in Physics, but are not used in any other EOC online assessment at this time
- Likelihood of background color changed to yellow for all EOC online assessments [like *NCEXTEND2* feasibility]

## Registration and Reporting

- Eligible participants are students currently enrolled in the course either at the school or through a virtual online course for which the test is required
- Registration and SIQ entry of participants in NCRegistration
- Scheduling of testing sessions in NCRegistration
- Participants must be registered, SIQs completed, and sessions scheduled in NCRegistration at least one day prior to the administration
- Standard administrations must be completed on the same day.
- Reporting output timeline and format is TBD
  - ✓ WINSCAN

## NCEXTEND2

- Feasibility study currently being conducted
- Feasibility study closes October 19, 2007
- One EC Teacher and one general education teacher choose one student with disabilities to complete the feasibility study
- More information on the feasibility study will be provided once analysis of results is conducted

## General

## Additional Resources

- <http://www.21stcenturyskills.org/>  
Link to Partnership for 21<sup>st</sup> Century Skills website
- <http://tps.dpi.state.nc.us/tech/PASITech.ppt>  
Direct link to PowerPoint on Technical Issues and Requirements for Online Testing presented by Benny Hendrix during PASI 2005

## Contact Information

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