

**Session Focal Points**  
North Carolina Online Assessments  
ETIPS Instructional Technology Regional Meetings, September 2006  
Presenter: Scott Ragsdale

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### *Session Purpose*

Cover information on online assessments currently implemented and scheduled for future implementation in North Carolina.

Topics include:

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

## **North Carolina Online Test of Computer Skills**

### **First Semester 2005 [Fall]**

- Operational Pilot administration
- October 17, 2005 – January 13, 2006
- Delayed Results
- 109,584 students tested
- Students completing administration = 99%
- Standard Setting: February 9-10, 2006
- State Board of Education (SBE) approved recommended passing score of 150 on March 2, 2006
- Results of Operational Pilot administration released on March 6, 2006

### **Second Semester 2006 [Spring]**

- Operational administration
- March 20, 2006 – June 16, 2006
- Results reported bi-monthly beginning March 31, 2006
- 50,941 students tested
- Students completing administration = 99.87%
- Individual Student Reports and labels available for 2005-2006 school year on June 13, 2006

### **Summer Semester 2006**

- Operational administration
- July 1, 2006 – July 28, 2006
- Results reported on July 31, 2006
- Available as an option for students in grades 8-12 who had not already met the computer skills graduation requirement
- Students who were NOT eligible to participate during this administration:
  - ✓ Students who were rising eighth-graders
  - ✓ Students who had previously participated, or were scheduled to participate, in a different Summer 2006 administration of computer skills [i.e., 1998 Curriculum Test Edition 2]
- Student registrations had to be assigned to the correct school for each student for the 2006-2007 school year
- Student information questions (SIQs) had to be completed before a student could be tested
- Students who were registered but did not have SIQ data completed would not show in the listing of names to choose from when beginning a test

### **2006-2007 School Year**

- Testing Calendar
  - ✓ First Semester 2006 [Fall]
    - October 2, 2006 – January 12, 2007
  - ✓ Second Semester 2007 [Spring]
    - March 12, 2007 – June 8, 2007
  - ✓ Summer Semester 2007
    - TBD
- NCDesk
  - ✓ New version is available
  - ✓ Windows upgrade to JRE [Java Runtime Environment] 1.5.0\_08
  - ✓ Test Simulation reconstructed

- ✓ New items
- ✓ Reduced to 5 items per section
- ✓ “Computer Reads Simulation Aloud” option
- ✓ Computer Reads Test Aloud Option
  - ✓ Available with new NCDesk release
  - ✓ Only available if read-aloud accommodation is selected in SIQ
  - ✓ Integrated speaker buttons in test environment allow option for computer to “read aloud”
  - ✓ Stem only in performance-based items
  - ✓ Stem and foils in multiple-choice items
  - ✓ Human voice NOT electronic vocalization
  - ✓ Bandwidth considerations [more bandwidth required]
- ✓ Justify option has been removed from NCEdit
- ✓ Mac OS X 10.2 no longer supported for testing
  - ✓ NCDesk will no longer run on this version
- ✓ JAWS integration still in research and development phase
- ✓ <http://cskills.ncsu.edu/ncdesk/current.asp>

➤ General

- ✓ 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
- ✓ Results reported daily [overnight]
- ✓ Embargo on results during first week of testing for quality control purposes [validity/reliability of programs and data]

## 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 Physics Online Assessment

## Beginnings

- Feasibility study conducted in Spring 2006
  - ✓ Over 600 students/educators participated
  - ✓ Flash simulations worked more often than Java
  - ✓ Some screen/layout issues with font sizes and symbols
  - ✓ Some item issues – not intended as an item review
  - ✓ Early participants more likely to use with students and report more positive feedback
  - ✓ Later participants more likely to have less planning and collaboration with local technical and testing staff
  - ✓ Many participants (about 50%) reported not receiving preparation materials and/or had other communication issues
  - ✓ Feedback – 157 surveys completed

## Technology

- Browser-based
  - ✓ Recent version of Internet Explorer or Firefox
- Flash-based environment
  - ✓ FlashPaper for standard item presentation
  - ✓ Flash content for interactive items
  - ✓ Flash player – most recent version recommended
- Javascript enabled
- Session-state cookies required

## Instrument

- Soft section breaks
  - ✓ Navigation throughout entire test
  - ✓ End of test page
- Interactive/Innovative Items
  - ✓ Flash content
  - ✓ Items will show in same window as standard test items – students will not need to manage other windows
  - ✓ Items will have imperative statements and require interactivity in order to complete a task correctly
- Embedded tools
  - ✓ Calculator and reference information

## 2006-2007 School Year

- Test environment still in development
- NCRegistration
  - ✓ Registration of all Physics students [completed at least one day prior to testing]
  - ✓ SIQ entry [completed at least one day prior to testing]
  - ✓ Scheduling [completed at least one day prior to testing]
  - ✓ Monitoring progress
- Field Testing during 2006-07 school year
  - ✓ Required format
  - ✓ Fall 2006 Testing and Spring 2007 Testing
  - ✓ No results reported

## The Future: Beyond the 2006-2007 School Year

- Scheduled to become operational for 2007-2008 school year
- EOC Physics Online assessment is **NOT** optional
  - ✓ required format for this assessment
  - ✓ no dual system of testing [online vs. traditional]
  - ✓ Students with accessibility issues will likely have to be put on the NCCLAS

## Resources

- <http://cuacs8.mck.ncsu.edu/physics/>  
Link to home page of the North Carolina EOC Physics Online Assessment
- <http://www.colorado.edu/physics/phet/web-pages/index.html>  
Link to University of Colorado Physics Education Technology home page

- <http://www.ncpublicschools.org/curriculum/science/scos/>  
Link to Science Standard Course of Study on the North Carolina Department of Public Instruction website
- <http://www.ncpublicschools.org/curriculum/science/scos/2004/27physics>  
Direct link to the Physics Standard Course of Study on the North Carolina Department of Public Instruction website

## North Carolina EOC Online Assessments

### Beginnings

- Optional
  - ✓ Dual testing system
  - ✓ Entire [school+subject] must either use all online or all traditional
  - ✓ **DO NOT** elect to test online unless you are confident that there will be no logistical and technical problems
  - ✓ Sufficient traditional materials printed for all students statewide
- Testing window TBD

### Technology and Instrument

- Browser-based
  - ✓ Recent version of Internet Explorer or Firefox
- Test environment and format will mimic EOC Physics Online Assessment
  - ✓ Some adjustments
  - ✓ No interactive/innovative items for other EOC subjects during the 2006-2007 school year

### 2006-2007 School Year

- NCRegistration
  - ✓ Registration of students [completed at least one day prior to testing]
  - ✓ SIQ entry [completed at least one day prior to testing]
  - ✓ Scheduling [completed at least one day prior to testing]
  - ✓ Monitoring progress
- Assessment must be completed on the same day
  - ✓ Exceptions:
    - Multiple Testing Sessions accommodation captured in SIQ
    - Technical problems before or during testing that prevent student(s) from beginning or completing administration
- Possibility of a lottery for number of students and/or session slots – a per subject per day quantity will likely have to be established in order to keep the test servers responsive to students and administrators during testing
- Current limit of 4,500 EOCs per day proposed (1,500 per starting session window)
- Within the same window as the North Carolina Online Test of Computer Skills

## 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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