

1. LEA Name
2. LEA Number
3. DPI Region Number
4. LEA point of contact and email address.
 - a. LEA point of contact
 - b. Email address

GENERAL

5. What are your district's three most significant challenges to effectively deploying and supporting information and instructional technology?
6. Please identify the top five information and/or instructional technology initiatives underway or planned for your district.
7. Please describe how your district believes the funding available to the NC Education Cloud could best be used to meet your district's needs for information and instructional technology.
8. What NC Education Cloud services would be most beneficial to your district?
9. What concerns, if any, does your district have regarding the financial viability of NC Education Cloud services?
10. Please describe how your district believes NC Education Cloud services should be funded during and after the four-year RttT grant period.
11. What does your district believe are the near-term and long-term challenges to a successful NC Education Cloud initiative?
12. What concerns, if any, does your district have with using NC Education Cloud services?

Information Technology:
INFRASTRUCTURE

A. Data Center/Server Room Facilities

13. Please rate the quality of your primary data center/server room using the metrics detailed in the following link:

(Poor / Satisfactory / Good / Excellent)

- Site
- Electrical Systems
- Mechanical Systems (Cooling and Fire Suppression)
- Structured Cabling Systems

14. If applicable, please rate the quality of your secondary or back-up data center/server room using the metrics detailed in the following link:

(Poor / Satisfactory / Good / Excellent)

- Site
- Electrical Systems
- Mechanical Systems (Cooling and Fire Suppression)
- Structured Cabling Systems

15. Please estimate the percent utilization of your primary data center/server room:

- Site – floor/rack space: _____%
- Electrical systems: _____%
- Mechanical systems – air conditioning: _____%

16. If applicable, please estimate the percent utilization of your secondary or back-up data center/server room.

- Site – floor/rack space: _____%
- Electrical systems: _____%
- Mechanical systems – air conditioning: _____%

17. Please describe any data center/server room issues related to capacity (space, electrical, mechanical) or reliability.

18. Please estimate planned expenditures for data center/server room facilities over the next three years.

| | 2011/2012 costs | 2012/2013 costs | 2013/2014 costs |
|---------------------------|-----------------|-----------------|-----------------|
| General Site Improvements | | | |
| Electrical | | | |
| Mechanical | | | |
| Structural cabling | | | |

19. Miscellaneous site interview notes related to data center/server room facilities.

B. Network Connectivity

Local Area Network (LAN)

- 20. Please select the primary LAN vendor used within your district.
(Allied Telesis, Cisco Systems, HP ProCurve, Nortel Networks, 3Com, Other)
- 21. Please select any LAN vendors used within your district other than your primary LAN vendor. (Check all that apply)
(Allied Telesis, Cisco Systems, HP ProCurve, Nortel Networks, 3Com, Other)
- 22. Please select the vendor you have standardized on for future LAN deployments. Please select TBD if that decision is still pending. (Check all that apply)
(Allied Telesis, Cisco Systems, HP ProCurve, Nortel Networks, 3Com, TBD, Other)
- 23. Miscellaneous site interview notes related to LAN infrastructure.

Wireless Local Area Network (WLAN) Infrastructure

- 24. Please select the top 1-3 WLAN vendors used within your district.
(Aerohive Networks, Aruba Networks, Cisco Systems, HP ProCurve including Colubris Networks, Juniper Networks/Trapeze Networks, Meru Networks, Xirrus, Other)
- 25. Please specify the model numbers and estimated number of deployed APs/Wi-Fi Arrays for each model number.

| Model No. | Estimated # Deployed | Model No. | Estimated # Deployed |
|-----------|----------------------|-----------|----------------------|
| | | | |
| | | | |
| | | | |

- 26. Please select the vendor you have standardized on for future WLAN deployments. Please select TBD if that decision is still pending.
(Aerohive Networks, Aruba Networks, Cisco Systems, HP ProCurve including Colubris Networks, Juniper Networks/Trapeze Networks, Meru Networks, Xirrus, TBD)
- 27. Please estimate the number of access points/Wi-Fi arrays you plan to add to your WLAN over the next 6-9 months.

28. If your district has deployed wireless LAN controllers, please list the model number and quantity for each.

| | Model No. | Estimated # Deployed | Model No. | Estimated # Deployed |
|-----------------------------------|-----------|----------------------|-----------|----------------------|
| Wireless LAN Controller Inventory | | | | |

29. What management/RF tools does your district use to support your WLAN?

30. What are your district's most significant challenges to deploying and supporting a WLAN?

31. Miscellaneous site interview notes related to WLAN infrastructure.

Wide Area Network (WAN)

32. Please select the network topology that best represents your wide area network. (*Star, Hierarchical, Ring*)

(If Hierarchical or Ring for #32)

32A. Please provide a network diagram during your site interview if you selected hierarchical or ring for your WAN topology.

(*Available, Not Available, Pending*)

33. Please identify the site at which your network core is located.

34. Please identify the WAN service type, bandwidth, and service provider for all the WAN trunks that terminate in your network core. Most districts will only have one WAN trunk.

| | Owned Fiber | Dark Fiber Lease | Metro Ethernet | Copper |
|--------------------|-------------|------------------|----------------|--------|
| Service Provider 1 | | | | |
| Service Provider 2 | | | | |
| Service Provider 3 | | | | |
| Service Provider 4 | | | | |

| | Owned Wireless | Carrier Wireless | Bandwidth | Service Provider | Burst Option (Y/N) |
|--------------------|----------------|------------------|-----------|------------------|--------------------|
| Service Provider 1 | | | | | |
| Service Provider 2 | | | | | |
| Service Provider 3 | | | | | |
| Service Provider 4 | | | | | |

35. Please select your LEA number to access school list for your district...

36.* Please specify the current WLAN infrastructure deployed at each school in your district.

**Note, for each LEA, a corresponding list of schools comes up. LEAs complete this information for every school in their district. For ease of reference, the question below is a generic version without specific school names. Answer options are listed below each column name.*

| | WLAN Deployed | 802.11 Protocols Supported | High-Density Deployment |
|-------------|---------------|----------------------------|-------------------------|
| School Name | Yes No | b/g a/b/g | Yes No |

| | | | |
|--|--|---------|--|
| | | a/b/g/n | |
|--|--|---------|--|

37.* Please specify the WAN service type, approximate bandwidth, and service provider for each school in your district effective July 1, 2011.

**Note, for each LEA, a corresponding list of schools comes up. LEAs complete this information for every school in their district. For ease of reference, the question below is a generic version without specific school names. Answer options are listed below each column name.*

| | | | | |
|-------------|-------------|------------------|----------------|--------|
| | Owned Fiber | Dark Fiber Lease | Metro Ethernet | Copper |
| School Name | | | | |

| School Name | Owned Wireless | Carrier Wireless | Bandwidth | Service Provider | Burst Option |
|-------------|----------------|------------------|---|---|--------------------------|
| | | | 1.5 Mbps 10 Mbps 25 Mbps 50 Mbps 100 Mbps 250 Mbps 500 Mbps 1 Gbps > 1 Gbps | -N/A -AT&T Corp. -CenturyLink -Time Warner Cable -Atlantic Telephone -BalsamWest FiberNET -Broadplex -Citizens Telephone -Charter Fiberlink -City of Wilson -Conterra Ultra Broadband -e-Polk, Inc. -French Broad Broadband -InterStar Communications -North State Telephone -Randolph Telephone -School Link/LMK Communications -Skybest Communications -Star Telephone -Surry Telephone -TW Telecom -Windstream Communications -Yadkin Valley Telephone -Other | <input type="checkbox"/> |

Internet Access

38. Please select the option that best describes your internet access configuration effective July 1, 2011.

(NCREN only, Multi-homed- Internet traffic directed to both NCREN and another Internet Service Provider, Primary ISP Other than NCREN)

(If Multi-homed OR Primary ISP other than NCREN for #38)

39. Please provide the name of your Internet Service Provider (other than NCREN) effective July 1, 2011.

(If Multi-homed OR Primary ISP other than NCREN for #38)

40. Please provide the bandwidth effective July 1, 2011 for the Internet access connection not provided by NCREN.

(20 Mbps, 25 Mbps, 50 Mbps, 100 Mbps, 150 Mbps, 200 Mbps, 250 Mbps, 500 Mbps, 1 Gbps, Other)

(If Multi-homed OR Primary ISP other than NCREN for #38)

41. Please select the entity that will manage your Internet routing policy effective July 1, 2011.

(NCREN, Internet Service Provider, Managed Internally)

42. Please provide the bandwidth effective July 1, 2011 for the Internet access connection provided by NCREN.

(100 Mbps, 250 Mbps, 500 Mbps, 1 Gbps)

C. Security

Firewall/Unified Threat Management (UTM)

43. Please select the firewall vendor your district uses for its perimeter security.
(Cisco Systems, Fortinet, Juniper Networks, SonicWALL, WatchGuard Technologies, Other)

44. Please specify the model number of the firewall your district uses for its perimeter security.

45. Does your district have a second firewall deployed for redundancy?

(Yes or No)

46. Please rate the significance of the following features/attributes when selecting a firewall product.

(Very Significant, Significant, Neutral, Insignificant)

-Cost

-Brand

-Performance

-User Interface

-UTM Functionality

-Advanced Features – Application Layer Firewall

47. Please rank the significance of the following features/attributes when selecting a firewall product.

(Rank 1-6, with 1=Most significant and 6=Least significant)

- Cost
- Brand
- Performance
- User Interface
- UTM Functionality
- Advanced Features – Application Layer Firewall

48. How many user interfaces are configured on your firewall?

(2, 3, 4, 5, 6)

49. Is one or more of the interfaces configured as a DMZ?

(Yes or No)

50. Is your firewall used as a VPN endpoint?

(Yes or No)

51. Do you use your firewall as a unified threat management (UTM) platform?

(Yes or No)

(If YES for #51)

52. What UTM functionality is enabled on your firewall?

(URL Filtering, IDS/IPS, Virus/Malware Gateway)

53. Are firewall alerts/messages sent to a remote syslog server for retention and analysis?

(Yes or No)

Web Filtering

54. Please select the web filtering vendor your district uses.

(Lightspeed Systems, M86 Security (8e6), EdgeWave – iPrism, Websense, DeepNines Technology, Other)

55. Please specify the model number for the web filter your district uses.

56. Please provide the following information regarding your web filtering contract:

- Contract amount:
- No. Client Devices Included in Contract:
- Contract Start Date:
- Contract Term (Months):
- No. Remote/Mobile Clients Included in Contract:
- Additional Cost for Remote/Mobile Clients:

57. Please provide a copy of the purchase order or contract for your web filter.
(Available, Not Available, Pending)

58. What is the deployment method for your web filter?
(Inline (bridge), Explicit proxy (PAC or WPAD), Transparent Proxy (WCCP, ICAP, Policy-based Routing), SPAN Port)

59. Is the web filter deployed in your district integrated with your directory services to support granular filtering policies to the user level?
(Yes, No, Comments)

60. Please rate the importance of the following features/attributes when selecting a web filtering product.
(Very Significant, Significant, Neutral, Insignificant)

- Cost
- Block anonymous and SSL-based Proxies
- User Interface
- URL Filtering and Categorization Methodology
- Directory Integration
- Support for Mobile and Remote Clients
- Malware Protection
- Granular and Automated Reporting
- Block P2P, IM, File Transfer, and Streaming Media.

61. Please rank the importance of the following features/attributes when selecting a web filtering product.
(Rank 1-9, with 1=Most significant and 9=Least significant)

- Cost
- Block anonymous and SSL-based Proxies
- User Interface
- URL Filtering and Categorization Methodology
- Directory Integration
- Support for Mobile and Remote Clients
- Malware Protection
- Granular and Automated Reporting
- Block P2P, IM, File Transfer, and Streaming Media.

62. What additional features/attributes of the web filter deployed in your district are most valuable to you?

63. What features/attributes are missing from the web filter deployed in your district?

64. How do district or IT policies impact the requirements for your web filtering technology?

65. Please list additional thoughts and experiences related to your district web filter.

Malware Protection

66. Do you use dedicated anti-malware appliance/software application in addition to your firewall (UTM) or web filter appliances?

(Yes or No)

If yes, please specify.

67. What features/attributes of the malware protection solution deployed in your district are most valuable to you?

68. What features/attributes are missing from the malware protection solution deployed in your district?

IDS/IPS

69. Do you use a dedicated IDS/IPS appliance in addition to your firewall (UTM) appliance?

(Yes or No)

If yes, please specify.

70. What features/attributes of IDS/IPS solution deployed in your district are most valuable to you?

71. What features/attributes are missing from the IDS/IPS solution deployed in your district?

72. Miscellaneous site interview notes related to security.

D. Client Platforms

This section includes all devices used by students, teachers, and administrators to access internal network and Internet resources for both instructional and administrative purposes.

73. Please approximate the number of Windows-based client devices in your district.

| | Windows98 | Windows2000 | WindowsXP | Vista | Windows7 | Total |
|----------|-----------|-------------|-----------|-------|----------|-------|
| Desktops | | | | | | |
| Laptops | | | | | | |
| Netbooks | | | | | | |

74. Please approximate the number of Mac-based client devices in your district.

Desktops/iMac/eMac: _____

Laptops/MacBook: _____

75. Please approximate the number of Linux-based client devices in your district.

Desktops: _____

Laptops: _____

76. Please approximate the number of thin client devices in your district.

HP: _____
Wyse: _____
NComputing: _____
Pano Logic: _____
Other: _____

77. Please approximate the number of smart devices in your district.

iPad: _____
iTouch: _____
Smart Phones: _____
Other: _____

78. Has your district standardized on a client device for your 1:1 initiatives?
(Yes or No)

(If YES for #78)

79. Please specify the client device(s) your district has standardized on for your 1:1 initiatives.

80. Are staff permitted to bring personal laptops to school in your district?
(Yes or No)

(If YES for #80)

81. Do the staff personal devices have access to your internal network?
(Yes or No)

(If YES for #80)

82. Do the staff personal devices have access to the Internet?
(Yes or No)

83. Are students permitted to bring personal laptops to school in your district?

(If YES for #83)

84. Do the student personal devices have access to your internal network?
(Yes or No)

(If YES for #83)

85. Do the student personal devices have access to the Internet?
(Yes or No)

86. What Productivity Suites are used in your district? (check all that apply)
(Microsoft Office, Google Docs, OpenOffice, Other (specify))

(If Microsoft Office for #86)

87. Please specify the Microsoft Office license fees your district incurred over the past three years.

- Software Package/Platform:
- 2010/2011 Costs:
- 2009/2010 Costs:
- 2008/2009 Costs:

(If Microsoft Office for #86)

88. Please estimate the Microsoft Office license fees your district anticipates incurring over the next three years.

- Software Package/Platform:
- 2011/2012 Costs:
- 2012/2013 Costs:
- 2013/2014 Costs:

89. Miscellaneous site interview notes related to client devices.

E. Systems/Storage

This section includes all servers, storage, virtualization technologies, and enterprise level backup solutions located in the core of your network.

90. Please approximate the number of Windows servers deployed in your district.

| | #Total Hosts/Instances | # File & Print | # Web Services / Applications | # Email | Network Services | Other |
|--------------|------------------------|----------------|-------------------------------|---------|------------------|-------|
| Windows 2000 | | | | | | |
| Windows 2003 | | | | | | |
| Windows 2008 | | | | | | |

91. Please approximate the number of Netware servers deployed in your district.

| | #Total Hosts/Instances | # File & Print | # Web Services / Applications | # Email | Network Services | Other |
|-------------|------------------------|----------------|-------------------------------|---------|------------------|-------|
| Netware 5.x | | | | | | |
| Netware 6.0 | | | | | | |
| Netware 6.5 | | | | | | |
| OES | | | | | | |

92. Please approximate the number of Mac OS X servers deployed in your district.

| | #Total Hosts/Instances | # File & Print | # Web Services / Applications | # Email | Network Services | Other |
|----------------------|------------------------|----------------|-------------------------------|---------|------------------|-------|
| Mac OS X Server 10.4 | | | | | | |
| Mac OS X Server | | | | | | |

| | | | | | | |
|----------------------|--|--|--|--|--|--|
| 10.5 | | | | | | |
| Mac OS X Server 10.6 | | | | | | |

93. Please approximate the number of Linux servers deployed in your district

| | #Total Hosts/Instances | # File & Print | # Web Services / Applications | # Email | Network Services | Other |
|---------------|------------------------|----------------|-------------------------------|---------|------------------|-------|
| SUSE | | | | | | |
| Red Hat | | | | | | |
| Linux - Other | | | | | | |

94. Is there a Storage Area Network (SAN) deployed in your district?
 (Yes – Fiber Channel, Yes – iSCSI, No, Other)

(If Fiber Channel SAN for #94)

95a. Please describe the Fiber Channel SAN deployed in your district.

| Vendor | Model Number | Fiber Switch | # Storage Processors | Total Capacity (TB) | Amt Free Space (TB) | #Attached Clients | Fiber Adaptor |
|--|--------------|-------------------------------------|----------------------|---------------------|---------------------|-------------------|-------------------------|
| <i>Dell/EMC Dell/EqualLogic HP IBM Other</i> | | <i>Brocade QLogic Other</i> | | | | | <i>QLogic Other</i> |

(If iSCSI SAN for #94)

95b. Please describe the iSCSI SAN deployed in your district.

| Vendor | Model Number | Total Capacity (TB) | Amt Free Space (TB) | #Attached Clients |
|--|--------------|---------------------|---------------------|-------------------|
| <i>Dell/EMC Dell/EqualLogic HP IBM Other</i> | | | | |

(If Other SAN for #94)

95c. Please describe the SAN deployed in your district.

| _____ SAN Description | Total Capacity | Amount of Free Space | # Attached Clients |
|-----------------------|-------------------------------------|----------------------|--------------------|
| | <i>Brocade QLogic Other</i> | | |

96. Is there Network-attached Storage (NAS) deployed in your district?
 (Yes or No)

(If YES for #96)

97. Please specify the vendor and model number for the NAS deployed in your district.
 NAS Vendor:
 NAS Model Number:

(If YES for #96)

98. Please describe the Network-attached storage deployed in your district.

| | Total Capacity (TB) | Amount of Free Space (TB) | # Attached Clients | Data Type – Backup | Data Type – File Storage (Images, Home Directories, etc.) | Databases |
|--------------------------|---------------------|---------------------------|--------------------|--------------------|---|-----------|
| Network-Attached Storage | | | | | | |

99. Please identify the server virtualization environment(s) used in your district.
 (ESX, ESXi, HyperV, XEN (Citrix), None, Other)

(If ESX for #99)

100. Please select your ESX VMware Version (check all that apply).
 (2.51, 3.0, 3.5, 4.0 vSphere)

(If any server virtualization environment selected for #99)

101. Please describe the server virtualization environment(s) used in your district.

| | # Hosts | # Virtual Machines |
|--------------|---------|--------------------|
| ESX | | |
| ESXi | | |
| HyperV | | |
| XEN (Citrix) | | |
| Other | | |

102. Please specify your enterprise data backup solution.

| | Total Capacity | Amount of Free Space | Retention Policy |
|--------------------------|----------------|----------------------|------------------|
| Tivoli | | | |
| Veritas-BackupExec | | | |
| Veritas-NetBackup | | | |
| Barracuda Backup Service | | | |
| Other | | | |

103. If "Other", please specify.

F. Directory Services

104. Please select the directory environments deployed in your district.

Active Directory – Single Directory or Multiple Directories (location-based)

eDirectory – Single Directory or Multiple Directories (location-based)

OpenLDAP – Single Directory or Multiple Directories (location-based)

105. Miscellaneous site interview notes related to systems environment.

Information Technology:
IT APPLICATIONS/SERVICES

A. Email

106. Effective July 1, 2011, will your email services provided to faculty/staff use an internal platform or be hosted by a third-party, i.e. cloud-based?
(*Internal Platform or Hosted/Cloud*)

(If Internal Platform for #106)

107. What email platform does your district use?
(*Microsoft Exchange, Novell Groupwise, Lotus Notes, Linux POP or IMAP server, Other*)

(If Internal Platform for #106)

108. Please specify your email SPAM filter.

(If Internal Platform for #106)

109. What are the features/attributes of your internal email platform that are most beneficial to your district?

(If Internal Platform for #106)

110. What are you district's concerns with migrating to a hosted or cloud email solution?

(If Hosted/Cloud for #106)

111. What hosted email solution does your district use for your faculty/staff?
(*Google Gmail, Live@Edu, Goggle, Other*)

(If Hosted/Cloud for #106)

112. What are the features/attributes of your hosted email solution that are most beneficial to your district?

(If Hosted/Cloud for #106)

113. What, if any, features/attributes are missing from the hosted email service deployed in your district?

114. Does your district provide email accounts to students?
(*Yes or No*)

(If YES for #114)

115. Effective July 1, 2011, will your email services provided to students use an internal platform or be hosted by a third-party, i.e. cloud-based?
(*Internal Platform, Hosted/Cloud*)

(If Internal Platform for #115)

116a. What email platform does your district use for students?

(Microsoft Exchange, Novell Groupwise, Lotus Notes, Linux POP, or IMAP server, Other)

(If hosted/cloud for #115)

116b. What hosted email solution does your district use for students?

(Google Gmail, Live@Edu, Gaggle, Other- specify)

117. Please approximate the number of email accounts in your district.

Internal Platform:

Hosted/Cloud:

118. Please select the email archiving solution used in your district.

(Barracuda, Freedom 9, EMC, Postini, Mimosa, None, Other- specify)

119. Please briefly describe your district's email retention policy.

120. Does your district maintain email accounts for parents/guardians?

(Yes or No, Comments)

121. Miscellaneous site interview notes for email.

B. Web Site Hosting

122. Effective July 1, 2011, will your district web sites be supported on an internal platform or be hosted by a third-party, i.e. cloud-based?

(Internal Platform or Hosted/Cloud)

(If Internal Platform for #122)

123. What web servers are you using in your district?

(IIS, Apache, Other – specify)

(If Internal Platform for #122)

124. Are your web servers serving static web pages or is a backend content management system used, e.g. SharePoint, Drupal, .Nuke?

(Static web pages, Backend content management system)

(If Static Web Pages for #124)

125. Does your district provide a template for creating school/teacher webpages?

(Yes or No, Comments)

(If Backend content management system for #124)

126. What backend content management system does your district use? (check all that apply)

(SharePoint, Drupal, .Nuke, Other – specify)

(If Internal Platform for #122)

127. What are the features/attributes of your internal web server platform that are most beneficial to your district?

(If Internal Platform for #122)

128. What features/attributes are missing from a hosted solution?

(If Hosted/Cloud for #122)

129. Please specify the web site hosting server provider used by your district.

(If Hosted/Cloud for #122)

130. What are the features/attributes of your district's hosted web sites that are most beneficial to your district?

(If Hosted/Cloud for #122)

131. What, if any, features/attributes are missing from the hosted web sites deployed by your district?

132. Miscellaneous site interview notes for web hosting.

C. Web Portal

Web Portals are designed to integrate multiple applications on a single web page that can be personalized by user. Users have the ability to choose the applications and/or widgets that are visible on their portal desktop.

133. Has your district implemented a Web Portal?
(Yes or No)

(If YES for #133)

134. What web portal is your district using?
(Microsoft SharePoint, Other – specify)

(If YES for #133)

135. Does the district Web Portal authentication point to the district's directory services?
(Yes or No, Comments)

(If YES for #133)

136. What, if any, features/attributes are missing from the Web Portal deployed in your district?

137. What features/attributes of a Web Portal are most important to the school district?

D. Desktop Virtualization

Virtual Desktops are a user's desktop environment (wallpaper, windows, folders, toolbars, etc) stored on a server instead of on a local PC. Desktop virtualization separates the desktop operating system and applications from the hardware. The desktop can be delivered on-demand to users from anywhere on any device (home PC, smart phone, or an iPad).

138. Are you currently using Virtual Desktops in your district?
(Yes, No, Comments)

(If YES for #138)

139. What Virtual Desktop hosting solutions are you using in your district?
(*VMware Virtual Desktop Infrastructure, Microsoft Virtual Desktop Infrastructure, Citrix XenDesktop, Stoneware, Other*)

(If YES for #138)

140. How many Virtual Desktops are deployed in your district?

(If YES for #138)

141. On what hardware are you running the Virtual Desktops? (check all that apply)
(*Legacy PCs, Terminals, Handheld Devices, Other*)

(If YES for #138)

142. What, if any, features are missing from the Virtual Desktop solution deployed in your district?

143. What features/attributes of a Virtual Desktop are most important to the school district?

E. Traditional and IP Telephony

144. Please select the telephony systems and services currently used by your district.
(Check all that apply)
(*Key System, PBX, Legacy Centrex, Premise-based IP Telephony, Hosted IP Telephony*)

145. Please specify the approximate number of stations supported by each of the telephony systems and services currently used by your district.

- Key System
- PBX
- Legacy Centrex
- Premise-based IP Telephony
- Hosted IP Telephony
- Other

146. Are Automated Call Distribution functions available with the telephony systems and service used by your district?
(*Yes, No, Comments*)

(If Key System, PBX, and/or Legacy Centrex for #144)

147. Please estimate the annual maintenance costs for your traditional telephony system.

(If Key System, PBX, and/or Legacy Centrex for #144)

148. What, if any, features are missing from the traditional telephony systems deployed in your district?

(If Key System, PBX, and/or Legacy Centrex for #144)

149. Are there technology obsolescence concerns with your current traditional telephony solution? If yes, please specify.

(Yes, No, Comments)

(If Premise-based IP Telephony for #144)

150. Please specify the premise-based IP telephony system deployed in your district.

(Avaya, Cisco Systems, 3Com, Other)

(If Premise-based IP Telephony for #144)

151. Please specify the model number for the IP telephony system deployed in your district.

(If Premise-based IP Telephony for #144)

152. In what year was the current premise-based IP Telephony system first deployed in your district?

(2011, 2010, 2009, 2008, Before 2008)

(If Premise-based IP Telephony for #144)

153. Please estimate the annual maintenance costs for your premise-based IP Telephony system.

(If Premise-based IP Telephony for #144)

154. Please rate the voice quality, reliability, features/attributes, and ease of use (maintainability) for your premise-based IP Telephony services.

(Poor - - - Good - - - Excellent)

-Voice Quality

-Reliability

-Features/Attributes

-Ease of use (Maintainability)

(If Hosted IP Telephony for #144)

155. Please specify the service provider for your Hosted IP Telephony service.

(If Hosted IP Telephony for #144)

156. Please estimate the monthly recurring charges for your Host IP Telephony service.

(If Hosted IP Telephony for #144)

157. Please rate the voice quality, reliability, features/attributes, and ease of use (maintainability) for your hosted IP telephony services.

(Poor - - - Good - - - Excellent)

-Voice Quality

-Reliability

-Features/Attributes

-Ease of use (Maintainability)

158. Have network infrastructure issues impacted the quality or reliability of your IP Telephony service? If yes, please comment.
(Yes, No, Comments)

159. Please describe any initiatives in-progress or planned that will significantly change the telephony systems and services currently in use by your district.

**Information Technology:
OPERATIONS MANAGEMENT**

A. IT Support Resources & Practices

160. Please estimate the number of full time equivalents (FTEs) supporting information technology planning, implementation, and support. The FTE estimate should include both employee and contract (staff augmentation) resources. Information technology includes client devices (desktops/laptops/mobile data), servers, network infrastructure, and IT applications. It excludes resources supporting instructional technology and media.

161. Please estimate the percentage of time these resources spend supporting the following IT functions (percentages should total to 100%):

- Planning
- Implementation – network and systems infrastructure
- Maintenance – network and systems infrastructure
- Deployment – client devices
- Client device/end-user IT support
- Other

162. If Other (above), please specify.

163. Please rate the operations management challenges you face supporting your district's IT infrastructure, and instructional software and platforms.

(Very Significant – Significant – Neutral – Insignificant)

- Number of IT staff
- IT staff competencies
- Availability of, or funding for, operations management tools
- End-user training/professional development
- Breadth of technologies supported
- Rollout of instructional technology initiatives

164. Please rank the operations management challenges you face supporting your district's IT infrastructure, and instructional software and platforms.

(Rank 1-6, with 1=Most Significant and 6=Least Significant)

- Number of IT staff
- IT staff competencies
- Availability of, or funding for, operations management tools
- End-user training/professional development
- Breadth of technologies supported
- Rollout of instructional technology initiatives

165. What IT support practices have been most effective for your district?

166. What major technology initiatives are planned for your district and how will they impact your IT organization?

167. What changes could be made to IT staffing, operations management practices, or technology standards to mitigate the impact of these new technology initiatives on the IT organization?

168. Please describe the typical process for handling a student or staff IT support request.

169. Do you use the help desk or trouble ticket software?

(Yes or No)

If yes, please specify.

170. Please describe your IT business continuity plan.

171. Is data replicated off site?

(Yes or No)

B. Systems Management

Desktop Management

172. Do you use a standard desktop build to guarantee the same image on each machine?

(Yes, No, Comments)

173. What anti-virus solution is deployed on your student and staff computers? (Check all that apply)

(Symantec, Sophos, Kaspersky, Trend Micro, Other)

174. What features/attributes of your client anti-virus software are most valuable to you?

175. What features/attributes are missing from the client anti-virus software you have deployed in your district?

176. How do you manage patch deployment/version control for your student and staff computers? (Check all that apply)

(LANDesk Systems Management, Patchlink, Windows Server Update Services – WSUS, ZENWorks Patch Management, Other)

177. How do you manage application deployment for your student and staff computers? (Check all that apply)

(Active Directory Group Policy, Alteris Client Management, LANDesk Systems Management, ZENWorks Configuration Management, ZENWorks for Desktops/Servers, Other)

178. How are you securing student computers? (Check all that apply)
(Active Directory – Windows Group Policies, ZENWorks Configuration Management – Windows Group Policies, Faronics Deep Freeze, Other)

179. How are you securing staff computers? (Check all that apply)
(Active Directory – Windows Group Policies, ZENWorks Configuration Management – Windows Group Policies, Faronics Deep Freeze, Other)

180. What tools do you use to image your student and staff computers? (Check all that apply)
(Alteris Client Management, LANDesk Systems Management, Microsoft Systems Management Services, ZENWorks Configuration Management, ZENWorks for Desktops/Servers, Other)

181. What tools do you use to collect hardware/software inventory information for your student and staff computers? (Check all that apply)
(Alteris Client Management, LANDesk Systems Management, ZENWorks Configuration Management, Other)

182. What features/attributes of your desktop management software are most valuable to you?

183. What features/attributes are missing from the desktop management software you have deployed in your district?

184. Miscellaneous site interview notes related to desktop management.

Server Management

185. What anti-virus solution is deployed on your file and application servers? (Check all that apply)
(Symantec, Sophos, Kaspersky, Trend Micro, Other)

186. What features/attributes of your server anti-virus software are most valuable to you?

187. What features/attributes are missing from the server anti-virus software you have deployed in your district?

188. How do you manage patch deployment/version control for our file and application servers? (Check all that apply)

(Windows Server Update Services – WSUS, ZENWorks Patch Management, Patchlink, Manually install patches, Other)

189. What tools do you use to collect hardware/software inventory information for your file and application servers? (Check all that apply)
(Alteris Client Management, LANDesk Systems Management, ZENWorks Configuration Management, Other)

190. How do you document configuration changes to file and application servers?
 (Check all that apply)
(Online Database / Change Log, Manual Notebook, Other)

191. Do you perform vulnerability testing of your file and application servers?
 (Yes or No)
 If yes, please specify.

192. Are you currently using a server management program? (Check all that apply)
(Dell OpenManage, HP Insight Manager, Other)

193. What features/attributes of your server management software are most valuable to you?

194. What features/attributes are missing from the server management software you have deployed in your district?

195. Miscellaneous site interview notes related to server management.

Network Management

196. Please specify the network management tools deployed in your district. (check all boxes that apply)

| | Fault Management | Configuration Management | Performance Management | Security Management |
|-------------------------|------------------|--------------------------|------------------------|---------------------|
| SolarWinds Orion | | | | |
| WhatsUp Gold | | | | |
| ProCurve Manager | | | | |
| CiscoWorks | | | | |
| Open Source: Nagios | | | | |
| Open Source: MRTG/Cacti | | | | |
| Other | | | | |

197. Miscellaneous site interview notes related to network management.

C. Identity Management

198. What username/password administration software do you use? (Check all that apply)
(Active Directory, eDirectory, OpenLDAP, Other)

199. Please identify the users with unique usernames in your user administration system.

| | Yes or No | Yes w/ Exception | Standard Username Format |
|-------------------------|-----------|------------------|--------------------------|
| Students: K9-K12 | | | |
| Students: K6-K8 | | | |
| Students: PK-K5 | | | |
| Teachers | | | |
| Administrators | | | |
| Parents | | | |
| Consultants/Contractors | | | |
| Other | | | |

200. What data do you capture/store for students in your LDAP directory or database? (Check all that apply)
(Username, First Name, Last Name, Graduation Year, Grade Level, Date of Birth, SSN, Phone Number, NC WISE Number, All Other – comma-delimited)

201. What data do you capture/store for staff in your LDAP directory or database? (Check all that apply)
(Username, First Name, Last Name, Graduation Year, Grade Level, SSN, Phone Number, HRMS Number, All Other – comma-delimited)

202. Are the usernames in NC WISE' consistent with your directory services usernames for students?
(Yes or No)

203. Are the usernames in HRMS consistent with your directory services usernames for staff?
(Yes or No)

204. Miscellaneous site interview notes related to identity management.

205. Please provide copies of the purchase orders or contracts for the desktop management and server management software used by your district.
(Available, Not Available, Pending)

206. Please describe any additional thoughts or experiences related to IT operations management.

207. Please describe how you believe the funding available to the NC Education Cloud could best be used to meet your district's need for IT operations management.

208. Miscellaneous site interview notes related to IT operations management.

Instructional Software and Platforms

209. Please identify the 4-6 instructional software packages and platforms for which your district incurred the greatest costs over the past three years. Please include your annual costs for the top packages and platforms.

| | Software Package/Platform | 2010/2011 Costs | 2009/2010 Costs | 2008/2009 Costs |
|------------------------------|---------------------------|-----------------|-----------------|-----------------|
| Software Package/Platform #1 | | | | |
| Software Package/Platform #2 | | | | |
| Software Package/Platform #3 | | | | |
| Software Package/Platform #4 | | | | |
| Software Package/Platform #5 | | | | |
| Software Package/Platform #6 | | | | |

210. Please provide a copy of the purchase order or contract for each of the instructional software packages or platforms identified in your answer to the previous question.

(Available, Not Available, Pending)

211. Please identify the 4-6 instructional software packages and platforms for which your district anticipates incurring the greatest costs over the next three years. Please include your anticipated annual costs for the top packages and platforms.

| | Software Package/Platform | 2011/2012 Costs | 2012/2013 Costs | 2013/2014 Costs |
|------------------------------|---------------------------|-----------------|-----------------|-----------------|
| Software Package/Platform #1 | | | | |
| Software Package/Platform #2 | | | | |
| Software Package/Platform #3 | | | | |
| Software Package/Platform #4 | | | | |
| Software Package/Platform #5 | | | | |
| Software Package/Platform #6 | | | | |

212. Please rate the challenges your district faces when deploying instructional software and platforms.

(Very Significant – Significant – Neutral – Insignificant)

- Cost
- Availability of products that meet your needs
- Diversity of needs across your district
- Staff training/professional development

- Availability of staff resources to identify, evaluate, implement and support solutions
- Ability of IT infrastructure to support instructional software and platforms

213. Please rank the challenges your district faces when deploying instructional platforms and platforms.

Rank 1-6, with 1=Most significant and 6=Least Significant

- Cost
- Availability of products that meet your needs
- Diversity of needs across your district
- Staff training/professional development
- Availability of staff resources to identify, evaluate, implement and support solutions
- Ability of IT infrastructure to support instructional software and platforms

A. Learning Management Systems (LMS)

An LMS is a software platform that facilitates the management and delivery of learning content and resources to students. An LMS can often act as a portal, integrating resources and tools, including learning object repositories, digital media collections, archived classes, Web 2.0 resources, and more. Blackboard is an example of an LMS.

Web Collaboration

Software to enable student collaboration, content creation and sharing, and personalization. Web collaboration examples include tools like wikis and blogs.

Web Conferencing/Communications

Applications that allow two or more participants at different locations to communicate with one another. Features often include:

- Audio via VoIP or standard telephone
- VideoScreen sharing
- Collaborative white boarding
- Video conferencing

ArchivingTools like Skype and IM are also included in this category.

Digital Content and Resources

Free and fee-based digital resources available over the web. Resources may simply be collections or files, while others are highly organized, and include lesson plans, instructional strategies, etc. Discovery Education is an example of a fee-based digital resource collection.

Library Automation/Online Public Access Catalog

An online database of materials held by a library or group of libraries. Users typically search a library catalog to locate books, periodicals, audio/visual materials or other items under control of a library.

Integrated Learning Systems (ILS) and Assessment Applications

An ILS is used for instruction and provides curriculum and lessons based on state standard course of study requirements. An ILS usually includes assessments to identify learning needs and to monitor progress. Standalone assessment applications are used by teachers to monitor student performance against standard course of study academic indicators. The assessments use customized tests created by the teacher or standardized tests prepared by the vendor.

214. Please rate the importance your district places on the use of the following instructional software and platforms to achieve its instructional goals.

(Highly Important – Important – Neutral – Not Important)

- Learning Management Systems
- Web Collaboration
- Web Conferencing/Communications
- Digital Content and Resources
- Library Automation/Online Public Access Catalog

-Integrated Learning Systems (ILS) and Assessment Applications

215. Please specify the various instructional software and platforms widely used in your district. (List up to 5 for each category)

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Learning Management Systems | | | | | |
| Web Collaboration | | | | | |
| Web Conferencing/ Communications | | | | | |
| Digital Content & Resources | | | | | |
| Library Automation/ Online Public Access Catalog | | | | | |
| Integrated Learning Systems (ILS) and Assessment Applications | | | | | |

216.* Are the instructional applications deployed as a web-accessible hosted service from a vendor, enterprise hosted, or client-based?

**Note, for each LEA, a list of their instructional applications is auto-populated from their response in the previous question. In this question, the LEA indicates how each application is deployed by checking the appropriate box (Hosted, Enterprise, or Client-based). The LEA should also complete the Hosting Service Provider name for each entry. For ease of reference, the question below is an example of how this question might appear.*

| | Hosted | Enterprise | Client-based | Hosting Service Provider |
|---------------------|--------|------------|--------------|--------------------------|
| Moodle | | | | |
| Google Apps | | | | |
| Skype | | | | |
| Discovery Education | | | | |
| Follett/Destiny | | | | |
| ClassScape | | | | |

Learning Management Systems (LMS)

An LMS is a software platform that facilitates the management and delivery of learning content and resources to students. An LMS can often act as a portal, integrating resources and tools, including learning object repositories, digital media collections, archived classes, Web 2.0 resources, and more. Blackboard is an example of an LMS.

217. What features/attributes of the learning management system(s) deployed in your district are most valuable to you?

218. What features/attributes are missing from the learning management system(s) deployed in your district?

219. Please describe any additional thoughts or experiences related to learning management systems.

Web Collaboration

Software to enable student collaboration, content creation and sharing, and personalization. Web collaboration examples include tools like wikis and blogs.

220. What features/attributes of the web collaboration tool(s) utilized in your district are most valuable to you?

221. What features/attributes are missing from the web collaboration tool(s) utilized in your district?

222. Please describe any additional thoughts or experiences related to web collaboration tools.

Web Conferencing/Communications

Applications that allow two or more participants at different locations to communicate with one another.

Features often include:

- Audio via VoIP or standard telephone
- Video
- Screen sharing
- Collaborative white boarding
- Video conferencing
- Archiving

Tools like Skype and IM are also included in this category.

223. What features/attributes of the web conferencing/communication tool(s) utilized in your district are most valuable to you?

224. What features/attributes are missing from the web conferencing/communication tool(s) you utilize in your district?

225. Please describe any additional thoughts or experiences related to web conferencing/communication tools.

Digital Content and Resources

Free and fee-based digital resources available over the web. Resources may simply be collections or files, while others are highly organized, and include lesson plans, instructional strategies, etc. Discovery Education is an example of a fee-based digital resource collection.

226. What features/attributes of the digital resource collections used in your district are most valuable to you?

227. What features/attributes are missing from the digital content and resources you have deployed in your district?

228. Please identify specific commercial or open-source digital resource collections that you feel should be licensed on a state-wide basis.

229. Please describe any additional thoughts or experiences related to digital content and resources.

Library Automation/Online Public Access Catalog

An online database of materials held by a library or group of libraries. Users typically search a library catalog to locate books, periodicals, audio/visual materials or other items under control of a library.

230. What features/attributes of the library automation/online public access catalog applications deployed in your district are most valuable to you?

231. What features/attributes are missing from the library automation/online public access catalog applications you have deployed in your district?

232. Please describe any additional thoughts or experiences related to library automation/online public access catalog applications.

Integrated Learning Systems (ILS) and Assessment Applications

An ILS is used for instruction and provides curriculum and lessons based on state standard course of study requirements. An ILS usually includes assessments to identify learning needs and to monitor progress. Standalone assessment applications are used by teachers to monitor student performance against standard course of study academic indicators. The assessments use customized tests created by the teacher or standardized tests prepared by the vendor.

233. What features/attributes of the integrated learning systems and assessment applications utilized in your district are most valuable to you?

234. What features/attributes are missing from the integrated learning systems and assessment applications deployed in your district?

235. Please describe any additional thoughts or experiences related to integrated learning systems and assessment applications.

236. Please describe how you believe the funding available to the NC Education Cloud could best be used to meet your district's needs for instructional software and platforms.

237. Miscellaneous site interview notes related to instructional software and platforms.

238. General site interview notes.