DPI/ESDB/NC School for the Deaf (NCSD)--Morganton
Technology Plan

2014-2016

Draft November 2013
Final July 2014
REQUIRED SUBSTANTIVE COMPONENTS
OF THE
LOCAL SCHOOL DISTRICT TECHNOLOGY PLAN

Schools, school districts, and libraries that want to apply for Schools and Libraries support, commonly referred to as "E-Rate," must first prepare a technology plan. Beginning with FY2011, technology plans are required only for Priority 2 services (Internal Connections and Basic Maintenance of Internal Connections). An approved technology plan sets out how information technology and telecommunications infrastructure will be used to achieve educational goals, specific curriculum reforms, or library service improvements.

A technology plan designed to improve education should cover the entire funding year (July 1 to June 30) but not more than three years. The plan must contain the following elements:

Goals and realistic strategy for using telecommunications and information technology
A professional development strategy
An assessment of telecommunication services, hardware, software, and other services needed
Ongoing evaluation process
Policies

The technology plan must be approved by a USAC-certified technology plan approver before discounted services can begin. The state is the certified technology plan approver for libraries and public schools. www.usac.org, August, 2011.

LEA/Charter Name: North Carolina School for the Deaf (NCSD)—Morganton

LEA/Charter Number: 298204

Superintendent Name: Dr. June St. Clair Atkinson

Superintendent Signature:

Local Board Chair Name: Dr. Audrey M. Garvin, Director

Local Board Chair Signature:

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# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision</td>
<td>4</td>
</tr>
<tr>
<td>Strategic Priorities Overview</td>
<td>5</td>
</tr>
<tr>
<td>Priority 1: Shared Services Model</td>
<td>7</td>
</tr>
<tr>
<td>Priority 2: Universal Access to Personal Teaching and Learning Devices</td>
<td>12</td>
</tr>
<tr>
<td>Priority 3: Access to Digital Teaching and Learning Resources, Including Digital Textbooks</td>
<td>16</td>
</tr>
<tr>
<td>Priority 4: Model of Technology-Enabled Professional Development</td>
<td>20</td>
</tr>
<tr>
<td>Priority 5: 21st Century Leadership for Your LEA</td>
<td>24</td>
</tr>
<tr>
<td>Appendices</td>
<td>28</td>
</tr>
<tr>
<td>References</td>
<td></td>
</tr>
<tr>
<td>Member</td>
<td>Job Title/Position</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Suzanne Levan</td>
<td>Assistant Business Manager</td>
</tr>
<tr>
<td>Dean Dodson</td>
<td>Electronics Technician</td>
</tr>
<tr>
<td>Dr. Audrey Garvin</td>
<td>Director</td>
</tr>
<tr>
<td>Steve Watts</td>
<td>Facilities Director</td>
</tr>
<tr>
<td>Donna S. Ross</td>
<td>Media Coordinator</td>
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<tr>
<td>Cora Oliveira</td>
<td>Residential Life Coordinator</td>
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<tr>
<td>Iris Stuart</td>
<td>School Counselor</td>
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<td>Peggy Sanders</td>
<td>CASS Department Director</td>
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<tr>
<td>Eric Totty</td>
<td>Technology Support Analyst</td>
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<tr>
<td>Scott Skelton</td>
<td>Residential Life/Athletic Director</td>
</tr>
<tr>
<td>Rene Skelton</td>
<td>Teacher</td>
</tr>
<tr>
<td>Irlanda Mayo</td>
<td>OCS Transition Coordinator</td>
</tr>
<tr>
<td>Katherine Murphy</td>
<td>Social Worker</td>
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</table>
Vision Statement

NC School for the Deaf (NCSD) students will be confident, collaborative members of an inclusive language rich educational community. All students will be healthy, well adjusted, lifetime learners who will contribute to world culture and succeed in a competitive global economy.

Purpose

NCSD’s purpose is to provide Deaf and Hard-of-Hearing children, youth and young adults a Language Rich Education in the Least Restrictive Environment. Maximizing parental involvement is an essential factor in the development of each student’s language and communication competence. Student inclusion and full participation in a multi-lingual, multi-cultural and multi-generational learning community is accomplished through full communication access.

Maximum achievement is supported by visual learning using visual language, including but not limited to American Sign Language and Standard Written English. Higher order thinking skills are developed through Instrumental Enrichment, Thinking Maps and Inquiry Learning.

Visual and virtual state-of-art interactive technology stimulates independent and peer-to-peer learning. NCSD students participate in NC academic achievement and career assessments. The measured annual growth of students’ achievement is included in NCSD’s accountability standards.

All students have Individual Education Plans and are fully included in the NC Common Core and Essential Standards curricula to be Career and College READY.
DPI/ESDB/NC School for the Deaf (NCSD)--Morganton
Technology Plan
Strategic Priorities
2014 - 2016

Strategic Priorities Overview:

The North Carolina School for the Deaf (NCSD) strives to provide access to digital resources and content for instruction. We believe technology can be used to extend the classroom beyond the school to state, national, and global levels. Technology provides a mechanism to create relevant meaningful content for project and inquiry based, student centered learning. To provide these educational opportunities, NCSD has completed our 1:1 initiative for K-12.

Two-thirds of K-12 academic classrooms have interactive display systems with mobile units shared with remaining academic classrooms. These systems will be used in classrooms and/or other instructional applications to further a technology rich learning environment. We anticipate by 2015, that all classrooms will be equipped with this technology.

Instructional Technology Facilitator, instructional specialists and technology support staff continue to work together to provide professional development opportunities at the classroom level to support 21st Century teaching and learning.

Our NCSD instructional technology vision includes:

1. Increasing academic performance in all areas;
2. Reducing communication barriers for students, staff and families;
3. Providing safety with visual rather than auditory alerting devices and with emergency communication access for both Deaf and hearing staff members;
4. Increasing staff technological competencies through professional development and opportunities to use technology;
5. Allowing our students to learn technological skills to increase future employment options, and
6. Increasing efficiency of record-keeping and staff productivity.

NCSD created an innovation lab with a variety of technology tools that are being used with students and staff in order to evaluate the effectiveness of these tools for individual learners. The outcome of student and staff evaluations will lead to a more individualized technology plan and purchases.

To accomplish a more individualized technology environment and culture for students and staff, NCSD is focusing on the following in order to acquire broad based technical competency.

- Diversity through multiple hardware/software (Windows, Apple and Android) platforms:
  - Mobile Devices
  - Desktop units
  - Video Phones
- Alert Messaging Systems
- FM Systems for Competent Auditory/Verbal Individuals
- Adaptive Technology Devices
- 3-D Printers
- Visual Public Announcements

NCSD K-12 residential and day students depend on technology to remove communication barriers caused by hearing loss and to obtain information that others gain from the ability to hear. Most of our students depend on sign language, both receptive and expressive for instruction, communication and socialization. In addition, NCSD staff members who are Deaf or Hard of Hearing depend on technology, as well as sign language, for information and communication.

Instructional technology is vital to our students since they depend on visual/auditory combined learning strategies. Technology fosters potential independence by expanding communication boundaries and by allowing information exchange between all individuals. We envision enhancing communication by acquiring and adapting technology to advance and create opportunities for student and staff learning.

NCSD will use data-driven technology instruction to support collaborative learning environments. Web-based assessments that immediately inform classroom instruction are in place for K-12 ELA, Math and Science. As assessment becomes technology-enabled and moves to online administration, NCSD is prepared to administer End of Course (EOC)/End of Grade (EOG) assessments and DPI online testing using technology.

Our graduates must compete for jobs in a global marketplace and they must possess the 21st Century skills to perform in a technology based workplace. Currently, we place our students in authentic job situations and we are rebuilding our Career and Technical Education (CTE) program with the appropriate technology and tools for each career cluster framework. We have started carpentry and construction, culinary arts and graphic arts programs. The plan is to add agriculture, automotive/auto body repair and welding programs.

Equitable access to a variety of technological resources will promote infusion of technology into all curriculum areas. The end result of our vision for technology expansion is a stronger more individualized and effective learning environment that enhances academic gains for all students, opens communication, fosters employment skills, and makes for a dynamic, creative work environment for staff.
Strategic Priority 1: A Statewide Shared Services Model

Currently, the North Carolina School for the Deaf has infrastructure that includes agency site-based and Cloud storage, management tools, printing and application, file sharing and other services. Wireless network hardware is available in the majority of academic environments to support mobile computing devices. Voice telephones and video phones are installed in all academic environments, administrative offices and dormitories. Firewalls and filters are maintained at the local level. NCSD administration and academic staff have been trained on all NC DPI Cloud resources and implemented Home Base* and PowerSchool. *Home Base, Truenorthlogic, TestNav, SchoolNet and OpenClass are currently blocked from NCSD access. This is internally being fixed by DPI.

As Cloud resources become available, the North Carolina School for the Deaf will utilize the statewide K-12 Learner Management System (LMS) and Learning Object Repository (LOR), statewide communication and collaboration tools, and an identity management solution system. NCSD has completed the high school and middle school student 1:1 initiative. Currently, iPads are in all K-12 classrooms with 1:1 being implemented in K-8.

A full campus-wide wireless plan was developed with an Request for Proposals (RFP) and E-rate Priority 2 funding was requested and not funded by the Universal Services Administrative Company (USAC) Schools and Libraries Program—E-rate. NCSD will continue to pursue both Priority 1 and 2 funding requests for all current services and future technology initiatives.
Using the chart below, briefly describe/explain how your LEA/Charter plan will utilize and align with the strategies in place in other plans/initiatives being implemented in your LEA.

Alignment to Other Plans and Initiatives:

**Strategic Priority 1: A Statewide Shared Services Model**

DPI/ESDB/NC School for the Deaf (NCSD)--Morganton will utilize and align with the following key initiatives/plans to reach for the vision and complete the strategic priorities of our plan...

**ACRE**

Continue to update the specifications of the technology infrastructure needed to support a 21st Century curriculum and assessment system and to move additional testing to appropriate technology formats.

**Career and College Ready, Set, Go!**

Put more technology into the hands of students and teachers to increase individualized learning options for the transition to online assessments, digital textbooks and universal access to personal teaching/learning devices.

**Race to the Top Local and State Scopes of Work**

Incorporate the state infrastructure blueprint into technology plans

- Participate in shared services hosted by NC Education Cloud where appropriate as services become available and current contracts expire
- Provide and support student, teacher, and administrator access to a Learner Management System, Learning Object Repository, and web collaboration tools at each school
- Provide access to effective, high-quality, job–embedded, data–informed professional development and support for educators with objectives aligned to the Race to the Top Initiatives

**Home Base Implementation**

Onsite trainer provides professional development for Home Base implementation

- Initial training of educational staff completed and monthly professional learning/training will be provided

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### 1. Statewide Shared Services Model

**Goals should be precise and measurable. See notes/guidelines regarding evaluation.**

<table>
<thead>
<tr>
<th>Suggested Goals/Targets</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Yearly Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>July 1, 2014 – June 30, 2015</td>
<td>July 1, 2015 – June 30, 2016</td>
<td>Evaluation Method(s)</td>
</tr>
<tr>
<td>Provide equitable and additional access to mobile devices</td>
<td>Completed implementation of K-12 1:1 initiative. Increase diversity of mobile devices through innovation labs. Strategy:</td>
<td>Continue to acquire personal mobile learning devices based upon use and preference of individual staff and students</td>
<td>Purchase Orders</td>
</tr>
<tr>
<td></td>
<td>● Acquire sample devices</td>
<td>● Expand sample devices in</td>
<td>Evaluation Tool for each device</td>
</tr>
</tbody>
</table>
| Provide equitable and additional access to digital resources | Expand wireless access points within K-12.  
Strategy:  
- Investigate and acquire wireless access equipment  
- Assess appropriate areas for usage  
- Facilitate installation of necessary equipment  
- Submit requisition forms and maintenance work orders | Deploy wireless access points within K-12 residential environment.  
Strategy:  
- Investigate and acquire wireless access equipment  
- Assess appropriate areas for usage  
- Facilitate installation of necessary equipment  
- Submit requisition forms and maintenance work orders | Purchase Orders  
Annual Inventory  
Maintenance Work Orders |
|---|---|---|---|
| Responsible:  
IT staff  
Budgetary Staff/Resources  
Maintenance Department | Responsible:  
IT staff  
Instructional staff | Responsible:  
IT staff  
Budgetary Staff/Resources  
Maintenance Department |  
| for innovation labs | innovation labs |  
- Train staff and students on how to use units  
- Evaluate sample software/applications  
- Evaluate staff and student use/preference for learning |  
- Train staff and students on how to use units  
- Acquire selected mobile devices (from Year 1 innovation labs), each staff and student  
- Equip each unit with appropriate software/applications |
| Reduce operating costs by facilitating a more strategic budgeting model utilizing blended funding and reducing isolated programmatic spending | Meet with NCSD Technology Committee and School Leadership to develop strategic plans to identify needs and funding sources. Strategies:  
- Research and apply for alternate sources of funding  
- Submit annual alternate funding applications, if applicable  
- Create expenditure analysis | Meet with NCSD Technology Committee and School Leadership to develop strategic plans to identify needs and funding sources. Strategies:  
- Research and apply for alternate sources of funding  
- Submit annual alternate funding applications, if applicable  
- Evaluate expenditure analysis | Responsible: Technology committee  
Budgetary Staff/Resources | Responsible: Technology committee  
Budgetary Staff/Resources | Meeting Minutes  
Bulk Procurement  
Expenditure Analysis |
|---|---|---|---|---|---|
| Promote/maintain innovative funding model by utilizing NCEdCloud offerings, Home Base and/or comparable alternatives | Utilize expenditure analysis to determine the cost of participation in NCEdCloud and Home Base offerings and components to accommodate NCSD needs. Strategy:  
- Cost benefit analysis | Utilize expenditure analysis to determine the cost of participation in NCEdCloud and Home Base offerings and components to accommodate NCSD needs. Strategy:  
- Cost benefit analysis | Responsible: IT Staff  
Budgetary Staff/Resources | Responsible: IT Staff  
Budgetary Staff/Resources | NCEdCloud Agreements  
Home Base Usage  
Expenditure Analysis  
Outcome of Cost Benefit Analysis |
| **Maximize E-Rate in support of instructional programs** | Apply for E-rate Priority 1 for all services and Priority 2 funding when appropriate to enhance technology infrastructure campus wide. Strategies:  
- Utilize strategic plans of identified needs  
- Maintain accurate E-rate funding documentation  
- Ensure State appropriations are available. | Apply for E-rate Priority 1 for all services and Priority 2 funding when appropriate to enhance technology infrastructure campus wide. Strategies:  
- Utilize strategic plans of identified needs  
- Maintain accurate E-rate funding documentation  
- Ensure State appropriations are available. | E-rate records  
Strategic Plans  
State Appropriation Budget |
|---|---|---|---|
| Responsible:  
IT staff  
E-rate Coordinator  
Budgetary Staff/Resources  
Technology committee  
Maintenance Department | Responsible:  
IT staff  
E-rate Coordinator  
Budgetary Staff/Resources  
Technology committee  
Maintenance Department | | |

| **Provide content filtering in accordance with the Children's Internet Protection Act (CIPA).** | Manage and maintain content filtering and firewall policies locally to ensure full compliance with CIPA. Strategy:  
- Monitor network usage | Review previous year firewall activity and adjust firewall policies as needed. Strategy:  
- Monitor network usage | CIPA Act  
Firewall Policy  
Activity Logs  
Purchase Orders  
Subscriptions  
Contracts  
Annual Renewals |
|---|---|---|---|
| Responsible:  
IT staff | Responsible:  
IT staff | | |
Strategic Priority 2: Universal Access to Personal Teaching and Learning Devices

The North Carolina School for the Deaf provides each teacher a desktop unit and an iPad. K-12 students have a 1:1 laptop/iPad. Computer labs (PC and Mac) provide one computer for each 1.5 students. Residential students have computers in the dorm and access to three computer labs in the Media Center. Students have web-based individualized Accelerated Reading and Math, Study Island and Failure Free Reading programs.

Students take MAP assessments online in English Language Arts and Math. As EOGs and EOCs go online staff and students are prepared for web-based assessments. NCSD is upgrading from interactive white boards to interactive display monitor systems with touch screen capability and integrated student response systems.

Technology must be an integral element of teaching and learning from beginning to end. NCSD strives to have proper and updated programs/equipment and infrastructure for student and staff use. The majority of academic environments have Wi-Fi access. Currently, NCSD is transitioning from agency site-based storage to Cloud storage and computing.

Students who have intellectual disabilities (ID) will upgrade from lab based computing with 1:1 iPads to individualized, adaptive devices in the classroom. Specialized software and devices will be selected and evaluated for learning and communicating. Portfolios of digital learning exemplars will be used for individual assessments of students with ID.

K-12 students without ID will use a variety of individual devices for web-based learning. NCSD will evaluate capacity of the current infrastructure to consider bring your own device/technology (BYOD/T).
Using the chart below, briefly describe/explain how your LEA/Charter plan will utilize and align with the strategies in place in other plans/initiatives being implemented in your LEA.

### Alignment to Other Plans and Initiatives:

#### Strategic Priority 2: Universal Access to Personal Teaching and Learning Devices

**DPI/ESDB/NC School for the Deaf (NCSD)--Morganton** will utilize and align with the following key initiatives/plans to reach for the vision and complete the strategic priorities of our plan...

<table>
<thead>
<tr>
<th>ACRE</th>
<th>Increase the percent of time on task using personal teaching and learning devices with Common Core and NC Essential Standards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career and College Ready, Set, Go!</td>
<td>Continue to increase virtual learning opportunities K-12. Increase the use of teacher/student online communication, assignment, submission and assessment.</td>
</tr>
<tr>
<td>Race to the Top Local and State Scopes of Work</td>
<td>Increase the use of technology to collect and evaluate teaching and learning.</td>
</tr>
<tr>
<td>Home Base Implementation</td>
<td>Increase the use of high-standard master lessons for Common Core and NC Essential Standards through collaboration.</td>
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</table>

#### Priority 2: Universal Access to Personal Teaching and Learning Devices

Goals should be precise and measurable. See notes/guidelines regarding evaluation.

<table>
<thead>
<tr>
<th>Suggested Goals/Targets</th>
<th>Year 1: July 1, 2014 – June 30, 2015</th>
<th>Year 2: July 1, 2015 – June 30, 2016</th>
<th>Yearly Evaluation Method(s)</th>
<th>DPI Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop a comprehensive sustainable LEA plan for universal access. <em>Resources: NCDPI, NCLTI, Educator Effectiveness, and District &amp; School Transformation</em></td>
<td>Continue to allocate funding and resources for purchasing mobile devices to further student/staff access to technology rich learning environments. Strategy: Select and evaluate specialized software and devices for learning and communicating</td>
<td>Continue to allocate funding and resources for purchasing mobile devices to further student/staff access to technology rich learning environments. Strategy: Select and evaluate specialized software and devices for learning and communicating</td>
<td>Budget, Purchase Orders, Maintenance, Records, Professional Development, Agendas/Survey</td>
<td></td>
</tr>
</tbody>
</table>
| Communicate your plan to all stakeholders. | Develop and initiate a comprehensive plan to communicate with stakeholders. Strategy:  
- Grade level communication to parents  
- Leadership communication with all stakeholders through informational outlets (e.g. web-site, newspaper, school PR materials) | Evaluate the comprehensive plan used to communicate with stakeholders. Strategy:  
- Grade level communication to parents  
- Leadership communication with all stakeholders through informational outlets (e.g. web-site, newspaper, school PR materials) | Number of and diversity of communications |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Responsible: Technology Committee  
Instructional Staff | Responsible: Technology Committee  
Instructional Staff | Responsible: Technology Committee  
Instructional Staff  
School Administrators | Responsible: Technology Committee  
Instructional Staff  
School Administrators |
| Increase overall access to personal learning devices. | Increase technology-enabled diversity and individualization through innovation labs. Strategy:  
- Acquire sample devices for innovation labs  
- Professional development opportunities given for training on equipment and programs for all instructional staff. | Continue to increase technology-enabled diversity and individualization through innovation labs. Strategy:  
- Acquire sample devices for innovation labs  
- Professional development opportunities given for training on equipment and programs for all instructional staff. |  
|---|---|---|
| Responsible:  
IT staff  
Instructional staff | Responsible:  
IT staff  
Instructional staff |  
| Utilize Personal Learning Devices to promote student owned learning. | Integrate laptops/mobile devices and interactive display systems to advance student learning in the classroom. Strategy:  
- Continue to acquire interactive display systems for classrooms  
- Equip each unit with appropriate software and programs for student use  
- Acquire best practices with use of laptops and interactive display boards. | Integrate laptops/mobile devices and interactive display systems to advance student learning in the classroom. Strategy:  
- Continue to acquire interactive display systems for classrooms  
- Equip each unit with appropriate software and programs for student use  
- Acquire best practices with use of laptops and interactive display boards. |  
| Responsible:  
Instructional staff | Responsible:  
Instructional staff |  
| Evaluate Sample Devices  
Purchase Orders  
Annual Inventory  
Professional Development | Budget  
Purchase Orders  
Professional Development |
Strategic Priority 3: Statewide Access to Digital Teaching and Learning Resources, Including Digital Textbooks

NCSD utilizes North Carolina’s digital online teaching and learning resource repository, NC WiseOwl, to provide free online resources for students and staff. Likewise, the University of North Carolina’s LearnNC is a repository of learning resources and professional development opportunities. The NC Virtual Public School is utilized for online course content and curriculum. Subscriptions to BrainPop, Study Island, Failure Free Reading, Accelerated Reading and Math and MAPs are used to enhance, customize, and create digital content for student learning as well as measuring student growth.

NCSD maintains a safe online learning environment in compliance with the Children’s Internet Protection Act (CIPA) by engaging in Gaggle’s cloud-based instructional solutions. These solutions designed specifically for K-12, engage students and promote collaboration, communication, organization, productivity, and networking.

The NC Education Cloud will be utilized to access digital resources and content provided for all K-12 students, as funding becomes available. It will include a Learning Object Repository (LOR) housing a collection of content, practice and assessment items aggregated for a single learning objective.

In collaboration with Burke County Public Schools (BCPS) and the NC School of Science and Math (NCSSM), NCSD students may enroll in the STEAM Academy administered by BCPS and taught by teachers from BCPS, NCSD and/or NCSSM. Students may enroll in STEAM courses with direct instruction and/or distance learning courses taught by NCSSM.

NCSD introduced digital textbooks in Middle school science. NCSD will increase the number of digital textbooks with interactive materials based on the availability and appropriateness for students. NCSD will utilize Home Base to access high-standard master lessons. Teachers of the Deaf will collaborate by providing high-standard master lessons to Home Base.
Using the chart below, briefly describe/explain how your LEA/Charter plan will utilize and align with the strategies in place in other plans/initiatives being implemented in your LEA.

Alignment to Other Plans and Initiatives:

**Strategic Priority 3: Statewide Access to Digital Teaching and Learning Resources, Including Digital Textbooks**

**DPI/ESDB/NC School for the Deaf (NCSD)--Morganton** will utilize and align with the following key initiatives/plans to reach for the vision and complete the strategic priorities of our plan:

**ACRE**
- Increase the number of digital textbooks with interactive materials based on the availability and appropriateness for students.

**Career and College Ready, Set, Go!**
- Increase the use of mobile learning devices off campus under teacher supervision and parent collaboration.

**Race to the Top Local and State Scopes of Work**
- Provide and support student, teacher, and administrator access to Learner Management System, Learning Object Repository, and web collaboration tools.
- Teachers will use technology tools for inquiry learning of the Common Core and Essential Standards, and related assessments.

**Home Base Implementation**
- Increase the use of high-standard master lessons for NC COS including essential standards and common core.
- Teachers of the Deaf will collaborate by submitting high-standard master lessons to Home Base.

**3: Statewide Access to Digital Teaching and Learning Resources, Including Digital Textbooks**

Goals should be precise and measurable. See notes/guidelines regarding evaluation.

<table>
<thead>
<tr>
<th>Suggested Goals/Targets</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Yearly Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>July 1, 2014 – June 30, 2015</td>
<td>July 1, 2015 – June 30, 2016</td>
<td>Evaluation Methods(s)</td>
</tr>
</tbody>
</table>
| **Continue to transition from traditional print and paper-based resources to current, affordable online resources** | Increase the number of digital textbooks with interactive materials. Strategy:  
- Investigate and implement online digital textbooks in curriculum content areas. | Increase the number of digital textbooks with interactive materials. Strategy:  
- Investigate and implement online digital textbooks in curriculum content areas. | Standardized Rubric for evaluating digital textbooks | Continue to transition from traditional print and paper-based resources to current, affordable online resources |
| Responsible:  
Principal  
Curriculum Content Committees | Responsible:  
Principal  
Curriculum Content Committees | | | |
| **Utilize procured resources such as NC WiseOwl, Home Base and other open education resources** | **Utilize procured resources in all academic content areas.** | **Utilize procured resources in all academic content areas.** | **Year 1:** Data Collection as baseline  
| | | | **Year 2:** Increase use by 20%  
| | | | Data Collection  
| | | |  
| Responsible: Principal  
Instructional staff  
Technology Committee  
IT Staff | Responsible: Principal  
Instructional staff  
Technology Committee  
IT Staff | Responsible: Principal  
Instructional staff  
Technology Committee  
IT Staff |  
| Strategy:  
- Monitor and document the use of procured resources and other open education resources.  
- Provide links to digital resources on school web page and Wiki | Strategy:  
- Monitor the increase of procured resources and other open education resources.  
- Provide links to digital resources on school web page and Wiki |  
| **Use digital content aligned specifically to Common Core and NC Essential Standards** | **Evaluate all purchases and procurements of digital materials based on their alignment to Common Core and NC Essential Standards.** | **Evaluate all purchases and procurements of digital materials based on their alignment to Common Core and NC Essential Standards.** | **Pre-purchase verification of content alignment**  
| | Strategy:  
- Evaluate publisher statement that ensures all content is aligned specifically to the Common Core and NC Essential Standards | Strategy:  
- Evaluate publisher statement that ensures all content is aligned specifically to the Common Core and NC Essential Standards | **Purchase Orders**  
| Responsible: Principal  
Instructional staff | Responsible: Principal  
Instructional staff | Responsible: Principal  
Instructional staff |  
|  

<table>
<thead>
<tr>
<th>Ensure equity to digital teaching and learning resources from school to school in your LEA</th>
<th>Deploy digital learning resources based on the K-12 implementation strategy and time table.</th>
<th>Deploy digital learning resources based on the K-12 implementation strategy and time table.</th>
<th>Purchase orders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strategy:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Collection of digital equipment and resource data K-12</td>
<td>● Collection of digital equipment and resource data K-12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Identification of gaps</td>
<td>● Identification of gaps</td>
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<tr>
<td></td>
<td>● Establishment of plan to systematically close gaps with checklist of steps for implementation/deployment</td>
<td>● Establishment of plan to systematically close gaps with checklist of steps for implementation/deployment</td>
<td></td>
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<tr>
<td></td>
<td>Responsible: Technology Committee</td>
<td>Responsible: Technology Committee</td>
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**Strategic Priority 4: A Statewide Model of Technology-Enabled Professional Development**

Technology-enabled instruction mandates continuous professional development. The North Carolina School for the Deaf has an active Technology Committee and the committee members have become leaders in adopting technology changes. Members of the technology committee have participated in trainings offered by NC School Library Media Association (NCSLMA), NC Technology in Education Society (NCTIES) and Northwest Regional Educational Service Alliance (NWRESA) on the DPI statewide initiative for technology-enabled professional development.

NCSD has increased use of webinars for professional development on site. NCSD continues to upgrade professional development primarily in the media center with interactive display system technology. Every teacher has access to interactive display systems for classroom instruction. NCSD continues to install interactive display systems in the K-12 program to ensure a technology-rich learning environment. Currently, NCSD is using distance learning through the NC Virtual Public Schools and the STEAM Academy. Technology has become an essential tool to acquire pertinent information concerning education on a daily basis.

Currently, students are using webcams to communicate with hearing and Deaf students regionally, nationally and globally. Students take MAP assessments online in English Language Arts, Math and Science to be added. As EOGs and EOCs go online staff and students are prepared for web-based assessments.

Our students can be dually enrolled in high school and Western Piedmont Community College. The college affords our students an opportunity to utilize specialized vocational software and equipment such as AutoCAD design program, 3-D modeling laser guided woodworking and design, and welding. NCSD is currently interviewing for Career and Technical Education instructors for high school course work to align with the community college.

NCSD will endeavor to establish collaboration with other residential schools across the United States and in foreign countries allowing for greater learning opportunities. NCSD will research Global SchoolNet, NovaNet, Geo Games and other technologies to achieve access and exposure to global exchanges and partnerships.

Solid planning and ongoing communication between administrators, teachers, and technology personnel keep a broad range of essential information and resources accessible. NCSD will continue to utilize all federal and state funds to purchase the interactive display systems, media and equipment recommended from the innovation labs.
Using the chart below, briefly describe/explain how your LEA/Charter plan will utilize and align with the strategies in place in other plans/initiatives being implemented in your LEA.

**Alignment to Other Plans and Initiatives:**

**Strategic Priority 4: A Statewide Model of Technology-Enabled Professional Development**

**DPI/ESDB/NC School for the Deaf (NCSD)--Morganton** will utilize and align with the following key initiatives/plans to reach for the vision and complete the strategic priorities of our plan...

| ACRE | Create a comprehensive, customized professional development system to provide teachers and administrators with the skills and understanding needed to use technology for instructional best practices. Continue to update the analysis of the technology infrastructure needed to support a 21st Century curriculum and assessment system. |
| Career and College Ready, Set, Go! | Put more technology into the hands of students and teachers to increase individualized learning options. Increase the use of technology for providing professional development opportunities for teachers. |
| Race to the Top Local and State Scopes of Work | A teacher to teacher initiative will be added to professional development with teachers who are using technology rich instruction. |
| Home Base Implementation | A teacher to teacher training initiative will be added to professional development to augment administrative training on the use of Home Base. |

**4: A Statewide Model of Technology-Enabled Professional Development**

Goals should be precise and measurable. See notes/guidelines regarding evaluation.

<table>
<thead>
<tr>
<th>Suggested Goals/Targets</th>
<th>Year 1 (July 1, 2014 – June 30, 2015)</th>
<th>Year 2 (July 1, 2015 – June 30, 2016)</th>
<th>Yearly Evaluation Method(s)</th>
<th>DPI Use</th>
</tr>
</thead>
</table>
| Implement a plan for embedded technology-enabled professional development for teachers and administrators. | All professional development will utilize new and existing technology within trainings. Strategy:  
- Identify master teachers  
- Provide teacher to teacher training | Increase the number of teachers capable of performing teacher to teacher training. Strategy:  
- Identify master teachers  
- Provide teacher to teacher training | Title II survey |
|                         | Responsible: Principal               | Responsible: Principal               |                             |         |
| Support models that assist all school personnel in creating technology-enabled instruction that transforms educational practice and improves student learning | Members of the fidelity team will use a standardized rubric for identifying models of technology enabled instruction for professional development. Strategy:  
- Identifying teachers to become the teacher trainer.  
  Responsible:  
  Fidelity Team  
  Principal | Members of the fidelity team will use a standardized rubric for identifying models of technology enabled instruction for professional development. Strategy:  
Continue to:  
- Support preparation of teachers who will provide staff development sessions about acquired knowledge and abilities dealing with technology.  
  Responsible:  
  Fidelity Team  
  Principal | Standardized Rubric  
Professional Development  
Evaluation forms |
| Prepare media specialists and instructional technology facilitators to support digital reform. | Continue ongoing trainings. Strategy:  
- Attend conferences, workshops and webinars to increase knowledge and abilities.  
  Responsible:  
  Fidelity Team w/Principal | Continue ongoing trainings. Strategy:  
- Attend conferences, workshops and webinars to increase knowledge and abilities.  
  Responsible:  
  Fidelity Team w/Principal | Standardized Rubric  
Professional Development  
Evaluation forms  
NWRESA  
Membeship  
CEU credits |
Strategic Priority 5: 21st Century Leadership for All Schools and Districts

Twenty-first century learning environments require a transition in the way teachers approach the art of teaching and in the way students experience learning. Establishing these learning environments requires not only investing in technology but also investing in people to build a technology rich culture appropriate for learning.

Twenty-first century skills encompass more than technology tools/usage; they also include collaboration, communication, creativity and critical thinking. NCSD students have and will continue to acquire technological skills to be College and Career READY. In order to do this they must be able to acquire, evaluate, and use information effectively in a technology intensive world.

NCSD/Burke County Public Schools, Western Piedmont Community College and NC School of Science and Math partnered and opened a school of science, technology, engineering, agricultural and math (STEAM Academy) that utilizes interactive and distance learning technology with students and staff who are hearing and Deaf learning together. This Academy is housed on the NCSD campus with the support of community and business partners.

NCSD leadership team has participated in NC DPI technology enabled professional development and required all NCSD staff to attend technology-enabled professional development. Leadership has actively promoted and purchased necessary technology tools. The 1:1 initiative for teaching and learning and web-based assessment has been completed. Technology needs are funded through state appropriated budgets and other available funding sources. The Schools and Libraries Program of the Universal Services Administrative Company (USAC) makes discounts available to eligible schools and libraries for telecommunication services, Internet access, and internal connections through the E-rate program. The program is intended to ensure that schools and libraries have access to affordable telecommunications and information services.

The current technology personnel, one Technology Support Analyst and one Electronics Technician, support both instructional and administrative technologies being utilized by teachers, students and staff. The leadership team is developing a third position to assist with the increase use of technology. The current staff maintains the infrastructure, network and technological environments. The increased use of expanded networks will require additional bandwidth for streaming video in the classrooms and video conferencing. The bandwidth at NCSD currently restricts these instructional options and further hampers collaborative efforts. The Media Coordinator collaborates with instructional staff to support utilization of technology.

NCSD has two staff that completed train-the-trainer professional development for PowerSchool and Home Base; they provide quarterly training and direct support to individual staff. Four members on the RttT fidelity team monitor adherence to the standards for learning environments.

The North Carolina School for the Deaf adheres to policies and procedures issued by the Department of Public Instruction and local guidelines. To ensure full implementation of the North Carolina School for the Deaf technology plan the Technology Committee will meet monthly to review plan progress. E-Rate applications, funding commitments and other available
funding sources are evidence that NCSD has and will realize the milestones of plan implementation.

*Ultimately, technology is a tool that helps every teacher and every student master skills, develop critical thinking and problem solving abilities.*
Briefly describe/explain how your LEA/Charter plan will utilize and align with the strategies in place in other plans/initiatives being implemented in your LEA.

Alignment to Other Plans and Initiatives:
**Strategic Priority 5: 21st Century Leadership for All Schools and Districts**

DPI/ESDB/NC School for the Deaf (NCSD)--Morganton will utilize and align with the following key initiatives/plans to reach for the vision and complete the strategic priorities of our plan...

<table>
<thead>
<tr>
<th>Suggested Goals/Targets</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Yearly Evaluation</th>
<th>DPI Use</th>
</tr>
</thead>
</table>
| Create and lead a vision for 21st century education | Using student learning profiles, institute selected strategies for improving instructional outcomes. Strategy:  
- School/grade level teacher committees will evaluate student profiles and identify instructional goals/targets.  
- Implement specific strategies to increase NWEA MAP assessments with DesCartes Continuum of Learning ELA/Math | | |
<table>
<thead>
<tr>
<th>Develop strategic partnerships with community and business to promote 21st Century learning.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase programs and courses offerings in the STEAM Academy.</td>
</tr>
<tr>
<td>Strategy:</td>
</tr>
<tr>
<td>- Seeking additional funding sources (grants, business sponsorship)</td>
</tr>
<tr>
<td>- Build community and business internships/partnerships</td>
</tr>
<tr>
<td>Responsible: Administrators and Staff of NCSD, BCPS, WPCC, NCSSM and Community/Business Leaders</td>
</tr>
</tbody>
</table>

| Increase programs and courses offerings in the STEAM Academy. |
| Strategy: |
| - Seeking additional funding sources (grants, business sponsorship) |
| - Build community and business internships/partnerships |
| Responsible: Administrators and Staff of NCSD, BCPS, WPCC, NCSSM and Community/Business Leaders |

<table>
<thead>
<tr>
<th>Measure growth in the number of courses offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure the number of students enrolled from the Fall 2013-2014 and 2014-2015 and 2015-2016</td>
</tr>
</tbody>
</table>
# Appendix A: Policies and Procedures

## DPI/ESDB/NC School for the Deaf (NCSD) -- Morganton Technology Plan

### Policy, Procedure, & Guidelines Implementation Chart

<table>
<thead>
<tr>
<th>Policies, Procedures, &amp; Guidelines</th>
<th>LEA Policy Code or Procedure</th>
<th>LEA Adoption, Implementation or Revision Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policies (Required)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Materials Selection Policy including internet resources (GS §115c-98(b))</td>
<td></td>
<td>07/15/2005</td>
</tr>
<tr>
<td>B. Disposal of Equipment / Replacement of Obsolete Equipment (GS §115c-518)</td>
<td></td>
<td>10/31/2002</td>
</tr>
<tr>
<td>C. Hardware and Software Procurement (GS §115c-522, 115c-522.1)</td>
<td></td>
<td>07/15/2005</td>
</tr>
<tr>
<td>D. Copyright and Plagiarism Policy (PL §94-553, 90 Stat. 2541)</td>
<td></td>
<td>07/15/2005</td>
</tr>
<tr>
<td>E. Acceptable Use Policy (PL §106-554) (including existing 1:1, bring your own device)</td>
<td></td>
<td>06/15/2005</td>
</tr>
<tr>
<td>F. Equipment/Materials Donation Policy (GS §115C-518)</td>
<td></td>
<td>07/15/2005</td>
</tr>
<tr>
<td>G. Data Privacy Policy (20 U.S.C. § 1232g; 34 CFR Part 99 (FERPA))</td>
<td></td>
<td>04/01/2005</td>
</tr>
<tr>
<td>H. Inventory Control Policy (GS §115c-539, 115c-102.6A-C(5))</td>
<td></td>
<td>06/15/2005</td>
</tr>
<tr>
<td>I. Access to Services Policy (GS §115c-106,2)</td>
<td></td>
<td>08/01/2002</td>
</tr>
<tr>
<td>J. Online Assessment and Instruction Policy</td>
<td></td>
<td>SY 2014-2015</td>
</tr>
<tr>
<td>K. Advertising and Commercialism Policy (GS §115c-98) (Procurement and gifts ethics)</td>
<td></td>
<td>07/15/2005</td>
</tr>
<tr>
<td>L. Internet Safety and Ethical Use including Cyberbullying and Harassment (Protecting Children in the 21st Century Act, CIPA, FERPA, GS 115C-407)</td>
<td></td>
<td>05/12/2010</td>
</tr>
<tr>
<td>M. (Locally identified policies)</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Procedures</th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>A. Hardware and Software Deployment</td>
<td></td>
<td>07/15/2005</td>
</tr>
<tr>
<td>B. Equipment maintenance and repairs</td>
<td></td>
<td>07/15/2005</td>
</tr>
<tr>
<td>C. Outdated Resources and Equipment Replacement</td>
<td></td>
<td>07/15/2005</td>
</tr>
<tr>
<td>D. Disaster Recovery of Data and Hardware</td>
<td></td>
<td>07/15/2005</td>
</tr>
<tr>
<td>E. Administration of Online Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Administration of Online Assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. (Locally identified procedures)</td>
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<table>
<thead>
<tr>
<th>Guidelines</th>
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<tbody>
<tr>
<td>A. Policy Translation</td>
<td></td>
<td>07/15/2005</td>
</tr>
<tr>
<td>B. Use of Digital Media and Resources</td>
<td></td>
<td>11/10/2011</td>
</tr>
<tr>
<td>C. Instructional Use of Videos</td>
<td></td>
<td>07/15/2005</td>
</tr>
<tr>
<td>D. Development of Online Resources</td>
<td></td>
<td></td>
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<tr>
<td>E. (Locally identified guidelines)</td>
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