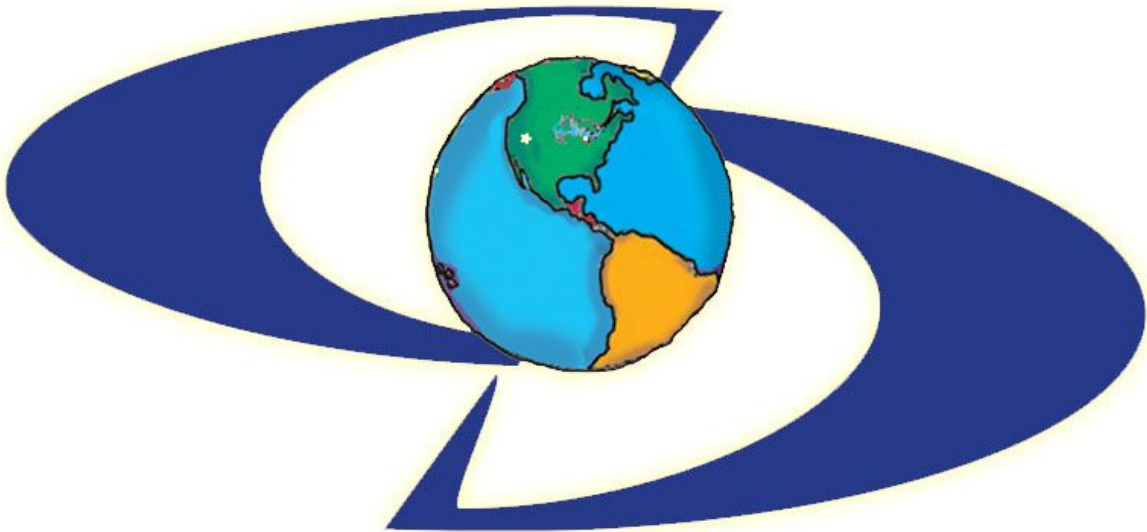


Carbon School District

Digital Teaching and Learning Grant Application



Carbon

School District

Contact: Steve Carlsen
Superintendent
Carbon School District
250 West 400 North
Price, UT 84501
Phone: (435) 637-1732
carlsens@carbonschools.org

Phillip Feichko
Technology Coordinator
Carbon School District
250 West 400 North
Price, UT 84501
Phone: (435) 613-3150
phil@carbonschools.org

LEA Overview

I. LEA's Results on the Readiness Assessment Required in Section 53A-1-1404

Carbon School District chose the North Carolina Digital Learning Plan for the required Readiness Assessment. The results of the assessment reflected the general thoughts we have had about areas of improvement we need in our district for digital learning. CSD has made a large financial investment in technology resources and infrastructure; we feel we are strong in these areas. We have known and the assessment confirmed that Carbon's efforts must be directed to professional development that improves the skills and ability of all staff to fully implement digital learning. This assessment can be reviewed at <https://goo.gl/NMXJmy>

Carbon's goals for the Digital Learning and Teaching initiative are twofold; we will strengthen the technology department's staff and increase the technological skills and abilities of educators and staff. CSD will increase the technology department's ability to repair and maintain the 1:1 devices currently deployed for all secondary as well as fourth and fifth grade students by hiring two part time technology paraprofessionals to perform routine troubleshooting operations. These employees will reduce the time the highly skilled staff perform maintenance operations. Secondly, the district wishes to improve instructional implementation of 1:1 devices and the capacity of educators and students to seamlessly integrate technology into the educational program. All educators and students will be participants in this technology adventure. Educator participation will not be optional, but educators will be rewarded because of their increased technology skills and by the monetary recognitions that will be made possible by this grant.

II. Inventory of the LEA's Current Technology Resources, Including Software, and a Description of How a LEA Will Integrate Those Resources into the LEA's Implementation of the Three Year Proposed Program

Part A

Carbon School District participated in the Utah School Technology Inventory project which was completed over the past school year in cooperation with UETN. The following is a summary of those results with updated totals for new devices that have been purchased since that time.

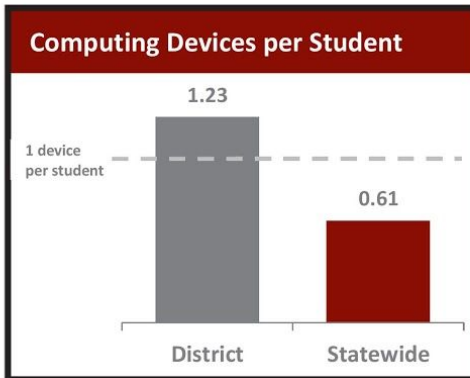
Computing Devices	Total for Student Use	Total for Teacher or Admin Use
Desktops Using Windows OS	949	353
Laptops Using Windows OS	304	38
Google Chromebooks	2600	250
iOS iPad Tablets	420	76



UTAH

School Technology Inventory

Carbon School District



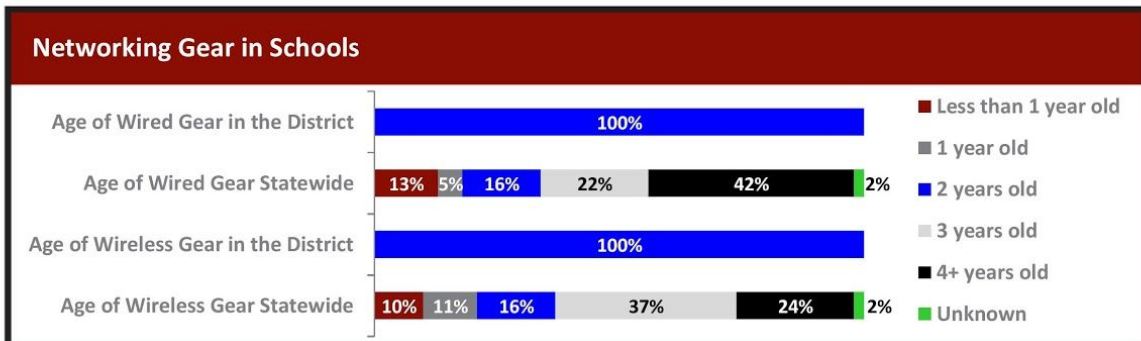
Computing Devices Used in Schools

Device Type	Total for Student Use	Total for Teacher or Administrator Use
Desktops Using Windows OS	949	353
Laptops Using Windows OS	304	38
Mac Desktops	0	0
Mac Laptops	0	0
Google Chromebooks	2,196	195
Windows Tablets	0	0
Android Tablets	0	0
iOS Tablets	420	76

0.80 Wi-Fi Access Points
 Per Classroom
 Compared to
0.58 Statewide

District Facts

Population	21,118
Student Body Size	3,141
Number of Schools	10
Urban/Rural	Rural
Median Household Income	\$44,724
Poverty Rate	15.1%
Free/Reduced Lunch Eligible	42.6%



For more information, visit www.uen.org/digital-learning
 Analyses based on validated data from 100% of Utah K-12 schools that participated in the survey.

In addition to computing devices most classrooms across the ten schools in our district also include the following technology resources

- Smart Board Interactive whiteboard
- Elmo document camera
- Audio Enhancement classroom audio system
- Desktop printer and or access to a high speed school centralized printer

Currently all secondary schools are 1:1 with student Chromebook devices that are issued by the district. Students in secondary schools are also able to take their devices home so they have 24/7 access to digital learning materials. In our elementary schools we are currently 1:1 with Chromebook devices that are setup in charging carts for fourth and fifth grades. Elementary schools also have shared iPad carts available for the primary grades.

In addition to mobile devices, each school has at least one centralized lab available for student use in specialized applications where mobile devices are not capable.

Teachers and students use a wide variety of software applications and online resources that are integrated into their daily teaching and learning. Below is a list of the most commonly used resources.

- Microsoft Office Suite
- Google Docs and Google Drive
- Smart Notebook
- Mastery Connect
- Google Classroom
- Hapara Classroom Management
- i-Ready
- ESGI

Part B

Educators have the opportunity to integrate Chromebooks and software into their classroom instruction. CSD will achieve seamless integration in the classroom by providing teachers with access to the technology and also the necessary training for effective implementation.

Current hardware/software maintenance are supported through existing budget channels. The Digital Teaching and Learning program will provide resources for ongoing as well as enhanced training for all educators. Inventory reporting will be handled per program directions.

CSD will participate in future inventory efforts with UETN as requested.

LEA Capacity and Goals

III. Statement of Purpose that Describes the Learning Objectives, Goals, Measurable Outcomes, and Metrics of Success and LEA Will Accomplish by Implementing the Program

The vision of the Carbon District is that educators and students will be creative producers of knowledge and will be successful participants in an ever changing world where technology advancements occur rapidly.

The mission of the Carbon District digital technology and learning initiative is to create a collaborative learning environment for all students and teachers, to promote engagement with content, and to develop self-directed lifelong learning.

Goals/Objectives

Goal 1: Maintain the 1:1 device implementation, technology infrastructure, classroom technology, and continue exploration of technology improvements.

Objectives

- A. CSD administrators will continue to allocate capital funds to maintain and replace existing technology and infrastructure.
- B. CSD will continue to allocate M&O funds to employ a highly skilled technology staff to maintain current technology and explore developing educational technology.
- C. CSD administrators will seek funding to employ part-time technical staff to support technology needs a schools.

Goal 2: Continue exploring, selecting, and implementing educational software and programming that supports, diagnoses, accelerates, tracks, remediates, assesses student learning and mastery of USBE core curriculum.

Objectives

- A. The technology team will adopt software to report and aggregate current usage of software applications.
- B. The technology team will examine usage data annually to determine cost versus benefit of specific software.

Goal 3: The technology team and administrators will develop sustainable and useful professional development for all educators.

- A. The technology team and administrators will identify necessary as well as extension technology skills and digital learning strategies which will be available for educator training through online and face to face formats. (Level 1, Level 2)
- B. The technology team and administrators will develop a third level of technology training which will allow highly proficient and interested educators to explore and implement innovative application of digital learning resources in the classroom.
- C. The technology team and administrators will monitor and provide staff development to ensure technology becomes seamlessly integrated into instruction and learning.

Goal 4: Student achievement on the SAGE total score will increase by 5% within the next three school years.

- A. CSD educators will implement technology Level 1, 2 and 3 training to accelerate student achievement.

Long-term Outcomes

Long term outcomes are both student and educator focused; overall student achievement on the SAGE will increase 5%.

An increase of training and faculty requirements to be **Level 1** (shown below) and **Level 2** Tech Certified will address skill deficiencies and provide administrators an avenue to enforce and support technology usage and curriculum implementation across the teacher spectrum. **Level 3** (in development) certification will provide teachers the opportunity to increase desired skills and to implement classroom digital learning innovations.

Intermediate Outcomes

Intermediate term outcomes are both student and educator focused;

Student Outcomes

- 1% increase in student achievement on SAGE results this year (2016-2017)
- 2% increase in student achievement on SAGE results this year (2017-2018)
- 2% increase in student achievement on SAGE results this year (2018-2019)

Educator and Staff Outcomes

- By the middle of school year 2017-2018, all educators will be proficient Level 1 and Level 2 users of technology
- By the end of the school year 2018-2019, all new educators will be competent in Level 1 and Level 2 technology
- By the end of the school year 2018-2019, highly proficient, interested educators will be able to participate in additional training, which includes but is not limited to guest lecturer in Tech Cafe forums, and stipends to implement digital learning in their classrooms.

Root causes of performance challenges

Performance challenges are mainly lack of classroom usage of provided devices by teachers and students. Our long term and intermediate goals will remediate and correct the performance challenges by increasing teacher and student usage of 1:1 devices. Increasing teacher usage of digital technology will be accelerated by stipends from the DLT grant. As educators master the first two technology levels, they will receive stipends equal to a approximate day's earnings. Teachers who become eligible for level three will be able to submit mini grants and proposals for which they will receive further stipends.

Digital Learning Integration

The Carbon School District Mission Statement says "Carbon School District through its educational alliances, will empower all students to become successful, productive, lifelong learners."

Carbon School District digital learning initiative is embedded within the language and purposes of the district mission statement.

Listed below are the Level 1 and Level 2 technology skills that will be required of all new and existing educators in order to facilitate digital learning in the classroom.

Level 1 Technology Skills

Level 1 Technology skills are those skills that every teacher needs. These are basic skills that form the foundation for using technology to teach with, as well as function in a building as a professional team member. These skills allow a teacher to participate in professional learning activities. Initiating professional learning activities may require Level 2 or 3 skills.

1. **Google Apps:** Professional employees will show understanding and application of basic skills using Google Apps
 - 1.1. [I can demonstrate using Google Chrome including the following:](#)
 - 1.1.1. Sign-in to chrome on any assigned device
 - 1.1.2. Use tabs for navigation
 - 1.1.3. Use bookmarks and Bookmark Bar
 - 1.2. [I can demonstrate using Google Drive including the following:](#)
 - 1.2.1. Access G-Drive from any assigned device
 - 1.2.2. Use “Rubik's cube” a.k.a. App Launcher menu
 - 1.2.3. Using G-Drive menus
 - 1.2.4. Find and open shared documents
 - 1.2.5. Create new documents
 - 1.2.6. Manage File and Folder locations
 - 1.2.7. Manage File and Folder Sharing
 - 1.2.8. Search documents
 - 1.2.9. Upload documents from school network to G-Drive
 - 1.2.10. Copy and paste from a Word doc to a Google doc
 - 1.3. [I can demonstrate using G-mail including the following:](#)
 - 1.3.1. Access G-Mail from any assigned device (Using Drive & App)
 - 1.3.2. Opening, composing and sending messages
 - 1.3.3. Setting a signature
 - 1.3.4. Search G-Mail for received messages
 - 1.3.5. Manage deleted messages
 - 1.3.6. Reply vs. Reply All
 - 1.4. I can demonstrate using Google Docs including the following:
 - 1.4.1. Access G-Docs from any assigned device (Using Drive & App)
 - 1.4.2. Open and Create new documents
 - 1.4.3. Share & Collaborate
 - 1.4.4. Insert Images, headers & Links
 - 1.4.5. Use Formatting tools
 - 1.4.6. Use Tables
 - 1.4.7. Spellcheck
2. **Mastery Connect:** Professional employees will show understanding and application of basic skills using MasteryConnect (1st Grade -12th Grade)
 - 2.1. I can use MasteryConnect to accomplish the following:
 - 2.1.1. Log in to my account
 - 2.1.2. Complete MC Mindful Introduction PD
 - 2.1.2.1. Navigate my homepage

- 2.1.2.2. Check News Feeds
 - 2.1.2.3. Update my profile
 - 2.1.2.4. Find and follow other teachers
 - 2.1.2.5. Create Trackers for all subjects or classes taught
 - 2.1.2.5.1. Add Students - Understand autoloading of students
 - 2.1.2.5.1.1. Who to contact when a student does not appear after 24 hours of the student being entered into SIS
 - 2.1.2.5.2. Select Standards
 - 2.1.2.6. View individual student data
 - 2.1.2.7. Rearrange Standards
 - 2.1.2.8. Create/Use Community assessments
 - 2.1.2.9. Enter Scores
 - 2.1.2.10. Basic Reports
 - 2.1.3. Complete MC Mindful Intermediate PD
 - 2.1.3.1. Upload Assessments (in multiple formats)
 - 2.1.3.2. Use Item Banks for assessments
 - 2.1.3.3. Create Rubric Based Assessments
 - 2.1.3.4. Raw Score Assessments
 - 2.1.3.5. Performance Grader Assessments
 - 2.1.3.6. Using Resource Pins
 - 2.1.3.7. Creating/Using Curriculum Maps
 - 2.1.3.7.1. Adding Standards
 - 2.1.3.7.2. Customizing
 - 2.1.3.7.3. Tracking and Sharing
3. **SIS/Aspire:** Professional employees will show understanding and application of basic skills using SIS Aspire
- 3.1. I can use SIS Aspire to accomplish the following:
 - 3.1.1. Login
 - 3.1.2. [Take Attendance](#)
 - 3.1.3. Define a Subject Template (except Kindergarten)
 - 3.1.3.1. Assignment Categories
 - 3.1.3.2. Creating a Mark Set
 - 3.1.4. Define Citizenship - behaviors based on disclosure / school policy
 - 3.1.5. Use Gradebook
 - 3.1.5.1. Defining a class
 - 3.1.5.2. Adding assignments
 - 3.1.5.3. Copy Tasks between classes
 - 3.1.5.4. Posting Term Final Grades
 - 3.1.6. [Basic report functions in Aspire](#)
4. **Classroom Hardware:** Professional employees will show understanding and application of installed classroom hardware
- 4.1 I can use Smart Technology software and hardware to accomplish the following:
 - 4.1.1 Create and Open Smart Notebook documents

- 4.1.2 Using pens/eraser
- 4.1.3 Creating and manipulating objects within the software
- 4.2 I can use Digital Projectors to accomplish the following:
 - 4.2.1 Power on/off/freeze/zoom
 - 4.2.2 Show computer screens and video
- 4.3 I can use Audio Enhancement (if available in your classroom) to accomplish the following:
 - 4.3.1 Amplify teacher voice
- 4.4 [I can use my Home \(H\) Drive to organize and protect my data](#)
 - 4.4.1 I can Identify and demonstrate the difference between my Desktop, Documents and H-drive for saving files.
 - 4.4.2 I can consistently save my files in the safest CSD file locations
 - 4.4.3 I can explain why it is important to save files in my H-drive
 - 4.4.4 I can set-up and maintain an organized file structure in my H-drive
 - 4.4.4.1 I can search documents in my H-drive
- 5. **Security:** Professional employees will show understanding of basic security practices regarding access and usage of district resources.
 - 5.1 I can change my passwords.
 - 5.1.a Ctrl + Alt + Del (network and sync with Google)
 - 5.1.b SIS (Aspire)
 - 5.2 I can prevent unauthorized access to unattended equipment by locking the device
 - 5.2.a Locking the desktop
 - 5.2.b Locking Chromebooks (in settings)
 - 5.3 I can comply with recommended password changing rules
 - 5.3.a 8 Character length minimum (mixture of letters and symbols optional)
 - 5.4 I can instruct students how to manage the security if their passwords

Alternate 2 **ESGI Software** : Professional employees will show understanding and application of basic skills using ESGI Software (Kindergarten & 1st Grade)

2.1 I can use ESGI Software to accomplish the following:

- 2.1.1 Log into my account
- 2.1.2 I can find and change my profile
- 2.1.3 I have watched the introduction Webinar

<https://www.youtube.com/watch?v=W4IbfulBsTk&list=PLyLDnPpeBx7ef0drhAKEhM5EzZd8bpqUa&index=28>

- 2.1.3.1 I can find my student list and change their profile for ELL students
- 2.1.3.2 I can create/add different groups for interventions
- 2.1.3.3 I can click on a student and select the test to give them
- 2.1.3.4 I can give a student an assessment
- 2.1.3.5 I know how to find different reports for students

- 2.1.3.6 I know the differences between all of the reports
- 2.1.3.7. I can print a parent letter in either English or Spanish
- 2.1.3.8 I can change the letter template if I want it to say something else
- 2.1.3.9 I can print flashcards for student(s)
- 2.1.3.10 I know I am NEVER to DELETE a student out of the Student Explorer
- 2.1.3.11 I know how to find a test in the test bank and add it to my homepage
- 2.1.4 I have watched the Create a test Webinar
<https://www.youtube.com/watch?v=gmmWhOboMdQ&list=PLyLDnPpeBx7ef0drhAKehM5EzZd8bpqUa&index=6>
- 2.1.4.1 I can find the test explorer tab on my homepage
- 2.1.4.2 I can sort tests in multiple ways to help me find what I am searching for
- 2.1.4.3 I can preview a test to see if it is what I want
- 2.1.4.4 I can add a test to my homepage
- 2.1.4.5 I can make a new test
 - 2.1.4.5.1 I know how to add questions to a test
 - 2.1.4.5.2 I know how to change the font size and color on a question
 - 2.1.4.5.3 I know how to add images to be used in questions
 - 2.1.4.5.4 I know how to randomize the questions in a test
- 2.1.5 I have watched the Tips and Tricks Webinar
<https://www.youtube.com/watch?v=v4AVsowzPol&index=5&list=PLyLDnPpeBx7ef0drhAKehM5EzZd8bpqUa>
- 2.1.6 As a principal and/or instructional coach, I have watched the Admin Webinar
<https://support.esgisoftware.com/hc/en-us/articles/209159326-Admin-Webinar>
- 2.1.7 I can find the support center for help.

Level 2 Technology Skills

Level 2 Technology skills are those skills that every teacher needs to successfully function in a digital workplace. These skills help all teachers be more effective in teaching students as well as working as a professional team member. These skills are beyond the basics and usually require some time outside of school time to master. These skills allow a teacher to use technology to augment student learning with

technology based learning activities. Students will master the basics of technology use from a teacher who has these skills. Items that are 'grayed out' are taught/learned in Level 1.

1. **Google Apps:** Professional employees will show understanding and application of intermediate skills using Google Apps

1.1. I can demonstrate using Google Chrome including the following:

1.1.1. Sign-in to chrome on any assigned device

1.1.2. Use tabs for navigation

1.1.3. Use bookmarks and Bookmark Bar

1.1.4. Use the "Hamburger Menu"

1.1.4.1. History

1.1.4.2. Downloads

1.1.4.3. Zoom

1.1.4.4. Settings

1.1.4.4.1. On Startup

1.1.4.4.2. Appearance

1.1.4.4.3. Search

1.1.4.4.4. Downloads

1.2. I can demonstrate using Google Drive including the following:

1.2.1. Access G-Drive from any assigned device

1.2.2. Using G-Drive menus

1.2.3. Create new documents

1.2.4. Manage File and Folder locations

1.2.5. Manage File and Folder Sharing

1.2.6. Search documents

1.2.7. Upload documents from school network to G-Drive

1.2.8. Convert Word Suite files to Google App files

1.2.9. Drag and Drop

1.2.10. Button Menus

1.2.11. Recent (Docs)

1.2.12. Starred (Docs)

1.3. I can demonstrate using G-mail including the following:

1.3.1. Access G-Mail from any assigned device (Using Drive & App)

1.3.2. Opening, composing and sending messages

1.3.3. Setting a signature

1.3.4. Set Themes

1.3.5. Manage Contacts (groups)

1.3.6. Manage G-mail Desktop

1.3.7. Settings

1.3.7.1. Display Density

1.3.7.2. Maximum Page Size

- 1.3.7.3. Default Reply Behavior
 - 1.3.7.4. Default Text Display
 - 1.3.7.5. Conversation View
 - 1.3.7.6. Stars
 - 1.3.7.7. Button Labels
 - 1.3.7.8. My Picture
 - 1.3.7.9. Snippets
 - 1.3.7.10. Labels
 - 1.3.7.11. Chat
- 1.4. I can demonstrate using Google Docs including the following:
- 1.4.1. Access G-Docs from any assigned device (Using Drive & App)
 - 1.4.2. Open and Create new documents
 - 1.4.3. Share & Collaborate
 - 1.4.4. Inset Images, headers & Links
 - 1.4.5. Use Formatting tools
 - 1.4.6. Use Tables
 - 1.4.7. View Mode
 - 1.4.8. Convert Word Suite files to Google App files
 - 1.4.9. Insert Drawing, Table, Page Break, Special Characters
 - 1.4.10. Tools
 - 1.4.10.1. Spelling, Research, Define, Word Count
 - 1.4.11. Table Menu
- 1.5. I can demonstrate using Google Sheets including the following:
- 1.5.1. Access G-Sheets from any assigned device (Using Drive & App)
 - 1.5.2. Open and Create new documents
- 1.6. I can demonstrate using Google Slides including the following:
- 1.6.1. Access G-Slides from any assigned device (Using Drive & App)
 - 1.6.2. Open and Create new documents
 - 1.6.3. Use Themes & Layouts
 - 1.6.4. Share & Collaborate
 - 1.6.5. Inset Images, Text Box, Links, Videos, WordArt, Lines & Shapes
 - 1.6.6. Use Formatting tools
 - 1.6.7. Present
 - 1.6.8. Import Slides
 - 1.6.9. Download as...
 - 1.6.10. Print Settings and Preview
 - 1.6.11. Find and Replace
 - 1.6.12. Transitions
 - 1.6.13. Arrange
 - 1.6.13.1. Order
 - 1.6.13.2. Align
 - 1.6.14. Tools
 - 1.6.14.1. Spelling, Research, Define

1.6.15. Tables

2. **Mastery Connect:** Professional employees will show understanding and application of intermediate skills using MasteryConnect

2.1. I can use MasteryConnect to accomplish the following:

- 2.1.1. Log in to my account
- 2.1.2. Complete MC Mindful Introduction PD
 - 2.1.2.1. Navigate my homepage
 - 2.1.2.2. Check News Feeds
 - 2.1.2.3. Update my profile
 - 2.1.2.4. Find and follow other teachers
 - 2.1.2.5. Create Trackers for all subjects
 - 2.1.2.5.1. Add Students
 - 2.1.2.5.2. Select Standards
 - 2.1.2.6. View individual student data
 - 2.1.2.7. Rearrange Standards
 - 2.1.2.8. Create/Use Community assessments
 - 2.1.2.9. Enter Scores
 - 2.1.2.10. Basic Reports
- 2.1.3. Complete MC Mindful Intermediate PD
 - 2.1.3.1. Upload Assessments (in multiple formats)
 - 2.1.3.2. Use Item Banks for assessments
 - 2.1.3.3. Create Rubric Based Assessments
 - 2.1.3.4. Raw Score Assessments
 - 2.1.3.5. Performance Grader Assessments
 - 2.1.3.6. Using Resource Pins
 - 2.1.3.7. Creating/Using Curriculum Maps
 - 2.1.3.7.1. Adding Standards
 - 2.1.3.7.2. Customizing
 - 2.1.3.7.3. Tracking and Sharing

3. **SIS/Aspire:** Professional employees will show understanding and application of intermediate skills using SIS Aspire

3.1. I can use SIS Aspire to accomplish the following:

- 3.1.1. Login
- 3.1.2. Take Attendance
 - 3.1.2.1. Use Seating Chart
- 3.1.3. Define Class Gradebook
 - 3.1.3.1. Assignment Categories
- 3.1.4. Use Gradebook
 - 3.1.4.1. Subject Templates
 - 3.1.4.2. Citizenship
 - 3.1.4.3. Define/Copy Tasks

4. **Google Classroom:** Professional employees will show understanding and application of skills using Google Classroom.

- 4.1. I can use Google Classroom to accomplish the following:
 - 4.1.1. Login
 - 4.1.2. Create Classes
 - 4.1.3. Select Class Themes
 - 4.1.3.1. Upload Photos
 - 4.1.4. Invite a collaborating teacher
 - 4.1.5. Create Assignments
 - 4.1.6. Create Announcements
 - 4.1.7. Create Questions
 - 4.1.8. Control Posting and commenting
 - 4.1.9. Sort Students
 - 4.1.10. Invite students to join classroom
 - 4.1.11. Open Submitted work
 - 4.1.12. Grade and return submitted work
- 5. **Hapara:** Professional employees will show understanding and application of skills using Hapara
 - 5.1. Hapara Highlights - student monitoring software
 - 5.1.1 Identify student opened tabs
 - 5.1.2 Closing student tabs
 - 5.1.3 Taking a screenshot
 - 5.1.4 Viewing all students current screens
 - 5.1.5 Sending a message to a single student
 - 5.1.6 Sending a message to the whole class

Alternate 2 **ESGI Software** : Professional employees will show understanding and application of basic skills using ESGI Software (Kindergarten)

- 2.1 I can use ESGI Software to accomplish the following:
 - 2.1.1 Log into my account
 - 2.1.2 I can find and change my profile
 - 2.1.3 I have watched the introduction Webinar
<https://support.esgisoftware.com/entries/23223677-Intro-Webinar>
 - 2.1.3.1 I can find my student list and change their profile for ELL students
 - 2.1.3.2 I can create/add different groups for interventions
 - 2.1.3.3 I can click on a student and select the test to give them
 - 2.1.3.4 I can give a student an assessment
 - 2.1.3.5 I know how to find different reports for students
 - 2.1.3.6 I know the differences between all of the reports
 - 2.1.3.7 I can print a parent letter in either English or Spanish
 - 2.1.3.8 I can change the letter template if I want it to say something else
 - 2.1.3.9 I can print flashcards for student(s)

- 2.1.3.10 I know I am NEVER to DELETE a student out of the Student Explorer
- 2.1.3.11 I know how to find a test in the test bank and add it to my homepage
- 2.1.3.12 I know how to find information from a previous school year
- 2.1.4 I have watched the Create a test Webinar

<https://support.esgisoftware.com/entries/23628582-Create-a-Test-Webinar>

- 2.1.4.1 I can find the test explorer tab on my homepage
- 2.1.4.2 I can sort tests in multiple ways to help me find what I am searching for
- 2.1.4.3 I can preview a test to see if it is what I want
- 2.1.4.4 I can add a test to my homepage
- 2.1.4.5 I can make a new test
 - 2.1.4.5.1 I know how to add questions to a test
 - 2.1.4.5.2 I know how to change the font size and color on a question
 - 2.1.4.5.3 I know how to add images to be used in questions
 - 2.1.4.5.4 I know how to randomize the questions in a test
 - 2.1.4.5.5 I know how to upload images to use on a test I am creating
 - 2.1.4.5.6 I know how to use the Parent Conference to schedule my SEP's and print letters and reminders for my SEPs
 - 2.1.4.5.7 I know how to use the Classroom Management tool to keep track of important information

- 2.1.5 I have watched the Tips and Tricks Webinar

<https://support.esgisoftware.com/entries/23444666-Tips-and-Tricks-Webinar>

- 2.1.6 As a principal and/or instructional coach, I have watched the Admin Webinar

<https://support.esgisoftware.com/entries/23304298-Admin-Webinar>

- 2.1.7 I can find the support center for help

Level 3 skills and ideas are in development for the 2017-2018 school year. Learning these skills will provide teachers with the opportunity to improve specific skills and explore digital learning innovations. Level 3 will support seamless integration of hardware, software, and instructional strategies that allow students to become self-directed digital learners and creators of knowledge. The goal of this level is to provide teachers with the skills to support students as they transition into becoming responsible for their own learning rather than being simple consumers of knowledge.

Level 3 Options

Tech Cafe Instruction

- A. The CSD Tech Cafe will host training on additional software and hardware owned by CSD and requested by users to improved the depth of knowledge and usage of the resource.
- B. Opportunities for existing staff to guest lecture on digital resources used in their classrooms.
- C. Staff may host demonstration classrooms that showcase specific implementation of technology

Stipend Opportunity

- A. Highly proficient and interested educators will be given the opportunity to apply for a stipend to explore new technology resources in the classroom and report results using student achievement data following a Student Learning Objective (SLO) format.

IV. Implementation Process Structured to Yield an LEA’s School Level Outcomes

As educators become proficient users of the technology available in Carbon School District, administrators believe that student learning will be accelerated and student learning will evolve into becoming more self-directed and personalized. This process will improve achievement. According to John Hattie’s Visible Learning, (p. 297) students who are self-directed learners, learn at a much faster and higher rate than students who are teacher directed. The desired outcome of this grant is to foster self-directed, digital learners.

Part A. Plan must clearly identify specific activities (and related deliverables) it will undertake to meet the required strategies to meet the outcome measures aligned to the SAGE and/or measure achievement of the goals.

The following table identifies the activities, timeline, roles, and the communication plan for this grant.

Activity	Timeline	Roles/Responsibilities	Communication Plan
Initial Communication <ul style="list-style-type: none">● Principals Forum● Faculty Meetings● Board Meetings● News Paper	Dec/16 to Jan 17	Superintendent, Principal Leadership Team School Board	Mission and Vision Handout (Level 1 & 2) Proposed Lvl 3 Announcement to faculty

			Proposed workshop/self directed learning schedule Required for employment
Professional Development <ul style="list-style-type: none"> Mastery Connect 	Weekly TBD - During School Time Oct. 24 2016	Tech Cafe Team Following Tech Cafe schedule (in place) or self-directed learning PD Training Day Legislative PD Day	
Assessments	Spring 2017-19	Sage Summative	Public announcements
Hire Additional Support Staff (local school support - for students)	ASAP	Technology Director	New employees will be assigned to schools
Level 3 Activities	Weekly	Teachers teaching teachers Teacher learning requests	

Part B. Plan must include the integration of effective strategies (e.g., prioritized, sequenced, evidence-based, best practice oriented, outcome focused, ambitious and achievable).

Carbon’s rationale and the bases for instruction and curriculum are captured in the following statement:

"Effective integration of technology is achieved when students are able to select technology tools to help them obtain information in a timely manner, analyze and synthesize the information, and present it professionally. The technology should become an integral part of how the classroom functions -- as accessible as all other classroom tools."-- NATIONAL EDUCATIONAL TECHNOLOGY STANDARDS FOR STUDENTS, INTERNATIONAL SOCIETY FOR TECHNOLOGY IN EDUCATION

Technology integration is the use of technology resources -- computers, mobile devices like smartphones and tablets, digital cameras, social media platforms and networks, software applications, the Internet, etc. -- in daily classroom practices, and in the management of a school. Successful technology integration is achieved when the use of technology is:

- Routine and transparent

- Accessible and readily available for the task at hand
- Supporting the curricular goals, and helping the students to effectively reach their goals

Technology integration is most effective when children or teachers automatically use it rather than pausing to think how to include it in their activity - it becomes second nature. And students are often more actively engaged in projects when technology tools are a seamless part of the learning process.

To achieve the ideas and strategies from the National Educational Standards for students, Carbon will continue with training in Levels 1, 2, and 3, by increasing teacher capacity to shift their pedagogical skills from teacher led and focused classroom instruction to creating learning tasks that allow students to use technology to deepen their own understanding of core standards and objectives. Teachers in most classrooms have access to a variety of technology tools: Smart Boards, desk top computers, 1:1 student devices, Elmos, Swivl cams, and a variety of software.

Teachers in CSD use Professional Learning communities as school subject/grade, horizontal, and vertical teams. Teachers are or have identified essential standards, benchmark assessments, and pacing guides for grades, subjects, and integrated activities. In their pacing guides, teachers will be able to create lessons for which there is appropriate technology that include the following recommended practices:

- Web-based lessons such as web-quests, CyberGuides, and filamentality;
- Multimedia presentations based on core standards and objectives that include text, graphics, video, animation, and sound - these activities are multidisciplinary, require sustained effort, promote student decision making, promote group work and real world connection;
- Telecomputing projects are Internet-enriched core learning activities that involve students in one location collaborating with students or adults in other locations - these activities include sharing experiences, beliefs, data, information, problem-solving strategies, and products that are often jointly developed with partner group;
- On-line discussions include environments for sharing information such as email, chat, and threaded discussions which require sets of protocols for conducting the activity. The teacher initiates and facilitates the discussion around a forum, with a calendar, and topics and readings from class.

Teachers will assess the effectiveness of technology integrated units with Mastery Connect assessments. Questions will include the extent to which technology replaced traditional pedagogy, and was used as substitution, augmentation, modification, or

replacement as well as assessment of knowledge of content.

Part C. Plan must include a comprehensive stakeholder engagement strategy that will ensure that all stakeholders understand the plan and roles in ensuring its success.

Stakeholder engagement strategies in Carbon will include all the following activities:

- The Superintendent will update or present the Digital Learning and Teaching Plan to the Board of Education at the first board meeting following formal announcement of grant recipients. Role: support efforts of administrators and teachers through the three year grant cycle.
- The Superintendent will update or present the Digital Learning and Teaching Plan to the to all administrators at the first Principals Forum following formal announcement of grant recipients. Role: design school plans to emphasize training and curriculum development/assessment as well as communicate with school stakeholders.
- The Superintendent will update or present the Digital Learning and Teaching Plan to representatives of the teachers association at their first meeting following formal announcement of grant recipients. Role: support and encourage teachers to learn and implement seamless integration of technology in their classrooms.
- The Superintendent will update or present the Digital Learning and Teaching Plan to teaching staff at the Opening Institute SY 2017/18.
- The district will advertise and promote the DTL Plan in its bi-annual magazine which is distributed to all community households. The initial magazine called *Relevant* was distributed on October 18, 2016, and included an article about the plan and grant application.
- The district and its schools have a full page each week in the newspaper, *The Sun Advocate*, which will feature ongoing articles about the DTL plan as well as weekly radio interviews with administrators.
- Annual community engagement: The Board of Education hosts a formal, annual activity that includes inviting community members to join the board in looking at what is working, what is not working, and other issues. The Superintendent will formally present the Digital Learning and Teaching Plan to the community and solicit their input. Role: support efforts of administrators and teachers through the three year grant cycle as well as to provide timely feedback on progress of implementation.

Stakeholder roles are identified in the underlined portions of the bulleted points.

Part D. Plan must include a comprehensive communications plan for ongoing dialogue with all stakeholders at multiple points along the implementation path.

The ongoing communication plan will be based on the activities identified in IV C.

Communication will be ongoing but will include the following formal Steps

- Community Engagement occurs annually and will include the introduction and discussion of the plan in year 1. Year 2 and 3 will address progress in the implementation and the attainment of strategic goals and objectives.
- The bi-annual district magazine, *Relevant*, will include ongoing implementation events such as classroom classroom web-quest, multimedia, telecommuting and online technology activities.
- The monthly principals forum agenda will include the DTL topic with reports on school implementation and related issues such as reports on training in Levels 1-3.
- The DLT topic will be addressed in weekly and monthly communications activities on the radio and in the newspaper.
- Ongoing feedback will be solicited on the district’s website. It is not yet developed but will become available upon the announcement of grant recipients.

CSD will provide implementation data to USBE on an annual basis.

Digital Curriculum - Instructional Tools

V. Description of High Quality Digital Instructional Materials with a Three Year Plan for How an LEA will ensure that Schools Use Software Programs With Fidelity

Part A. Plan must provide a description of necessary high quality digital instructional materials being used in the project, both new and pre-existing.

The following table lists software applications, their purposes, and other information. Fidelity targets are set in accordance with the recommended usage requirements of the software provider, and the best practices recommended by the software or hardware provider.

Carbon uses the following digital instruction tools to enhance teaching and learning in our schools. At this time the district does not anticipate purchasing software with grant funds. This list is included to show current software.

Software	Purpose	Monitoring/Reporting
----------	---------	----------------------

Microsoft Office Suite	Productivity/Communication core component of CTE Business / Computer Technology	Business State Skills Tests outcomes
Google Docs / Apps Open Ed. Resource	Productivity/Communication	Google Management Console
Smart Notebook	Lesson enhancement	Principal Observation
MasteryConnect	Assessment / Progress Monitoring	Usage reporting by manufacturer
Google Classroom Open Ed. Resource	Lesson enhancement/communication	Google Management Console
OER Texts	Science Resources	OER currently unreported but will be collected by LearnPlatform
Hapara Classroom Management	Student Supervision	Usage reporting by manufacturer
I-Ready / Waggle	Assessment / Progress Monitoring in Reading & Math	Usage reporting by manufacturer and LearnPlatform in future
ESGI	Assessment / Progress Monitoring	Usage reporting by manufacturer and LearnPlatform in future
Utah Compose Open Ed. Resource	Writing	Usage reporting by manufacturer and LearnPlatform in future

Part B. Plan must address how all primary digital instructional products, regardless of funding source will be implemented with fidelity.

Carbon School District ensures that educators and others use these software products with fidelity by requiring professional development for their use and capacity in our Level 1 and 2 training. These levels include assessments to ensure educators understand and are able to use the resources. When available, staff uses the built in tracking and monitoring tools in each software application. Fidelity targets are set in accordance with the recommended usage requirements of the software provider and the best practices recommended by the software or hardware provider.

Part C. Plan must articulate alignment of new high quality digital instructional materials to address student performance targets in plan goals.

When new, promising ideas or technological applications become available, school, horizontal, and vertical PLC teams will be able to integrate these activities into existing or new essential standards, lessons, and activities. Learning targets are based on the essential standards from the core, which are measured by four levels performance, below proficient, approaching proficient, proficient, and above proficient. Mastery Connect is used to progress monitor benchmark assessments, as well as instructional support applications such as iReady, Utah Compose, and ESGI. The SAGE interim and summative assessments will ultimately establish the degree of acquisition of learning targets.

All purchases of digital instructional activities and software are integrated into the curriculum pacing guides that are used at all grade levels and in core subjects: ELA, math, and science. The pacing guides identify essential standards from the Utah core curricula, lesson plans, and benchmark assessments. Professional learning communities in schools, grade levels, and subject areas have developed pacing guides for over a three to 25 year period to ensure that teachers and administrators have robust, consistent materials for instruction.

Part D. Plan must articulate how data will be used to inform instruction.

The PLC process ensures that data is used to inform instruction. The purpose of PLCs is to examine data from a variety of sources, especially from benchmark assessments to determine what students know and what they do not know, and then what should be done to address all points of learning on the spectrum. The data examination allows teachers to reflect on what concepts were successfully learned rather than taught. As well, the examination reveals who taught these concepts with greater success than others. These discussions inform the next step of re-teaching specific concepts and enriching other concepts for students who learned more comprehensively.

The “view from the balcony” is provided by such assessments as the SAGE winter interim which will assess a variety of concepts and is predictive of student performance on the SAGE summative assessment. SAGE benchmark assessments also indicate successful student learning on specific concepts. IReady and ESGI measure attainment and are also used to inform instruction.

The basic and beginning source of instruction is the examination of data from a variety of assessments. This activity answers what do students know and do not know. The

instruction begins with “what am I going to do about it.” Instruction arises from the data results.

The PLC model is used at all grade levels and in all subjects in Carbon School District. When educators engage in this process with fidelity, they realize that it is successful and will increase their students’ learning.

Part E. Plan must address LEA procured digital content purchased by topic, enabling teachers to customize content from multiple sources and create curriculum tailored to their standards.

The digital content purchased by the district include iReady math, ST math K-3, K-8, iReady reading, K-8, Utah Compose 2-12, OER science (free), and math 7-12.

iReady reading and math are supplemental digital curricula and provide educators with a diagnosis of what students do and do not know in both subjects, as well as instructional/practice opportunities for students on all the essential concepts in each subject. The i Ready reports provide progress monitoring for teachers to maintain up to date knowledge of students successes and challenges. Teachers are able to use i Ready to increase or vary student practice on specific concepts to increase the robustness of student work. Student work is personalized by this software, allowing students to learn at their own pace and toward mastery of concepts identified in their assessment of learning. Program fidelity requires 45 minutes per subject, per week per student to achieve the outcomes promoted by the program.

ST math offers the same uses as i Ready, but requires 90 minutes of student engagement to achieve the outcomes promoted by the program.

Utah Compose provides students the opportunities to compose in a variety of genres and to receive personal and immediate feedback on all the elements of the rubric for their topic. Utah Compose provides a variety of prompts for each core writing standard and objective. Each prompt includes a rubric and is scored by artificial intelligence. Teachers may select prompts that are appropriate to their units or create their own prompt and save to the system. Teacher created prompts are scored against a generic rubric. The Utah Compose program provides reports that allow teachers to progress monitor their students’ writing from rough draft through revision/editing. Other reports indicate the amount of time, number of revisions, and word length of assignments. As well, specific tutorials are available for students struggling with grammar topics or elements of the rubric. Feedback and tutoring are personalized to student need. The

assignments are often teacher directed, but the subsequent work is designed for the individual student need for proficiency in the genre, which are identified in the Utah ELA core.

Secondary science instructors use the science oer resources provided by the USBE on the core website. Science teachers are able to organize their grade/subject level curriculum by topic from the core for instruction. These topics may be organized and sent for printing for student texts. Teachers present the OER materials via SmartBoards; students access teachers’ units through their 1:1 devices and teacher webpages. This OER implementation will be monitored and reported through the LearnPlatform program. While these OER curriculum packages are teacher selected and organized, students are offered a wide array of self-selected projects and opportunities for exploration in which they can individualize and personalize their learning. Most of these opportunities are enhanced by students’ ability to use 1:1 devices and further personalize their activities.

Secondary math teachers have developed and implemented units of instruction in grades six through Secondary III by utilizing the online math programs on the USBE math resources. These units are delivered through SmartBoard and 1:1 technology. No print texts support these units. Math teachers use their own webpages to ensure that class presentations and explanations are available to students and parents.

Part F. Plan must identify a comprehensive set of actions to meet fidelity requirements and have a clear, comprehensive and realistic plan for mitigating challenges.

During 2015-2016, Carbon School District participated in the UETN edtech inventory process, highlighting 11 products in use.

Number	Products Included in 2015-16 Inventory
11	Microsoft Office, Google Apps for Education, Adobe Acrobat Reader, UEN Open Educational Resources, i-Ready, Mastery Connect, Google Classroom, Hapara, Kahoot, SAGE

Carbon School District will utilize the state-supported LearnPlatform to support overall program management of its DTLI efforts, including monitoring utilization and our

educators' experience with these and other technologies to inform continuous improvement. As a Google Apps for Education(GAFE), we will also take advantage of the LearnPlatform Chrome extension to support our teachers and students, and understand which tools are used most frequently. Our goal is to improve both outcomes for students and our investments in digital teaching and learning.

Carbon School District's configuration of the LearnPlatform will streamline the process for all stakeholders to (1) develop continuous improvement plans, (2) use data to inform instructional and operational decisions and (3) integrate and analyze multiple data sources to develop plans and continuously improve.

During 2016-17, continuous improvement plans will be finalized. Carbon School District will work with the LearnPlatform technical assistance team to quickly configure and align the LEA's LearnPlatform account to support our LEA's business processes, communication and monitoring for continuous improvement, including:

1. Integrating (LEA)'s previous edtech inventory and engineering study information;
2. Configuring the system to match the needs of our administrators, teachers, students and administrators;
3. Providing access for teachers and administrators to access and monitor their edtech;
4. Defining the key edtech activities, interventions and measurements (see below for examples).

Carbon School District's program management will focus on continuous and ongoing improvement, supported by integrated insights, data and input from and for administrators and teachers. To support our educators' efforts, Carbon will have a centralized digital teaching and learning profile for each school, with an integrated edtech inventory on its LearnPlatform. In alignment with all state and federal regulations, data integration from products, process automation, and communication tools of the LearnPlatform will be used to further streamline processes, such as:

1. Allowing educators an easy way to centrally see, share insights, learn and ask questions about digital teaching and learning tools;
2. Efficiently piloting new tools, with both qualitative and quantitative results to inform implementation;
3. Rapidly analyzing the impact of current and new digital teaching and learning interventions;
4. Providing administrators and educators instant dashboards for digital teaching and learning ecosystem;

5. Use the Google Apps for Education extension (or other Carbon supplied technology) to provide time saving tools for educators and remotely monitor which digital teaching and learning tools are used and how often;
6. Centrally managing and sharing findings and status for all teachers and administrators to inform their instructional and operational decisions; and,
7. Enhancing Carbon's own processes with insights learned from other LEAs.

Program technology utilization and achievement measures will be monitored and centralized in LearnPlatform and mapped against additional data sources which include:

1. Quantified feedback from educators, based on research-based rubric
2. Pilot and trial tests which survey specific user types, products, learning applications and/or student variables
3. De-identified student co-variate data (demographic, gender and other filters)
4. Carbon and state-level testing data
5. Product utilization data at the user and/or school level
6. Product access monitoring (via Chrome extension where applicable)

Administrators and teachers will have secure access, dashboards, and appropriate controls, as well as quarterly reports to inform plan adjustment to advance our digital teaching and learning initiative.

Part G. Plan must include necessary and appropriate software for special education students.

CSD provides special education students with appropriate software, devices, and services as recommended by the special education assistive technology team to ensure they can participate to the fullest extent possible in their educational plan and fully access both hardware and software.

VI. Detailed Three Year Plan for Student Engagement in Personalized Learning Including a Three Year Plan for Digital Citizenship Curricula and Implementation

Part A. Plan must provide a detailed plan for student engagement in personalized learning as related to the goals of the plan.

Carbon School District's plan involves Levels 1 - 3 training and learning strategies as detailed in Section 3. Educators will be able to implement increased digital lesson

resources in classrooms and enhance the opportunities for students to have personalized learning goals and lessons. As educators become proficient in their implementation of digital learning strategies, they will revise existing pacing guides in English Language Arts, math and science (carbonschools.org, teacher resources) at all grade levels to include digital learning lesson designs and opportunities for self-directed student learning opportunities. Self-directed learning activities include stand alone activities and integrated opportunities, which may be conducted by students working alone or in collaboration. As indicated in such works as the National Technology Standards, there are model strategies, which have been peer reviewed, that enrich technology guided and supported lessons at all levels of instruction and in all grade levels. Such model lessons include web-based lessons: WebQuests, CyberGuides, Filamentality, Multimedia and Telecommuting projects, and online discussions. Increasing instructor capacity will naturally provide greater and greater access to these lessons for students, thus increasing student engagement in content and personalizing their learning goals. Greater student engagement and ownership of learning, according to John Hattie, has the greatest impact on student learning. He indicates that an effect size of .40 is positive and useful for student learning. Self-directed, self-reported activities has an effect size of 1.44 (Hattie, Visible Learning, p.297), the highest effect size in his studies. We believe that as students gain this level of responsibility for their own learning, their SAGE achievement will increase to proficient and beyond levels.

Part B. Students will have consistent opportunities to participate in digital learning activities that integrate critical thinking, communication, collaboration, and creativity skills.

To achieve the ideas and strategies from the National Educational Standards for students, Carbon will continue with training in Levels 1, 2, and 3, by increasing teacher capacity to shift their pedagogical skills from teacher led and focused classroom instruction to creating learning tasks that allow students to use technology to deepen their own understanding of core standards and objectives. Teachers in most classrooms have access to a variety of technology tools: Smart Boards, desktop computers, 1:1 student devices, Elmos, Swivl cams, student response systems, and a variety of software.

Teachers in CSD participate in Professional Learning communities as school subject/grade, horizontal, and vertical teams. Teachers are or have identified essential standards, benchmark assessments, and pacing guides for grades, subjects, and integrated activities. In their pacing guides, teachers will be able to create lessons for which there is appropriate and deliberate integration of technology. Lessons will include

and demonstrate technology activities that allow student choices, require critical thinking, collaboration and creativity. Examples of these lessons include game-based learning, blended learning opportunities, interactive systems such as Smart Boards, student response systems, web-based projects and explorations, student created media, online collaborations, and social media engagement activities. The pacing guides will allow purposeful enhancement of lessons or composition of integrated lessons that have consistent digital learning opportunities for students. Students will be developing skills useful in post-secondary education as well as real-life problem solving.

Part C. Students will have consistent opportunities to use digital tools to select personalized learning paths based on their learning needs specific to measurable student targets.

The following information from Section V. Part G addresses the questions of consistent opportunities and personalized learning paths. This information addresses identification of student needs in specific subjects through digital learning tools in reading and math, personalized learning paths based on the diagnoses from the digital tool, and identified and measurable student learning targets.

“The digital content purchased by the district include iReady math, ST math K-3, K-8, iReady reading, K-8, Utah Compose 2-12, OER science (free), and math 7-12.

iReady reading and math are supplemental digital curricula and provide educators with a diagnosis of what students do and do not know in both subjects, as well as instructional/practice opportunities for students on all the essential concepts in each subject. The i Ready reports provide progress monitoring for teachers to maintain up to date knowledge of students successes and challenges. Teachers are able to use i Ready to increase or vary student practice on specific concepts to increase the robustness of student work. Student work is personalized by this software, allowing students to learn at their own pace and toward mastery of concepts identified in their assessment of learning. Program fidelity requires 45 minutes per subject, per week per student to achieve the outcomes promoted by the program.

ST math offers the same uses as i Ready, but requires 90 minutes of student engagement to achieve the outcomes promoted by the program.

Utah Compose provides students the opportunities to compose in a variety of genres and to receive personal and immediate feedback on all the elements of the rubric for

their topic. Utah Compose provides a variety of prompts for each core writing standard and objective. Each prompt includes a rubric and is scored by artificial intelligence. Teachers may select prompts that are appropriate to their units or create their own prompt and save to the system. Teacher created prompts are scored against a generic rubric. The Utah Compose program provides reports that allow teachers to progress monitor their students' writing from rough draft through revision/editing. Other reports indicate the amount of time, number of revisions, and word length of assignments. As well, specific tutorials are available for students struggling with grammar topics or elements of the rubric. Feedback and tutoring are personalized to student need. The assignments are often teacher directed, but the subsequent work is designed for the individual student need for proficiency in the genre, which are identified in the Utah ELA core.

Secondary science instructors use the science oer resources provided by the USBE on the core website. Science teachers are able to organize their grade/subject level curriculum by topic from the core for instruction. These topics may be organized and sent for printing for student texts. Teachers present the oer materials via SmartBoards; students access teachers' units through their 1:1 devices and teacher webpages. This oer implementation will be monitored and reported through the LearnPlatform program. While these OER curriculum packages are teacher selected and organized, students are offered a wide array of self-selected projects and opportunities for exploration in which they can individualize and personalize their learning. Most of these opportunities are enhanced by students' ability to use 1:1 devices and further personalize their activities.

Secondary math teachers have developed and implemented units of instruction in grades six through Secondary III by utilizing the online math programs on the USBE math resources. These units are delivered through SmartBoard and 1:1 technology. No print texts support these units. Math teachers use their own webpages to ensure that class presentations and explanations are available to students and parents."

Through targeted professional development, teachers will be more proficient utilizers of Mastery Connect (MC) to provide similar information and feedback for students. MC allows teachers and students to develop appropriate learning targets in conjunction with PLCs in grades K - 12, and in all subjects, students participate in benchmark assessments based on the Utah core content standards. Educators identify essential standards, create benchmark assessments, administer these to students, and record results based on four levels of achievement, remediation, near mastery, mastery, and high mastery, respectively, red, yellow, green, and blue. Students receive interventions

at several levels according to their areas of deficiency or mastery. Reports from MC indicate to students, teachers, and parents. Intervention and extension activities are designed to allow students to explore and become digitally engaged in their assignments. Assignments include collaboration, webquest and multimedia projects that become class presentations that are integrated into multiple subjects.

Part D. Plan must articulate a comprehensive plan for teaching digital citizenship.

Carbon School District educators and administrators ensure all schools and all grade levels implement the NetSafe programs with fidelity as mandated by HB 213 within required timelines. Current trainings occur annually within all schools and will continue to be provided as required in the future. Digital citizenship is also covered with parents during yearly back to school night meetings.

Personalized Professional Learning

VII. Professional Learning This section shall include a description of how an LEA will:

Part A. Provide high quality professional learning over three years for educators, administrators, and support staff participating in the program, including ongoing periodic coaching:

Carbon School District offers a robust technology training program for all educational staff members: Teachers including itinerants, building administrators, and district administrators. At present, all individuals can participate on a self selected basis from Levels 1 and 2, and soon to be Level 3. For SY 1/18, Levels 1 and 2 will not be voluntary. These levels represent, respectively, beginning, intermediate, and advanced technology skills. The first two levels allow teachers and others to use student information systems, use their SmartBoards and elmos for instruction, integrate 1:1 devices into their instruction, create assessments, manage their results, use other software for individualized and personalized student learning, and organize instructional materials such as Google classroom and Hapara. These levels will allow teachers to substitute, augment, and begin to modify their digital instruction. Level 3 will allow teachers to exceed these skills to engage in further modification and redefinition of their classroom's implementation of all things technological. Technology will be seamless, designed, developed, and infused into digital learning experiences that become the fabric of the instructional setting. Students will have the autonomy to individualize and personalize their learning within the parameters of core core curriculum standards and

objectives in content and grade level pacing guides. As students gain autonomy in their learning, teachers will inversely release their instructional directiveness. Teachers will have designed and planned their instructional activities to facilitate learners acquisition of knowledge. Levels 1, 2, and 3 will provide the scaffold for teachers to develop digitally friendly and student self-directed learning. In fact, Level 3 training for educators will reflect the goal for students to be self-directed, somewhat autonomous learners and will allow educators to explore their own digital transformative practices.

Training for administrators, both building and district is parallel to other educator training, tech cafe, tech training days, and other tech training activities. While most training has been self-selected and voluntary, it will soon become mandatory, according to the following time line:

Technology Level(s)	Participants	Measurement	Goal Date
1 only	Support staff	Level 1	Within time of hire
1 and 2	All current teachers and administrators	Level 1 and 2 Assessments	Second Semester, SY 2017/18
1 and 2	All new teachers, administrators, new to district	Level 1 and 2 Assessments	End of SY 2017/18 On-going for new to district educational staff
Level 3	By application; educators who have demonstrated significant implementation of technology	Annual self assessment, principal evaluation	On-going
Administrative Evaluation Training of Levels 1 & 2	Principals and district administration	Teacher evaluation rubric (Std 7.4, 7.5)	On-going

Part B. Proposal for required management restructuring, if necessary and relevant to the LEA needs.

Management restructuring for the implementation of technology has been an on-going activity in CSD for the past five years. The technology program was reorganized as

retirements and other movement took place. CSD has the current Technology Director, four technology specialists, a secretary, building specialists, and an educator technology team composed of an elementary, middle school, and high school teacher who provide the instructional components of implementation. As well new and struggling teachers receive mentors to assist them in performing the necessary technology applications. Through the DTL grant, the district hopes to increase the technology support team to include two part-time technology paraprofessionals to provide more assistance at the school level in the maintenance of labs and 1:1 devices.

The Technology Director reports to the superintendent which ensures that technology issues can be mitigated quickly and systems are productive and functional. If this distribution of employees or direct report were to become less functional, the superintendent has the authority to reorganize or to redeploy staff as needed by the district. .

Part C. Plan must provide ongoing periodic coaching and mentoring with the necessary frequency to ensure a successful implementation.

Educators receive direct instruction in Levels 1 and 2 during tech cafe, legislative days, and other scheduled tech training activities. Their instruction and skill acquisition is supported by self-selected topics in other tech cafes, but tech specialists in each building offer one one or small group mentoring on specific skills. New teachers, new to our district, or probationary teachers receive their own mentors who also support the technology needs of this group. New teachers receive a qualified mentor for 3 years. Each building has an assigned technology specialist whose primary function is initial troubleshooting and one-on-one technology support for all employees.

Each week Carbon's technology specialists offer tech cafe where educators receive personalized training on Levels 1 and 2. The first two levels allow all staff and administration to request training on individual topics or the formal training from the Level 1 and/or Level 2 required topics as shown in Section III. As well, the district schedules one legislative day per year to address technology training needs. The day may be used for teachers to complete their required Level 1 and 2 trainings, or for training on new technology software acquisition. The second full day opportunity will occur on a specific day during the fourth quarter of the school year. This day will offer Level 1 and 2 training for those educators who have not yet successfully passed appropriate assessments. See Section 3 for detailed training objectives.

As well, CSD will continue providing out of district training for technology specialists and other who have demonstrated high levels of implementation and wish to increase their skills and knowledge. As the Level 3 skills continue to be identified, additional training for appropriate staff will be offered to support these skills. Level 3 training will become the opportunity the district seeks to raise educational practices that will increase the implementation of digital learning.

Part D. Plan must focus on curriculum planning and student learning activities integrated with digital technology tools and resources.

To achieve the ideas and strategies from the National Educational Standards for students, Carbon will continue with training in Levels 1, 2, and 3, by increasing teacher capacity to shift their pedagogical skills from teacher led and focused classroom instruction to creating learning tasks that allow students to use technology to deepen their own understanding of core standards and objectives. Teachers in most classrooms have access to a variety of technology tools: Smart Boards, desktop computers, 1:1 student devices, Elmos, Swivl cams, student response systems, and a variety of software.

Teachers in CSD participate in Professional Learning communities as school subject/grade, horizontal, and vertical teams. Teachers are or have identified essential standards, benchmark assessments, and pacing guides for grades, subjects, and integrated activities. In their pacing guides, teachers will be able to create lessons for which there is appropriate technology. Lessons will include and demonstrate technology activities that allow student choices, require critical thinking, collaboration and creativity. Examples of these lessons include game-based learning, blended learning opportunities, interactive systems such as Smart Boards, student response systems, web-based projects and explorations, student created media, online collaborations, and social media engagement activities. The pacing guides allow purposeful enhancement of lessons or composition of integrated lessons that have consistent opportunities for students to participate in digital learning. Students will be developing skills useful in post-secondary education as well as real-life problem solving.

Part E. Plan must focus on content specific strategies for integrating digital technology into the curriculum for all subjects areas addressed in the goals and objectives.

Teachers in CSD participate in Professional Learning communities as school subject/grade, horizontal, and vertical teams. All schools have an early out schedule each week which allows teachers almost two hours to exam data and address

interventions. Goal subject areas for 5% achievement by the end of the grant period are ELA, math, and science. All three content and grade level teachers are or have identified essential standards, benchmark assessments, and pacing guides for grades, subjects, and integrated activities. In these content area pacing guides, teachers will be able to create lessons for which there is appropriate technology that include the following recommended practices, which have application to all content areas:

- Web-based lessons such as web-quests, CyberGuides, and filamentality;
- Multimedia presentations based on core standards and objects that include text, graphics, video, animation, and sound - these activities are multidisciplinary, require sustained effort, promote student decision making, promote group work and real world connection;
- Telecomputing projects are Internet-enriched core learning activities that involve students in one location collaborating with students or adults in other locations - these activities include sharing experiences, beliefs, data, information, problem-solving strategies, and products that are often jointly developed with partner group;
- On-line discussions include environments for sharing information such as email, chat, and threaded discussions which require sets of protocols for conducting the activity. The teacher initiates and facilitates the discussion around a forum, with a calendar, and topics and readings from class.

Teachers in these content areas will assess the effectiveness of technology integrated units with Mastery Connect assessments. Questions will include the extent to which technology replaced traditional pedagogy, and was used as substitution, augmentation, modification, or replacement.

Part F . Plan must include a commitment to continue to participate in professional learning with USBE and UETN through implementation.

Carbon School District will continue to participate in the professional Learning and implementation support offered by USBE and UETN.

Assessment - Measurable Outcomes

VIII. Three Year Plan for how an LEA will Monitor Student and Teacher Usage of the Program Technology

During 2015-2016, Carbon School District participated in the UETN edtech inventory process, highlighting 11 products in use.

Number	Products Included in 2015-16 Inventory
11	Microsoft Office, Google Apps for Education, Adobe Acrobat Reader, UEN Open Educational Resources, i-Ready, Mastery Connect, Google Classroom, Hapara, Kahoot, SAGE

Carbon School District will utilize the state-supported LearnPlatform to support overall program management of its DTLI efforts, including monitoring utilization and our educators' experience with these and other technologies to inform continuous improvement. As a Google Apps for Education(GAFE), we will also take advantage of the LearnPlatform Chrome extension to support our teachers and students, and understand which tools are used most frequently. Our goal is to improve both outcomes for students and our investments in digital teaching and learning.

Carbon School District's configuration of the LearnPlatform will streamline the process for all stakeholders to (1) develop continuous improvement plans, (2) use data to inform instructional and operational decisions and (3) integrate and analyze multiple data sources to develop plans and continuously improve.

During 2016-17, continuous improvement plans will be finalized. Carbon School District will work with the LearnPlatform technical assistance team to quickly configure and align the LEA's LearnPlatform account to support our LEA's business processes, communication and monitoring for continuous improvement, including:

5. Integrating (LEA)'s previous edtech inventory and engineering study information;
6. Configuring the system to match the needs of our administrators, teachers, students and administrators;
7. Providing access for teachers and administrators to access and monitor their edtech;
8. Defining the key edtech activities, interventions and measurements (see below for examples).

Carbon School District's program management will focus on continuous and ongoing improvement, supported by integrated insights, data and input from and for

administrators and teachers. To support our educators' efforts, Carbon will have a centralized digital teaching and learning profile for each school, with an integrated edtech inventory on its LearnPlatform. In alignment with all state and federal regulations, data integration from products, process automation, and communication tools of the LearnPlatform will be used to further streamline processes, such as:

8. Allowing educators an easy way to centrally see, share insights, learn and ask questions about digital teaching and learning tools;
9. Efficiently piloting new tools, with both qualitative and quantitative results to inform implementation;
10. Rapidly analyzing the impact of current and new digital teaching and learning interventions;
11. Providing administrators and educators instant dashboards for digital teaching and learning ecosystem;
12. Use the Google Apps for Education extension (or other Carbon supplied technology) to provide time saving tools for educators and remotely monitor which digital teaching and learning tools are used and how often;
13. Centrally managing and sharing findings and status for all teachers and administrators to inform their instructional and operational decisions; and,
14. Enhancing Carbon's own processes with insights learned from other LEAs.

Program technology utilization and achievement measures will be monitored and centralized in LearnPlatform and mapped against additional data sources which include:

7. Quantified feedback from educators, based on research-based rubric
8. Pilot and trial tests which survey specific user types, products, learning applications and/or student variables
9. De-identified student co-variate data (demographic, gender and other filters)
10. Carbon and state-level testing data
11. Product utilization data at the user and/or school level
12. Product access monitoring (via Chrome extension where applicable)

Administrators and teachers will have secure access, dashboards, and appropriate controls, as well as quarterly reports to inform plan adjustment to advance our digital teaching and learning initiative.

CSD will provide implementation data to USBE on an annual basis.

Robust Technical Infrastructure

IX. Three Year Plan for Infrastructure Acquisition and Process for Procurement and Distribution of the Goods and Services an LEA Intends to Use as Part of an LEA's Implementation of the Program

CSD recognizes that a robust technical infrastructure is a critical component to the success of our teachers and students learning experience. If the network is not reliable or performance is suffering then there is a direct impact on the efficiency of teachers and staff doing their jobs. We use network management and monitoring tools to ensure that the network infrastructure is performing as expected and to also identify future areas of improvement. Bandwidth is monitored on all backbone connections and upgrades are planned when links are averaging over 50% utilization. Most network upgrades are planned on a yearly basis to be done over summer break to minimize downtime for teachers and staff. Equipment purchases are done through competitive bidding process and also by utilizing state contracts when possible.

E-rate funds are used to help cover costs of eligible services and equipment purchases. Below is a list of site specific information regarding student enrollment and NSLP totals.

School	Full Time Students	NSLP Eligible
Castle Heights Elementary	469	219
Castle Valley Center	122	61
Mont Harmon Middle School	596	277
Carbon High School	847	293
Creekview Elementary	457	186
Sally Mauro Elementary	314	172
Helper Middle School	199	88
Bruin Point Elementary	100	80
Wellington Elementary	259	144
Lighthouse High School	86	55

Internet connectivity and bandwidth delivered to the district is provided by UETN in cooperation with the district. UETN does an excellent job of managing these internet connections and also takes care of the E-rate reimbursements on the connections they manage.

CSD currently uses a combination of network management software and other internal databases to track infrastructure inventory. Databases are updated on an ongoing basis and keep at least a 5 year history of data.

CSD will participate in future inventory efforts with UETN as requested.

Over the next three years these are the main goals that we plan to accomplish in regard to network infrastructure.

- All network connections should be capable of at least 1 Gigabit speeds
- All network switches throughout the district will be capable of remote management and standardized on a specific make and model series
- Network switches will be capable of POE requirements in required areas
- Each school will be connected back to the district office with at least a 1 Gigabit fiber optic connection
- Wireless access points will be managed by a centralized controller located at the district office
- All classrooms will be equipped with 802.11ac based wireless access points to provide high density coverage
- Commons areas and all other parts of each building will have adequate wireless coverage and be able to handle expected usage requirements

X. Technical Support for Implementation and Maintenance of the Program

Part A. Plan must address scale up of technical support to be available so that business and instructional operations are minimally impacted.

Technical support in Carbon District is managed mainly through support staff based out of the Technology Center located at the district office and technology specialists from several schools. Currently our support staff consists of one technology coordinator, four

technicians and one secretary. There is also a person at each building in the district who is a part time building technology specialist. Basic tech support procedures in each building start with contacting the building specialist to handle level 1 troubleshooting. If there is a problem that is a higher level emergency or the building specialist is not available, then support requests come directly to the technology center. If support requests handled by our building specialists need district level help then a request is entered into an online work order system which is monitored daily by district support staff. Requests are prioritized on a daily basis and average response times are usually 1-2 days.

Part B. Plan must address the presence or building of a well-defined technical support procedure.

A big part of the technical support is centered around supporting 1:1 Chromebook devices in all schools grades 4-12. At two of our largest secondary schools we have a district support technician available each morning before school to handle support needs directly with students. This helps remove the burden on teachers for supporting the technology and also gives students a faster turnaround time on needed repairs

Part C. Plan must include process to inventory and track portable and fixed technology assets and is catalogued and LEA continues to participate in statewide inventory surveys.

CSD currently uses a combination of network management software and other internal databases to track infrastructure inventory. Databases are updated on an ongoing basis and keep at least a 5 year history of data. A custom in-house web based management system is used to track portable and fixed technology assets. All new technology that arrives at the district is immediately entered into our custom in-house inventory management system. As devices are assigned to students and staff members the inventory database is updated to reflect who is assigned to which devices.

CSD will participate in future inventory efforts with UETN as requested.

Part D. Plan must provide process and measures of the of the classroom teacher technical support burden and provide measures that reduce the teacher technical support burden.

As indicated in Part B., The tech specialists reporting to each school, some on a rotation, and some daily, helps remove or reduce the burden on teachers for supporting

the technology and also gives students a faster turnaround time on needed repairs. Tech specialist presence on site at the schools prevents backlogs of repairs and unanswered questions. Teachers and principals have spoken positively about this service and appreciate the quick turnaround on repairs and information.

Data and Privacy

XI. Proposed Security Policies, Including Security Audits, Student Data Privacy, and Remediation of Identified Lapses

Part A. LEA Security Policies

Carbon School District maintains an Acceptable Use Agreement with all employees and students. Users are required to sign the policy prior to accessing the district's network, hardware and software. This policy can be reviewed at:

[http://www.carbonschools.org/files/721944/acceptable%20use%20policy\(rev%201.2.1\).pdf](http://www.carbonschools.org/files/721944/acceptable%20use%20policy(rev%201.2.1).pdf)

District provided Chromebooks require students to sign an additional agreement which details the acceptable use of the device and conduct in online environments. This policy can be reviewed at:

<http://www.carbonschools.org/files/721944/Chromebook%20Agreement%2016-17.pdf>

Part B. LEA Security Audit Plan

Carbon School District will work with the UETN security team to plan ongoing audits of the security of internal and external network resources. CSD will also evaluate and monitor security of internal information systems on an ongoing basis. Technology center staff will monitor security for all critical IT systems including network firewalls, network switching and routing, network authentication, wifi system access, application and other network servers, mobile devices, desktop workstations.

Part C. LEA Student Data Privacy Policies and Procedures

In accordance with the Family Educational Rights and Privacy Act (FERPA) Carbon School District maintains strict access control of student records limited to administrative entities requiring access for the function of the school district. Local procedures include restriction of access to student's network drives, emails and digital

content to the student and technical support teams. Sharing of resources between student's and teachers is handled on an as needed basis between the student and the teacher using Google's platform and security protocols.

<http://www.carbonschools.org/policies.cfm?pid=15791&searchwords=>

The school district also maintains a protection system in compliance with the Children's Internet Protection Act (CIPA) wherein all student provided devices are filtered by the school district prior to accessing the general internet resources. This is intended to restrict social media access and access to inappropriate material. This is supported by Carbon School District Policy FDF

<http://www.carbonschools.org/policies.cfm?pid=25883&searchwords=>

Part D. LEA Remediation Plan of Identified Lapses

In the event of security breaches, (i.e., hacking or unintended access) the school district's technical response is proportional to the breach. Simple access remediation includes identification of resources accessed, removal of access pathway, changing login credentials and potential loss of access rights. Breaches of network and malicious access to student records require additional research of access damage and are handled on a case by case basis with assistance from external entities (e.g., UETN). We will also consider recommendations from third party audits to improve on existing security measures.

Part E. Security Training for All Stakeholders

CSD will provide ongoing security training for all stakeholders in various forms. All new teachers and staff will receive security training as part of their standard new employee training. Security training will also be part of our Level 1 technology requirements that all teachers will be required to pass off. Students will receive security training as part of our yearly digital citizenship training that is required for all students. Security training for parents will be provided through various yearly activities such as back to school night and specific parent meetings involving one to one digital devices.

Budget and Resources

XII. Budget

The LEA's overall three year financial plan, including use of additional LEA non-grant funds, to be utilized to adequately fund the LEA plan.

Part A. Disclosure of LEA's Current Technology Expenditures

Carbon School District has allocated a total of \$483,000 for technology expenditures for the 2016-2017 school year. Part of this budget will go towards replacing aging equipment which includes replacing desktop computers that are older than five years. Student chromebook devices will be rotated out on a 4 year cycle. Below is a list of specific projects that are slated for the 2016-17 school year.

- Replacement of Teacher Computers at Castle Heights Elementary
- Replacement of Teacher Computers at Wellington Elementary
- Replacement of centralized computer lab at LHS
- Replacement of Training Lab Computers located at the District Technology Center
- Additional Chromebooks needed for increased secondary enrollment
- Additional Chromebooks for all 4th grade students throughout the district
- Replacement of file servers throughout the district
- District-wide expansion of wireless infrastructure
- Upgrade of aging network switches throughout the district to gigabit poe switches.
- District Software Licensing for Chromebooks
- District Software Licensing of Microsoft Products
- District Software Licensing for Educational Software Products
- Memory Upgrades for aging computers
- District Technology Equipment Expansion/Upgrades
- Upgrades and replacements for aging smartboards, elmos, and projectors
- Maintenance and upgrades for phone systems throughout district
- Repairs, supplies, subscriptions, etc.

Carbon School District also employs one Technology Director, four full time technicians, and one secretary as part of the technology center staff based out of the district office. There is also one person at each school that is paid extra salary to take on the duties of building technology specialist. The total yearly salary of all current technology based positions is \$426,789.00.

Part B. Budget for Grant Funding Year 1-3

CSD will use the grant fund to provide stipends for educators to become proficient in Level 1 and Level 2 technology skills, support two part-time technology specialists, and additional Level 3 training and Tech Cafe trainers.

Funding Details Year 1	Budget
Level 1 & Level 2 Educator training and certification (see Section 3) Estimated 200 employees x 8 hours (including benefits)	\$49,463.00
(2) Part-time Technicians - to provide first level technical support for students and educators during the mornings at high population school locations (19.5 hrs/week) x 38 weeks	\$17,436.00
(3) Tech Cafe Specialists - to provide ongoing support and training for Level 1 - 3 skills	\$21,414.00
Total	\$88,314.00

Funding Details Year 2 +3	Budget
Level 1 & Level 2 New educator training and certification (see Section 3) Estimated 30 employees x 8 hours (including benefits)	\$10,000.00
Level 3 - Enhanced training topics and stipends for advanced technology educators - Additional out of district training for specialists.	\$19,920.00
(2) Part-time Technicians - to provide first level technical support for students and educators during the mornings at high population school locations (19.5 hrs/week) x 38 weeks	\$17,436.00
(3) Tech Cafe Specialists - to provide ongoing support and training for Level 1 - 3 skills	\$21,414.00
Total	\$68,770.00

Part C. Possible Increase in Funding (10% Increase Plan)

Potential increased funding details - Year 1	Budget
Software and Hardware for digitally enhanced lessons including original video productions	\$8,800.00
Total	\$8,800.00

Potential increased funding details - Years 2 and 3	Budget
Software and Hardware for digitally enhanced lessons including original video productions	\$6,877.00
Total	\$6,877.00

Part D. Projection for Future Support Costs

Carbon School District will need to maintain Level 1 and Level 2 training requirements at the new teacher level. The district’s Tech Cafe will need to be maintained at current levels to ensure sufficient technical training and support for existing educators. Level 3 costs may be scaled back to supportable levels within current district budgets.

Part E. Sustainability

Carbon School District has already redirected savings from existing digital learning programs to purchase student devices instead of textbooks and the removal of hardwired computer labs to increase classroom space to handle increased student populations.

As these are new initiatives within Carbon School District and do not involve additional purchases of software or hardware there may be few redirected savings.

We will redirect cost savings from digital teaching and learning to support the maintenance and growth of the program.

Part 3: BUDGET				
Applicant: Carbon School District				
Description	Funding Requested – Year One <i>January 1, 2017 – June 30, 2017</i>	Funding Requested – Year Two <i>July 1, 2017 – June 30, 2018</i>	Funding Requested – Year Three <i>July 1, 2018 – June 30, 2019</i>	TOTAL FUNDING REQUEST
A. (100) Salaries	\$68,650.00	\$53,731.00	\$53,731.00	\$176,112.00
B. (200) Employee Benefits	\$19,664.00	\$15,039.00	\$15,039.00	\$49,742.00
C. (300) Purchased Professional & Technical Services				
D. (400) Purchased Property Service				
E. (500) Other Purchased Service				
F. (580) Travel				
G. (600) Supplies & Materials				
H. (800) Other (Exclude Audit Costs)				
I. TOTAL DIRECT COSTS (Lines A through H)	\$88,314	\$68,770	\$68,770	\$225,854.00
J. (800) Other (Audit Costs)				
K. Indirect Cost (* Approved Indirect Cost Rate)				
L. Property (includes equipment)				
M. TOTAL (Lines I through L)	\$88,314	\$68,770	\$68,770	\$225,854.00

This form is a required element of the grant application. Justification for each of the categories shall be included in the budget narrative portion of the application. Modifications to the grant must be reflected over the three years of the grant and included as part of the annual reporting. For reporting, it must include an itemized breakdown of these budget categories and a budget narrative explaining how you calculated each line item and the actual total project cost share.

Utah State Board of Education

250 East 500 South
P.O. Box 144200
Salt Lake City, Utah 84114-4200

Applying Institution or Organization: Carbon School District

Program Title: Digital Teaching and Learning Grant Program

Program Director

Name: Phillip Feichko

Title: Technology Coordinator

Address: 251 West 400 North Price UT 84501

Telephone: 435-613-3150 **Fax:** 435-613-0348

E-mail: phil@carbonschools.org

Number of Teachers to Be Served Directly (teachers
may be counted each year they are involved):

<u>200</u>	Year One
<u>30</u>	Year Two
<u>30</u>	Year Three
<u>260</u>	TOTAL

Certification by Authorized or Institutional Official:

The applicant certifies that to the best of his/her knowledge the information in this application is correct, that the filing of this application is duly authorized by the governing body of this organization, or institution, and that the applicant will comply with the attached statement of assurances.

Phillip Feichko
Typed or Printed Name of Authorized Official
Grants Officer or Superintendent of Fiscal Agent

Technology Coordinator
Title


Signature of Authorized Official

11/11/2016
Date

NORTH CAROLINA

DIGITAL LEARNING PLAN

Digital Learning Progress Rubric

Version 2

Prepared by the Friday Institute for Educational Innovation



Introduction

The North Carolina Digital Learning Progress Rubric is a strategic planning tool, or “roadmap,” intended to support North Carolina’s educators and communities in the transition to digital-age teaching and learning. The rubric is designed to help school district teams reflect on the current stage of their transition, plan next steps, and track their progress moving forward.

This rubric contains five main areas: *Leadership; Technology and Infrastructure; Content and Instruction; Professional Learning; and Data and Assessment*. Each main area is broken down into three to seven key elements (e.g., “Shared Vision,” “Professional Development Format,” “Access to Digital Content,” etc.).

Guide for Use

Members of a district leadership team can work individually or together to rate their district’s progress on each of the 25 key elements. They may rate the progress as either “Early” (the least advanced ranking), “Developing,” “Advanced,” or “Target” (the most achieved ranking). A district may consider having different individuals or groups determine ratings separately, and then schedule a time for all parties to come together and form consensus for each key element score. The more data (quantitative or qualitative, formal or informal, etc.) that can be used to inform the ranking process, the more accurate and effective the strategic planning process will be. A glossary of terms used throughout the rubric may be found in Appendix A.

To make the scoring system the most effective, the following rule should be used: all indicators (sub-bullets) within a particular cell should be marked as “achieved” for a district to give itself the particular ranking assigned to that cell (Early, Developing, Advanced, or Target). For example, if the district has achieved two of three indicators listed in the Advanced cell, then the district should rank itself as Developing. The district can rank itself as Advanced once it has achieved all three indicators listed. A scoring sheet may be found in Appendix B.

Once a self-assessment on the rubric has been completed, the user should reflect on the results and identify priority areas for improvement. The user might ask, “What are one to three action steps that can be taken to move closer to achieving the desired goals?” A guide for data interpretation and transition planning may be found in Appendix C.

NOTE: Every school and district in North Carolina must identify and comply with all relevant federal (e.g., FERPA, CIPA), state, and local laws related to digital teaching and learning.

LEADERSHIP				
	Early	Developing	Advanced	Target
L1 Shared Vision	<ul style="list-style-type: none"> <input type="checkbox"/> A district leadership team is being created for the purposes of planning and leading digital teaching and learning. <input type="checkbox"/> A vision for digital teaching and learning has not yet been created. <input type="checkbox"/> A planned effort to discuss the eventual vision for digital teaching and learning with faculty, staff, and other stakeholders has not yet been put in place. <input type="checkbox"/> There is no consistent effort to have district and school leaders consistently communicate about digital teaching and learning practices. 	<ul style="list-style-type: none"> <input type="checkbox"/> A district leadership team, consisting of a <i>few</i> individuals, collaboratively crafts <i>the vision</i> for digital teaching and learning. <input type="checkbox"/> A <i>vision</i> for digital teaching and learning <i>guides district digital education activities</i>. <input type="checkbox"/> District and school leadership <i>annually</i> promote the district vision for digital teaching and learning <i>to faculty and staff</i>. <input type="checkbox"/> School leaders <i>communicate about digital teaching and learning practices but do not model effective use of digital resources</i>. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> A district leadership team, consisting of <i>many</i> individuals, collaboratively crafts <i>the vision, goals, and strategies</i> for digital teaching and learning. <input checked="" type="checkbox"/> The <i>vision, goals, and strategies</i> for digital teaching and learning <i>exist as a self-contained initiative</i>. <input checked="" type="checkbox"/> District and school leadership <i>occasionally</i> promote the district vision for digital teaching and learning <i>to all stakeholders, including faculty, staff, students, parents, and community members</i>. <input checked="" type="checkbox"/> School leaders <i>serve as lead learners for digital teaching and learning practices, modeling effective use of high quality digital resources</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> A <i>diverse, representative</i> district leadership team, <i>consisting of district and school administrators, teachers, students, parents, and community members</i>, collaboratively crafts <i>the vision, goals, and strategies</i> for digital teaching and learning. <input type="checkbox"/> The <i>vision, goals, and strategies</i> for digital teaching and learning <i>are integrated as core components of the district's strategic plans and other high-level guiding frameworks</i>. <input type="checkbox"/> District and school leadership <i>consistently</i> promote the district vision for digital teaching and learning <i>to all stakeholders, including faculty, staff, students, parents, and community members</i>. <input type="checkbox"/> <i>District and school leaders serve as lead learners for digital teaching and learning practices, modeling effective use of high quality digital resources</i>.
L2 Personnel	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> District schools require teacher leaders and other faculty to lead, learn, and share together about digital teaching and learning in meetings before or after school. <input type="checkbox"/> Schools within the district do not yet make digital teaching and learning skills a requirement or priority for any teaching position. <input type="checkbox"/> District schools do not yet identify teacher-leaders for digital teaching and learning. 	<ul style="list-style-type: none"> <input type="checkbox"/> Every school within the district has <i>at least one part-time instructional coach for technology or at least one full-time certified school library media coordinator</i>. <input checked="" type="checkbox"/> Schools within the district recruit, hire, and develop <i>a few</i> teachers on their faculty to have high quality digital teaching and learning skills. <input checked="" type="checkbox"/> Every district school has <i>informal pathways to identify current teacher-leaders</i> for digital teaching and learning. 	<ul style="list-style-type: none"> <input type="checkbox"/> Every school within a district has <i>at least one full-time instructional coach for technology and at least one full-time certified school library media coordinator</i>. <input type="checkbox"/> Schools within the district recruit, hire, and develop <i>many</i> teachers on their faculty to have high quality digital teaching and learning skills. <input type="checkbox"/> Every district school has <i>informal pathways to identify and develop current and future teacher-leaders</i> for digital teaching and learning. 	<ul style="list-style-type: none"> <input type="checkbox"/> Every school within the district has <i>at least one full-time instructional technology facilitator and at least one full-time certified school library media coordinator</i>. <input type="checkbox"/> Schools within the district recruit, hire, and develop <i>all</i> teachers on their faculty to have high quality digital teaching and learning skills. <input type="checkbox"/> Every district school has <i>formal pathways to identify and develop current and future teacher-leaders</i> for digital teaching and learning.

LEADERSHIP				
	Early	Developing	Advanced	Target
L3 Communication & Collaboration	<ul style="list-style-type: none"> <input type="checkbox"/> Digital tools are <i>rarely</i> used to provide just-in-time information about important district activities and to connect parents, community members, and other stakeholders to the district using two-way communication. <input type="checkbox"/> School leaders do not yet maintain a digital culture within their schools, in which the collaborative, transparent, free-flow exchange of information takes place among sub-groups of school faculty and staff. 	<ul style="list-style-type: none"> <input type="checkbox"/> Digital tools are <i>occasionally</i> used to provide just-in-time information about important district activities and to connect parents, community members, and other stakeholders to the district using two-way communication. <input type="checkbox"/> <i>Few</i> school leaders maintain a digital culture within their school, in which the collaborative, transparent, free-flow exchange of information takes place among sub-groups of school faculty and staff. 	<ul style="list-style-type: none"> <input type="checkbox"/> Digital tools are <i>consistently</i> used to provide just-in-time information about important district activities and to connect parents, community members, and other stakeholders to the district using two-way communication. <input type="checkbox"/> <i>Many</i> school leaders maintain a digital culture within their school, in which the collaborative, transparent, free-flow exchange of information takes place among sub-groups of school faculty and staff. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Digital tools are <i>continuously</i> used to provide just-in-time information about important district activities and to connect parents, community members, and other stakeholders to the district using ongoing, two-way communication. <input checked="" type="checkbox"/> <i>All</i> school leaders maintain a collaborative, transparent digital culture within their school, in which the free-flow exchange of school information takes place among all school faculty and staff.
L4 Sustainability	<ul style="list-style-type: none"> <input type="checkbox"/> The district has not yet considered a sustainability and scalability plan for maintaining and expanding digital services for more students in more contexts. <input type="checkbox"/> The district has not yet developed a long-term funding plan for digital teaching and learning. <input type="checkbox"/> The district leadership team <i>is not yet considering</i> options for supporting digital teaching and learning through managed services. <input type="checkbox"/> The district <i>is not yet considering</i> efficiency, effectiveness, or the total cost of ownership for services to be purchased. 	<ul style="list-style-type: none"> <input type="checkbox"/> The district <i>is considering developing</i> a sustainability and scalability plan for maintaining and expanding digital services for more students in more contexts, <i>but has not yet studied financial projections or budget items.</i> <input type="checkbox"/> The district has a long-term funding plan that <i>provides ongoing funding for digital teaching and learning with discretionary funds and accommodates for refresh cycles.</i> <input type="checkbox"/> The district leadership team <i>is exploring</i> options for supporting digital teaching and learning through managed services. <input type="checkbox"/> The district <i>is building their capacity to evaluate</i> efficiency, effectiveness, or the total cost of ownership for services to be purchased. 	<ul style="list-style-type: none"> <input type="checkbox"/> The district <i>has</i> a sustainability and scalability plan for maintaining and expanding digital services for more students in more contexts <i>that is updated with new financial projections, budget items, and priority areas every couple years.</i> <input checked="" type="checkbox"/> The district has a long-term funding plan that <i>includes: ongoing funding for digital teaching and learning as a core operating cost; leverages at least one external funding source; and accommodates for refresh cycles.</i> <input checked="" type="checkbox"/> The district leadership <i>has identified</i> options for supporting digital teaching and learning through managed services. <input checked="" type="checkbox"/> The district <i>occasionally evaluates</i> efficiency, effectiveness, or the total cost of ownership for services to be purchased. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> The district <i>has</i> a sustainability and scalability plan for maintaining and expanding digital services for more students in more contexts <i>that is continually updated with new financial projections, budget items, and priority areas and is aligned to the district improvement plan.</i> <input type="checkbox"/> The district has a comprehensive long-term funding plan that <i>includes: ongoing funding to fully fund digital teaching and learning; leverages multiple external funding sources; and accommodates for refresh cycles, product upgrades, and expansion of services.</i> <input type="checkbox"/> The district <i>uses</i> options for supporting digital teaching and learning through managed services. <input type="checkbox"/> The district <i>consistently evaluates</i> efficiency, effectiveness, or the total cost of ownership for services to be purchased.

LEADERSHIP				
	Early	Developing	Advanced	Target
L5 Policy	<ul style="list-style-type: none"> <input type="checkbox"/> District-specific Terms of Use agreements including policies for data privacy and confidentiality <i>are not yet in place.</i> <input type="checkbox"/> District and school digital technology policies include language for an Acceptable Use policy, but have not been updated within the past two years and do not yet have a systematic process for consistent policy updates. <input type="checkbox"/> District leaders <i>have not yet considered</i> policies that enable and support: 24/7 access to devices and content, student-owned mobile devices in the school setting, flexible uses of time, and alternative assessments. <input type="checkbox"/> School and district digital technology policies <i>are not yet aligned</i> to the district improvement plan and <i>do not mention</i> the role of digital technology in furthering the district toward the goals outlined in the improvement plan. <input type="checkbox"/> School and district policies do not yet mention the role of digital technology in a student-centered learning environment. 	<ul style="list-style-type: none"> <input type="checkbox"/> District-specific Terms of Use agreements including policies for data privacy and confidentiality <i>have been discussed by leadership and are in the process of being created.</i> <input type="checkbox"/> District and school digital technology policies <i>include an Acceptable Use policy, but do not have a systematic process for consistent or continual policy updates.</i> <input type="checkbox"/> District leaders <i>are considering</i> policies that enable and support: 24/7 access to devices and content, student-owned mobile devices in the school setting, flexible uses of time, and alternative assessments. <input type="checkbox"/> School and district digital technology policies <i>are in the process of being aligned</i> to the district improvement plan and <i>do not mention</i> the role of digital technology in furthering the district toward the goals outlined in the improvement plan. <input type="checkbox"/> School and district leaders <i>are discussing</i> the role of digital technology in a student-centered learning environment. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> District-specific Terms of Use agreements include policies for data privacy and confidentiality <i>have been adopted by the district.</i> <input checked="" type="checkbox"/> District and school digital technology policies <i>have shifted from an Acceptable Use policy to Responsible Use guidelines, but do not have a systematic process for consistent or continual policy updates.</i> <input checked="" type="checkbox"/> District leaders <i>have adopted policies that enable or support at least one of the following:</i> 24/7 access to devices and content, student-owned mobile devices in the school setting, flexible uses of time, and alternative assessments. <input checked="" type="checkbox"/> School and district digital technology policies <i>have been aligned</i> to the district improvement plan and <i>do not mention</i> the role of digital technology in furthering the district toward the goals outlined in the improvement plan. <input checked="" type="checkbox"/> School and district leaders <i>have adopted policy regarding</i> the role of digital technology in a student-centered learning environment. 	<ul style="list-style-type: none"> <input type="checkbox"/> District-specific Terms of Use agreements include policies for data privacy and confidentiality <i>have been communicated (e.g. public forums, parent information nights, media sent home with students, faculty memos, etc.) with all stakeholder groups, and serve as a guide for purchasing and service agreements for new product acquisition.</i> <input type="checkbox"/> District and school digital technology policies <i>incorporate Responsible Use guidelines that encourage proactive, positive behavior with digital technologies and have a systematic process for consistent or continual policy updates.</i> <input type="checkbox"/> District leaders <i>have adopted and communicated policies to enable and support:</i> 24/7 access to devices and content, student-owned mobile devices in the school setting, flexible uses of time, and alternative assessments. <input type="checkbox"/> School and district digital technology policies <i>have been aligned</i> to the district improvement plan and <i>explicitly delineate</i> the role of digital technology in furthering the district toward the goals outlined in the improvement plan. <input type="checkbox"/> School and district leaders <i>have worked with a variety of stakeholder groups to create and adopt policy</i> regarding the role of digital technology in a student-centered learning environment <i>and have a systematic process in place to continuously advocate for this policy with relevant stakeholder groups.</i>

LEADERSHIP

	Early	Developing	Advanced	Target
L6 Continuous Improvement	<ul style="list-style-type: none"> <input type="checkbox"/> The district <i>is not yet considering</i> continuous improvement plans for digital learning initiatives. <input type="checkbox"/> Continuous improvement systems have not yet been identified or established. <input type="checkbox"/> Data is not yet being used or collected related to digital learning initiatives. 	<ul style="list-style-type: none"> <input type="checkbox"/> District leaders <i>are considering</i> continuous improvement plans for digital learning initiatives. <input type="checkbox"/> <i>Digital learning initiatives are seen as separate from the rest of the teaching-and-learning process and little effort is given regarding overall evaluation.</i> <input type="checkbox"/> <i>Limited data</i> are being used to continuously improve the implementation of digital teaching and learning. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> District leaders <i>have begun to develop</i> continuous improvement plans for digital learning initiatives. <input checked="" type="checkbox"/> <i>Digital learning initiatives are improved every 1-2 years based upon summative results of continuous improvement data</i> (e.g., based on findings professional development is adjusted; schedules are changed; content access protocols are improved; policies are updated; etc.). <input checked="" type="checkbox"/> <i>Mostly high-level data</i> (e.g. student grades and test scores) are being used to continuously improve the implementation of digital teaching, <i>but district leaders are beginning to develop plans for the collection of more nuanced, informative data.</i> 	<ul style="list-style-type: none"> <input type="checkbox"/> <i>A team of stakeholders that includes district leadership and representatives of some other groups such as, school administrators, teachers, parents, students, and/or community members have developed</i> continuous improvement plans for digital learning initiatives aligned to the district improvement plan. <input type="checkbox"/> <i>Digital learning initiatives are continuously improved based on results of the ongoing data collection</i> (e.g., based on findings professional development is adjusted; schedules are changed; content access protocols are improved; policies are updated; etc.). <input type="checkbox"/> <i>Multiple and varied sources of data</i> (e.g., student performance data, classroom observation data, web analytics, participation tracking, survey data, etc.) are being used to continuously improve the implementation and impact of digital teaching and learning.
L7 Procurement	<ul style="list-style-type: none"> <input type="checkbox"/> District-procured digital content is purchased <i>as a package.</i> <input type="checkbox"/> The accessibility and usability of digital content is not addressed. <input type="checkbox"/> Procured licenses for each student and teacher and are not transferrable between individuals as needed. 	<ul style="list-style-type: none"> <input type="checkbox"/> District-procured digital content is purchased <i>by course.</i> <input type="checkbox"/> Accessibility and usability of digital content for all students with disabilities or special needs <i>is partially addressed by at least asking the vendor to provide assurances.</i> <input type="checkbox"/> Procured licenses are <i>based on enrollment count, and are not licensed to individual students and teachers.</i> 	<ul style="list-style-type: none"> <input type="checkbox"/> District-procured digital content is purchased <i>by unit.</i> <input type="checkbox"/> Accessibility and usability of digital content for all students with disabilities or special needs <i>is addressed by providing alternatives for inaccessible content.</i> <input type="checkbox"/> Procured licenses are <i>based on a flexible licensing model on the number of concurrent users.</i> 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> District-procured digital content is purchased <i>by topic, enabling teachers to customize content from multiple sources and create curriculum tailored to their standards.</i> <input checked="" type="checkbox"/> All digital content is accessible and useable by all students with disabilities or special needs. <input checked="" type="checkbox"/> Procured licenses are <i>based on a flexible licensing model that allows for transferability among users, or on the total enrollment of the school.</i>

TECHNOLOGY INFRASTRUCTURE & DEVICES

	Early	Developing	Advanced	Target
T1 School Networks	<ul style="list-style-type: none"> <input type="checkbox"/> Network and Internet connection bandwidth are <i>not yet sufficient to support average district access needs.</i> <input type="checkbox"/> Wireless access points are <i>not yet</i> managed by a central controller. <input type="checkbox"/> Wireless network is <i>not yet available in all classrooms, or is not yet sufficient to meet demand.</i> <input type="checkbox"/> Wireless connectivity is <i>not yet sufficient</i> to support one device per student with some performance degradation during average use. <input type="checkbox"/> Network performance monitoring is <i>not yet in place.</i> 	<ul style="list-style-type: none"> <input type="checkbox"/> Network and Internet connection bandwidth are <i>sufficient to meet average district access needs (though not peak demand).</i> <input type="checkbox"/> Some wireless access points are managed by a central controller. <input type="checkbox"/> Wireless network access is <i>generally available in computer labs and classrooms; wireless access is available in some common spaces.</i> <input type="checkbox"/> Wireless connectivity is <i>sufficient to support one device per student with some performance degradation during average use.</i> <input type="checkbox"/> Network performance monitoring is <i>in place at MDF and core switching equipment.</i> 	<ul style="list-style-type: none"> <input type="checkbox"/> Network and Internet connection bandwidth are <i>sufficient to support all district access needs with some performance degradation at peak access times.</i> <input checked="" type="checkbox"/> All wireless access points are managed by a central controller. <input checked="" type="checkbox"/> Wireless access is <i>available in all instructional and indoor common areas.</i> <input checked="" type="checkbox"/> Wireless connectivity is <i>sufficient to support one device per student without performance degradation during average use.</i> <input type="checkbox"/> Network performance monitoring is <i>in place for the wired and wireless networks including individual access points.</i> 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Network and Internet connection bandwidth <i>support all district access needs without performance degradation even during times of maximum use.</i> <input type="checkbox"/> All wireless access points are managed by a central controller <i>with redundancy and traffic routing.</i> <input type="checkbox"/> Wireless access is <i>available and reliable in all instructional spaces and indoor/outdoor common areas.</i> <input type="checkbox"/> Wireless connectivity is <i>sufficient to support two or more devices per student without performance degradation during average use.</i> <input checked="" type="checkbox"/> Network performance monitoring is <i>in place for the wired wireless network and can measure usage at the device level.</i>
T2 End-User Devices	<ul style="list-style-type: none"> <input type="checkbox"/> District-owned devices are available <i>in a fixed location on a limited or scheduled basis for teacher and learner use.</i> <input type="checkbox"/> District-owned devices are <i>not yet configured for remote management or update.</i> <input type="checkbox"/> Standards for the alignment of district-owned devices to instructional programs (e.g. NC Test Specifications) <i>do not yet exist.</i> <input checked="" type="checkbox"/> District does <i>not yet allow students to bring their own devices.</i> 	<ul style="list-style-type: none"> <input type="checkbox"/> District-owned devices are available <i>to entire classes on a rotating basis in the classroom for teacher and learner use.</i> <input type="checkbox"/> Some district-owned devices are <i>configured for remote management or update.</i> <input type="checkbox"/> Some <i>district-owned devices</i> meet standards for the alignment of district-owned devices to instructional programs (e.g. NC Test Specifications, modern LMS, instructional applications). <input type="checkbox"/> District <i>allows students to bring any devices.</i> 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> District-owned devices are available <i>to all students and teachers during the school day.</i> <input type="checkbox"/> District-owned devices are <i>configured for remote management or update at the school.</i> <input type="checkbox"/> <i>Most district-owned devices</i> meet standards for the alignment of district-owned devices to instructional programs (e.g. NC Test Specifications, modern LMS, instructional applications). <input type="checkbox"/> District <i>provides support for schools to implement a "Bring Your Own Device" (BYOD) program.</i> 	<ul style="list-style-type: none"> <input type="checkbox"/> District-owned devices are available <i>to all students and teachers 24/7.</i> <input checked="" type="checkbox"/> District-owned devices are <i>configured for remote management or update across the district.</i> <input checked="" type="checkbox"/> <i>All district-owned devices</i> meet standards for the alignment of district-owned devices to instructional programs (e.g. NC Test Specifications, modern LMS, instructional applications). <input type="checkbox"/> District <i>requires BYOD, student-owned devices used on campus to meet specifications that ensure they can be used for core learning applications.</i>

TECHNOLOGY & INFRASTRUCTURE

	Early	Developing	Advanced	Target
T3 Learning Environments	<ul style="list-style-type: none"> <input type="checkbox"/> All instructional spaces <i>do not yet have a dedicated large display.</i> <input checked="" type="checkbox"/> Classrooms have <i>fewer than five power receptacles available for student use.</i> <input type="checkbox"/> Peripheral devices (e.g., document cameras, 3-D printers, assistive/adaptive devices, etc.) are not yet available in the classroom, or do not function. <input type="checkbox"/> Learning spaces are <i>not yet</i> designed and furnished to provide flexibility for students to work individually and collaboratively. 	<ul style="list-style-type: none"> <input type="checkbox"/> All instructional spaces <i>have a large display system that is hard-wired to a single device.</i> <input type="checkbox"/> Classrooms have <i>enough receptacles to allow students to rotate for access to power.</i> <input checked="" type="checkbox"/> Peripheral devices are available <i>for use in the classroom, are functional, but are only for teacher use.</i> <input checked="" type="checkbox"/> A <i>few</i> learning spaces are designed and furnished to provide flexibility for students to work individually and collaboratively. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> All instructional spaces <i>have a large fixed display system that is hard wired to a single device.</i> <input type="checkbox"/> Classrooms have <i>sufficient power receptacles available, but are not conveniently located for student use.</i> <input type="checkbox"/> Peripheral devices are available <i>in the classroom and can be used by students.</i> <input type="checkbox"/> <i>Many</i> learning spaces are designed and furnished to provide flexibility for students to work individually and collaboratively. 	<ul style="list-style-type: none"> <input type="checkbox"/> All instructional spaces <i>have a large display system with the ability to show teacher and student screens wirelessly.</i> <input type="checkbox"/> Classrooms have <i>sufficient power receptacles available, located in positions that allow students to charge devices.</i> <input type="checkbox"/> Peripheral devices are available <i>in the classroom and controlled by both teacher and student devices.</i> <input type="checkbox"/> <i>All</i> learning spaces are designed and furnished to provide flexibility for students to work individually and collaboratively.
T4 Technical Support	<ul style="list-style-type: none"> <input type="checkbox"/> Technical support <i>response time is a barrier to instructional delivery and normal business operations.</i> <input type="checkbox"/> Technical support <i>response time is typically more than four days.</i> <input type="checkbox"/> Technical support is <i>provided primarily by Instructional personnel</i> (e.g., instructional technology facilitators, coaches, or other instructional positions). <input type="checkbox"/> <i>No defined technical support procedures exist yet.</i> <input type="checkbox"/> Technical support requests are <i>not yet tracked.</i> <input type="checkbox"/> <i>Inventory</i> of digital technology assets (i.e. counts of devices) <i>has been formalized.</i> 	<ul style="list-style-type: none"> <input type="checkbox"/> Technical support <i>responses are sometimes a barrier to instructional delivery and normal business operations.</i> <input type="checkbox"/> Technical support is <i>available within two to three business days, in most cases.</i> <input type="checkbox"/> Instructional <i>personnel provide "first level" technical support.</i> <input type="checkbox"/> A technical support procedure exists only at the individual school level. <input type="checkbox"/> Technical support <i>requests are tracked, but are not reviewed for trends.</i> <input type="checkbox"/> <i>Inventory and tracking</i> of portable digital technology assets is <i>cataloged and linked to individuals.</i> 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Technical support <i>responses are rarely a barrier to instructional delivery and normal business operations.</i> <input checked="" type="checkbox"/> Technical support is <i>available within 24 hours, in most cases.</i> <input checked="" type="checkbox"/> Instructional <i>personnel serve as back-up technical support.</i> <input type="checkbox"/> A well-defined technical support procedure is <i>in place, but is not consistently enforced.</i> <input type="checkbox"/> Technical support requests are <i>tracked and reviewed for trends periodically.</i> <input checked="" type="checkbox"/> <i>Inventory and tracking</i> of portable and fixed digital technology assets is <i>catalogued and linked to individuals and spaces.</i> 	<ul style="list-style-type: none"> <input type="checkbox"/> Technical support is <i>available enough that instructional and business operations are minimally impacted.</i> <input type="checkbox"/> Technical support is <i>generally available within the same day.</i> <input type="checkbox"/> Technical support <i>does not rely primarily on instructional technology facilitators, coaches, or other instructional positions.</i> <input checked="" type="checkbox"/> A well-defined technical support procedure is <i>in place and consistently enforced.</i> <input checked="" type="checkbox"/> Technical support requests are <i>logged, tracked, and annotated.</i> <input type="checkbox"/> <i>Inventory and tracking</i> of portable and fixed technology assets is <i>catalogued and linked to individuals and spaces and incorporates repair history and refresh plans.</i>

TECHNOLOGY & INFRASTRUCTURE				
	Early	Developing	Advanced	Target
T5 Network Services	<ul style="list-style-type: none"> <input type="checkbox"/> Equipment is replaced <i>at the point of failure</i>. <input type="checkbox"/> Single-sign-on <i>is not yet in use</i>. <input type="checkbox"/> Content filtering <i>is not yet differentiated by user type</i>. <input type="checkbox"/> Content filtering <i>exclusively restricts and often prevents teachers and students from accessing instructional tools/resources</i>. <input type="checkbox"/> Guest devices <i>do not yet have wireless access</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> Equipment is replaced <i>sporadically as funding is available</i>. <input type="checkbox"/> Single-sign-on <i>is in use only for basic services (i.e., network logins, content filtering, and email systems)</i>. <input type="checkbox"/> Content filtering <i>is differentiated by staff and students</i>. <input type="checkbox"/> Content filtering <i>sometimes prevents the use of some instructional websites</i>. <input type="checkbox"/> Upon request guest devices can be connected to the district wireless network. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> A routine and comprehensive replacement cycle exists <i>for some devices and digital technology infrastructure</i>. <input checked="" type="checkbox"/> Single-sign-on <i>is in use for basic services and some additional applications</i>. <input checked="" type="checkbox"/> Content filtering <i>is differentiated by school level and user role</i>. <input checked="" type="checkbox"/> Content filtering <i>seldom prevents the use of instructional websites</i>. <input checked="" type="checkbox"/> Guest devices can connect to the district wireless network but no system is in place for access control. 	<ul style="list-style-type: none"> <input type="checkbox"/> A routine and comprehensive replacement cycle exists <i>for all devices and digital technology infrastructure</i>. <input type="checkbox"/> Single-sign-on <i>and identity management are integrated across all applications</i>. <input type="checkbox"/> Content filtering <i>is in place at the school level, grade level, and by user role</i>. <input type="checkbox"/> Content filtering <i>does not restrict Internet usage beyond legal requirements and local responsible use policies</i>. <input type="checkbox"/> Guest devices connect to the district wireless network through a system with multiple and varied rates and that tracks users.
T6 Outside of School	<ul style="list-style-type: none"> <input type="checkbox"/> <i>Fewer than 50%</i> of teachers and students have Internet/broadband access outside the school day. <input type="checkbox"/> Partnerships with the community groups (e.g. public libraries, community centers, municipalities, downtown areas, and Internet providers) to support out-of-school Internet access <i>are not yet established</i>. <input checked="" type="checkbox"/> Commercial Internet/broadband providers <i>do not yet offer discounts</i> for rural or economically disadvantaged families. <input type="checkbox"/> Student and teacher devices <i>are not yet filtered</i> off-premises. 	<ul style="list-style-type: none"> <input type="checkbox"/> <i>50%</i> of teachers and students have Internet/broadband access outside the school day <i>at least two days per week</i>. <input type="checkbox"/> Partnerships with the community groups (e.g. public libraries, community centers, municipalities, downtown areas, and Internet providers) to support out-of-school Internet access <i>are brief and rare</i>. <input type="checkbox"/> Commercial Internet/broadband providers <i>offer modest discounts</i> for rural or economically disadvantaged families. <input type="checkbox"/> <i>Limited content filtering</i> operates on student and teacher devices off-premises. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> <i>Most</i> teachers and students have Internet/broadband access outside the school day <i>3-5 days per week</i>. <input checked="" type="checkbox"/> Partnerships with the community groups (e.g. public libraries, community centers, municipalities, downtown areas, and Internet providers) to support out-of-school Internet access <i>exist with a small number of organizations or individuals</i>. <input type="checkbox"/> Commercial Internet/broadband providers <i>offer substantial discounts</i> for rural or economically disadvantaged families. <input checked="" type="checkbox"/> <i>Sufficient content filtering</i> operates on student devices when they are off-premises. 	<ul style="list-style-type: none"> <input type="checkbox"/> <i>All</i> teachers and students have Internet/broadband access outside the school day <i>6-7 days a week</i>. <input type="checkbox"/> Partnerships with the community groups (e.g. public libraries, community centers, municipalities, downtown areas, and Internet providers) to support out-of-school Internet access <i>are continuous and leverage multiple types of organizations</i>. <input type="checkbox"/> Commercial Internet/broadband providers <i>offer free service</i> for rural or economically disadvantaged families. <input type="checkbox"/> <i>Sufficient content filtering</i> operates on student and teacher devices when they are off-premises.

PROFESSIONAL LEARNING				
	Early	Developing	Advanced	Target
P1 Professional Development Focus	<ul style="list-style-type: none"> <input type="checkbox"/> Digital learning-focused professional development focuses on <i>sharing information about digital technology tools and resources</i>. <input type="checkbox"/> Professional development on pedagogy in a digital learning environment <i>has not yet been provided</i>. <input type="checkbox"/> Digital learning-focused professional development <i>has not yet been provided on content-specific strategies for integrating digital technology into the curriculum</i>. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Digital learning-focused professional development focuses on <i>engaging with digital technology tools and resources</i>. <input checked="" type="checkbox"/> Professional development on pedagogy in a digital learning environment <i>introduces digital learning frameworks (e.g., TPACK, SAMR, 4Cs, etc.)</i>. <input checked="" type="checkbox"/> Digital learning-focused professional development <i>has been provided on content-specific strategies for integrating digital technology into the curriculum for CCSS subjects (ELA, mathematics)</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> Digital learning-focused professional development focuses on <i>curriculum planning integrated with digital technology tools and resources</i>. <input type="checkbox"/> Professional development on pedagogy in a digital learning environment <i>explores digital learning frameworks (e.g., TPACK, SAMR, 4Cs, etc.) for the effective uses of digital technology to support instructional strategies</i>. <input type="checkbox"/> Digital learning-focused professional development <i>has been provided on content-specific strategies for integrating digital technology into the curriculum for ELA, mathematics, social studies, and science</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> Digital learning-focused professional development focuses on <i>curriculum planning and student-learning activities integrated with digital technology tools and resources</i>. <input type="checkbox"/> During professional development on pedagogy in a digital learning environment, <i>teachers reflect on and revise their implementation of digital learning frameworks (e.g., TPACK, SAMR, 4Cs, etc.)</i>. <input type="checkbox"/> Digital learning-focused professional development <i>has been provided on content-specific strategies for integrating digital technology into the curriculum for all subject areas</i>.

PROFESSIONAL LEARNING				
	Early	Developing	Advanced	Target
P2 Professional Development Format	<ul style="list-style-type: none"> <input type="checkbox"/> Digital learning-focused professional development is typically delivered <i>in a large-group via lecture</i>. <input type="checkbox"/> Digital learning-focused professional development is designed to address <i>large group needs as determined by district goals or initiatives</i>. <input type="checkbox"/> Digital learning-focused professional development <i>does not yet include ongoing support through coaching, mentoring, or learning communities</i>. <input type="checkbox"/> Digital learning-focused professional development is <i>rarely delivered in face-to-face or synchronous settings</i>. <input type="checkbox"/> Teachers <i>do not have the opportunity to discuss digital learning in professional learning community meetings</i>. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Digital learning-focused professional development is typically delivered <i>in small group settings via lecture</i>. <input checked="" type="checkbox"/> Digital learning-focused professional development is designed to address <i>large group needs identified through perceptions of district leaders</i>. <input type="checkbox"/> Digital learning-focused professional development <i>includes ongoing support through coaching, mentoring, and/or learning communities</i>. <input type="checkbox"/> Digital learning-focused professional development is <i>delivered in face-to-face or synchronous settings</i>. <input type="checkbox"/> Teachers <i>occasionally share lessons and activities about digital learning through infrequent professional learning community meetings (e.g., quarterly early release days)</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> Digital learning-focused professional development is typically delivered <i>in small group settings using an appropriate pedagogical strategy (e.g., job-embedded, ongoing, relevant, or sustainable)</i>. <input checked="" type="checkbox"/> Digital learning-focused professional development is designed to address <i>large group needs identified through data (e.g., surveys, teacher evaluations)</i>. <input checked="" type="checkbox"/> Digital learning-focused professional development <i>includes ongoing support with coaching, mentoring, and professional learning communities</i>. <input checked="" type="checkbox"/> Digital learning-focused professional development is <i>delivered in face-to-face or synchronous settings and informal opportunities are encouraged</i>. <input checked="" type="checkbox"/> Teachers <i>frequently share lessons and activities about digital learning in their regular professional learning communities (e.g., weekly common planning periods)</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> Digital learning-focused professional development is typically delivered <i>in small group settings using multiple pedagogical strategies (e.g., job-embedded, ongoing, relevant, and sustainable)</i>. <input type="checkbox"/> Digital learning-focused professional development <i>is personalized based on participants' professional learning needs identified through data (e.g., surveys, teacher evaluations)</i>. <input type="checkbox"/> Digital learning-focused professional development <i>includes ongoing support through peer observation, assessment, coaching, professional learning communities, and mentoring</i>. <input type="checkbox"/> Digital learning-focused professional development is <i>delivered in face-to-face or synchronous settings and includes intentional opportunities for informal and anytime, anywhere learning</i>. <input type="checkbox"/> Teachers <i>frequently share lessons and activities about digital learning in their regular professional learning communities, guiding their work with research-based framework (e.g., Marzano, DuFour, Senge, Hord, etc.)</i>.
P3 Professional Development Participation	<ul style="list-style-type: none"> <input type="checkbox"/> Teachers are <i>responsible for pursuing digital learning-focused professional development independently</i>. <input type="checkbox"/> District provides information to administrators about opportunities for teacher professional development on digital learning. <input type="checkbox"/> The district <i>has no additional CEU requirements specific to digital learning</i>. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> District provides <i>some digital learning-focused professional development typically available after school or during planning time</i>. <input type="checkbox"/> Administrators attend professional development on digital learning with their teachers. <input checked="" type="checkbox"/> The district <i>encourages teachers to pursue professional development opportunities specific to digital learning</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> District provides <i>multiple opportunities to meet the professional development needs of all teachers, including some release time to participate in professional learning opportunities</i>. <input checked="" type="checkbox"/> Administrators participate in professional development on leading digital learning initiatives. <input type="checkbox"/> The district <i>requires 1 CEU specific to digital learning during a renewal cycle</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> District provides <i>multiple and varied opportunities to meet the individual professional development needs of all teachers, including some release time to participate in professional learning opportunities</i>. <input type="checkbox"/> Administrators participate in professional development on leading digital learning initiatives, including evaluating authentic digital learning. <input type="checkbox"/> The district <i>requires 2 or more CEUs specific to digital learning during a renewal cycle</i>.

CONTENT & INSTRUCTION				
	Early	Developing	Advanced	Target
C1 Educator Role	<ul style="list-style-type: none"> <input type="checkbox"/> Shifts in educator role in a digital learning environment, in which teachers do more facilitation, <i>are not yet being addressed.</i> <input checked="" type="checkbox"/> <i>Teachers do not demonstrate proficiency</i> with the “NC Digital Learning Competencies for Teachers” (focus areas include: Leadership in Digital Learning, Digital Citizenship, Digital Content and Instruction, Data and Assessment). 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Shifts in the educator role in a digital learning environment, in which teachers do more facilitation, <i>are driven at the teacher level and are not systemic.</i> <input type="checkbox"/> <i>Few teachers demonstrate proficiency</i> with the “NC Digital Learning Competencies for Teachers” (focus areas include: Leadership in Digital Learning, Digital Citizenship, Digital Content and Instruction, Data and Assessment). 	<ul style="list-style-type: none"> <input type="checkbox"/> Shifts in the educator role in a digital learning environment, in which teachers do more facilitation, <i>are driven at the school-leader level and are not systemic.</i> <input type="checkbox"/> <i>Many teachers demonstrate proficiency</i> with the “NC Digital Learning Competencies for Teachers” (focus areas include: Leadership in Digital Learning, Digital Citizenship, Digital Content and Instruction, Data and Assessment). 	<ul style="list-style-type: none"> <input type="checkbox"/> Shifts in the educator role in a digital learning environment, in which teachers do more facilitation, <i>are driven at the district level and are systemic.</i> <input type="checkbox"/> <i>All teachers demonstrate proficiency</i> with the “NC Digital Learning Competencies for Teachers” (focus areas include: Leadership in Digital Learning, Digital Citizenship, Digital Content and Instruction, Data and Assessment).
C2 Student-Centered Learning	<ul style="list-style-type: none"> <input type="checkbox"/> Students <i>do not participate in</i> digital learning activities that develop critical thinking, communication, collaboration, and creativity skills. <input checked="" type="checkbox"/> Students <i>do not have the ability to</i> use digital tools to select their own learning paths. 	<ul style="list-style-type: none"> <input type="checkbox"/> Students <i>have a few opportunities to participate in</i> digital learning activities that integrate critical thinking, communication, collaboration, and creativity skills. <input type="checkbox"/> Students <i>have few opportunities to</i> use digital tools to select personalized learning paths based on their learning differences. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Students <i>have many opportunities to participate in</i> digital learning activities that integrate critical thinking, communication, collaboration, and creativity skills. <input type="checkbox"/> Students <i>have many opportunities to</i> use digital tools to select personalized learning paths based on their learning differences. 	<ul style="list-style-type: none"> <input type="checkbox"/> Students <i>have consistent opportunities to participate in</i> digital learning activities that integrate critical thinking, communication, collaboration, and creativity skills. <input type="checkbox"/> Students <i>have consistent opportunities to</i> use digital tools to select personalized learning paths based on their learning differences.
C3 Access to Digital Content	<ul style="list-style-type: none"> <input type="checkbox"/> Students <i>do not have access to</i> digital content and resources. <input type="checkbox"/> Teachers <i>do not have access to</i> digital content and resources <i>for instructional use in the classroom.</i> <input type="checkbox"/> Parents <i>do not have access to</i> teacher-generated and curated digital content. 	<ul style="list-style-type: none"> <input type="checkbox"/> Students <i>have few opportunities to</i> access digital content and resources. <input type="checkbox"/> Teachers <i>have few opportunities to</i> access digital content and resources <i>for instructional use in the classroom.</i> <input checked="" type="checkbox"/> Parents <i>have few opportunities to</i> access teacher-generated and curated digital content. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Students <i>have many opportunities to</i> access digital content and resources. <input checked="" type="checkbox"/> Teachers <i>have consistent opportunities to</i> access digital content and resources <i>for instructional use in the classroom.</i> <input type="checkbox"/> Parents <i>have many opportunities to</i> access <i>all</i> teacher-generated and curated digital content. 	<ul style="list-style-type: none"> <input type="checkbox"/> Students <i>have anytime/anywhere</i> access to digital content and resources. <input type="checkbox"/> Teachers <i>have anytime/anywhere</i> access to digital content and resources <i>for instructional use throughout the entire school.</i> <input type="checkbox"/> Parents <i>have consistent access to</i> <i>all</i> teacher-generated and curated digital content <i>and the work submitted by their students.</i>

CONTENT & INSTRUCTION				
	Early	Developing	Advanced	Target
C4 Learning Management System (LMS)	<ul style="list-style-type: none"> <input type="checkbox"/> The district <i>does not</i> have a policy regarding a learning management system. <input type="checkbox"/> A learning management system <i>is not</i> used by teachers. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> The district provides <i>flexibility and support</i> to schools in choosing a learning management system. <input checked="" type="checkbox"/> A learning management system is used by <i>some</i> teachers. 	<ul style="list-style-type: none"> <input type="checkbox"/> The district provides an <i>integrated learning management system(s)</i> but <i>not all</i> schools are using it. <input type="checkbox"/> A learning management system is used by <i>most</i> teachers. 	<ul style="list-style-type: none"> <input type="checkbox"/> The district provides <i>support in implementing a comprehensive, integrated learning management system(s)</i> to help teachers plan and organize curriculum, provide student activities, and track students' progress. <input type="checkbox"/> A district-provided learning management system is used by <i>all</i> teachers.
C5 Curation & Development	<ul style="list-style-type: none"> <input type="checkbox"/> District-supported digital content and instructional resources are selected <i>without teacher input</i>. <input type="checkbox"/> Teachers <i>do not</i> have access to a <i>searchable repository</i> to share their curated and/or developed digital content. <input type="checkbox"/> Teachers are not yet able to customize digital content aligned to their standards from any sources. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> District-supported digital content and instructional resources are selected <i>with teacher input</i>. <input checked="" type="checkbox"/> Teachers <i>have access</i> to a <i>searchable grade-level or subject-area repository</i> to share their curated and/or developed digital content. <input type="checkbox"/> Teachers are able to customize digital content aligned to their standards from <i>a few sources</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> District-supported digital content and instructional resources are selected <i>with input from teachers and content/pedagogy experts</i>. <input type="checkbox"/> Teachers <i>have access</i> to a <i>searchable school-level repository</i> to share their curated and/or developed digital content. <input type="checkbox"/> Teachers are able to customize digital content aligned to their standards from <i>many sources</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> District-supported digital content and instructional resources are selected <i>through a vetting process with input from teachers and content/pedagogy experts</i>. <input type="checkbox"/> Teachers <i>have access</i> to a <i>searchable district-level repository</i> to share their curated and/or developed digital content. <input type="checkbox"/> Teachers are able to customize digital content aligned to their standards from <i>unlimited sources</i>.
C6 Data-Informed Instruction	<ul style="list-style-type: none"> <input type="checkbox"/> Teachers <i>do not yet</i> use digital tools to access a variety of data to inform instruction. <input type="checkbox"/> Teachers <i>do not yet</i> engage in data-driven re-teaching. 	<ul style="list-style-type: none"> <input type="checkbox"/> <i>Few teachers</i> use digital tools to access a variety of data to inform instruction. <input checked="" type="checkbox"/> Teachers engage in <i>large group</i> data-driven re-teaching on a few key standards with which <i>the majority of students</i> are struggling. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> <i>Many teachers</i> use digital tools to access a variety of data to inform instruction. <input type="checkbox"/> Teachers engage in <i>small group</i> data-driven re-teaching on a few key standards with which <i>particular groups of students</i> are struggling. 	<ul style="list-style-type: none"> <input type="checkbox"/> <i>All teachers</i> use digital tools to access a variety of data to inform instruction. <input type="checkbox"/> Teachers engage in <i>personalized</i> data-driven re-teaching to <i>individual students</i> who are struggling.

DATA & ASSESSMENT				
	Early	Developing	Advanced	Target
D1 Data Systems	<ul style="list-style-type: none"> <input type="checkbox"/> Learner data storage plan is <i>not yet developed</i>. <input type="checkbox"/> A process for collecting, managing, and accessing learner data <i>in place</i>. <input type="checkbox"/> Learning and content tools do <i>not yet share assessment, grading, or analytics data with a central repository</i> (e.g. a learning management system or student information system). 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Learner data is <i>stored by individual teachers</i> according to school/district policy or procedure. <input checked="" type="checkbox"/> A process for collecting, managing, and accessing learner data <i>is used by some educators and administrators</i>. <input type="checkbox"/> Some learning and content tools <i>share assessment data with a central repository</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> Learner data is <i>housed in centralized applications</i> but is <i>not accessible through a single portal</i>. <input type="checkbox"/> A process for collecting, managing, accessing, and analyzing learner data <i>is used by some educators and administrators in real time</i>. <input type="checkbox"/> Most learning and content tools <i>share assessment data with a central repository</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> Learner data is <i>housed in centralized applications</i> and is <i>accessible through a single portal</i>. <input type="checkbox"/> Educators, administrators, parents, and students <i>access individualized learner data in real-time</i>. <input type="checkbox"/> Most learning and content tools <i>share assessment and analytics data with a central repository</i>.
D2 Learner Profiles	<ul style="list-style-type: none"> <input type="checkbox"/> Student-level learner <i>profiles are not available district wide</i>. <input type="checkbox"/> Teachers make <i>limited use of student data from state level systems</i>. <input type="checkbox"/> School Administrators make <i>limited use of student data from state level systems</i>. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Student learner <i>profiles exist district wide and include historical student performance data</i>. <input type="checkbox"/> Teachers <i>use learner profiles to plan instruction at the classroom level</i>. <input checked="" type="checkbox"/> School Administrators <i>use learner profiles to make general plans to support schoolwide instructional goals</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> Student learner profiles <i>exist district wide and include historical student performance data and real-time formative assessment data</i>. <input checked="" type="checkbox"/> Teachers and students <i>use learner profiles to make just in time adjustments for differentiated instruction</i>. <input type="checkbox"/> School Administrators <i>use learner profiles to support schoolwide instructional goals at the grade/subject level</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> Student learner profiles <i>exist district wide and include historical student performance data, real-time formative assessment data, information on student learning differences and other contextual out of school factors</i>. <input type="checkbox"/> Teachers and students <i>use learner profiles to personalize learning at the student level</i>. <input type="checkbox"/> School Administrators <i>use learner profiles to support schoolwide instructional goals at the classroom level</i>.

DATA & ASSESSMENT				
	Early	Developing	Advanced	Target
D3 Multiple & Varied Assessments	<ul style="list-style-type: none"> <input type="checkbox"/> Multiple and varied assessments are <i>not yet in place</i>. <input type="checkbox"/> A few teachers use <i>Multiple and varied assessments</i> at the classroom level as indicators of student learning. <input type="checkbox"/> Teachers <i>independently create</i> multiple and varied assessments. <input type="checkbox"/> Rubrics that measure critical thinking, communication, collaboration, and creativity across content areas <i>are not yet in place</i>. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Multiple and varied assessments <i>are used to identify grade- or subject-level needs and strengths for learning goals</i>. <input type="checkbox"/> Most teachers use <i>multiple and varied assessments</i> at the classroom level as indicators of student learning. <input checked="" type="checkbox"/> Teachers <i>collaborate informally</i> to create multiple and varied assessments. <input checked="" type="checkbox"/> Rubrics that measure critical thinking, communication, collaboration, and creativity across content areas <i>are in place in individual classrooms</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> Multiple and varied assessments are <i>embedded into instruction and are used to identify classroom-level needs and strengths for learning goals</i>. <input checked="" type="checkbox"/> Schools <i>encourage and support the use of multiple and varied assessments</i> as indicators of student learning. <input type="checkbox"/> Teachers <i>work across grade- or subject-level teams</i> to create multiple and varied assessments. <input type="checkbox"/> Rubrics that measure critical thinking, communication, collaboration, and creativity across content areas <i>are in use and are vertically-aligned at the school level</i>. 	<ul style="list-style-type: none"> <input type="checkbox"/> Multiple and varied assessments are <i>embedded into instruction and are used to identify individual student needs and strengths for learning goals</i>. <input type="checkbox"/> Districts <i>encourage and support the use of multiple and varied assessments</i> as indicators of student learning. <input type="checkbox"/> Teachers <i>work district wide in grade- or subject-level teams</i> to create multiple and varied assessments. <input type="checkbox"/> Rubrics that measure critical thinking, communication, collaboration, and creativity across content areas <i>are in use and are vertically-aligned at the district level</i>.

Appendix A. Glossary

Rubric Term	Definition
24/7	Available and accessible twenty-four hours per day, seven days per week
24/7/365	Available and accessible twenty-four hours per day, seven days per week, three hundred sixty-five days per year
4 C's	The 21st century skills considered the most important for K-12 education: critical thinking, communication, collaboration, and creativity
Acceptable Use policies	Traditionally, acceptable use policies were interchangeable with "terms of use," establishing baseline behavior for users of a given technology, product, or service; these policies are often written passively and in consideration of what the minimum acceptable behavior might be in a given scenario; there is little or no information offered that might aid users in determining responsible behaviors in a given scenario; these policies are often taken only at face value
Benchmark assessment	Short assessments administered throughout the school year that give teachers immediate feedback on the degree to which students are meeting academic standards; regular use of benchmark assessments is seen as a tool to measure student growth across cohorts and design curriculum to meet learning needs; benchmark assessments are typically standardized at the school or district level
Bring Your Own Device (BYOD)	Programs, policies, and procedures for students and employees to connect personally-owned computers, tablets, and cell phones to school networks for instructional and business purposes
CIPA	The Children's Internet Protection Act (CIPA) is federal law enacted in 2000 to address concerns about children's access to obscene or harmful content over the Internet; CIPA imposes certain requirements on schools or libraries that receive discounts for Internet access or internal connections through the federal E-rate program
Classroom display systems	Commonly referred to as CRS (classroom response systems), these interactive tools exist in many forms developed by a variety of vendors, but operate on the same fundamental concept: students use hand-held devices to respond to multiple choice or polling questions, then their responses are gathered by a central receiver, combined, and totals are immediately projected back for all to see
Collaboration	Students: demonstrate ability to work effectively and respectfully with diverse teams; exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal; assume shared responsibility for collaborative work; and value the individual contributions made by each team member <i>(adapted from p21.org)</i>

Rubric Term	Definition
Communication	Students: articulate thoughts and ideas effectively using oral, written, and nonverbal communication skills in a variety of forms and contexts; listen effectively to decipher meaning, including knowledge, values, attitudes and intentions; use communication for a range of purposes (e.g., to inform, instruct, motivate and persuade); use multiple media and technologies, and know how to judge their effectiveness and assess their impact; and communicate effectively in diverse environments (<i>adapted from p21.org</i>)
Confidentiality policies	Policies which ensure that information is accessible only to those with authorization and that the information is protected throughout its lifecycle; these policies imposes boundaries on the amount of personal information and data that can be disclosed without consent, and allow individuals to feel secure giving sensitive information and trust that their privacy is being protected
Creativity	Students: think creatively, using a wide range of idea creation techniques like brainstorming, creating new and worthwhile ideas, and elaborating, evaluating, and refining their ideas; work creatively with others by developing and communicating new ideas with others, being open to diverse perspectives, incorporating feedback, viewing failure as an opportunity to learn, understanding creativity as a cyclical process; and implement innovations by acting on creative ideas to make a tangible and useful contribution (<i>adapted from p21.org</i>)
Critical thinking	Students: use various types of reasoning, like inductive, deductive, etc., as appropriate to the situation; use systems thinking by analyzing how parts of a whole interact with each other to produce overall outcomes; make judgements and decisions by effectively analyzing and evaluating evidence, arguments, claims and beliefs, synthesizing and making connections between information and arguments, and reflecting critically on learning experiences; and solve different kinds of non-familiar problems in both conventional and innovative ways, asking significant questions that clarify various points of view and lead to better solutions (<i>adapted from p21.org</i>)
Data privacy	Information privacy, or data privacy or data protection, is the relationship between collection and dissemination of data, digital technology, the public expectation of privacy, and related laws; data privacy is undergirded by the understanding that an individual's data – particularly related to online activity and accounts and content creation – is to remain confidential and in compliance with federal (including CIPA and FERPA), state, and local laws
Digital competencies	At of the publication of this document, the North Carolina Department of Public Instruction was in the process, but had not yet completed, two formal sets of “North Carolina Digital Learning Competencies” – a set for teachers and a set for administrators
Digital learning	Any instructional practice that effectively uses digital technology to strengthen a student's learning experience; it includes a focus on the following instructional characteristics: personalized learning; advancement based on mastery of content and competency in application; anywhere and anytime learning; student-centered instruction; digital content; assessments that are integrated into learning activities; and project-based learning activities

Rubric Term	Definition
Discretionary funds	Monies specifically allocated to cover unforeseen costs as well as to fund those efforts and initiatives that may not require their own budget line
FERPA	FERPA (Family Educational Rights and Privacy Act of 1974) is a federal law ensuring the rights and privacy of students and parents, particularly in relation to personally identifiable information (PII), learning progress, additional relevant student information, and educational determinations
Formal pathways	Clear, well-developed set(s) of standards, actions, responsibilities, and performance indicators to identify, develop, and recruit teachers into roles and positions of leadership; teachers are aware of the specific tasks and steps outlined for them, particularly those desiring to assume additional responsibilities
Formative assessment	Formative assessment is a diagnostic process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes
Informal pathways	Unspoken, undocumented, and typically subjective means by which teachers assume additional leadership opportunities and responsibilities; there are no clear standards or metrics for identifying or developing leadership potential
Instructional technology facilitator	An instructional coach who supports teachers with the selection, training, and implementation of digital tools into classroom instruction
Job-embedded	Job-embedded professional development refers to teacher learning that is grounded in day-to-day teaching practice and is designed to enhance teachers' content-specific instructional practices with the intent of improving student learning; it is primarily school or classroom based and is integrated into the workday, consisting of teachers assessing and finding solutions for authentic and immediate problems of practice as part of a cycle of continuous improvement (<i>adapted from Croft, et al., 2010</i>)
Just-in-time learning	The acquisition of knowledge or skills at the times they are needed rather than in advance or following
Learner profiles	Suite of information describing an individual student, including but not limited to: performance, learning styles, extracurricular interests, etc.; the profiles are consistent between grade levels, accounting for new knowledge, standards, and expectations at each grade level
Learning management system (LMS)	A tool or platform used to deliver, track, and manage the distribution of instructional content and used to manage learner interactions; learning management systems can perform tasks such as: distribution and allowance for online submission of student work; online assessment; presentation of instructional content; facilitation of teacher feedback on student work; and facilitation of teacher-student and student-student discussions

Rubric Term	Definition
Learning modalities	Refer to how students use their senses in the learning process; four modalities are commonly considered: visual (seeing), auditory (hearing), kinesthetic (moving), and tactile (touching); the more modalities that are activated during a lesson, the more learning will take place
Main distribution frame (MDF)	The location and equipment for connecting external connections (internet/WAN connection) to the internal network
Maker spaces	A makerspace is a place where students and all individuals present can gather to create, invent, tinker, explore and discover using a variety of tools and materials; they provide a physical laboratory for inquiry-based learning; makerspaces give room and materials for physical learning; these spaces can easily be cross-disciplinary and students can find their work enriched by contributions from others students; students often appreciate the hands-on use of emerging technologies and the opportunity to explore the kind of experimentation that leads to a completed project (<i>adapted from Educause Education Learning Initiative "7 Things About Makerspaces"</i>)
Managed services	Outsourcing day-to-day management and maintenance responsibilities for network services and applications as a method for improving operations and reducing expenses; managed services are also often used for bundled content, student information systems, learning management systems, mobile device management, professional development, network management, etc.
Parent portal	A digital platform which allows parents to stay informed and engaged in their child's education; a parent portal gives parents and guardians real-time access to their child's most recent instructional activities, performance, teacher feedback, etc., as well as access to their child's grades, schedule, contact information, etc.
Performance degradation	A deterioration in network reliability or speed caused by factors such as interference or heavy use
Performance-based assessment	A type of assessment in which students demonstrate the knowledge and skills they have learned; often students are asked to create a product or a response or to perform a specific task or set of tasks; performance-based assessments measure how well students can apply or use what they know, typically in real-world or simulated situations

Rubric Term	Definition
Professional learning	<p>High quality professional learning, in most ideal form, is personalized, job-embedded, ongoing, and interactive; <i>Learning Forward (learningforward.org)</i>, national leader for educator professional development, has outlined 7 standards for professional learning that increases educator effectiveness and results for all students:</p> <ul style="list-style-type: none"> - occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment; - requires skillful leaders who develop capacity, advocate, and create support systems for professional learning; - requires prioritizing, monitoring, and coordinating resources for educator learning; - uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning; - integrates theories, research, and models of human learning to achieve its intended outcomes; - applies research on change and sustains support for implementation of professional learning for long-term change; and - aligns its outcomes with educator performance and student curriculum standards
Project-based learning	<p>A teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to a complex question, problem, or challenge; <i>The Buck Institute (bie.org)</i>, national leader for project-based learning, outlines the following 7 Essential Project Design Elements for Gold Standard PBL:</p> <ul style="list-style-type: none"> - challenging problem or question - sustained inquiry - authenticity - student voice and choice - reflection - critique and revision - public product <p>The Buck Institute also outlines the following Teaching Practices for Gold Standard PBL:</p> <ul style="list-style-type: none"> - design and plan - align to standards - build the culture - manage activities - scaffold student learning - assess student learning - engage and coach
Refresh cycles	A regular, consistent schedule for replacing technology equipment

Rubric Term	Definition
Responsible Use policies	Policies that outline clear, proactive standards that project higher expectations than traditional “acceptable use” policies; the primary difference from acceptable use policies is that a responsible use policy acts as a “floor” for technology use, encouraging users to think beyond the bare minimum behaviors stated in policies and to contemplate what true, responsible use of a given technology might entail; these policies are especially valuable when the terms of use or acceptable use policies are unclear or incomplete
SAMR	An observational taxonomy, developed by Dr. Ruben Puentedura, for classifying the role of technology within a learning activity from “substitution” (technology acting as a substitution for traditional tools) to “augmentation” to “modification” to “redefinition” (technology allowing instructional activities that would not otherwise be possible)
Shared vision	Educational leaders bring together stakeholders - faculty, staff, students, parents, community members, etc. – to form a collective, clear picture of what the school (or other organization) aspires to be or become in the future; the leaders also set in motion a process to assess progress toward achieving that vision; the vision will be shared and valued when a process of assessment is in place to provide feedback about the degree to which the vision is being achieved
Summative assessment	Cumulative assessments used to measure student learning at the end of an instructional unit, often given at the end of a course to determine the degree to which long term learning goals have been met; summative information can shape how teachers organize their curricula or what courses schools offer their students; common examples include state-mandated tests, district benchmark assessments, end-of-unit tests, and end-of-term exams
Synchronous	Existing or occurring at the same time; with regard to digital learning environments, typically refers to online discussions or other learning events in which participants are having direct, immediate, real-time conversations with each other, as opposed to “asynchronous” discussions in which participants leave posts or other artifacts which other participants respond to at a later time
Terms of Use policies	Policies locally established that clarify the rights and responsibilities of all users (including but not limited to teachers, students, and staff members) in relation to the technology and its proper use; these policies should create clear definitions for the expected use of various technologies as well as what expectations are being placed upon the user in a mutually agreeable interaction; often used interchangeably with “acceptable use” and “responsible use” agreements, terms of use policies should focus on the role of technology, rather than the behavior of the user
Total cost of ownership	A comprehensive assessment of information technology or other costs across organizational boundaries over time; can include hardware and software acquisition, management and support, communications, end-user expenses, the opportunity cost of downtime, training, and other productivity losses
TPACK	A framework for understanding the kinds of technology, pedagogical, and content knowledge needed by educators in a digital learning environment; the framework was created by Punya Mishra and Matthew J. Koehler at Michigan State University, and was based on the Pedagogical Content Knowledge framework created by Lee Shulman

Rubric Term	Definition
Two-way communication	A process in which two people or groups can communicate reciprocally and exchange ideas; digital platforms with two-way communication allow for both parties to express themselves and receive information from the other
Vertically-aligned	Educational frameworks (practices, content strands, etc.) that are consistently applied across grade-levels with modifications for the developmental level of the students at each grade-level

Appendix B. Scoring Sheet

District Name: Carbon School District Date Rubric Completed: 9/8/2016

Names and/or numbers of district staff completing the rubric:

School administrators: _____

Central office administrators: Steve Carlsen, Judy Mainord, Phillip Feichko

Teachers: Rob Bradley

Other: _____

Enter the identified ranking or “score” into the blank boxes below each key element name, and calculate overall score (e.g., 16 out of 28 possible points or 16/28):

Early = 1 Developing = 2 Advanced = 3 Target = 4

LEADERSHIP							Comments
L1 Shared Vision:	L2 Personnel:	L3 Comm. & Collaboration:	L4 Sustainability:	L5 Policy:	L6 Continuous Improvement:	L7 Procurement:	
3	2	4	3	3	3	4	Overall Leadership Score (SUM/28): 22

TECHNOLOGY INFRASTRUCTURE & DEVICES						Comments
T1 School Networks:	T2 End-User Devices:	T3 Learning Environments:	T4 Technical Support:	T5 Network Services:	T6 Outside of School:	Areas of improvement could include more power outlets, more options for out of school internet access, improved learning spaces, more student access to peripheral devices.
3	3	2	3	3	3	Overall Tech. & Infra. Score (SUM/24): 17

PROFESSIONAL LEARNING			Comments
P1 Professional Development Focus:	P2 Professional Development Format:	P3 Professional Development Participation:	
1	2	1	Overall Prof. Development Score (SUM/12): 4

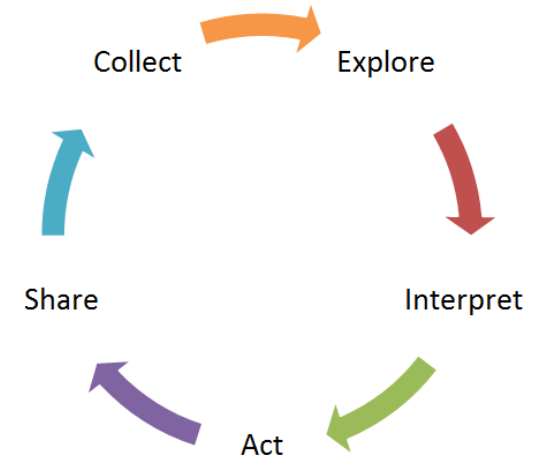
CONTENT & INSTRUCTION						Comments
C1 Educator Role:	C2 Student-Centered Learning:	C3 Access to Digital Content:	C4 Learning Management System (LMS):	C5 Curation & Development:	C6 Data-Informed Instruction:	
1	1	2	2	1	2	Overall Content & Instruction Score (SUM/24): 9

DATA & ASSESSMENT			Comments
D1 Data Systems:	D2 Learner Profiles:	D3 Multiple & Varied Assessments:	
2	2	2	Overall Data & Assess. Score (SUM/12): 6

Overall NC Digital Learning Progress Rubric Score: <i>(sum of overall scores for each main area out 100 possible points, e.g., 52/100)</i>	58
--	----

Appendix C. Data Interpretation Guide

Analysis for strategic planning is the process of breaking down and examining data to understand project implementation or impact. Before meaningful decisions can be made, it is necessary to understand what data show by manipulating them in thoughtful ways. Analysis bridges the gap between collecting data and interpreting those data for monitoring and adjusting a project. Interpretation, the next phase in strategic planning, is the process of determining “what the data mean”—an important activity between the analysis of data and the making of decisions for next steps.



PHASE	GUIDING QUESTIONS
<p>Explore</p>	<ul style="list-style-type: none"> • Do your rubric results resonate? • Any surprises? Why? • Any disappointments? Why? • Do you see any correlation or inconsistencies between the rubric results and other data you have? Why do you think this is the case?
<p><i>Identify 3-4 questions that emerge as you review your data.</i></p> <p>Completing the rubric allowed the technology group a view from the balcony, an opportunity to exam the full scope of technology. Rubric results confirmed several ideas and beliefs that administrators and staff have felt, but it also illuminated areas we have not fully addressed. As the group met to examine rubric results, it became apparent that administrators and teachers looked at the rubric from different points of view.</p> <p>Questions/Activities: -deeper look and reconciliation of all areas of the rubric -need feedback from teachers and other partners -need clear vision and mission for technology</p>	
<p>Interpret</p>	<ul style="list-style-type: none"> • What do the results mean? How would you summarize the data? • What is working really well in your district? What is not? • What are the critical points or trends you saw in the data? • At your district, who needs to be involved in a discussion about this data? How can you engage teachers and other stakeholders?

PHASE	GUIDING QUESTIONS
<p><i>Document at least 3 takeaways from your review of your data.</i></p> <p>Carbon has strengths and challenges in our digital learning plan. Strengths include a good infrastructure of devices, wireless capacity, and highly functioning tech staff. 1:1 devices, Chromebooks, have been widely deployed for students 4-12 as well as all teachers. More and better targeted professional development is a need in Carbon. Professional development has been voluntary, hence technology at a variety of levels is not as widely implemented as we hoped. We need to include teachers, community partners, administrators, and students on the discussion of a tech plan.</p>	
<p>Act</p>	<ul style="list-style-type: none"> • What does this rubric data tell you about efforts you should prioritize now? Next school year? • What changes are you going to make based on this data? • How do these data inform local policy?
<p><i>Identify two things you should do based on the data and who in your district should be involved in next steps.</i></p> <p>The data tells us to design and implement a plan for comprehensive technology and learning. The plan must be an outgrowth of vision and mission for technology. We should not move forward without a concrete plan. Carbon has a need to revise Policy FE to formally include responsible use.</p>	
<p>Share</p>	<ul style="list-style-type: none"> • How should you share your interpretation of the data with staff? Parents? School board? • Who should have this information? • How can your data support current or ongoing initiatives in your district? • What is your vision for getting additional input as you go through the planning process?
<p><i>Note how and with whom this data should be shared.</i></p> <p>The work in progress on a mission and goals for technology can be shared with the board in work meeting, administrators in principals forum, teachers in faculty meetings, parents in school community councils, and any other large group meetings. As well, we can share through the newspaper, local radio interviews, and on district website. Responsibility for sharing the information begins with the superintendent and flows to district and building administrators, current tech staff, and board members. Ongoing input can be collected through surveys as well as the same process as dissemination.</p>	
<p>Collect</p>	<ul style="list-style-type: none"> • What local data do you already have available? • What new data do you need to collect? • What about qualitative data?
<p><i>List other data you already have available and additional data that you need.</i></p> <p>Carbon can currently collect usage data on a variety of software (iReady, Mastery Connect, Waggle, Fuel Ed., Imagine Learning, and others). Teacher evals and PLCs will provide the depth and breadth of Smart Board use, Mastery Connect. Carbon could implement other data collections that include teacher reflections on new tech implementation, action research, ...</p>	

Bibliography

- Croft, A., Coggshall, J.G., Dolan, M., Powers, E., & Killion, J. "Job-Embedded Professional Development: What It Is, Who Is Responsible, and How to Get it Done Well." *Learning Forward Issue Brief*, April 2010.
- IMPACT: Guidelines for North Carolina Media and Technology Programs*. North Carolina Department of Public Instruction. 2005.
<http://www.ncwiseowl.org/IMPACT/>.
- "National Educational Technology Standards for Administrators." International Society for Technology in Education. Eugene, OR: International Society for Technology in Education, 2009.
- "National Educational Technology Standards for Students." International Society for Technology in Education. Eugene, OR: International Society for Technology in Education, 2007.
- "National Educational Technology Standards for Teachers." International Society for Technology in Education. Eugene, OR: International Society for Technology in Education, 2008.
- North Carolina Essential Standards for Instructional Technology*. North Carolina Department of Public Instruction. 2012.
<http://www.dpi.state.nc.us/acre/standards/new-standards/#it>.
- North Carolina Learning Technology Initiative (NCLTI) Framework for Planning*. Raleigh: Friday Institute for Educational Innovation, 2008.
http://www.fi.ncsu.edu/assets/research_papers/nc-11-learning-technology-initiative-planning/nclti-planning-framework-doc.
- North Carolina Professional Teaching Standards*. Public Schools of North Carolina. 2012.
<http://www.dpi.state.nc.us/docs/profdev/standards/teachingstandards.pdf>.
- Staker, H. & Horn, M. "Classifying K-12 Digital Learning." *Innosight Institute, Inc.*, May 2012.
<http://www.christenseninstitute.org/?publications=classifying-k-12-digital-learning-2>.
- Texas STaR Chart: A Tool for Planning and Assessing School Technology and Readiness Aligned with the Texas Long-Range Plan for Technology*. Texas Education Agency. 2001.
- Texas STaR Chart*. Texas Education Agency. 2002. Accessed June 4, 2007. <http://starchart.esc12.net/default.html>.
- Wolf, M.A. & Schneiderman, M. Pre-conference paper presented at the Technology Enabled Personalized Learning Summit, Raleigh, NC. February 2014.