

NORTH CAROLINA **DIGITAL** LEARNING PLAN

Methods Summary

Prepared by the Friday Institute for Educational Innovation for the North Carolina State Board of Education-Department of Public Instruction

How We Developed the North Carolina Digital Learning Plan: Methods and Data

Goals of the Development Process

The questions that framed the development of the North Carolina Digital Learning Plan were:

1. What exemplary approaches and lessons learned from local school districts' digital learning initiatives should North Carolina build upon?
2. How will existing systems, such as Home Base and the North Carolina Virtual Public School, support the transition to digital resources and digital learning?
3. How will North Carolina ensure that every public school has the technology, service, and support infrastructure needed to sustain robust digital learning?
4. How will North Carolina build or enhance the capacity of all its teachers, school leaders, and district leaders, to fully utilize digital resources and meet the new digital learning standards?
5. How do state and local education policies and processes need to be updated and revised to further digital learning?
6. How can North Carolina best support current and future local digital learning transitions in districts throughout the state?

Theoretical Framework

Two theoretical approaches guided the Plan's development: *needs assessment* and *evaluation capacity-building*.

A needs assessment approach first identifies needs (discrepancies between what is and what should be) and prioritizes them, then recommends needs-based decisions, allocation of resources, and implementation actions that will meet those needs.¹

¹ Altschuld & Kumar (2010)

An evaluation capacity-building approach focuses on creating sustainable organizational processes that make ongoing evaluation a continuous part of the organizational framework. The emphasis is on building the internal capacity of an organization, which includes attention to staffing, staff commitment, and a sustainable infrastructure.²

Fully combining these two approaches is an eight-step process, the first six of which included development of the Plan itself: (1) understanding the scope of the challenge of developing the Plan; (2) deciding on what types of plan development actions would be most useful; (3) dividing the team into working groups with more specific tasks; (4) conducting in-depth assessments of the state's current conditions in each working group area (i.e., developing sharper pictures of needs, assets, and resources in each area); (5) using what each working group learned to make decisions for possible Plan elements; and (6) developing a strategy for coordinating asset- and need-based elements. The last two steps will guide the ongoing implementation of the Plan: (7) implementing these plans, then monitoring and evaluating them to determine how well they are moving forward; and (8) returning to earlier findings to add more pieces or expand the improvement package.³

The Friday Institute team and its partners used this framework to help guide data collection, organization, and analysis throughout the Plan's development. The framework helped the team to identify and prioritize needs and assets related to digital learning that, in turn, helped guide development of strategic recommendations for the state.

Methods & Data

To implement this innovative approach to Plan development, four working groups were identified (Step 3, above): Policy and Funding, Technology Infrastructure, Human Capacity, and Digital Content. These working groups all took part in intentional and systemic collection and analysis of both quantitative and qualitative data.

This data collection and analysis unfolded across three phases: Phase 1 – organizing and interpreting existing data sources; Phase 2 – targeted data collection and data analysis within and across the working groups; and Phase 3 – synthesizing findings into a useable format for education stakeholders and decision-makers. A wide range of local, state, and national education stakeholders were engaged in each phase of the development of the Plan.

Phase 1 (Summer 2014)

During this phase, the working groups used existing data to identify existing state- and district-level digital learning resources, strengths, assets, and needs (Table 1, following page). In addition to organizing and interpreting existing data, the team also conducted initial discussions and information-gathering sessions with stakeholders in the field (via presentations, meetings, and the online NC Digital Learning Plan Initial Information Gathering Survey). The existing data and data from these early information-gathering sessions were synthesized to plan the work of Phase 2.

² Stockdill, Baizerman, & Compton (2002)

³ Altschuld (2014)

Phase 2 (Fall 2014 through Spring 2015)

During Phase 2, work groups turned their attention to collecting new information to help inform approaches to addressing the needs identified during Phase 1. This targeted data collection consisted of 18 extended “deep dive” site visits (which lasted between one and three days), which took place in each of the state’s eight regions. The team also coordinated visits to several charter schools, regional stakeholder input meetings, and working sessions with other stakeholders. Data were collected during site visits through classroom observations, school walk-throughs, interviews, and focus groups with district leaders (superintendents, chief financial officers, chief technology officers or technology directors, curriculum and instruction specialists, professional development directors), school leaders, teachers, students, parents, and community members.

Table 1. Data Sources

Data Source	Collection Date	Sample Size
NC Teacher Working Conditions Survey	Spring 2014	93,178 teachers from 2,519 schools
School Technology Needs Assessment (STNA) Survey for Teachers	2013-2014	11,402 teachers
School Technology Needs Assessment (STNA) Survey for Students	2013-2014	22,902 students
NC Department of Public Instruction (DPI) Annual Media and Technology Report	2013	All NC district tech directors with data from every school
Friday Institute STEM Surveys	2013-2014	528 teachers and 16,877 students
NC Speak-up Survey	2013	26,635 respondents from 40 districts, including students, teachers, parents, librarians, and administrators
NC Race to the Top Evaluation Omnibus Survey	2013-2014	13,889 teachers from a matrix sampling of representative schools across 97 districts
NC Race to the Top Evaluation Professional Development Coordinator	Fall 2013	85 district professional development coordinators from across the State
Race to the Top Cloud Computing Initiative Wireless & 1:1 Survey	May 2013	114 districts
Project 24 School or District Digital Learning Needs Assessment Survey	2013-2014	129 North Carolina schools as part of a national survey

Phase 3 (Spring and Summer 2015)

In the final phase, the working groups synthesized and analyzed all of the collected data and developed the Plan's recommendations. The work groups identified patterns in their data and leaders from each work group met to discuss and compare the relationships among what they were learning and ways in which they might fit into the emerging Plan. These meetings throughout the data collection process resulted in the development of higher-level, cross-work group recommendations that drew together several related emerging recommendations. Finally, after the data were analyzed and the recommendations formed, early drafts of the plan were shared with numerous stakeholders to get feedback about each aspect of the emerging Plan. The team made final modifications based on that feedback and submitted the Plan for consideration the North Carolina State Board of Education in September, 2015.