

Robert M. Ford
Director of Technology
Entry Plan

Thank you for the opportunity to join the team at the Lincoln Public Schools. I am very excited about the chance to work with faculty, staff, administrators, students and families to improve teaching and learning through the use of technology. The following outlines my proposed entry plan into the district.

This entry plan is designed to assist me in developing a comprehensive understanding of the technology resources and needs in the Lincoln Public Schools. In addition to developing a sense of the district, this plan will help inform the goals of the technology department moving forward. It will also help me and the members of the Lincoln Public Schools learning community to become acquainted with each other, and begin to establish a working relationship with teachers, administrators, staff, students, and community members as soon as possible.

I look forward to the opportunity to review and refine this plan with the district's leadership, and begin immediate implementation to allow for a smooth transition.

Entry Plan Goals

1. Develop a better understanding of the culture and values of the Lincoln Public Schools, and the technology department in particular.
2. Build a working knowledge of the technology resources currently in the district including software, hardware, networks, and other systems, and the policies and procedures in place around the procurement, use, and maintenance of these systems.
3. Establish working relationships both within the technology department and across the district's multiple constituencies.
4. Examine the district's needs around technology and how these might be addressed in the future.
5. Develop strategies and goals for improvement that emerge from the data.

Entry Plan Action Components

1. Interviews and meetings with various individuals and groups.
2. School and technology facility visits.
3. Technology needs assessment survey.
4. Review existing plans, documents, and contracts.

Key Constituents and Stakeholders

Key constituents and stakeholders I will meet with include:

- Superintendent, Assistant Superintendent, Administrator of Business and Finance, Administrator for Student Services
- Principals
- Preschool and Special Education Coordinators
- METCO Director
- Facilities Manager
- Network Manager
- Database Manager
- Help Desk Support Staff
- Instructional Technology Specialists
- Librarians
- Team Leaders and Teachers

- School and District Administrative Support Staff
- Hanscom Air Force Base School Liaison Officer
- Students, Parents, and other Community Organizations, including Hanscom PTO, Lincoln PTO, and Lincoln School Foundation
- Town of Lincoln Information Technology Department Director
- Lincoln Public Library Director
- Contracted Service Providers

Objectives

I have identified the following objectives for each group:

Superintendent, Assistant Superintendent, Administrator of Business and Finance, Administrator for Student Services:

1. Develop a working relationship with all members of the central office team.
2. Understand the Superintendent's vision and goals for the district.
3. Examine the role of technology in supporting central office functions.
4. Develop an understanding of the key issues regarding technology as identified by the administrative team and the relative priority of those issues.

Principals

1. Develop a working relationship with building principals.
2. Examine the role of technology in supporting school office functions.
3. Identify key issues regarding technology in each school.
4. Ascertain technology professional development needs within each building.
5. Gain insight into the existing teacher leaders in technology within each building.

Preschool and Special Education Coordinators

1. Develop a working relationship with the Coordinators.
2. Examine the role of technology in supporting the Preschool program.
3. Examine the role of assistive technology in the district.
4. Ascertain technology professional development needs as it relates to assistive technology.
5. Gain insight into the existing teacher leaders in the area of assistive technology.

METCO Director

1. Develop a working relationship with the METCO Director.
2. Examine the role of technology in supporting the METCO program.
3. Gain an understanding of the METCO program in Lincoln.
4. Examine how technology can support students in the METCO program.

Facilities Manager

1. Develop a working relationship with the Facilities Manager.
2. Examine the role of technology in supporting the Facilities office.
3. Develop an understanding of ongoing and upcoming building projects and capital work as it relates to technology.

Network Manager

1. Develop a working relationship with the Network Manager.
2. Examine the systems and networks managed by the technology department.
3. Identify key issues regarding the district's technology resources.
4. Develop an understanding of the department's approach to security and disaster recovery.
5. Develop an understanding of current projects and initiatives.
6. Understand the district's relationships with contracted service providers.
7. Identify applied for and/or awarded technology-related grants and related deliverables or deadlines.
8. Understand the district's progress towards the PARCC technology readiness targets.
9. Gain insight into the support and training needs within the technology department.

Database Manager

1. Develop a working relationship with the Database Manager.
2. Examine the data systems managed by the technology department including Aspen.
3. Identify key issues regarding the district's approach to data management.
4. Understand the district's relationships with contracted service providers in the area of data management.
5. Gain insight into the support and training needs in the district related to data management and analysis.

Help Desk Support Staff

1. Develop a working relationship with the technology support staff.
2. Identify key issues regarding technology in the district.
3. Gain insight into the support and training needs within the technology department.

Instructional Technology Specialists

1. Develop a working relationship with the instructional technology staff.
2. Understand which technologies are being successfully integrated into the classroom.
3. Develop an understanding of current professional development offerings.
4. Identify key issues regarding technology in the classroom and professional development needs.
5. Begin to develop an understanding of students' technology skills.
6. Gain insight into the support and training needs within the technology department and the district in general.

Librarians

1. Develop a working relationship with the district's librarians.
2. Develop and understand of the library curriculum and how it is implemented.
3. Begin to develop an understanding of students' information literacy skills.
4. Gain insight into the support and training needs for librarians and the district in general.

Team Leaders and Faculty

1. Develop a working relationship with grade level leaders and other faculty.
2. Examine the role of technology in each grade level and curriculum area.
3. Develop an understanding of the key issues regarding technology in each grade level and curriculum area.
4. Identify key issues regarding technology in the classroom and professional development needs.
5. Understand what technologies are being successfully used in the classroom.
6. Develop an understanding of students' technology skills.
7. Begin to identify teacher leaders in technology.

School and District Administrative Support Staff

1. Develop a working relationship with administrative support staff in each school and at the district office.
2. Begin to develop an understanding of the technology tools used by administrative support staff in the district.
3. Gain insight into the training and professional development needs of administrative support staff.

Hanscom Air Force Base School Liaison Officer

4. Develop a working relationship with the Hanscom Air Force Base School Liaison Officer.
5. Begin to develop an understanding of the unique needs of students attending the Hanscom schools.
6. Discuss how the technology department can support students and families attending the Hanscom schools.

Students, Parents, and Community Organizations

1. Develop a working relationship with students, parents, and community members through initial contacts with members/leaders of different organizations.
2. Gain insight into the involvement of groups such as the Hanscom PTO, Lincoln PTO, and the Lincoln School Foundation in supporting the use of technology in the district.
3. Understand the issues that students face around technology use in the district.
4. Become familiar with technology-related student activities, initiatives, and events.
5. Begin to establish relationships with business, professional, and social organization leaders in the town.

Town of Lincoln Information Technology Department Director

1. Develop a working relationship with the Town of Lincoln Information Technology Department Director.
2. Identify any common areas of concern and potential opportunities for resource sharing.
3. Gain insight into technology resources and expertise within the town.

Lincoln Public Library Director

1. Develop a working relationship with the Lincoln Public Library Director.
2. Gain an understanding of the relationship between the school libraries and Lincoln Public Library.
3. Identify any common areas of concern and potential opportunities for resource sharing.

Contracted Service Providers

1. Develop a working relationship with any contracted service providers.
2. Identify contracted responsibilities of service providers, contract cycles, and any existing issues.

Technology Needs Assessment Survey

The technology needs assessment will be a district-wide electronic survey of teachers, administrators, and support staff to develop a greater understanding of current levels of technology integration and software, hardware, professional development, and instructional needs.

Document and Plan Review

The following documents are among those that will be reviewed as part of the entry plan:

- District Goals & Policies
- District Technology Plan
- Technology Curriculum
- Library Curriculum
- Technology Department FY14 Budget
- Technology Department Budget Reports (FY12-FY13)
- Other Budget Documents and Reports
- Technology-related Grant Applications, Awards, and Reports
- Acceptable Use Policies, and other Technology Policies and Documented Procedures
- Technology Documentation, Training Materials, and Online Resources
- Technology Department Staff Evaluation Process and Instruments
- Technology Department Job Descriptions
- Technology Department Staff Contracts, Evaluations, and Licensure
- District Professional Development Plan
- Technology Professional Development Curriculum
- Other Technology Professional Development Documents
- School Improvement Plans
- Hanscom 1:1 Initiative Plan and Reports
- Technology Department, District, and School Websites
- Equipment Replacement Plans, Disaster Recovery Plan, Security Plan, and Other Technology Planning Documents.
- Technology Inventory
- Network Documentation and Diagrams
- Current Support Agreements and Other Contracts
- Building Project Plans and Technology-Related Documents
- DESE Technology Plan Reports (FY10-FY12)
- PARCC Technology Readiness Report
- Data Systems Documentation

Timetable

The timetable for completing the objectives in this plan will necessarily extend well into my first year in Lincoln, and will likely evolve as I learn more about areas of need. In order to best position the district to effectively utilize the summer months for any necessary systems work, I will focus first on the area of IT operations.

Spring 2013

- Network and Systems Operations
- Technology Procurement and Asset Management
- Review of Current and Planned Projects
- Needs Assessment Survey

Summer 2013

- Data Systems
- Technology Policies and Procedures
- Technology Planning

Fall/Winter 2013

- Curriculum and Instruction
- Technology Professional Development
- Library Program

As I complete each phase of this entry plan, an update regarding my progress towards these objectives will be provided to the Superintendent. A final entry plan report will be submitted to the Superintendent synthesizing key knowledge gained during the process.

Summary

This entry plan will help me build my understanding of the Lincoln Public Schools and its technology resources, and assist me as I work with the rest of the technology department staff to improve learning through the use of technology. Throughout the process I will be seeking help identifying other “must meet” individuals, important documents and programs to review, and any other actions that would help build my knowledge of the district and the technology department.



Lincoln Public Schools

ROBERT FORD
DIRECTOR OF TECHNOLOGY

To: Superintendent Becky McFall
From: Rob Ford
Date: May 9, 2013

Subject: Initial Network Assessment

As I have begun transitioning into the Director of Technology role in Lincoln, I have focused initially on assessing the district's network. A reliable network is critical to the successful use of technology by students and teachers. In my initial conversations with faculty and administrators, I have consistently heard about the enthusiasm educators in Lincoln have for using technology more effectively in their instruction, however I have also heard that the performance of the wireless network presents a barrier. Technology staff also report that networking equipment including switches, access points, and wireless controllers require frequent rebooting to address network problems.

As part of my initial assessment, I asked educators in the district to respond to a short survey. One hundred and nine educators shared their experiences with network performance through this survey. 56% of respondents reported that the network was somewhat or very unreliable. 46% described network performance as fair or below. Most concerning, 31% reported that the network had a negative impact on teaching and learning in their classrooms and 24% said the network's performance made them less likely to use technology in their classroom.

In investigating the network's performance problem, three primary root causes have emerged. First, the wireless access points in the district are not able to support the density of devices present on the network. The access points only have a single b/g radio and there are not enough deployed, particularly in the Hanscom Middle School, to provide sufficient connectivity for a full class activity.

Second, the network is essentially flat with no provisions taken to segment the network or implement quality of service (QoS) protocols. This has negative performance, as well as security, implications.

Third, there is a significant bandwidth constraint in the network. All switches in any given network closet, including the head end, are linked by 10/100 connections. While wireless access points have gigabit connectivity to PoE switches and individual closets connect to the core via gigabit Ethernet, all traffic is then passed through multiple 10/100 bottlenecks.

Fully addressing these problems will take time and concentrated efforts, including introducing a regular maintenance program and a network equipment replacement plan, better monitoring, and ongoing performance analysis. In the short term, however, there are immediate actions that can be taken to address the most significant problems described above. Replacing and augmenting the wireless access points and removing the bottlenecks through reconfiguration and/or replacement would significantly improve network reliability and performance and make immediate improvements in the classroom.

I look forward to discussing how we might be able to begin this work to build a Lincoln Public Schools network that can meet the needs of our students and educators.

If you have any questions, please do not hesitate to contact me.