Lincoln Public Schools
2015 – 2018 Technology Plan

The introduction of Chromebooks for staff for the 2015-2016 school year will be a game changer for teaching and learning. This cost effective solution will pair with the 2013-2014 Technology Infusion that placed classroom projectors and sound systems in classrooms throughout the district. The additional use of upgrades to the wireless network builds off the 2014 Wireless Classroom Initiative to provide added security and capability for all users.

Owing to the vision of the Superintendent of the Lincoln Public Schools, the Technology Committee was tasked to develop the Three Year Plan focusing on three areas:

- Blended Learning / Assessment
- Technology Integration
- Communication, Collaboration

Under the guidance of the subcommittee chairs, the committees have researched and collaborated to produce the Lincoln Public Schools 2015-2018 Technology Plan. This Technology Plan represents our best projections to continue our focus to provide the technological support to the District Strategic Plan.

Vision for Technology Integration

Students, parents, and educators will use communication and information technologies to enhance and expand the way in which teaching and learning takes place in the Lincoln Public Schools. We believe the basic goal of education has not changed, that is to prepare our students for lifelong learning and success in a changing society. However, the tools and instructional methods to achieve these goals have advanced dramatically. The Lincoln Public Schools have the responsibility for developing curriculum and applying instructional methods enriched with technology and in assuring that our students and teachers are proficient users of these new technologies. A successful educational system leverages the talent, energy, and creativity of a highly functioning staff. It is fueled by efficient and effective organizational practices, and a culture that supports innovation and progress. It cultivates the full participation, support and resources of families and community partners. The following pages articulate the goals, outcomes, and strategies that will serve as our road map to fulfilling this vision.

Members of the Lincoln Public Schools District Technology Committee

Kristine Donabedian	School Committee Chair
Mary Anne Roll	School Committee Vice Chair
Georgia Fortunato	Superintendent
Lori Miller	Business Administrator
Caroline Frey	Director of Curriculum / Blended Learning Subcommittee Chair
Maryann Struble	Director of Student Services
Mark Gadbois	IT Specialist / Technology Integration Subcommittee Chair
Alec Ciminello	Northern Elementary Principal
Kevin McNamara	High School Principal - Communication Subcommittee Chair
Patricia Gablinske	Central Elementary Principal
Reza Sakarati	Saylesville Elementary Principal
Rosemary Stein	Lonsdale Elementary Principal
Mark Thompson	Middle School Principal
Barbara Maher	Middle School Assistant Principal
Michael Babbitt	Budget Board
Barbara Berleth	Saylesville Teacher
Brandon Lahoud	High School Teacher
Cheryl Zecchin	Saylesville Teacher
Dianne Mohler	Northern Teacher
Elizabeth Byerlee	Saylesville Teacher
Frederick Hoppe, Jr.	Middle School Teacher / LTA President
Ian Bedard	Lonsdale Teacher
Joanne Koczera	Saylesville Teacher
Kara Haddad	Saylesville Teacher
Lauren Bentley	Saylesville Teacher
Susan Johnson	Middle School Teacher
Yvette Manning	Middle School Teacher
Alexandra Pepin	Middle School Parent
Alison Almond	Middle School Parent
Emily Garthee	Lonsdale Parent
Jeffrey Allen	Middle School Parent
Jennifer Brouillard	Saylesville Parent
Joe Lezon	Middle School Parent
Kevin Plouffe	Central Parent
Larry O'Brien	Saylesville Parent
Laurie Cullen	High School Parent
Mete Tunca	Central Parent
Sandy Ackerman	Saylesville Parent
Wendy Cotta	Central Parent
Ben Chiacchia	High School Student
Gabby Carson	High School Student
Tyler Balon	High School Student

Blended Learning / Assessment

The integration of technology into all aspects of teaching and learning can only be accomplished with dedicated professional development tailored to meet the evolving technological abilities of the staff of the Lincoln Public Schools. As such, we will devote all available Professional Development (PD) to improving the skill set of our professional staff. Specifically, the 2015-2016 PD day in September 2015 will include multiple classes and trainings that encompass those items identified in the 2014-2015 Teacher Technology Competency Survey as needing additional training.

The addition of a Technology Coach to assist Elementary Staff with technology integration on an ongoing basis is a key component of the Technology Plan. This individual will operate within the four elementary schools on a rotating basis to provide effective modeling, on-the-spot assistance, and guide the Blended Learning program at the classroom level.

The transition of the Lincoln Public Schools to a new Student Information System (SIS) will also require additional professional development for staff. We are currently planning to do a mid-year transition, with a "go-live" date of January 2016. Previous SIS transitions have shown that starting the school year with the existing SIS minimizes the concerns that inevitably arise with new students in new buildings, schedules, etc.

Whenever possible, we will utilize existing resources to supplement our professional development. Of particular use will be our National Board Certified Teachers providing onsite training to their peers as well as opportunities available through the annual Northwest Consortium Summer Technology Institute held at Lincoln Middle School. Additional outside vendors may also be engaged to provide onsite and offsite trainings as needed in the following areas with a focus on technology integration:

- Blended Learning
- Classroom Management
- Google Classroom
- PARCC Operations

The Northwest Consortium Summer Technology Institute, held annually at Lincoln Middle School, may also be used to provide specialized PD over the course of two days during the summer on a voluntary basis.
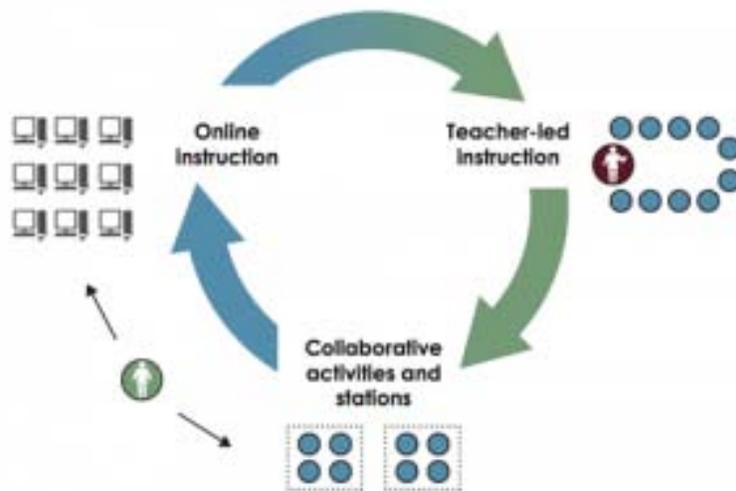
Blended Learning in an Elementary Environment

Blended learning is an opportunity for powerful online learning that will allow elementary teachers to differentiate and customize learning to fit students' academic goals while addressing the rigor of the Common Core State Standards (CCSS). It provides a student centered learning system where learning is personalized and tailored to an individual student's particular needs**.**

Blended learning provides an opportunity to prevent struggling students from falling behind while helping other advanced students move ahead. This 'personalized**/**differentiated learning' opportunity provides students with an element of control over time, place, and pace of their learning. It lets students fast forward if they have already mastered a concept, pause if they need more time to process a concept, or slow down if they need to review material (Horn & Staker, 2015).

Teachers are critical to the success of high-quality blended learning opportunities. A vital role for teachers in the next three years will be to create a cadre of online materials and resources that support multiple pathways towards addressing the curriculum and the Common Core State Standards, including Khan Academy, Infinity Cyber Academy among others.

Elementary classrooms may use a rotation model to incorporate blended learning in the elementary classroom environment. Station rotation: Students rotate on a fixed schedule or at the teacher's discretion between learning modalities – one of which is online learning. Individualized Rotation**:** a student has an individualized list of stations to rotate to.

Station Rotation Model in an Elementary Classroom

Objective - Create Dynamic Professional Development program aligned with ISTE Standards for Teachers -
http://www.iste.org/standards/ISTE-standards/standards-for-teachers

Year One

Goals	Action Steps	Evaluation	Facilitated by
1.1 Facilitate and inspire student learning and creativity.	Elementary ● Create Staff Introductory Video ● Develop model online lessons Secondary ● Create Staff Introductory Video ● Develop model Online model lessons ● Post Online lessons	● Feedback from educators ● Survey - (November 2015, February 2016)	● Director of Curriculum ● IT Specialist ● Technology Coach ● Principals ● National Board Certified Teachers
1.2 Model and support digital age teaching and learning to develop capacity in the classroom	Elementary in technology systems ● Integrate/implement Google classroom Grades 3-5 ● Support use of online resources Secondary ● Support/Develop fluency in technology systems ● Integrate/implement Google classroom Grades 6-12 ● Maximize use of online resources	● Technology Coach reports ● Feedback from educators	● Director of Curriculum ● IT Specialist ● Technology Coach ● Principals ● National Board Certified Teachers

Year Two

Goals	Action Steps	Evaluation	Facilitated by
2.1 Design and develop digital age learning experiences and assessments.	Elementary ● Update Staff Introductory Video ● Create three video lessons ● Develop Online lessons Secondary ● Update Staff Introductory Video ● Create three video lessons ● Continue development of online lesson archive aligned with Common Core State Standards	● Feedback from educators ● Survey - (Nov 2016, Feb 2017)	● Director of Curriculum ● IT Specialist ● Technology Coach ● Principals ● National Board Certified Teachers
2.2 Engage in professional growth and leadership.	Elementary ● Conduct meetings using online collaborative technology tools developing the technology skills of others ● Participate in local and global learning communities to explore creative applications of technology to improve student learning Secondary ● Participate in local and global learning communities to explore creative applications of technology to improve student learning	● Technology Coach reports ● Feedback from educators ● Collaborative online workshops with NWC staff	● Director of Curriculum ● IT Specialist ● Technology Coach ● Principals ● Nation Board Certified Teachers

Year Three

Goals	Action Steps	Evaluation	Facilitated by
3.1 Promote and model digital citizenship and responsibility	Elementary ● Promote and model digital etiquette and teach responsible social interactions related to the use of technology and information. Secondary ● Advocate, model, and teach safe, legal, and ethical use of digital information and technology	● Feedback from educators ● Survey - (November 2017, February 2018)	● Director of Curriculum ● IT Specialist ● Technology Coach ● Principals

Technology Integration

Preparation of Technology Resources for a three year period requires the comparison of past trends with future needs. While the lifespan of most technology is historically four years, we have been able to continue using older technology well beyond this time frame. Through the retirement of our oldest resources, purchase of new and refurbished computers, and continued transition to mobile devices, we can continue to provide resources to support all teaching and learning in the Lincoln Public Schools.

The cost of the Chromebooks for Staff (2015-2016) will be balanced out through the redistribution of classroom desktops, as well as the retirement of certain switches dedicated to the wired network. Application of E-Rate funds for Infrastructure Upgrades will support the relevance of the Wireless Network completed during the Wireless Classroom Initiative (2014-2015). It is our intent to begin to retire all desktop printers in favor of building based network copiers. This transition will result in significant savings over the life of the copiers and increased print security.

In order to keep pace with the general population of students as new technology is implemented, assistive technology supports for special education students will be considered and updated accordingly. In addition to maintaining desktop computers, color printers and software to ensure that already purchased programs continue to run efficiently over the next three years, compatible assistive technology supports will need to be purchased to meet the needs of special education students.

The devices needed for special education students include desktop resources, software and apps that cannot currently be universally supported through mobile devices such as Chromebooks. As such, it is necessary that we continue to upgrade, replace and maintain a percentage of non-mobile devices. A migration to Chromebooks as a replacement for the NEO brand of portable word processors used by some special education students is also planned. In addition, software and app purchases will be required to continue supporting our more challenged student population.

Our summer 2015 program will also include the addition of Chromecasts for classrooms, allowing teachers and administrators to wirelessly broadcast from their Chromebooks. Those projectors that are unable to support the Chromecast will be replaced as time and budgets allow.

Objective – Identify technology needs, including access, throughout the district and provide equipment and embedded professional development on an ongoing basis.

Year One

Goals	Action Steps	Evaluation	Facilitated by
1.1 Provide each educator with a Chromebook to access the network and the internet to improve teaching and learning.	- Support online assessments - Support PARCC - Support use of Google Classroom - Participate in school and district data leadership teams - Support ongoing curriculum development and implementation	- Feedback from educators, SchoolDude tickets, classroom visits - Continuous review of RIDE Comprehensive Assessment System	- Director of Curriculum - IT Specialist - Technology Coach - Principals
1.2 Provide each classroom with Chromecast to support teaching and learning.	Wireless connectivity to projector to allow classroom mobility	Feedback from educators, SchoolDude tickets, classroom visits	- Director of Curriculum - IT Specialist - Technology Coach
1.3 Provide ongoing replacements and maintenance of district computers	- Support full implementation of Instructional Management System (IMS) and the Educator Performance and Support System (EPSS) - Office 365 / Google for anywhere / anytime access to learning resources - Technology acquisitions (see below)	- Feedback from educators, SchoolDude tickets, classroom visits - Annual report on progress to School Committee	- Director of Curriculum - IT Specialist - Technology Coach

1.4 Provide online troubleshooting and FAQ for users, parents & families	● FAQ Website - August 2015	● Feedback from educators, SchoolDude tickets, classroom visits	● Principals ● IT Specialist ● Technology Coach

Year Two

Goals	Action Steps	Evaluation	Facilitated by
2.1 Provide ongoing replacements and maintenance of district computers	● Support full implementation of IMS, EPSS ● Technology acquisitions (see below)	● Feedback from educators, SchoolDude tickets, classroom visits ● Annual report on progress to School Committee	● Director of Curriculum ● IT Specialist ● Technology Coach

Year Three

Goals	Action Steps	Evaluation	Facilitated by
3.1 Provide ongoing replacements and maintenance of district computers	● Support full implementation of IMS, EPSS ● Technology acquisitions (see below)	● Feedback from educators, SchoolDude tickets, classroom visits ● Annual report on progress to School Committee	● Director of Curriculum ● IT Specialist ● Technology Coach

Additional Technology Acquisitions (Action Steps for 1.3 2.1 and 3.1):
Year 1

- District – RADIUS, Office 365, Chromecasts (220), Chromebooks (310) - $160,000.00
- Administration – Switch replacement (2) - $2,000.00
- Middle School – B205 Computer lab (30) - $12,000.00

Year 2

- High School – Switch replacements (6), C215 desktop computers (30), 210 desktop computers (30), C33 desktop computers (30) - $42,000.00
- Middle School – B115 desktop computer lab (30) - $12,000.00

Year 3

- High School – 220 Desktop Animation lab (30), 205 desktop computer lab (30), - $42,000.00
- Middle School - Switch replacements (6), Grade Six laptop cart (30) - $18,000.00

- Lonsdale - Switch replacements (3) - $3,000.00
- Northern - Switch replacements (3) - $3,000.00
- Saylesville – Library laptops (30) - $12,000.00
- Central – Library laptops (30) - $12,000.00

<div align="center">**Communication / Collaboration**</div>

The adoption of Bring Your Own Device (BYOD) program will enable the Lincoln Public Schools to expand the use of technology. It will require specific outreach to members of the Lincoln Public Schools community, including staff, parents, and students at the secondary grade levels impacted . In addition to developing a Parent/Student version of Wireless Wednesday tech submissions, policies and protocols will require review and possibly revision. Some of these include:

- Student Acceptable Usage
- Student Mobile Device policies
- Use of Google accounts
- Staff Technology Expectations
- Printing policies

Signage regarding use of the Linc-Student and Linc-Guest wireless will also be created to assist users in connecting to the internet via Lincoln Public Schools' wireless network. Segregation of traffic and bandwidth for staff, students and guests is a primary consideration of daily operations. To this end, it is imperative that the use of staff and student Google Accounts be implemented properly to allow the maximum use of resources by the appropriate users. The use of a "splash page" to log into the network should include links to all relevant policies.

Objective - Promote Safe, Effective Use of District Wireless Access and Online Resources

Year One

Goals	Action Steps	Evaluation	Facilitated by
1.1 Develop district –wide communication to support use of technology in each school.	● Staff resource ● Student resource ● Parent/family resource Completion date - Sept 2015 ● Create FAQ ● Provide signage in each building ● Use websites, Facebook pages to inform community	● Survey (November 2015)	● Principals ● IT Specialist ● Technology Coach ● Communication Consultant
1.2 Create onsite Tech Champions	Elementary ● Technology Coach classroom work Secondary ● Local resources for classroom applications ● Student password reset capabilities	● Technology Coach reports ● Feedback from educators	● Principals ● IT Specialist ● Technology Coach ● National Board Certified Teachers

| 1.3 Review, revise and develop policies and protocols to address expanding use of technology | ● Student Acceptable Usage - Oct 2015

● Student Mobile Device Policy updated - Oct 2015

● Printing policies - Oct 2015 | ● Feedback from educators
● Feedback from students
● Feedback from parents/families | ● Principals
● IT Specialist
● Technology Coach
● Lincoln School Committee |

Year Two

Goals	Action Steps	Evaluation	Facilitated by
2.1 Use a variety of media to communicate with staff, parents and the public relevant information related to the use of technology in the LPS. 2.2 Review policies and protocols. Rewrite as needed.	● Update technology-related policies ● Continue implementation of school, department/team, classroom and teacher website	● Ongoing feedback from educators ● Ongoing feedback from students ● Ongoing feedback from parents/families	● Principals ● IT Specialist ● Technology Coach ● Communications Consultant ● Lincoln School Committee

Year Three

Goals	Action Steps	Evaluation	Facilitated by
3.1 Same as 2.1 3.2 Review policies and protocols. Rewrite as needed.	● Update technology-related policies ● Continue implementation of school, department/team, classroom and teacher website	● Ongoing feedback from educators ● Ongoing feedback from students	● Principals ● IT Specialist ● Technology Coach ● Communications Consultant ● Lincoln School Committee