Lincoln Public Schools
2018 – 2021 Technology Plan

The proliferation of Chromebooks throughout the district has proven to be a cost effective and efficient solution. Blended learning is gaining momentum, both using outside resources as well as developing internal capacity in our existing staff. The goal of this District Technology Plan is to provide the supports, equipment and procedures needed by the district to advance teaching and learning.

The 2018-2021 District Technology Committee is tasked with reviewing existing plans, making recommendations for improvement, forecasting budgets and planning for the future. The 2018-2021 Three Year Plan will guide the Lincoln Public Schools IT Department's priorities, purchasing, and personnel operations.

Vision for Technology Integration

Students, parents, and educators will use communication and information technologies to enhance and expand the traditional role of education in the Lincoln Public School community.   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 ensuring that our students and teachers are proficient users of these new technologies. These technologies should meet the needs of all students regardless of disability, income, or race. 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

Mary Ann Roll - Lincoln School Committee
Caroline Frey - Director of Curriculum
Kevin McNamara - Lincoln High School Principal
James Williamson - Lincoln Middle School Principal
Mark M. Gadbois - IT Specialist
Patricia Vivari - Lincoln High School Library Media Specialist
Dianne Mohler - Elementary Technology Coach

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.

The Technology Coach provided excellent training and assistance for our Elementary Staff over the past several years. As the district returns this position to the classrooms, professional development must be provided to district users on a regular basis to continue positive staff development. Staff surveys have shown that PD that provides a menu of choices of topic has the greatest impact and should be continued. While many of the basic tasks of using technology require minimal reinforcement, staff are encouraged to share their expertise in all areas with peers in their building.

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. 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
- RICAS Operations

Blended Learning in an Educational/ K - 12 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 a 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 CCSS, i.e. Khan Academy, Infinity Cyber Academy…

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** ● Develop Online lesson to support student success **Secondary** ● Develop Online lesson to support student success ● Post Online lessons	● Feedback from educators ● Survey - (November 2019, February 2020)	● Director of Curriculum ● IT Specialist ● Principals
1.2 Model digital age work and learning.	**Elementary** ● Demonstrate fluency in technology systems ● Google classroom Grades 3-5 ● Maximize use of online resources **Secondary** ● Demonstrate fluency in technology systems ● Google classroom Grades 6-12 ● Maximize use of online resources	● Technology Coach reports ● Feedback from educators	● Director of Curriculum ● IT Specialist ● Principals

Year Two

Goals	Action Steps	Evaluation	Facilitated by
2.1 Design and develop digital age learning experiences and assessments.	**Elementary** ● Create three video lessons ??? ● Develop Online lesson to support student success **Secondary** ● Continue development of online lesson archive aligned with Common Core State Standards	● Feedback from educators ● Survey - (Nov 2020, Feb 2021)	● Director of Curriculum ● IT Specialist ● Principals

2.2 Engage in professional growth and leadership.	Elementary ● Conduct meetings using online collaborative technology tools developing the technology skills of others 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 ● Principals

Year Three

Goals	Action Steps	Evaluation	Facilitated by
3.1 Promote and model digital citizenship and responsibility	Elementary ● Promote and model digital etiquette and 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 2021, February 2022)	● Director of Curriculum ● IT Specialist ● 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.

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.

Technology Integration Year One Goals Met - Teacher Chromebook, Chromecast, Ongoing Support
Technology Integration Year Two & Three Goals Met - Ongoing Support

Immediate Infrastructure Technology Needs:

Server Replacements (6) ~$3500 each - one per building (erate)

Network Infrastructure (LAN) - 3 switches ~$2000 each Northern (erate)

2020-2021 - Virtual Array and Backup ~$70,000 - District wide - can exist at HS

2020-2021 - Racks for Saylesville, Northern ~ $1,000

2021-2022 - Wireless Infrastructure reaches end-of-life

Curriculum Technology Needs:

2019-2020 - Teacher Chromebook Replacement (350), 10% Classroom Tech Refresh

Mobile Augmentations / Replacements / Retirements

Lonsdale (60/60/60)

Central(60/60/60)

Saylesville(60/60/60)

Northern(90/60/60)

Middle School(120/90/90)

High School(150/90/90)

High School Computer lab (2) ~$60,000

2020-2021 - 30% Classroom Tech Refresh

Mobile Augmentations / Replacements / Retirements

Lonsdale (30/60/60)

Central(30/60/60)

Saylesville(30/60/60)

Northern(60/60/60)

Middle School(120/90/90)

High School(90/90/90)

Middle School Library laptop replacement (30) ~$30,000

High School Library laptop replacement (30) ~$30,000

2021-2022 - 30% Classroom Tech Refresh

Mobile Augmentations / Replacements / Retirements

Lonsdale (30/60/60)

Central(30/60/60)

Saylesville(30/60/60)

Northern(60/60/60)

Middle School(90/90/90)

High School(90/90/90)

Middle School Computer lab replacement ~$30,000

High School Computer lab (1) ~$30,000

School Committee Approved: April 8, 2019