# LEARN

## EDUCATIONAL TECHNOLOGY PLAN/ROADMAP

## July 1, 2015 – June 30, 2016

## (with guidance for years 2016-17 and 2017-18)



**PLAN VERSIONS**

- PDF Version: To be circulated upon completion of plan
  (One time version, no updates)
- Website (www.learn.k12.ct.us): To be launched upon completion of plan.
  (Updated regularly by LEARN Technology Committee)

**Acknowledgements**

Many thanks to all staff, parents, teachers, and other educators that helped with the preparation of this plan, provided information, provided ideas, or simply provided inspiration. All involved believe that technology and its role in education can be incredibly powerful but is yet to be fully utilized.

Special thanks to the members of the committee:

Lindsi Bratland – Teacher, DLAMMS
Brad Columbus – Principal, TRMCHS
Peter Cummings – Assoc. Director, LEARN
Kelly Falvey – Library Media, CT River Academy
Diane Felty – Teacher, TFS
Amy Frese – Asst. Dir., RMMS
Bridgette Gordon Hickey - Director Special Services, LEARN
Lance Hagan - Technology Director, LEARN
Rebecca Hall - Instructor, DLAMMS
Clint Kennedy - Consultant
Eric Litvinoff – Teacher, MSMHS
Callie Mish – Teacher, GCECMS
Erica Page – Special Services, LEARN
Matt Parsons – Teacher, CT River Academy
Pam Poirier - Teacher, RMMS
Pamela Santerre - Teacher, Three Rivers Middle College
Nick Spera – Principal, MSMHS
Ruth Toledo - Teacher, TFS
Leanne Tormey - Masterjoseph – Dir. Of Ed Dev., LEARN

**LEARN Regional Educational Service Center**

Is proud to include the following schools:

The Friendship School (Grades PreK-2)

Goodwin College Early Childhood Magnet School (Grades PreK-2)

Regional Multicultural Magnet School (Grades K-5)

Dual Language & Arts Magnet Middle School (Grades 6-8)

Marine Science Magnet High School of Southeastern Connect (Grades 9-12)

Three Rivers Middle College (Grades 11-12)

CT River Academy (Grades 9-12)

LEARN also supports the following school systems:

- Clinton
- East Haddam
- East Hampton
- East Lyme
- Groton
- Guilford
- Ledyard
- Madison
- Montville
- New London
- North Stonington
- Norwich
- Old Saybrook
- Preston
- Salem
- Stonington
- Waterford
- Westbrook
- Region #4 (Chester, Deep River, Essex)
- Region #17 (Haddam, Killingworth)
- Region #18 (Lyme, Old Lyme)

**Mission**

The LEARN "way" is simple and powerful….Innovate...Collaborate….Serve….

***INNOVATE*** *Optimize Potential*

*Identify, develop, and deliver innovative and customized services, programs and tools that meet our members' needs.*

***COLLABORATE*** *Enhance the Quality of Learning*

*Cultivate collaborative partnerships and strategic alliances and relationships, and promote regional efficiencies.*

***SERVE*** *Meet Member Needs*

*Listen and respond to our stakeholders with respect and responsibility, and provide high quality services.*

The mission of LEARN is twofold, to adapt and build an educational model of excellence within the LEARN schools and to support LEARN regional schools and Districts with services founded on best practices and researched within LEARN schools. This plan supports this twofold mission with a priority in year 1 of enhancing teaching and learning in the seven LEARN schools through the use of information and communication technologies.

The overall LEARN vision:

To ensure that every child has access to high quality public education through systems of education, support, and service.

**Table of Contents**

**Executive Summary**

This technology roadmap is about supporting improved teaching and student learning, not about boxes and wiring or the number of printers to install. The LEARN District Educational Technology Plan/Roadmap provides guidance for creating processes, procedures, and structures to support and enhance teaching and learning in the LEARN District schools and for supporting and serving others in the LEARN region.

The plan is designed to encourage the advancement of student skills and understandings in all curricular areas and the development of behaviors and competencies that will increase student success in today's global society. By leveraging the inherent valuable affordances in modern information and communication technologies, LEARN schools will use this plan/roadmap to direct their "digital conversion" and build structures to support continued growth.

A qualitative and quantitative needs assessment was performed by the committee. This included interviews, workshops, informal conversations, and formal data gathering tools. One key finding of the needs assessment was that each school shares common mission but often represents very different students and educational cultures. Therefore, the work regarding a needs assessment is incomplete. The second half of the needs assessment is discussed in this plan. It will honor the differences in each school and strive to build on-going systems for identifying what is best needed to support teaching and learning.

Six key topics were identified during the needs assessment phase of this plan. These topics represent the critical areas on the roadmap that must be visited if technology is to be leveraged for enhanced teaching and learning. The critical elements of these topics are discussed and specific action steps are shared in this plan. Curated resources are also provided to support the work in and adoption of these topics.

Key Topics:

1. **Technology Integration** into Curriculum, Instruction, and Assessment
2. **Digital Conversion** for Teaching, Learning, and Administration
3. **Best Practices** for Integrating Technology
4. Technology **Support**
5. Using **Data**
6. **Infrastructure**

**Introduction**

This plan/roadmap has been designed to be used by LEARN, LEARN schools, teachers, administrators, parents, students, and others as a roadmap to support future efforts to enhance teaching and learning. It is not a comprehensive guide. It has been designed to be read "cover to cover" in 30 minutes. It is the belief of the LEARN Technology Committee that past comprehensive three year plans were more of a compliance document than a roadmap that represents the commitment of the educators carrying out the action steps of the plan. We refer to the plan as a roadmap specifically because it provides a course for improved teaching and learning through the better integration of modern information and communication technologies. With any map there are typically a variety of routes one can take. This roadmap plots the course that the Committee believes is most direct and cost effective. It honors, however, alternative routes and allows for course corrections as context and other variables change.

1+2 NOT 3

This is not a traditional three-year tech plan. It is a 1+2 year roadmap. This plan includes specific Action Steps for the first year (July 1, 2015 to June 30, 2016). The roadmap also includes general recommendations (Guidance) for years 2 and 3 (July 1, 2016 to June 30, 2017 and July 1, 2017 to June 30, 2018). The plan/roadmap will be evaluated formally on a yearly basis by the Committee. Action Steps will be added, modified, and deleted as is necessary.

Purpose

We believe that technology plays a critical role in an appropriate and differentiated modern education.

> "*We want to develop inquisitive, creative, resourceful thinkers; informed citizens; effective problem-solvers; groundbreaking pioneers; and visionary leaders. We want to foster the excellence that flows from the ability to use today's information, tools, and technologies effectively and a commitment to lifelong learning. All these are necessary for Americans to be active, creative, knowledgeable, and ethical participants in our globally networked society.*
>
> *To accomplish this, schools must be more than information factories; they must be incubators of exploration and invention. Educators must be more than information experts; they must be collaborators in learning, seeking new knowledge and constantly acquiring new skills alongside their students. Students must be fully engaged in school— intellectually, socially, and emotionally. This level of engagement requires the chance to work on interesting and relevant projects, the use of technology*

*environments and resources, and access to an extended social network of adults and peers who support their intellectual growth."*

Transforming American Education Learning Powered by Technology
National Education Technology Plan 2010

We believe that effective use and integration of technology into curriculum and instruction enables teachers to be more effective and productive. Integrated technology provides students with more engaging, relevant, and meaningful experiences. We believe that students must leverage technology during their formal education to learn and experience the essential skills for success in today's world, including critical thinking, problem solving, communication and collaboration (commonly referred to as the 4 C's). Overall, technology should support and bring to life LEARN's core values of Innovation, Collaboration and Service.

## Local and Global Challenges

The most recent State of Connecticut Department of Education Technology plan discusses numerous challenges technology can be used to address:

- Closing achievement gaps and providing an exemplary educational experience for every Connecticut student.
- Ensuring that all students graduate with skills and understandings to succeed in post high school educational experiences.
- Equip students with today's and tomorrow's workforce skills.
- Provide access to high quality educational offerings, materials, and resources for all Connecticut students.
- Address the problem of insufficient numbers of "highly qualified" teachers, especially in some subjects or geographic areas of the state.

## Vision

The LEARN vision for supporting and enhancing teaching and learning with technology:

The committee's vision grows from our strong belief that we must innovate, collaborate and serve at every level of our organization. Excellent systems encourage innovative practices and insist on high-quality instruction for all learners. When we are successful, we prepare our students for successful careers in a global society and arm them with the 21st Century skills they will need to remain competitive.

All within our schools are deserving of safe and respectful digital networked learning environments, in which individual needs are honored and addressed. We insist upon, and provide for, wide-scale opportunities to collaborate with others in their buildings and beyond.

We serve our learning communities best by allowing for authentic and cognitively rigorous learning experiences. These increase student engagement and build strong relationships between students and their teachers. We look for opportunities to integrate content area between and among subjects so that students learn to make valuable connections between their learning experiences.

We believe there must be cohesive alignment of our technology instruction and utilization PreK-12. There is a need to build a supportive environment that encourages collaboration for teachers when integrating technology into instruction for students. This rests on a strategic plan to increase the capacity of all adults within LEARN to build their professional technology skills. Students, teachers, administrators and parents, must interface using technology and all must develop the ability to adapt previously learned schools to new environments. We understand our charge to model positive digital citizenship, embrace requests for assistance with technology.

**Needs Assessment**

Purpose

The committee began its overall investigation by assessing the current educational technology status of LEARN and LEARN schools. The investigation was loosely based on the five categories used in the previous LEARN technology plan: curriculum integration, professional development, and equitable use of educational technology, infrastructure and telecommunications services and administrative needs.

This plan was also designed as a roadmap for technology to serve as a foundational component to many of the existing and important projects at various stages of completion within LEARN. These projects include the updating and rollout of professional development opportunities for teachers and staff, curriculum committee work, teacher evaluation system implementation and monitoring, and the use of data for instructional improvement and assessment.

Process

Four specific actions were taken to complete the needs assessment portion of the committees work.

Interviews
Members of the committee conducted numerous interviews. Interviewees included current teachers, administrators, local and regional experts as well as members of the committee.

Vision Draft
Prior to beginning the needs assessment portion of the plan, committee members collaborated on a vision document. The committee was led through a process to capture a future vision of technology that would best serve our students and enhance teaching and learning. The result of this effort can be found in the Vision section of this plan.

Committee Survey

Individual committee members completed an extensive survey to gather information from their perspective and as a representative from their building. The results were compiled and used assist in the identification of the Key Topic found in this plan.

Review of LEARN Principles
The committee reviewed all LEARN planning, mission, and vision documentation. Through this process and interviews with LEARN leadership, the committee worked to build a consensus understanding of the LEARN values and goals to help shape the direction of the tech plan.

Essential Conditions

ISTE provides educators and school leaders a research-backed framework to guide implementation of local District plans. This committee has identified evidence of these elements throughout LEARN and its seven schools. However, not all of these elements are present and those that are not necessarily evenly distributed and ingrained in school culture and the environment. It is recommended later in this plan that LEARN leadership take part in a formal and guided process to take full inventory of our current capacity for technology integration and make necessary changes as needed.

LEARN School Profiles (Full profiles can be found in the Appendix or associated Resources folder depending on plan version)

Connecticut River Academy
School Name: Connecticut River Academy
School URL (web-address): http://ctriveracademy.org/
School Mission or Theme (if applicable): Environmental Studies and Early College
Geographic region served: Located in East Hartford under the Regional School Choice Office (RSCO)
Grades served: 9-12
Approx. number of students: 400- 480
Approx. number of staff: 70
CTRA is a 1:1 environment where students are given Macbook Air laptops in the classroom.

Each classroom is equipped with an IMac desktop, a set of Kindle Fire HD and iPads, and a 800 series Smart Boards. While each educator is equipped with a Macbook laptop and an iPad is made available for them. Additionally in our school we have a 3-D printer and 13 document cameras. For daily technology support, we use CT Center for Advanced Technology (CCATS).

Goodwin College Early Childhood Magnet School
School Name: Goodwin College Early Childhood Magnet School
School URL (web-address): www.goodwin-ecms.org
School Mission or Theme (if applicable): Reggio Emilia Theme; Early Childhood Focus
Geographic region served: Greater Hartford Area. We serve 39 towns. 40% of our students are Hartford, 15% East Hartford, 45% Other Districts
Grades served: Pre-Kindergarten 3 to 1st grade. Next year we will add 2nd grade. Each year we will add a grade until 5th grade.
Approx. number of students: 310 students, (187 preschool students)
Approx. number of staff: 48
Description of current technology use at the school:
At GCECMS each classroom is equipped with a SMART board and one desktop computer. The SMART board as well as desktop computer is used for research based needs, as well as basic typing/writing skills. All teaching teams use MacBook Pro laptops and have a educator iPad. Our school has 100 iPads for students use (to be shared with all grades). The iPads do come equipped with 40 apps. Each classroom has a digital camera in which the teachers and children can document learning. The school also has a digital projector, 2 black and white printers and one color printer.

Marine Science Magnet High School of Southeastern Connecticut
School Name: Marine Science Magnet High School
School URL (web-address): www.msmhs.com
School Mission or Theme (if applicable): Marine Science
Geographic region served: Southeastern Connecticut (We take from 28 different districts from Clinton to North Stonington)

Grades served: 9-12
Approx. number of students: 270
Approx. number of staff: 40
Description of current technology use at the school:
MSMHS is a 1:1 environment where every student is given a laptop on day 1 of their freshman year. They use the laptop in all classrooms for email, research, design, word processing, reading, etc. The laptops are an integral tool for the student and is embedded in the curriculum. In addition to laptops, all classrooms are outfitted with Promethean Boards. Furthermore, the Marine Studies curriculum utilizes a Ship Bridge Simulator to enhance the introduction of navigation and small boat handling skills.

Regional Multicultural Magnet School
School Name: Regional Multicultural Magnet School (RMMS)
School URL (web-address): www.rmms.k12.ct.us
School Mission or Theme (if applicable): Multiculturalism
Geographic region served: Students can enroll from any town in Southeastern Connecticut.
Grades served: K-5
Approx. number of students: 540
Approx. number of staff: 90 (This number includes staff from other districts who service our students.)
Description of current technology use at the school:
At RMMS each classroom is equipped with a SMART board. Some classrooms share printers while others are on networked copiers. In grades kindergarten through 5th grade students visit the technology laboratory each week for an instructed 40-minute lesson using iMac desktops. In grades 2nd through 5th they use a combination of iPads and MacBooks.

The Friendship School
School Name: The Friendship School
School URL (web-address): www.thefriendshipschool.org
Geographic region served: New London and Waterford
Grades served: Pre-Kindergarten (21 classes) and Kindergarten (7 classes)
Approx. number of students: 520 students
Approx. number of staff: 120 staff in all

Description of current technology use at the school:
TFS currently 10 classrooms that are equipped with a Promethean board; seven of these classrooms are for kindergarten and three are for pre-kindergarten. Teachers have access to a Promethean board in a separate classroom once a week as well as use of a computer lab with touch screens for each child. Teachers also have access to 20 Microsoft Surface tablets that they can sign out for student use in their classroom. Each teacher also has their own laptop in their classrooms, as well as 2-4 desktop computers for student use.

Three Rivers Middle College
School Name: Three Rivers Middle College Magnet High School
School URL (web-address): threeriversmiddlecollege.org
School Mission or Theme (if applicable): College & Career Readiness
Geographic region served: New London County
Grades served: 11-12
Approx. number of students: 63
Approx. number of staff: 8
Description of current technology use at the school:
TRMCMHS is a 1:1 environment where students are given a Lenovo Thinkpad laptop. Additionally, students have a Google Apps for Education account, including a Gmail address. Teachers and students use Google Drive (including Docs, Slides, and Forms). Teachers have recently begun using Google Classroom as blended learning platform for their courses.

**Key Topics**

1. Technology Integration into Curriculum, Instruction, and Assessment
2. Digital Conversion for Teaching, Learning, and Administration
3. Best Practices for Integrating Technology
4. Technology Support
5. Using Data
6. Infrastructure

The key topics listed above were identified through an extensive process by the LEARN Technology Planning Committee. Key topics represent the areas that are crucial to success of this plan and the work it represents. These topics are analogous to the key topics that existed previously in the Connecticut State Department of Education Technology Plan template but have been adjusted to better represent the technology realities currently and the needs of LEARN and its member schools.

Each key topic has been organized into four sections. These sections include Elements, Action Steps, Guidance, and Resources. Elements are the key areas under the main topic that explain, describe, and address identified and future needs. Action Steps address the Elements directly and create actionable tasks. Action Steps represent suggested tasks to be completed within the next school (2015-16). Guidance includes more general action steps that continue to address the topic Elements. Guidance items are intended to be discussed over the course of the current year and adopted as specific Action Steps for the following two years (2016-17 & 2017-18). Resources provide content and links to more specific information regarding the Elements.

| KEY TOPICS | | |
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| **TOPIC 1 - Technology Integration into Curriculum, Instruction, and Assessment** | | |
| Elements | Action Steps – Year 1 | Guidance – Years 2 & 3 |
| Educational Technology Standards<br>• The educational technology set of standards created by the International Society for Technology in Education (ISTE) is the preeminent set of standards available to educators to improve teaching and learning. The standards are defined in the Resources section of this plan.<br>• The ISTE standards, including the student, teacher, and administrator standards, are a critical component of the technology integration process. Standards are typically included in the curriculum writing and lesson plan development process. | Adopt the ISTE Standards for students, teachers, and administrators. | Adopt the ISTE standards for Technology Coaches.<br><br>LEARN will create and adhere to a process of assessing the impact of ISTE Standards adoption on student performance and the ability of staff and frequency of technology integration in classrooms. |
| Technology Integration Model<br>• The educational technology integration model SAMR (Substitution, Augmentation, Modification, and Redefinition) created by Dr. Ruben Puentedura is the preeminent model available to schools for successful integration of technology into instruction. The model is defined in the Resources section of this plan.<br>• An integration model is a critical component of the curriculum writing and instructional improvement process. | Adopt the SAMR technology integration model across all schools. | Review and identify current performance of the SAMR model and other possible integration models as needed. |
| Assessment of Staff and Students<br>• A measure of a student's ability to use technology for learning is critical. Without identification of a student's current level of ability, it will be more difficult for educators to design and facilitate learning experiences for the student.<br>• A measure of a teacher's ability to use technology for teaching and learning is critical. Without identification | The district Technology Committee will research, create, and adopt an assessment/evaluation tool for identifying the essential conditions necessary to optimize technology integration. | Assess and modify assessments as needed.<br><br>NOTE: Performance assessments should be used when possible or when more widely available. This allows students to demonstrate their |

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| of a teacher's current level of ability to integrate technology into instruction, it will be more difficult for professional development staff to design and facilitate learning experiences for the teacher.<br>• A measure of an administrator's ability to use technology for leading, teaching and learning is critical. Without identification of an administrator's current level of ability to integrate technology into his/her leadership activates, it will be more difficult for professional development staff and district leadership to design and facilitate learning experiences for the administrator.<br>• A measure of the essential conditions at district and school levels is critical. Without a measurement of school preparedness for technology integration it will be more difficult for district and school leadership to meet identified integration goals. | The district Technology Committee will research, create, and adopt an assessment/evaluation tool for identifying proficiency levels of staff and students.<br><br>Schools must be prepared (hardware, software, bandwidth, coordination, etc) to participate fully in SBAC and other similar high-stakes testing. | abilities and allows educators to collect more/better information to better instruct students. |
| **TOPIC 2 – Digital Conversion for Teaching, Learning, and Administration** | | |
| Elements | Action Steps – Year 1 | Guidance – Years 2 & 3 |
| <u>Implementation Planning</u><br>• LEARN schools will review data on equitable digital access (i.e. hardware, software, and wifi) amongst staff and students. Discussion may include but not limited to:<br>o Number of functioning personal devices (iPads, laptops, etc.)<br>o Network capabilities<br>o Equitable accessibility for all students<br>• LEARN Tech Coach(es) will formulate and share research/best practices for using technology to improve instruction and learning by age level (ie primary, middle, secondary) and curriculum need. | Technology coaches at each individual school will be responsible for assisting in the development of a school-based action plan for moving to a full 1-to-1 environment.<br><br>LEARN will make the modeling of a technology rich, integrated environments a priority. | The LEARN district will Identify and implement technology policies for personal device use (theft, breakage, fault, license, etc.) |

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| • LEARN District Technology Committee will review technology policies at each school | | |
| Going 1-to-1<br>• The long term goal is for the LEARN District to provide an appropriate networked device for every student and staff member to support the LEARN mission/teaching & learning.<br>• Schools will develop policies and procedures that align with the equal access needs of the school<br>• School site and district technology teams organize family meetings and notifications on process and responsibilities. Primary and Secondary Students will have opportunity to take device home as deemed appropriate by building policies and procedures.<br>• Internet access outside of school is an essential component for success. Each school will identify need through student and parent surveys. Accommodations may be made for those students who do not consistently have access outside of school and require equitable access. | An initial cohort of lead teachers at LEARN will demonstrate teaching with 1:1 devices in their classrooms.<br><br>The Tech Committee will continue development of sample daily activities<br><br>Review, select, and/or expand, at the school level, a learning management system to support instruction.<br><br>Adopt assistive technology (AT) guidelines and support processes for purchasing and use. | The Technology committees will initiate yearly analysis and modification of digital conversion efforts. |
| Platform and Device<br>• All school-based platform and device decisions will be made in conjunction with the LEARN Technology Department to assure coherence, compatibility, and necessary support.<br>• Criteria for regular platform and hardware decision-making should be driven by school educational goals and the LEARN Tech Depts. ability to implement and maintain. | Individual school will build a 1+2 year plan for hardware device and peripheral purchasing in alignment with their teaching and learning needs. | Monitor and adjust as needed. |
| Digital Tools<br>• The LEARN district-based productivity suite for teaching and learning will be GOOGLE APPS while | Full implementation of Google Apps as the instructional productivity suite for students and teachers will occur. | Review pros/cons of hybrid Google/Microsoft platform. Pick a winner. |

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| the recommended district-based productivity suite for administration will be MS OFFICE and Office 365<br>• A comprehensive school-based learning mgmt. system (LMS) should allow for:<br>o Course management tools for teachers<br>o Blended learning opportunities for students<br>o Blending learning opportunities for staff<br>• Connecticut's Assistive Technology Guidelines and Support should drive decision-making going forward. (http://www.sde.ct.gov/sde/lib/sde/pdf/publications/atguide/atguide.pdf )<br>• The domain naming conventions used by LEARN schools for web and email services are inconsistent and may lead to confusion or lack of communication with parents, students, and the community. | Full implementation of Microsoft Office 365 as the administrative productivity suite for all administration and staff will be supported.<br><br>Review and pilot testing of LMS systems by level.<br><br>Review fully the list of domain names owned by LEARN. Create a consistent logical naming convention for both email and web services. (See Resources section for current list of domain names) | Support from AT experts to assist in identifying necessary technologies and to coordinate efforts across the District should be investigated especially in the creation and monitoring of IEPs/504s.<br><br>Selection of an LMS system by level. |
| **TOPIC 3 – Best Practices for Integrating Technology** | | |
| Elements | Action Steps – Year 1 | Guidance – Years 2 & 3 |
| Technology and Curriculum Development<br>• The LEARN district will support the new LEARN curriculum design and development process with a digital workflow.<br>• ISTE Technology Standards must be aligned to all current and future formal LEARN and school curriculum documents.<br>• Lesson plan design will link embedded standards, content, and tools with suggestions for integration based on the SAMR model of technology integration. | The district Technology Committee will research and develop a process for integrating ISTE standards and the SAMR integration model into the current formal curriculum writing/updating process including lesson plan development.<br><br>Work with LEARN curriculum committee(s) or equivalent to digitize curriculum and support | Monitor curriculum development and modification process. Where can technology support these efforts in general and specific identified issues.<br><br>Is the LEARN District curricula fully digitized?<br><br>Curriculum Topic Recommendations:<br>• Intro to Computer Science starting at the middle level |

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| | the design and development of a digital workflow. | • The New Literacies of online research (locating, evaluating, synthesizing and communicating) |
| <u>Supporting Tool-Specific Professional Development</u><br>• The number of websites, web-services, and mobile apps (those used on iPads in LEARN schools) used by teachers and students continues to increase and expand.<br>• Training for websites, web-services, and mobile apps must take place to assure greater impact on teaching and learning. Current efforts have been poorly attended or have been limited due to scheduling conflicts.<br>• Assistive technology in the form of websites, web-services, and mobile apps for our IEP and 504 students must be maintained and implemented separately due to the specialized nature of the tools and the considerable costs associated with these tools. | Implement new professional development structures, in consultation with the Director of professional development, to support digital learning.<br><br>Implement new professional development opportunities, in consultation with the Director of IT, to train teachers in the use of digital technologies. | Are the implemented structures effective and/or sufficient? Modify as needed. |
| <u>Supporting Professional Development with Technology</u><br>• Online and real-time opportunities are needed to support individual collaboration for teachers and administrators in a geographically dispersed district environment.<br>• Technology committees are inconsistent throughout LEARN schools and ad-hoc at the District level. A standing committee at the District and individual school level that leverages online technologies to collaborate and complete their work is essential for a digitally converted district.<br>• A modern, web-based professional development management information system is needed for tracking and better decision making to enhance and differentiate teacher learning. | The district Tech Committee will engage with the LEARN Director of Educator Development to create:<br>• Professional Learning Communities for staff to support their learning and implementation of Educational Technology<br>• Professional development opportunities for staff to grow in their knowledge and experience with ISTE Standards and SAMR model<br>• Online spaces to support Professional Development | Create a system for the tracking of professional development activities and growth. Collect data.<br><br>Are the implemented activities effective and/or sufficient based on feedback/data? Modify as needed.<br><br>Has online learning tools and techniques (including MOOCs) been explored for teacher learning? |

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| | including spaces teachers to share PD documents, videos, etc. and engage in related discussions with and among the entire LEARN District<br><br>Implement video conferencing capabilities for teachers/students using Google Hangouts and Teachers/Administrators using Skype. | |
| <u>Moving to Best Practices</u><br>● Common best practices for teaching and learning are continually being researched, updated, and communicated nationally. It is the responsibility of a collaborative learning community to continually stay informed and share these best practices. Information and communication technologies can be used to both stay better informed and to more efficiently communicate information.<br>● With an emphasis on more and better differentiation in the classroom for student learning and overall for teacher learning, technology should be utilized to personalize the learning environment and<br>● Recognition of teachers, students, and administrators who are using technology in innovative ways to further school and district goals should be recognized formally. Those who are recognized can serve as ambassadors to inspire others to better integrate technology.<br>● Best practices have shown us that there are specific "essential conditions" that can be present in a school | Identify and communicate new roles and procedures for Tech Coach and IT Specialists for the district as they relate to professional development.<br><br>Create a process for identifying current practices with digital tools and resources both instructionally and administratively.<br><br>Create a process for recognizing, awarding, and communicating excellence in technology integration (i.e. the Steve Jobs award) | Are all roles and procedures up to date?<br><br>Do we have a clearinghouse of best practices?<br><br>How do we currently recognize excellence?<br><br>Are the current policies and processes sufficient to protect student and teacher privacy?<br><br>Are current school practices and policies in compliance with Federal, State, and local requirements concerning students and the Internet? |

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| and district climate that can optimize the technology integration process for better teaching and learning. | | |
| **TOPIC 4 – Technology Support for Teaching and Learning** | | |
| Elements | Action Steps – Year 1 | Guidance – Years 2 & 3 |
| Tech Coach(es)<br>● LEARN will develop a job description for Tech Coaches that reflect the theme of each school and age of students. It is recommended that coaches have an educational background reflective of the grades level in which they serve. The job description for these coaches should be guided by the ISTE standards for Tech Coaches (see Resources) and can be modeled after the progression of the current position Theme Coach for Instructional technology (hiring Spring 2015).<br>● Responsibilities of Coaches should include:<br>● Troubleshooting day-to-day tech support issues<br>● Referring advanced problems to the appropriate IT Specialist<br>● Working with teachers to develop curriculum units and lessons that integrate technology in meaningful ways using the SAMR model<br>● Co-teaching students in the classroom with teachers as needed<br>● Working with teachers and administrators to investigate and evaluate technology that will meet the needs of individual schools and the LEARN District<br>● Facilitating school-based and district technology committees.<br>● Working with the Director of Educator Development and Professional Development, District Technology Committee, and Educator Evaluation Committee to develop and offer | LEARN will create a Technology Coach position(s) with roles and responsibilities guided by the ISTE Standards and based upon the Theme Coach currently being filled (as of June 2015). | LEARN will implement, evaluate, and expand the Tech Coach model as appropriate. Ideally, each school will have a permanent, full-time Tech Coach.<br><br>The LEARN District-Wide Technology Committee will continue to work with individual schools and Technology Coaches to address problems and concerns.<br>LEARN will provide resources and support for Technology Coaches to ensure that they stay current with upcoming technology advances. |

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| technology related PD and resources including an electronic PD site . | | |
| <u>IT Specialists (current technicians)</u><br>• LEARN IT will continue to develop and enhance the capacity of IT Specialists<br>• LEARN IT will develop and strengthen relationships with the other IT Specialists (Goodwin, CCAT, and TRCC) to ensure effective collaboration.<br>• LEARN IT will investigate new roles & processes needed for the IT Specialists as goals and needs of the LEARN District and individual schools evolve.<br>• LEARN IT will identify needs and access outside expertise as needed.<br>• LEARN IT Specialists will collaborate and communicate with LEARN Tech coaches regularly to understand needs of students and teachers. | LEARN will refine the role of IT Specialists with the IT Director to address evolving support needs focused on instructional improvement. | What is the current role of IT Specialist in LEARN and LEARN schools? Is it sufficient? Do they contribute to improved teaching and learning? |
| <u>Tech Committees</u><br>• Standing committees regarding educational technology integration and general information technology needs are a critical component of the LEARN digital conversion.<br>• Committees should be either created or strengthened at the individual school level, the District level, and the LEARN region level. | All schools will create and or redefine the work of their school-based Technology Committee.<br><br>LEARN will continue to support the Tech Planning Committee to continue its current work focusing on the implementation of the technology plan.<br><br>LEARN will re-initiate hosting and leading regional technology collaborative opportunities. | LEARN will ensure that Professional Development continues to focus on teachers' needs to integrate technology into lessons.<br><br>LEARN schools will offer practical hands-on professional development sessions throughout the year according to staff needs.<br><br>LEARN schools will use follow up surveys to determine technology needs each year.<br><br>LEARN will host regular collaborative learning |

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| | | opportunities for regional technology and education teachers and staff to support IT functions and technology integration needs. |
| **TOPIC 5 – Using Data** | | |
| Elements | Action Steps – Year 1 | Guidance – Years 2 & 3 |
| Student Information System<br>• The current readily available modules of PowerSchool have not been rolled out equally across all LEARN schools.<br>• PowerSchool must move from a simple repository of demographic and attendance data to an instructional decision making and reporting tool. | Complete rollout of PowerSchool Teacher and GradeBook uniformly across all schools with unique components based on student population, parent needs, and school grading policies.<br><br>Complete rollout of PowerSchool Parent Portal uniformly across all schools with unique components based on student population, parent needs, and school level. | Modify GradeBook and Parent Portal, as needed based on parent, teacher, student, and community feedback. |
| Data Repository<br>• A robust, scalable, customizable, and searchable data repository is a critical component to the continuous instructional improvement process that aligns with curriculum needs and the assessment calendar of the District<br>• An instructional data solution for teachers must be made available that allows easy data entry, data analysis, and data reporting at the classroom level.<br>• An instructional data solution for building level administrators must be made available that allows | Investigate options for an instructional decision making data repository including PowerSchool related tools, compatible 3rd party tools, and homegrown solutions. | Select, purchase, implement, customize, train, use. |

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| easy data aggregation, data analysis, and data reporting at the school level.<br>• An instructional data solution for district level administrators must be made available that allows easy data aggregation, data analysis, and data reporting at the LEARN District level.<br>• An appropriate level of data privacy and security must be implemented and audited regularly to protect unlawful or inappropriate use of the data. | | |
| Local and State Reporting<br>• A system of reporting must be able to access all relevant data as needed for local decision making purposes and as required by the Connecticut State Department of Education (CSDE).<br>• The system must be highly flexible and customizable so as to provide data in a format that aids the decision making process locally and takes into consideration the perpetually changing nature of requests from the CSDE. | Investigate options for a reporting engine that fully integrates with PowerSchool and the selected data repository solution. | Select, purchase, implement, customize, train, use.<br><br>Reporting engine should be accessible by all educational stakeholders and should disaggregate data at the district, school, grade, class, and students levels. |
| Data Team Development<br>• Data teams in each LEARN school should be created or if existing, team goals and mission should be updated.<br>• Data teams, to function effectively and efficiently, must include individuals who are knowledgeable and proficient with collaboration, critical thinking, and communication strategies.<br>• Data teams should include clear goal setting procedures and follow an overall mission of instructional improvement. | | |
| **TOPIC 6 – Infrastructure** | | |
| Elements | Action Steps – Year 1 | Guidance – Years 2 & 3 |

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| The Friendship School<br>• In fiscal year 2014-2015, TFS purchased seven new switches<br>• In fiscal year 2014-2015, TFS purchased a wireless controller<br>In fiscal year 2014-2015, TFS purchased 25 Access Points | Purchase 2 new switches to replace the Cisco 2950G's that are 10-11 years old. | UPS for the server room should be replaced. A total of 5 UPS will be needed. |
| Regional Multicultural Magnet School<br>• In fiscal year 2014-2015, RMMS purchased ten new switches<br>• In fiscal year 2014-2015, RMMS purchased a wireless controller with an additional High Availability controller<br>• In fiscal year 2014-2015, RMMS purchased 50 Access Points | Plans to purchase 6 more 48 port switches to completely update network infrastructure. These will replace Cisco 2950G's that are 12 years old.<br>The Intel Modular Server will need to be replaced with two different servers (Domain Controller and File Server).<br>Two UPS should be replaced. | 23 SmartBoards will be 9 years old in 2016 |
| Dual Language & Arts Magnet Middle School<br>• In fiscal year 2014-2015, DLAMMS purchased three new switches<br>• In fiscal year 2014-2015, DLAMMS purchased a wireless controller<br>• In fiscal year 2014-2015, DLAMMS purchased 25 Access Points | No action needed for this year | Look into replacing the firewall in 2016.<br>Server should be replaced in 2017 |
| Marine Science Magnet High School<br>• In fiscal year 2014-2015, MSMHS purchased ten new switches<br>• In fiscal year 2014-2015, MSMHS purchased a wireless controller with an additional High Availability controller<br>• In fiscal year 2014-2015, MSMHS purchased 50 Access Points | No action needed for this year | 3 UPS will need to be replaced in the server and switch rooms.<br>Front projectors should be monitored to see if they will need to be replaced |

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| LEARN - Hatchetts Hill<br>• In fiscal year 2014-2015, Hatchetts Hill purchased five new switches<br>• In fiscal year 2014-2015, Hatchetts Hill purchased five Backup Servers<br>• In fiscal year 2014-2015, Hatchetts Hill purchased two servers and two DAS systems | A new Firewall will have to be purchased in 2015.<br>More cabling should be done to adjust to the growth at Hatchetts Hill. | In 2016 the phone system should be looked into for replacement. The phone system will be about 16 years old at that time.<br>In 2017 both the email archiver and spam filterer should be examined for replacement. |

**Resources**

(NOTE: All resources can be found in the accompanying digital folder to this plan and the PDF appendix)

*Topic 1 - Technology Integration into Curriculum, Instruction, and Assessment*

- ISTE Standards Overview
  - ISTE Standards for Students
  - ISTE Standards for Teachers
  - ISTE Standards for Administrators
- SAMR Model of Technology Integration
- Essential Conditions Overview

*2-Digital Conversion for Teaching, Learning, and Administration*

- Mooresville Case Study
- Google Apps Overview
- Office to Office 365 Overview
- Assistive technologies (TBD)
- Chromebooks in Education Overview
- iPads in Education Overview
- Google Classroom Overview

*3-Best Practices for Integrating Technology*

- LEARN curriculum writing process documents (TBD)
- LEARN curriculum writing schedule (TBD)
- Other (TBD)

*4-Technology Support*

- ISTE Standards for Tech Coach
- ISTE Tech Coach White Paper

*Topic 5 – Using Data*

- PowerSchool Overview (PDF)
- Pearson Inform
- Pearson Schoolnet

*Topic 6 – Infrastructure*

**Monitoring/Revisions/Additions**

Initially, it is the intention of the Committee to release the plan to the public in two versions:

- PDF Version: To be circulated upon completion of plan
  (One time version, no updates)
- Website (www.learn.k12.ct.us): To be launched upon completion of plan.
  (Updated regularly by LEARN Technology Committee)

As discussed above, the plan is a 1+2 rolling plan. Action Steps have been recommended for Year 1 with Guidance provided for Years 2 & 3. Each year, in the Spring, the LEARN Technology Committee will meet to review the status of plan, review Guidance from Years 2 & 3, create action steps for the following year, and make any additional adjustments, modifications, additions, subtractions, etc. as needed. A new and updated PDF document will be distributed each year in June.

The LEARN Technology Committee will meet in person quarterly to discuss the plan and to provide feedback to the LEARN Administrative team. The website will be updated after each quarterly meeting to reflect the current state of technology in LEARN schools.

The LEARN Technology Committee will meet monthly via online real-time video. The Committee will include a member from each school's technology committee as well as staff from the LEARN District office.

**Budget Implications**

The majority of the action steps outlined in this plan are budget neutral or have been considered in the current operating budget. Other items would require new budget items to be added to existing school or district budgets. Additional budgeting is not under the purview of this Committee. Additional funds will be needed and should be allocated with the support of the LEARN Administrative team during the budget process.

**Timeline**

The following are the major milestones of this plan and approximate dates for completion:

| Milestone | Approximate Dates |
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| LEARN Technology Planning Committee meets to launch new plan process | March 2015 |
| LEARN Technology Planning Committee meets regularly (5 times for 3 hours each time) to gather evidence, assess needs, and draft plan | March-May 2015 |
| LEARN Technology Planning Committee completes "Full Draft 1" of plan and hands off the draft and associated resources to LEARN leadership | June 2015 |
| Representatives from the LEARN Technology Planning Committee shares the "Full Draft 1" with LEARN leadership team | Summer 2015 |
| Proposed: LEARN leadership approves plan | Summer/Fall 2015 |
| Proposed: LEARN Technology Planning Committee meet to build launch plan | September 2015 |
| Proposed: Roll-out plan over the course of the 2015-2016 school year | September 2015 - June 2016 |
| Proposed: LEARN Technology Planning Committee will review Year 1 Actions Steps and Years 2 & 3 Guidance to create an updated 1+2 year plan for the 2016-2017 school year | May 2016 |

## Contact

For more information regarding this plan or for general questions regarding the use of technology to enhance teaching and learning at LEARN, please contact:

Lance Hagen
Director of Information Technology
lhagen@learn.12.ct.us

**Appendices** (Resources from Topics)