Livingston Public Schools

Technology Plan for Digital Learning

2018 - 2021

"Empowering all to learn, contribute and grow."

District Technology Committee

Title	Name
Superintendent	Jim O'Neill
Assistant Superintendent	Lisa Steiger
Director of Instructional Technology	Erin Borino
Technology Manager	Tom Douglas
Director of C & I STEM	Natalie Topylko
Director of C & I Humanities	Marybeth Kopacz
Director of Student Services	Blair Rosenthal
Supervisor Tech Ed & Business	Jim Novotny
Supervisor Visual and Performing Arts	Mara Rubin
Supervisor Science K-6	Dorian Gemellaro
Technology Coach	Lori Perez
Technology Coach	Mitch Wasserman
Technology Coach	Ellen Fishter
Technology Coach	Lisa LeBlanc
Principal- Hillside	Carlos Gramata
Principal- Livingston High School	Mark Stern
Principal- Heritage Middle School	Shawn Kelly
Library Media Specialist	Colleen Donnelly
Library Media Specialist	MaryAnn Dellosa
Library Media Specialist	Jessica Sental
Teacher	Sue Latino
Teacher	Alex Lamon
Teacher	Ken Zushma

Parent	Brian Whang
Parent	Zachary Cohen
Board of Education Member	Ronnie Konner
Board of Education Member	Samantha Messer
Board of Education Member	George Shen

NJDOE Vision Statement

All students will be prepared to meet the challenge of a dynamic global society in which they participate, contribute, achieve, and flourish through universal access to people, information and idea.

In a digital world, students need to learn to use the tools to master the learning skills that are essential to everyday life and workplace productivity. The proficiency is known as ICT (information and communication technologies) literacy, defined by the Programme for International Student Assessment as "the interest, attitude and ability of individuals to appropriately use digital technology and communication tools to access, manage, integrate and evaluate information; construct new knowledge; and communicate with others in order to participate effectively in society." This definition goes far beyond a narrow technical competency, which is a relatively low-level skill, to include higher-level skills, critical thinking and intelligent, creative and ethical use of technology. - A Policymakers' Guide to 21st Century Skills (p.11).

Livingston Mission Statement
The mission statement of Livingston Public Schools is "Empowering all to learn, create, contribute and grow." This mission is the driving force behind the district's current strategic plan. This five-year plan focuses on these primary strategic goals:

Goal 1: The district will establish a cycle of continuous improvement to develop and implement preschool-12th grade research-based practices that will engage and empower each student to become college and career ready.

Goal 2: The district will attract, hire, retain and develop a high quality staff that will create, innovate, and implement best practices to foster student growth and address the diverse needs of students

Goal 3: The district will create and maintain a safe, civil and sustainable environment in which to learn, teach and grow.

Goal 4: The district will strengthen the partnership among parents, school, and community, as active partners in the education of all children.

The Technology Plan strategic goals are based on the Future Ready Framework and embody our on-going efforts to achieve Future Ready certification. We envision this work as vibrant and ever-evolving over the upcoming years. As particular goals are attained, new ones will be articulated and will lead to subsequent applications for higher levels of Future Ready certification.

The Future Ready Framework articulates key objectives in seven broad categories related to technology and digital learning. Digital tools now enable personalized learning for every student in our system. The Future Ready Framework provides a roadmap for our district to move towards a shared vision of preparing students for success in college, careers and citizenship. With student learning at the center, the framework provides a means for our district to align each of seven key categories, or gears, in order to advance toward successful digital learning. [source: dashboard.futurereadyschools.org]

The success of our Technology Plan is dependent on innovative leadership at all levels. First and foremost, leaders within a district must be empowered to think and act innovatively, they must believe in the district's shared vision for personalized learning through the effective use of digital tools and resources. Critical to our success will be a culture of innovation that builds the capacity of students, teachers, administrators, parents, and community to work collaboratively towards that vision.

Technology Vision

Livingston Public Schools is committed to leveraging the power of digital tools to personalize learning and develop future-ready students. Our future-ready vision is focused not on devices themselves, but on their use as tools to assist and improve the teaching and learning process. Our goal is to provide an environment that welcomes, supports, and provides the digital tools necessary to personalize learning.

Technology Mission

Our mission is to support the district technology goals by providing effective technology resources and training to foster a community of academic risk taking, innovation, collaboration, and global awareness.

Goals and Objectives of the Plan

CURRICULUM, INSTRUCTION, AND ASSESSMENT

In a Future-Ready district, curriculum, instruction, and assessment are tightly aligned to engage students in 21st Century, personalized, deeper learning. Curricula and instruction are standards-aligned, research-based, and enriched through authentic, real-world problem solving. Students and teachers have robust and adaptive tools to customize the learning, teaching, and assessment, ensuring that it is student-centered.

Goal 1: Livingston Public Schools is committed to leveraging the power of digital tools to personalize learning through the integration of standards-aligned curricula, future ready skills, real-world problem solving, collaboration, and authentic, timely feedback.

Goal	Benchmark-Activity	Responsible Individual(s)	Grade Level Focus	18-19	19-20	20-21
1.1	Plan, budget and complete actionable steps in Goal 1 to apply for and sustain Future Ready status for LPS.	Future Ready Committee	K-12	X (Initial Application)	X (Next level application)	X (Next level application)
1.2	Develop and implement digital citizenship units & information literacy embedded in media curriculum.	Erin Borino Media Specialists Technology Coaches	Spiral K-12	X (K-6)	X (7-12)	
1.3	Technology Coach consultation or participation in curriculum writing as needed.	Technology Coaches Supervisors	Spiral K-12	X	On-going	On-going
1.4	Adopt SAMR (Substitution, Augmentation, Modification, Redefinition) model for	Future Ready Committee	K-12	X	On-going	On-going

	technology integration with on-going professional development for teachers.					
1.5	Authentic integration of technology in lesson plans at teacher discretion, as necessary for lesson/learning goals.	Teachers K-12	K-12	Teachers self-evaluate SAMR & attempt at least one lesson integrating technology in lesson at current SAMR level.	On-going Teachers self-evaluate SAMR & attempt at least one lesson integrating technology in lesson at next SAMR level if applicable.	On-going
1.6	Re-evaluate the STEM/STEAM initiative, in light of the Crayola Professional Development work and define the scope for the next 3-5 years. Explore the need to hire an additional Technology teacher or STEM Coach to support the STEM initiative.	Erin Borino Natalie Topylko Marybeth Kopacz Dorian Gemellaro K-5 Principals	K-5	X (Re-evaluate STEM initiative)	X (Budget for additional Tech teacher/STEM Coach)	
1.7	Review and re-evaluate district robotics, coding and Technology Education programs.	Jim Novotny Tech Ed Teachers IBA Teachers	K-12	On-going	On-going	On-going
1.8	Informal peer sharing via email invites & open door signage to demo PD activities/instruction.	Principals Supervisors	K-12	X		

PERSONALIZED PROFESSIONAL LEARNING

Technology and digital learning should be utilized to expand access to high-quality, ongoing, job-embedded opportunities for professional learning for teachers, administrators, and other education professionals. Digital tools and resources offer teachers and administrators opportunities to collaborate, learn, share, and produce best practices with colleagues in school buildings across the district and country.

Goal 2: Livingston Public Schools is committed to utilizing digital tools to enhance, support, and share ownership for the growth and development of our staff.						
Goal	Benchmark-Activity	Responsible Individual(s)	Grade Level Focus	18-19	19-20	20-21
2.1	Plan, budget and complete actionable steps in Goal 2 to apply for and sustain Future Ready status for LPS.	Future Ready Committee	K-12	X (Initial Application)	X (Next level application)	X (Next level application)
2.2	Train administration & staff in selected technology integration model (SAMR).	Erin Borino Supervisors Tech Coaches PD Instructors Principals PLC Leaders	K-12	X	On-going	On-going
2.3	Promote use of specific tools/apps that best align with instructional goals.	Erin Borino Tech Coaches PLC Leaders PD Instructors	K-12	On-going	On-going	On-going
2.4	Schedule PLC time & common planning time to work on technology integration.	Principals Supervisors Central Office	K-12	X Schedule this with principals	On-going	On-going

2.5	"SAMR" Fair/Showcase where staff can show ways they are implementing all stages of the framework. (Feb. PD)	School Future Ready Teams Erin Borino Natalie Topylko Teachers Tech Coaches	K-12			X	X
2.6	Differentiate levels of technology PD (Based on what you teach). (Facilitate teacher self-reflection on SAMR) □ SAMR ≠ evaluative.	Natalie Topylko Erin Borino	K-12	X		X	X
2.7	Train staff to understand & model principles of digital citizenship.	Erin Borino Tech Coaches School Counselors	All Staff	X		X	X
2.8	Create a digital learning community that serves as a repository of models (exemplary lessons) where ideas can be exchanged & questions posted. Create a classroom indicator for a lesson that is attempting next SAMR level for other teachers to observe or for instructional rounds. Share examples of technology integration at faculty/department meetings.	Media Specialists Erin Borino Technology Coaches	K-12	X (Livingston Schoology Users' Group created in 17-18)		X	X
2.9	Train Administration to identify level of SAMR being observed & what resources are available to assist/support teachers.	Natalie Topylko Erin Borino Technology Coaches	All	X			

USE OF SPACE AND TIME

Student-centric learning requires changes in the way instructional time is used. A student-centered system adapts learning to meet the needs, pace, interests, and preferences of the learner. This adaptation may include flexible, anytime, anywhere learning; learning environments and resources for personalized learning; competency/standards-based teaching and learning; and strategies that incorporate project-based, collaborative learning opportunities. Opportunities for student-centered use of time are made possible through innovative uses of technology for diagnostic, formative and summative assessments, for managing learning, for engaging students in learning, and for providing anywhere, anytime learning.

Goal 3: Livingston Public Schools is committed to examining ways in which to leverage technology to provide a student-centered learning environment.						
Goal	Benchmark-Activity	Responsible Individual(s)	Grade Level Focus	18-19	19-20	20-21
3.1	Plan, budget and complete actionable steps in Goal 3 to apply for and sustain Future Ready status for LPS.	Future Ready Committee	K-12	X (Initial Application)	X (Next level application)	X (Next level application)
3.2	Review of physical plant facilities to evaluate needs and staffing. Revision/Redesign of STEM/Maker Spaces/Computer Labs.	Tech/Design/ Engineer/ Supervisor Art Supervisor Media Spec. /Maker Space Coordinator Dorian Gemellaro Principals	K-12	MS/HS Level Develop Plan ID Resources Needed - Time - Expertise - Space - Tools/Materials	Pilot? At the MS/HS Level Develop Plan for Elementary	
3.3	Use of observations & instructional rounds to support meaningful/best practice-based technology integration into lessons when necessary	Administration	K-12	X	X	X

3.4	Expand use of learning management systems (Schoology/Google Classroom) to enable students to participate in learning activities outside of the normal school day.	Administration	Gr. 2-12	X	X	X
3.5	Planned time for vertical, horizontal, and cross curricular student - centered technology discussions.	Administration	K-12	Ongoing	Ongoing	Ongoing
3.6	Pilot online course for students in Schoology.	Administration Teachers Directors of Curriculum & Instruction	9-12	Plan ½ year Personal Financial Literacy Course at LHS.	Pilot ½ year Personal Financial Literacy Course at LHS.	
3.7	Pilot online professional development courses for teachers.	Administration Teachers Directors of Curriculum & Instruction	K-12	Pilot course will run in 2018-19 at LHS.		

TECHNOLOGY, NETWORKS, AND HARDWARE

The effective use of technology provides tools, resources, data, and supportive systems that increase teaching opportunities and promote efficiency. Essential components of an effective technology, network, and hardware environment include access to adequate, appropriate digital tools; a robust network infrastructure; adequate and responsive support; and a formal cycle for review and replacement. High quality, high speed technology and infrastructure systems within a school district are essential to the advancing of digital learning.

Goal 4: Livingston Public Schools is fully committed to ensuring the district's technology, network, and infrastructure are updated and accessible to support digital learning.						
Goal	Benchmark-Activity	Responsible Individual(s)	Grade Level Focus	18-19	19-20	20-21
4.1	Plan, budget and complete actionable steps in Goal 4 to apply for and sustain Future Ready status for LPS.	Future Ready Committee	K-12	X (Initial Application)	X (Next level application)	X (Next level application)
4.2	NJTraxx-update yearly and submit to NJDOE.	Erin Borino Tom Douglas	K-12	Yearly by the end of September	Yearly by the end of September	Yearly by the end of September
4.3	Develop three-year upgrade plan for network infrastructure. Evaluate existing and new wireless standards. Ensure infrastructure ready to accommodate next generation wireless devices.	Erin Borino Tom Douglas	K-12	Initial review and information gathering	Implementation	Review

4.4	Evaluate replacement devices for 9-12 1:1 initiative. Existing Surface 3's will age out at the end of the 2018-19 school year. Obtain sample devices and evaluate.	District Technology Committee Device sub committees	9-12	X	Implementation	Review
4.5	Monitor the use of the voice, video, and data network to ensure adequate bandwidth is available to facilitate collegial communication and collaboration. Evaluate network speed requirements and develop multi-year plan to ensure all district requirements are met. Ensure multiple ISP's are used and configure for automatic failover in the event of primary ISP outage.	Tom Douglas Erin Borino	K-12	Ongoing	Ongoing	Ongoing
4.6	Monitor existing intercom equipment and expand the Cisco voice communications system to integrate with the school's intercoms as obsolete systems fail.	Tom Douglas Erin Borino	K-12	Ongoing	Ongoing	Ongoing
4.7	Evaluate classroom management software for Chrome, Windows and IOS devices. Obtain demo licenses and evaluate the software in classroom settings.	Tom Douglas Erin Borino Tech Coaches Technology committee Building committees	K-12	Implementation and review of Go Guardian at MPM. Review products for 7-12	Implementation in grades 6-12.	Ongoing
4.8	Review devices for use in K-1 and recommend purchase or refresh.	Tom Douglas Erin Borino Elem. Admins Technology committee Building committees	K-1	Initial review and information gathering as part of Technology Committee work	Implementation district-wide for all elementary schools.	Review and refresh devices as needed

4.9	Maintain existing multimedia projection and sound field infrastructure in all K12 classrooms.	Tom Douglas Erin Borino Technicians	K-12	Ongoing	Ongoing	Ongoing

DATA AND PRIVACY

The district must ensure that sound data governance policies are enacted and enforced to ensure the privacy, safety, and security of confidential data sets. Such policies and procedures must ensure that access to authorized persons is secure. A personalized, learner-centered environment uses technology to collect, analyze, and organize data to provide continuous cycles of feedback to students, teachers and other education professionals, with the intent of increasing the depth, breadth, complexity, and efficiency of learning.

Goal 5: Livingston Public Schools is committed to utilizing data to inform instruction and decision making while implementing appropriate systems to ensure the privacy and security of information.						
Goal	Benchmark-Activity	Responsible Individual(s)	Grade Level Focus	18-19	19-20	20-21
5.1	Plan, budget and complete actionable steps in Goal 5 to apply for and sustain Future Ready status for LPS.	Future Ready Committee	K-12	X (Initial Application)	X (Next level application)	X (Next level application)
5.2	Review existing software to ensure compliance with district privacy requirements.	Erin Borino Tom Douglas Technology Coaches	K-12	Ongoing	Ongoing	Ongoing
5.3	Perform security audit and external penetration test.	Tom Douglas Technology Department	K-12	Ongoing	Ongoing	Ongoing
5.4	Ensure backup integrity. Perform full restore to DR site.	Tom Douglas Technology Department	K-12	Ongoing	Ongoing	Ongoing

5.5	Develop standard operating procedures for the provisioning and deployment of any new district software.	Erin Borino Tom Douglas Technology Coaches	K-12	Gather data regarding district policies & background information for SOP development.	Draft SOP (Summer 2019) and implement	Review and revise SOP as needed
5.6	Collect and analyze tech-related disciplinary action data.	Principals HIB Coordinator School HIB Specialists	K-12	Gather data on incidents & review district policies. Revise policy if needed. Provide additional student disciplinary citizenship training as needed.	Ongoing	Ongoing
5.7	Collect student standardized assessment data and store electronically in Genesis Student Information portal/Linkit.	Natalie Topylko Marybeth Kopacz Technology Department	K-12	Explore possibility of uploading PDFs to augment student data profiles in Genesis. Implement collection of literacy formative assessments in Genesis.	Ongoing	Ongoing
5.8	Ensure student assessment data is accessible to appropriate stakeholders and used to personalize and improve subsequent instruction.	Natalie Topylko Marybeth Kopacz Principals Supervisors Teachers	K-12	Data analysis conversations at grade level, department and faculty meetings. Findings used to inform curriculum rewrites/redesigns, teacher SGOs.	Ongoing	Ongoing

COMMUNITY PARTNERSHIPS

Community partnerships include the formal and informal local and global community connections, collaborative projects, and relationships that advance our district's learning goals. Digital communications, online communities, social media, and digital learning environments serve as connectors for these partnerships.

Goal	Benchmark-Activity	Responsible Individual(s)	Grade Level Focus	18-19	19-20	20-21
Goal 6: Livingston Public Schools is committed to developing and strengthening robust partnerships with our student, parent, business, and township communities to advance our vision of developing future-ready students.						
6.1	Plan, budget and complete actionable steps in Goal 6 to apply for and sustain Future Ready status for LPS.	Future Ready Committee	K-12	X (Initial Application)	X (Next level application)	X (Next level application)
6.2	Soliciting community stakeholders for information/opportunities related to the Future Ready skills that students will need to be successful.	District/ School Based FR Teams	K-12	X	Incorporate findings from the community surveys into curriculum revisions/rewrites, professional development/ coaching	Ongoing
6.3	Hosting parent training/information sessions on tech. Integration across the district (1:1 classroom, internet safety). Learning platforms.	Tech Coaches ScIP Administration	K-12	X	X	X

6.4	Develop opportunities for students to engage in community based activities that promote future ready skills. (CIP, Co-op, Sr. Service @ HS)	Guidance Teachers/Staff Administration High School Staff	K-12	Ongoing	Ongoing	Ongoing
6.5	Coordinate/collaborate with public library on workshops to promote digital citizenship.	Technology Coaches ScIP Administration	K-12	Establish relationship with Livingston Public Library and explore opportunities for future collaboration	To be determined based on dialogue with Livingston Public Library	To be determined based on dialogue with Livingston Public Library
6.6	Create new/further utilize existing social media platforms to establish a unique identity for Livingston and promote the work of students and staff in instruction.	Michelle Bent Principals Supervisors	K-12	Ongoing	Ongoing	Ongoing

Evaluation Plan

Progress monitoring, revisions, and evaluation of goal attainment is a shared responsibility of all district administrators. The district Technology Coaches meet monthly to review, evaluate, modify and implement strategies and methodologies that reflect change/innovations in technology opportunities. Their assessments are turn-keyed to the Director of Instructional Technology, Technology Manager and Director of Curriculum & Instruction- STEM. Additionally, the District Technology Committee may meet at least once a year to evaluate and review plan goals.