

Instructional Technology Plan for the Erie 1 Board of Cooperative Educational Services 2019-2024

Overview

As dictated by the New York State Education Department, this Instructional Technology plan exists to identify how the Erie 1 Board of Cooperative Educational Services (hereafter called Erie 1 BOCES) will:

- Develop a strategic vision and goals to support student achievement and engagement through the seamless integration of technology into teaching and learning;
- Provide technology-enhanced, culturally- and linguistically-responsive learning environments to support improved teaching and learning;
- Increase equitable access to high-quality digital resources and standards-based, technology-rich learning experiences;
- Design, implement and sustain a robust, secure network to ensure sufficient, reliable high-speed internet connectivity for learners, educators and leaders; and
- Provide access to relevant and rigorous professional development to ensure educators and leaders are proficient in the integration of learning technologies.

Section I – District LEA Information

The district administrator responsible for curating this plan is Marley Smith, Supervisor of Instructional Technology.

Other members of the team developing the plan are:

- Christa McHale, Director of Workforce Development and Educational Partnerships
- Michael Capuana, Director of Career and Technical Education
- Patrick Canfield, Director of Exceptional Education
- Anedda Trautman, Associate Director of Career and Technical Education

- Kristen Marchiole, Senior Supervisor of Exceptional Education
- Michelle Okal-Frink, Director – WNYRIC Business Continuity, Research and Innovation
- Kelsie Kruppa, Systems Coordinator
- Jackie Coyle, Career and Technical Education Supervisor

Section II – Strategic Technology Planning

1. Statement of mission: Erie 1 BOCES commits to those we serve; students, staff and communities by understanding, anticipating, and responding to their needs.
2. The vision statement that guides instructional technology use in Erie 1 BOCES is: Instructional technology provides a gateway for students to experience authentic, personalized, and responsive instruction.
3. Goals that will drive the attainment of the vision are:
 - Infrastructure Goal:** Erie 1 BOCES will sustain a robust, secure network with sufficient capacity and reliable high-speed internet connectivity for learners, educators and leaders.
 - Equipment Goal:** Erie 1 BOCES will provide the appropriate devices for educators to provide authentic, personalized, and responsive instruction to our students. The equipment and systems provide avenues for students to engage in their learning goals. Equipment will be properly tracked, inventoried, and monitored for needed upgrades.
 - Student Achievement Goal:** Erie 1 BOCES will actively seek new technologies focused on increasing student achievement, assess those technologies, and only procure the right tools for the job. Educators are expected to deliver differentiated instruction tailored to the unique learning needs of our exceptional students. Particular attention will be paid to those learners with specialized needs.

Staff Goal: Erie 1 BOCES staff will employ instructional technologies focused on the engagement, enhancement, and extension of student learning goals. Educators will be provided with capacity, access and professional development to support progressing educator competence in these focus areas.

Leadership Goal: Erie 1 BOCES' leaders will model technology use and take an active role in identifying need and assisting educators in employing instructional technology to meet educational targets efficiently.

4. To summarize the planning process used to develop this Instructional Technology Plan, A survey to all instructional staff, faculty, and administrators of the Erie 1 BOCES Instructional Services Division was completed in November/December 2017. This survey was used by the Instructional Services Technology Steering Sub-Committee to craft the goals put forth above. The International Society for Technology in Education (ISTE) Standards for Students and Teachers, and educational research were consulted in the development of the goals as well. The Technology Support Staff conducted an infrastructure study in 2018-19 to assess infrastructure needs.
5. A summary of the professional development plan for building the capacity of educators and administrators in the attainment of the instructional technology vision is being developed through the Instructional Services Technology Steering Sub-Committee and the Professional Development Advisory Council. (January 2019) Erie 1 BOCES provides professional development in a variety of modalities including one-on-one coaching, small group sessions led by WNY Teacher Center Staff as well as colleagues, and large-group learning at Staff Development Day. Teachers are encouraged to explore technology tools that will assist them in providing a personalized, authentic, and responsive educational environment to our students.

Section III – Action Plan

Goal #1: Infrastructure Goal: Erie 1 BOCES will sustain a robust, secure network with sufficient capacity and reliable high-speed internet connectivity for learners, educators and leaders.

Action Step	Responsible Stakeholder	Anticipated Completion (month/year)	Additional Division Cost	Actual Completion Date	Completion notes
Infrastructure Study	Supervisor of Instructional Technology (IT), and IT Support Team	02/2019	\$0	02/2019	Aging servers, currently meet Federal standards for speed.
Develop Maintenance and Purchase plans for pro-active equipment replacement	Supervisor of IT, IT Support Team, Managed IT Team	Yearly Jan-March	\$8,000-\$10,000/year	January 2019, January 2020, January 2021	Plans reviewed with principals and directors to prioritize needs
Ensure coordination with Building Project plans	Supervisor of IT and IT Support Team	Initial meetings Spring 2019	\$0		
E-Rate funding planning	WAN team and Supervisor of IT	Yearly in October	\$3,000/year	October 2019, October 2020	1 building per year to get new equipment
Increase wireless access points to 1 per classroom	WAN Team and Supervisor of IT	September 2021	\$8,000		1 building per year to get new equipment
Increase district bandwidth from 1Gbps to 2 Gbps	WAN Team/ WNYRIC	March 2021	\$5,000		

Goal #2: Equipment Goal: Erie 1 BOCES will provide the appropriate devices for educators to provide authentic, personalized, and responsive instruction to our students. The equipment and systems provide avenues for students to engage in their learning goals. Equipment will be properly tracked, inventoried, and monitored for needed upgrades.

Action Step	Responsible Stakeholder	Anticipated Completion (month/year)	Additional Division Cost	Actual Completion Date	Completion notes
Needs assessment	Supervisor of IT and IT Support team	annually	\$0	2/2019	Desktops need to be replaced; mobile technologies investigated
Pilot devices to replace desktops	Supervisor of IT, teachers	annually	\$0	04/2019	Teacher and student devices identified
Prepare purchase plan based on 1/5 of devices per year for 5 years	Supervisor of IT and IT Support team, Directors, Principals, Supervisors	annually	\$375,000	04/2019	Staff upgrades determined by principal; strong support from Directors
Induction training for teachers on new touch devices	Supervisor of IT and Tech Integrators	Annually (anticipated 05/2019)	\$0	09/2018, 05/2019	Tech Integrator to catch up on 2020 crew due to pandemic.
Equipment tracking	IT Support team	ongoing	Excel sheet = \$	01/2019,	Assessing current system - not ideal

				Last update 01/2021	
Expand Tech Advocate Role	Supervisor of IT and IT Support team	Ongoing; Notify May 2019, Begin fall 2019 12/2021	Tech Advocate support = \$5,500/year		Trying to hold quarterly meetings to review duties and teach new skills.

Goal #3: **Student Achievement Goal:** Erie 1 BOCES will actively seek new technologies focused on increasing student achievement, assess those technologies, and only procure the right tools for the job. Educators are expected to deliver differentiated instruction tailored to the unique learning needs of our exceptional students. Particular attention will be paid to those learners with specialized needs.

Action Step	Responsible Stakeholder	Anticipated Completion (month/year)	Additional Division Cost	Actual Completion Date	Completion notes
Needs assessment for missing tools; increase software supports for E1B learners	Supervisor of IT, Supervisors, Directors, Principals, Committee for Instructional Technology, Curriculum Council	05/2019; yearly thereafter	\$89,000 (2020-21)	July 20019, June 2020	Service Now button "Request for Pilot" 03/19; Supervisors and Principals took ownership during pandemic to ensure access for students and T's.

Examine yearly survey results	Committee for Instructional Technology, Directors	annually	\$0	December 2017, February 2019	No survey in 2020 due to pandemic. Need to resume?
Support teacher and Administrator attendance at NYSCATE and other instructional technology Conferences	Supervisor of IT, Principals, Directors, Teachers	annually	\$10,000		6 teachers and 2 Admin attended NYSCATE 2018 Annual Conf; in 2019, there were 3 teachers in attendance.
Conduct structured pilots of new instructional technology tools	Supervisor of IT, Teachers, Supervisors, Directors, IT Support Team	Ongoing (3-month increments)	\$0		2018-19 Pilots: Apple TV, LanSchool, Apple Classroom, Freckle, Precision Exams
Highlight best practices in using technology to differentiate instruction	Administrators, Directors, Supervisors, PDAC, Teacher Center, Tech Advocates,	Ongoing, examine at Committee for Instructional Technology Meetings	Paid through Teacher Center		Principals to identify teachers using best practices. PLCs and Teacher-Leaders

	Committee for Instruc Tech				
Investigate Hybrid Learning Model for Long-Term Suspension and Alternative Education	Directors, Supervisor of IT, Curriculum Council	06/2019, Alt Ed still under development 2/2021	\$7,000	January 2020 for suspension; Alt Ed still developing	Implement Google co-teachers in suspension programs for start of 2020.
Create eAcademy for Alternative learners to use a fully-remote platform to access instruction	Directors, Assistant Superintendent, Alt Ed Principals	August 2020	\$700,000	September 2020	eAcademy features 6 HS teachers and 6 MS teachers in year 1.
Implement the digital software supports for curricula	Supervisors	Fall 2020	\$56,000 + additional as identified		Hybrid learning model for 2020-21 required additional digital resources.

Goal #4: **Staff Goal:** Erie 1 BOCES staff will employ instructional technologies focused on engagement in learning goals, enhancement of learning goals, and extension of student learning goals. Educators will be provided with capacity, access and professional development to support progressing educator competence in these focus areas.

Action Step	Responsible Stakeholder	Anticipated Completion (month/year)	Additional Division Cost	Actual Completion Date	Completion notes
Hire a Technology Integrator to support technology best-practices	Supervisor of IT, PDAC, and Teacher Center Director	July 2019	\$60,000/year	July 2019	Kelly Castle is our new Technology Integrator
Educator PD in best-practices with Instructional Technology	Directors, Supervisor of IT, Tech Integrator	05/2020; ongoing yearly	\$0		Pandemic 2020-21 caused a jolt in tech PD around Google tools and coaching for our purchased software tools.
Increase 2-way communication around this goal – Are we meeting the mark?	Instructional Services Tech Steering Sub-Committee	ongoing	\$0		Committee for Instructional Technology formed 2020-21 school year. Quarterly meetings with building/ department representation.
Build teacher-leaders in the area of technology integration & use of digital teaching tools	Supervisor of IT, Tech Integrator, Supervisors, Curriculum Council		\$0		3/19/21 PD day presenters/ co-presenters. Targeted technology coaching, building PLCs at each Center and Academy.

Goal #5: **Leadership Goal:** Erie 1 BOCES’ leaders will model technology use and take an active role in identifying need and assisting educators in employing instructional technology to meet educational targets efficiently.

Action Step	Responsible Stakeholder	Anticipated Completion (month/year)	Additional Division Cost	Actual Completion Date	Completion notes
Office 365 training for all Instructional Staff	Supervisor of IT, Tech Integrators	05/2019	\$0		Teacher Required PD classes 2018-19; Admin PD day August 2018
Technology Leadership PD – ISTE Standards for Leaders, Deeply Assessing Tech, “Look-Fors” in the classroom	Supervisor of IT, others as needed	Ongoing – begin 08/2019 (Admin retreat)	\$0		Still need to do this. Summer 2021.
Develop proficiency in assessing technology use in the classroom and hybrid learning	Administrators, Supervisors	Ongoing – begin 09/19 or 09/20?			“Best Practices for Blended Learning” PD series January/Feb 2021.
Administrators using technology to communicate more effectively	All Building and District Instructional Administrators	Ongoing – begin March 2020	\$0		Principals are using Teams, webex, Google, TikTok, Flipgrid 2020-21.

Section IV – Administrative Management

- Staff Plan – Full-Time Equivalent (FTE) count of all staff whose primary responsibility is delivering technology integration training and support and/or technical support for teachers:

Title	Full-Time Equivalent (FTE)
District Technology Leadership	1.0
Instructional Support	1.0 as of July 2019 (previously 0.2)
Technical Support	3.0

- Investment Plan – NYSED recommends development of a three-year investment plan to support the vision and goals put forth in Section II of this plan. Erie 1 BOCES funds all projects through the District Operating Budget, E-Rate and Grants.

Anticipated Item or Service	Age of Equipment Being replaced	Estimated Cost	Is cost one-time, annual or both?
IP Surveillance servers at Kenton, Potter, WDC	6 years	\$27,000	One-time (Year 1- 2019)
IP surveillance server at Northtowns	5 years	\$9,000	One-time (Year 3 2020)
Replace Teacher devices	5 years +	\$83,000 (2018 expense)	annual
Replace student devices; move toward ubiquitous access	5 years +	\$166,000 (2018 expense)	annual
Replace Smart Boards	8 years +	\$61,000 (2018 expense)	annual
Increase Building Security	n/a	\$35,000	annual
PA systems (Kenton, Potter, Harkness)			One-time
Professional Development in Instructional Technology (NYSCATE)	n/a	\$8,000	annual

3. [Link to the District's public website.](#)
4. The person responsible for the District's Information Security and Information Privacy is the Chief Security Officer.
5. The district's Cybersecurity Audit (information security and/or privacy audit) was conducted in January-March 2019. A Cybersecurity Audit has been performed once. The audit WAS performed by an independent, third party contractor.
6. The school district does provide for educating minors about appropriate online behavior including interacting with other individuals on social networking websites and in chat rooms.
7. The District provides for educating minors about cyberbullying awareness and response. Additionally, the District maintains an online Bullying Reporting System.
8. The District has a Cyberbullying Policy. [Link to the relevant section of the Code of Conduct.](#) [Link to the Dignity for All Students Act policy.](#)
9. The District does have an Internet Safety Policy included in the Acceptable Use Policy. [Link to this policy.](#)
10. The District does have a Parents' Bill of Rights for Data Privacy and Security. [Link to this policy.](#)
11. The District does have an information breach policy that addresses the district's planned response to an information breach. [Link to this policy for student information.](#) [Link to the policy for non-instructional breaches.](#)
12. The District's Instructional Technology Plan will be posted on the District webpage under About Us – [District Plans.](#)