

Key Areas	Teaching and Learning					
	(A)	(B)	(C)	(D)	(E)	
Focus Areas / Levels of Progress	Impact of Technology on Teacher Role	Patterns of Teacher Use	Design of Instructional Setting	Curriculum Areas	Patterns of Student Use	Content of Training
Early Tech	Mostly teacher-centered lectures. Minimal student use of technology in instruction.	85% teachers use technology as a productivity tool (e.g. e-mail, grades) and or as a classroom supplement (e.g. drill and practice).	Mostly computer labs or libraries; scheduled use only.	Limited to teaching technology skills at different grade levels.	85% of students are developing skills to meet Massachusetts Standards 1 and 2.	Technology skills (email, word processing, internet browser use, etc.) for teachers' professional use.
Developing Tech	Mostly teacher directed learning. Students use technology to work on individual projects	85% teachers explore using technology to support curriculum goals (e.g. research, lesson planning)	Labs, libraries, many classrooms; flexible scheduling.	Use of technology is minimal in a few curricular areas across grade levels.	85% of students show proficiency in Massachusetts Standards 1 and 2 and are developing skills in Standard 3.	Training encompasses more complex professional uses (district applications such as attendance and report cards, scanners, cameras) and curriculum integration strategies.
Proficient Tech	Mostly teacher facilitated learning. Students use technology for cooperative projects in their own classroom.	85% teachers use technology for research, lesson planning, multimedia and graphical presentations and simulations, and share technology uses with colleagues.	Lab, libraries, all classrooms, and portable technology (e.g. wireless laptops or handheld electronic devices); flexible scheduling.	Integrated into most Framework curricular areas and activities at all grade levels.	85% of students show proficiency in all Massachusetts Technology Standards.	Training directly ties technology to its use in content areas and how to effectively manage it in the classroom.
Advanced Tech	Mostly student-centered learning, teacher as mentor/facilitator. Students use technology to communicate and collaborate outside the classroom.	85% teachers integrate evolving technologies that transform the teaching process by allowing for greater levels of access, interest, inquiry, analysis, collaboration, creativity, and content production.	Seamlessly integrated throughout classes and all content areas. Technology is available anytime both in school and within the community.	Integral to all curricular areas at all grade levels.	All students show proficiency in all Massachusetts Technology Standards.	Training focuses on modeling, mentoring and adopting new technologies as well as the integration of Universal Design and access considerations for all students.

Key Areas	Educator Preparation and Development					Vision and Planning
	(G)	(H)	(I)	(J)	(K)	
Focus Areas / Levels of Progress	Capabilities of Educators	Leadership and Capabilities of Building Principals and District Administrators	Models of Professional Development	Levels of Understanding	Universal Access: Integration of Universal Design and Assistive Technology	Vision and Planning
Early Tech	10% meet ISTE and/or local district teacher technology competencies and implement them into the school environment.	Recognizes benefits of technology in instruction to improve learning outcomes for all students. Minimal personal use (email, word processing, internet browser use, etc.). Awareness of national standards for administrators.	Whole group, skill based training with minimal followup.	Most at entry or adoption stage (Students learning to use technology; teachers use technology to support traditional instruction).	Emerging awareness of universal design and assistive technologies (hardware/software) limited to special educators; few examples across the district of universal design strategies or assistive technology used to promote access to the general curriculum.	Minimal technology plan; technology used mainly for administrative tasks such as word processing, budgeting, attendance, grade book.
Developing Tech	30% meet ISTE and/or local district teacher technology competencies and implement them into the school environment.	Supports use of technology in instruction. Uses technology in daily work. Approaching proficiency of national standards for administrators.	Whole group curriculum based training with follow-up to facilitate classroom implementation.	Most at adaptation stage (technology used to enrich curriculum). Most beginning to use with students.	Awareness of universal design and assistive technologies (hardware/software) by special educators & some general educators; universal design strategies or assistive technology used to promote access to the general curriculum demonstrated across all grade levels	The technology plan is aligned with Massachusetts Technology Plan, approved by the School Committee & supported by the Superintendent. Plan collaboratively developed by key stakeholders (e.g., teachers, parents, community members, local business & individuals w/disabilities), guiding policy & practice. Addresses local district teaching & learning standards.
Proficient Tech	60% meet ISTE and/or local district teacher technology competencies and implement them into the school environment.	Recognizes and identifies exemplary use of technology in instruction. Uses technology skills in daily work such as research and communication and models appropriately with staff. Provides constructive feedback to teachers on their technology use.	Coaching, modeling best practices, district-based mentoring. Involvement in a development / improvement process. Study groups.	Most at appropriation stage (technology is integrated, used for its unique capabilities).	Awareness of universal design and assistive technologies (hardware/software) by special educators & most general educators; universal design strategies or assistive technology used to promote access to the general curriculum demonstrated across all grade levels; staff are designated to provide AT assessment, procurement, support (training) and maintenance	The technology plan aligns with Massachusetts Technology Plan; integrated into district plan; used for internal planning, budgeting, applying for external funding and discounts. Teachers / administrators have a vision for technology use in support of student learning, teacher professionalism, and data management.
Advanced Tech	90% meet ISTE and/or local district teacher technology competencies and implement them into the school environment.	Promotes exemplary use of technology in instruction. Models and uses in daily work in communication, presentations, on-line collaborative projects, and management tasks. Develops a school culture that expects all teachers to use technology. Advocates for the community integration of technology in instruction. Expects all teachers to use technology well.	Creates a culture of inquiry, sharing and knowledge building. Anytime learning available through a variety of delivery systems (e.g. Just in time support, mentoring, peer observation).	Most at invention stage (teachers discover and accept new uses for technology).	Systemic adoption of universal design curriculum development strategies and the seamless integration of assistive technology to promote access to the general curriculum for all students; staff are designated to provide AT assessment, procurement, support (training), and maintenance.	The technology plan & vision are focused on improving the success of all students based on needs, research, proven teaching and learning principles and is actively supported by the School Committee and Superintendent. Technology plan is collaboratively developed, guiding policy & practice; updated at least annually.

Key Areas	Administration and Support Services				(Q)	(R)
	(M)	(N)	(O)	(P)		
Focus Areas / Levels of Progress	Technical Support (hardware, operating system, network)	Curriculum Integration Staffing	Budget Levels	Budget Allocated for Technology (Total Cost of Ownership)	Universal Design: Physical Access/Software & Hardware Compatibility	Students Per Instructional Computer
Early Tech	Technical support call-in; response time greater than 24 hours. Problems cause major disruptions to curriculum delivery using technology.	No district level Technology Director. Local instructional technology support is inconsistent.	Budget for hardware and software purchases and professional development.	Less than \$125 per student.	Universal design & access considerations for computers, mobile technologies and eLearning tools are considered through Individualized Educational Programs (IEPs) for students w/disabilities; no procurement policies in place to ensure usability and/or backwards compatibility	10 or more students per Type A or B computer; no firm computer replacement policy established by district.
Developing Tech	At least one technical staff per 350 computers. Same-day technical support for infrastructure problems by call-in. Problems sometimes cause major disruptions to curriculum delivery using technology. Network Administrator.	District level Technology Director. One-half instructional technology specialist per 60-120 staff.	Budget for hardware and software purchases (new and replacement) and professional development, minimal staffing support, and some ongoing costs.	Between \$125- \$250 per student.	Universal design & access considerations for limited number of computers, workstations, mobile technologies, and eLearning tools are established in areas of high student use (e.g., libraries, computer labs); limited awareness of procurement policies ensuring usability and/or backwards compatibility.	Less than 10 students per Type A and B computer; replacement policy established; one computer per teacher.
Proficient Tech	At least one technical staff per 200 computers. Same-day in-classroom technical support available. Problems infrequently cause major disruptions to curriculum delivery using technology. Network administrator.	District level Technology Director. Dedicated instructional technology specialist - one half person per 30-60 staff. Dedicated staff at district level for data management and assessment.	Budget for purchases, professional development, adequate staffing support, and ongoing costs. Other state, federal, and local programs directed to support technology funding. Business partnerships, donations, and other local funding designated for technology.	Between \$250 - \$375 per student	UD & access considerations for limited number of computers, workstations, & mobile technologies are established in areas of high student use (e.g., libraries, computer labs), some computer classrooms & administrative offices; routine implementation of procurement policies ensuring backwards compatibility	Less than 5 students per Type A and B computer; replacement cycle established for 6 years or less; one computer per teacher - possibly a laptop for home work. Most students have access to handheld electronics (e.g., PDA's, graphing calculators, Alpha Smarts). Maintains a list of places students can use technology outside of school.
Advanced Tech	At least one technical staff per 150 computers for just-in-time support. Technical support is readily available on-site for both infrastructure and application problems. Problems do not cause major disruptions to curriculum delivery using technology. Network administrator.	District Technology Director. Dedicated instructional technology specialist - one half person per 30-60 staff. Dedicated staff at district level for data management and assessment and to help produce integrated curriculum content.	Budget for purchases, incentives for professional development, sufficient staffing support, and ongoing costs. Appropriate budget to support district technology plan.	\$375 or more per student	Universal design and access considerations for all computers, workstations, mobile technologies, and eLearning tools are implemented throughout the district.	One student per Type A and B computer or other electronic device. Replacement cycle established for 5-6 years or less; one computer per teacher - possibly a laptop for home work. 75% of computers meet Massachusetts A/B standards. School works with community to provide equitable access to technology for students and community members after school hours.

Key Areas	Infrastructure for Technology				
	(S)	(T)	(U)	(V)	(W)
Focus Areas / Levels of Progress	Internet Access Connectivity/Speed	E-Learning Environments	LAN/WAN	Other Technologies	Security
Early Tech	Dial-up connectivity to the Internet available only on a few computers. District wide acceptable use policy in place.	Web- and/or satellite-based interactive learning opportunities delivered synchronously, or asynchronously, on a scheduled or unscheduled basis, primarily for professional development on a limited basis	Limited print/file sharing network at each school for lab, administration, and some classrooms. Some shared resources and providing some secure storage space.	Shared teacher use of resources such as telephone, TVs, VCRs, DVDs, and classroom sets of programmable calculators.	Backup and restoration procedures and virus protection to guard individual computers.
Developing Tech	Direct connectivity to the Internet available at each school and in most rooms. Adequate bandwidth to the school to avoid most delays.	Expanded web- and/or satellite-based interactive learning opportunities with the possible addition of asynchronous video streaming or synchronous videoconferencing. The addition of courses for professional development for teachers and student courses at the high school and college level (K-16)	Most rooms connected to Internet via LAN/WAN and wireless connectivity where possible at each school with student access. Minimum 10/100 mb Cat 5 hubbed network. Basic servers for sharing some resources at each school.	Shared use of resources such as telephone, TVs, VCRs, DVDs, classroom sets of programmable calculators, digital cameras, and scanners. Computer/Video projectors available.	Basic firewall protection and diligent upgrading of network vulnerabilities added to protect against external threats.
Proficient Tech	Direct connectivity to the Internet available in all rooms in all schools. Adequate bandwidth to each classroom over the LAN (10/100mb) to avoid most delays. Easy access for students and teachers including some wireless.	Development of connections for improved access to web-based and/or interactive IP-based video learning on the local, state, regional, national, and international level(school to school, district to district, school/district to state, state to state, country to country). Applications to include courses, cultural projects, virtual field trips.	All rooms connected to Internet via LAN/WAN with significant wireless connectivity at each school with sufficient bandwidth for effective student access. Minimum 10/100 mb Cat 5 switched network. Servers for providing secure storage, backups, schedule, e-mail, web. Students, teachers and parents have easy access to educational resources from home and school (e.g., web portal).	Dedicated and assigned use of common technologies such as telephone, TVs and VCRs and DVDs. Programmable calculators assigned to each student as needed. In each school there is shared use of specialized technologies, digital cameras, scanners, handheld electronic devices, and computer/video projectors.	Adequate server and availability protection added to above for expanded capabilities and to ensure dependable access.
Advanced Tech	Direct connectivity to the Internet available in all rooms in all schools. Adequate bandwidth to each classroom over the LAN (10/100mb). Easy access for students and teachers including most wireless connectivity to enable interactive presentations and video.	Seamless IP-based infrastructure expanded to K-16 to allow development of high-quality web- and video-based content. Content distribution available for all students and teachers. Archives allow for content review asynchronously and sharing/distribution of these resources.	All rooms connected to Internet via LAN/WAN with significant wireless connectivity at each school with sufficient bandwidth for effective student access. All schools connected to the WAN (100 mb/gb switched network) have sufficient servers and bandwidth for content delivery through resources such as video streaming and conferencing. Students, teachers and parents have easy access to educational resources from home and school (e.g., web portal). --	Fully equipped classrooms with computer/video projectors and technology that will enhance student instruction readily available as above as well as using new and emerging technologies.	Usage authentication added to above for mobile computer and home/external access requirements.

Key Areas
Focus Areas / Levels of Progress
Early Tech
Developing Tech
Proficient Tech
Advanced Tech