



# Three Year Technology Plan

2013-14 through 2016-17

Paulo Freire Social Justice Charter School

161 Lower Westfield Rd

Holyoke, MA

## **Introduction**

This technology plan is a working document outlining the status of and action plan to improve the use of technology within Paulo Freire Social Justice Charter School (PFSJCS). This document will be reviewed annually and action plans adjusted based upon the priority needs identified.

The plan consists of the following major sections; Introduction, Mission Statement, Vision Statement, Assessment, Priority Needs & Action Plan, and Summary.

## **Mission Statement**

The Paulo Freire Social Justice Charter School offers a secondary school alternative for Holyoke and surrounding towns dedicated to academic excellence and following the concepts of social justice espoused by Paulo Freire. PFSJCS will promote powerful, transformative teaching and learning for the development of whole human beings integrated with their communities and dedicated to a just and sustainable society.

## **Vision**

The Paulo Freire Social Justice Charter School will provide a strong intellectual and ethical foundation, enhance self-esteem, increase community and global understanding and involvement, and inspire future leaders for our society. The School will provide a continuous program of growth and development for students, family members, and the entire school community. Paulo Freire will have programs throughout the school year, an extended day, virtual learning programs, adult literacy classes, a summer academy and community building activities. The school will model social justice values and norms, and will build a collective awareness to foster equality and respect for all individuals.

## **Assessment**

This technology plan utilizes the DESE suggested Massachusetts School Technology and Readiness Chart (STAR Chart), to assess the the status of technology within Paulo Freire Social Justice Charter School. For each focus area within the STAR Chart Paulo Freire Social Justice Charter School indicated where they fall on the continuum from “Early Tech” to “Advanced Tech”. The results will provide a roadmap for Paulo Freire Social Justice Charter School to move forward improving technology within the school.

In addition the PARCC Technology Guidelines are applied to Paulo Freire Social Justice Charter School. This will help ensure the school is prepared for the administration of the PARCC assessment.

## STAR Chart

---

Massachusetts Education Technology Advisory Council's (ETAC's) School Technology and Readiness Chart (STaR Chart) is designed to promote best practices in the use of technology in the Commonwealth's schools. Districts can use it to find suggested next steps along the technology continuum to improve teaching, learning, and educational management. It can also be used to inform decision/policy makers about the complexity of the issue and how multiple elements must be addressed simultaneously to ensure the effectiveness of technology implementation and use.

The STaR Chart is organized to address the impact of technology in four broad realms. Each realm contains multiple focus areas that describe a typical progression from early through advanced technology use. Each level builds upon the capabilities of the earlier level.

1. Teaching and Learning
  - Impact of Technology on Teacher Role
  - Patterns of Teacher Use

- Design of Instructional Setting
  - Curriculum Areas
  - Patterns of Student Use
2. Educator Preparation and Development
- Content of Training
  - Capabilities of Educators
  - Leadership of Principals, Teacher Leaders, and District Administrators
  - Models of Professional Development
  - Levels of Understanding
  - Universal Access: Integration of Universal Design and Assistive Technology
3. Administration and Support Services
- Vision and Planning
  - Technical Support (hardware, operating system, network)
  - Technology Integration Specialist
  - Budget Levels
  - Budget Allocated for Technology (Total Cost of Ownership)
4. Infrastructure for Technology
- Universal Design and Accessible Technology Considerations (e.g. Section 508)
  - Students Per Instructional Computer
  - Internet Access Connectivity/Speed
  - E-learning Environments
  - LAN/WAN
  - Other Technologies
  - Safety and Security

## 1. TEACHING AND LEARNING

Row	Focus Areas	Levels of Progress			
		Early Tech	Developing Tech	Proficient Tech	Advanced Tech
(A)	<b>Impact of Technology on Teacher Role</b>	Mostly teacher-centered lectures. Minimal student use of technology in instruction.	Mostly teacher directed learning. Students use technology to work on individual projects.	Mostly teacher-facilitated learning. Students use technology for cooperative projects in their own classroom.	Mostly student-centered learning, teacher as mentor/facilitator. Students use technology to communicate and collaborate outside the classroom.
	<b>School Status</b>			<b>X</b> <b>Students use individual laptops and Chromebooks to both manage individual work as well as work collaboratively through Google Apps for Education</b>	
(B)	<b>Patterns of Teacher Use</b>	85% of teachers use technology as a productivity tool (e.g., email, grades) and/or as a classroom supplement (e.g. drill and practice).	85% of teachers explore using technology to support curriculum goals (e.g. research, lesson planning).	85% of teachers use technology for research, lesson planning, multimedia and graphical presentations and simulations. Teachers share technology uses with colleagues.	85% of teachers integrate evolving technologies that transform the teaching process by allowing for greater levels of access, interest, inquiry, analysis, collaboration, creativity, and content

					production.
	<b>School Status</b>			<p style="text-align: center;"><b>X</b></p> <p><b>Technology and online resources are relied upon heavily for research and lesson planning. Multimedia presentations are integrated throughout the content areas. Teachers use Google Apps to collaborate and share their work</b></p>	
(C)	<b>Design of Instructional Setting</b>	Mostly computer labs or libraries; scheduled use only.	Labs, libraries, many classrooms; flexible scheduling.	Lab, libraries, all classrooms, and portable technology (e.g. wireless laptops or handheld electronic devices); flexible scheduling.	Seamlessly integrated throughout classes and all content areas. Technology is available anytime both in school and within the community.
	<b>School Status</b>			<p style="text-align: center;"><b>X</b></p> <p><b>The entire school is wireless enabled with mobile devices found in all classrooms for student use.</b></p>	
(D)	<b>Curriculum Areas</b>	Limited to teaching technology skills at different grade levels.	Use of technology is minimal in a few curricular areas across grade levels.	Integrated into most Curriculum Framework areas and activities at all grade levels.	Integral to all curricular areas at all grade levels.
	<b>School Status</b>			<b>X</b>	

				<b>Technology, in particular Google Apps, is the foundation for all student work and collaboration - thus technology is integrated into all content areas and grade levels.</b>	
<b>(E)</b>	<b>Patterns of Student Use</b>	Less than half of students show proficiency in all Massachusetts Technology Literacy Standards and Expectations for their grade.	More than half of students show proficiency in all Massachusetts Technology Literacy Standards and Expectations for their grade.	Almost all of students show proficiency in all Massachusetts Technology Literacy Standards and Expectations for their grade.	All students show proficiency in all Massachusetts Technology Literacy Standards and Expectations for their grade.
	<b>School Status</b>	<b>N/A</b> <b>The students have not yet been assessed in relation to the MA Technology Literacy standards</b>			
<b>(F)</b>	<b>Content of Training</b>	Technology skills (email, word processing, Internet browser use, etc.) for teachers' professional use.	Training encompasses more complex professional uses (district applications such as attendance and report cards, scanners, cameras) and curriculum integration strategies.	Training directly ties technology to its use in content areas and how to effectively manage it in the classroom.	Training focuses on modeling mentoring, and adopting new technologies as well as the integration of Universal Design and access considerations for all students.
	<b>School Status</b>		<b>X</b> <b>Training is focused on the core professional uses this year;</b>		



			<b>attendance, grades, parent portal, Smart boards/Smart notebook, Google Apps etc....</b>		
--	--	--	--	--	--

## 2. EDUCATOR PREPARATION AND DEVELOPMENT

		<b>Levels of Progress</b>			
<b>Row</b>	<b>Focus Areas</b>	<b>Early Tech</b>	<b>Developing Tech</b>	<b>Proficient Tech</b>	<b>Advanced Tech</b>
<b>(G)</b>	<b>Capabilities of Educators</b>	100% meet TSAT and/or local district teacher technology competencies and implement them into the school environment.	80% meet TSAT and/or local district teacher technology competencies and implement them into the school environment.	80% meet TSAT and/or local district teacher technology competencies and implement them into the school environment.	80% meet TSAT and/or local district teacher technology competencies and implement them into the school environment.
	<b>School Status</b>	<b>N/A TSAT has not yet been administered</b>			
<b>(H)</b>	<b>Leadership of Principals, Teacher Leaders and District Administrators</b>	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	Supports use of technology in instruction. Uses technology in daily work. Approaching proficiency of national standards for administrators.	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	Promotes exemplary use of technology in instruction. Models and uses in daily work in communication, presentations, online collaborative projects, and management tasks. Develops a school culture

		standards for administrators.		feedback to teachers on their technology use.	that expects all teachers to use technology. Advocates in the community for the integration of technology in instruction. Expects all teachers to use technology well.
	<b>School Status</b>				<b>X</b> <b>The administration supports and values the importance of technology's role in the classroom and educational process. The Administration role models effective use of technology through everyday tasks.</b>
<b>(I)</b>	<b>Models of Professional Development</b>	Whole group, skill-based training with minimal follow-up.	Whole group curriculum-based training with follow-up to facilitate classroom implementation.	Coaching, modeling best practices, district-based mentoring. Involvement in a development / improvement process. Study groups.	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).
	<b>School Status</b>				<b>X</b> <b>All teachers are given an additional prep period to meet with colleagues, do</b>

					<b>peer visits, build integrative curriculum; staff have meetings every morning to share ideas and support teacher development; supervision happens regularly (weekly); and teachers have access to weekly training in ELL and technology</b>
<b>(J)</b>	<b>Levels of Understanding</b>	Most at entry or adoption stage (Students learning to use technology; teachers use technology to support traditional instruction).	Most at adaptation stage (technology used to enrich curriculum). Most beginning to use with students.	Most at appropriation stage (technology is integrated, used for its unique capabilities).	Most at invention stage (teachers discover and accept new uses for technology).
	<b>School Status</b>			<b>X</b> <b>All teachers are using technology daily in every classroom. Most instruction and student activities are based on a foundation of technology resources.</b>	
<b>(K)</b>	<b>Universal Access: Integration of Universal Design and Assistive</b>	Emerging awareness of universal design and assistive technologies (hardware/software) limited to special educators; few examples	Awareness of universal design and assistive technologies (hardware/software) by special educators & some general educators;	Awareness of universal design and assistive technologies (hardware/software) by special educators & most general educators; universal	Systemic adoption of universal design strategies throughout the curriculum and the seamless integration of assistive technology to promote access to the

	<b>Technology</b>	across the district of universal design strategies or assistive technology used to promote access to the general curriculum.	universal design strategies or assistive technology used to promote access to the general curriculum demonstrated across all grade levels.	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.	general curriculum for all students; staff are designated to provide AT assessment, procurement, support (training), and maintenance.
	<b>School Status</b>			<b>X</b> <b>Assistive technology is in place and used to provide access to general curriculum for all students</b>	

### 3. ADMINISTRATION AND SUPPORT SERVICES

		<b>Levels of Progress</b>			
<b>Row</b>	<b>Focus Areas</b>	<b>Early Tech</b>	<b>Developing Tech</b>	<b>Proficient Tech</b>	<b>Advanced Tech</b>
<b>(L)</b>	<b>Vision and Planning</b>	Minimal technology plan; technology used mainly for administrative tasks such as word processing, budgeting attendance, grade book.	The technology plan is aligned with the Massachusetts Technology Plan, and is approved by the School Committee & supported by the Superintendent. Plan collaboratively developed by key	In addition, the Technology Plan is integrated into district plan; used for internal planning, budgeting, applying for external funding and discounts. Teachers and administrators have a vision for technology use in support of student learning, teacher	The technology plan and 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

			stakeholders (e.g., teachers, parents, community members, local business, and individuals with disabilities), guiding policy and practice. Addresses local district teaching and learning standards.	professionalism, and data management.	Superintendent. Technology plan is collaboratively developed, guiding policy and practice; updated at least annually.
	<b>School Status</b>	<b>X</b> <b>Current technology planning is done through the administration with outside consultation assistance.</b>			
<b>(M)</b>	<b>Technical Support (hardware, operating system, network)</b>	Some technical support and minimal support tools to resolve 95% of problems in greater than five days. Problems cause major disruptions to curriculum delivery using technology.	Sufficient technical staff and support tools to resolve 95% of problems in two to five days. Same-day technical support for infrastructure problems by call-in. Problems sometimes cause major disruptions to curriculum delivery using technology. Designated Network Administrator.	Sufficient technical staff and support tools to resolve 95% of problems within two days of problems within two days. Same-day in-classroom technical support available. Problems infrequently cause major disruptions to curriculum delivery using technology. Network administrator.	Sufficient technical staff and support tools to resolve 95% of problems within one day. 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.
	<b>School Status</b>			<b>X</b>	

				<b>Technology support is provided through a combination of in house technology teacher support as well as contracted onsite and remote technology support with on line help desk support.</b>	
<b>(N)</b>	<b>Technology Integration Specialist</b>	No district level Technology Director. Local instructional technology support is inconsistent.	District level Technology Director. One-half instructional technology specialist per 60-120 staff.	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	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.
	<b>School Status</b>			<b>X</b> <b>District level technology director provided through outside consultation. Full time in house technology integration specialist provides support for teaching staff.</b>	
<b>(O)</b>	<b>Budget</b>	Budget for hardware and	Budget for hardware and	Budget for purchases,	Budget for purchases,

	<b>Levels</b>	software purchases and professional development.	software purchases (new and replacement) and professional development, minimal staffing support, and some ongoing costs.	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.	incentives for professional development, sufficient staffing support, and ongoing costs. Appropriate budget to support district technology plan.
	<b>School Status</b>			<b>X</b> <b>Adequate funding exists for technology, support and professional development. In addition, partnerships, donations and other funding sources are leveraged as much as possible.</b>	
<b>(P)</b>	<b>Budget Allocated for Technology (Total Cost of Ownership)</b>	Less than \$175 per student.	Between \$175- \$300 per student.	Between \$300 - \$425 per student	\$425 or more per student
	<b>School Status</b>				<b>X</b>
<b>(Q)</b>	<b>Universal Design and Accessible Technology Considerations (e.g.,</b>	Considerations for universal design and accessible technologies are limited to the Individual Education Program (IEP) process for students with disabilities.	Considerations for universal design and accessible technologies are established in areas of high student use (e.g., libraries, computer labs)	Considerations for universal design and accessible technologies are established in areas of high student use (e.g., libraries, computer labs), some classrooms and	Universal design and accessible technologies considerations are established throughout the district; procurement policies for information

	<b>Section 508)</b>	Procurement policies for information and instructional technologies do not ensure usability, equivalent access or interoperability.	inconsistent implementation of procurement policies for information and instructional technologies that ensure usability, equivalent access, and interoperability.	administrative offices; routine implementation of procurement policies for information and instructional technologies that ensure usability, equivalent access, and interoperability.	and instructional technologies that ensure usability, equivalent access, and interoperability in accordance to the guidelines established by Section 508.
	<b>School Status</b>		<b>X</b> <b>Universal design and accessible technologies are employed where needed for individual students and in areas of high use.</b>		
<b>(R)</b>	<b>Students Per Instructional Computer</b>	10 or more students per Type A or B computer; no firm computer replacement policy established by district.	Fewer than 10 students per Type A and B computer; replacement policy established; one computer per teacher.	Fewer 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 working at home. Most students have access to handheld electronics. Maintains a list of places students can use technology outside of school.	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 working at home. 75% of computers meet Massachusetts A/B standards. School works with community to provide equitable access to technology for student and community members



					after school hours.
	<b>School Status</b>				<b>X</b> <b>The school maintains 1 Type A computer per student with a 5 to 6 year replacement cycle.</b>

#### 4. INFRASTRUCTURE FOR TECHNOLOGY

		<b>Levels of Progress</b>			
<b>Row</b>	<b>Focus Areas</b>	<b>Early Tech</b>	<b>Developing Tech</b>	<b>Proficient Tech</b>	<b>Advanced Tech</b>
(S)	<b>Internet &amp; WAN Access, Connectivity, and Speed</b>	Dial-up connectivity to the Internet available only on a few computers.	Direct connectivity to the Internet available at each school and in most rooms. Adequate bandwidth to the school to avoid most delays.	District Internet connection of 10 Mbps per 1,000 students and staff district-wide. School connection to district WAN of 100 Mbps per 1,000 students/staff to avoid most delays. Easy access for students and teachers, including some wireless.	District Internet connection of 100 Mbps per 1,000 students and staff district-wide. School connection to district WAN of 1,000 Mbps per 1,000 students/staff. Easy access for students and teachers including most wireless connectivity to enable interactive presentations and video.
	<b>School Status</b>				<b>X</b> <b>The school currently</b>

					<b>maintains a 20Mbs connection to the internet for 150 students. In addition all areas of the school have adequate wireless coverage and bandwidth.</b>
<b>(T)</b>	<b>E-Learning Environments</b>	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.	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).	Building upon Developing Tech, 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, etc.	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.
	<b>School Status</b>	<b>X</b> <b>Limited interactive learning environments provided currently. School is beginning to explore and integrate additional online learning opportunities for both the</b>			

		<b>students and staff professional development.</b>			
<b>(U)</b>	<b>LAN</b>	Limited print/file sharing network at each school for lab, administration, and some classrooms. Some shared resources and some secure storage space. Minimum 10/100 Mbps Cat 5 hubbed network.	Most rooms connected to Internet via WAN and wireless connectivity where possible at each school with student access. Minimum 10/100 Mbps Cat 5 switched network. Basic servers for sharing some resources at each school.	All rooms connected to Internet with significant wireless connectivity at each school with sufficient bandwidth for effective student access. Minimum 100 Mbps Cat 5e switched network. District-owned servers or cloud computing provides secure storage, backups, applications, schedule, email, and website. Students, teachers and parents have easy access to educational resources from home and school (e.g., web portal).	All rooms connected to Internet with significant wireless connectivity at each school with sufficient bandwidth for effective student access. Minimum 100 Mbps/1 Gbps Cat 5e/6 switched network to classroom. Different services (data, phone, video, guest access, etc.) on different virtual LANs. All schools have sufficient 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).
	<b>School Status</b>				<b>X</b> <b>School maintains a new LAN infrastructure delivering 100/1000 Mbs to every</b>

					<b>classroom &amp; office space along with managed wireless throughout the campus</b>
<b>(V)</b>	<b>Other Technologies</b>	Shared teacher use of resources such as telephone, TVs, VCRs, DVD players, and classroom sets of programmable calculators.	Shared use of resources such as telephone, computer video projectors, or interactive white boards, classroom sets of programmable calculators, digital cameras, and scanners.	Dedicated and assigned use of common technologies such as telephone, computer video projectors, or interactive white boards. Programmable calculators assigned to each student as needed. In each school, there is shared use of specialized technologies, digital cameras, scanners, handheld electronic devices.	Readily available fully equipped classrooms with computer/video projectors, interactive whiteboard, and other technology to enhance student instruction. Use of new and emerging technologies.
	<b>School Status</b>				X All classrooms are equipped with adequate technology to support instruction; computer, projector, interactive whiteboard.
<b>(W)</b>	<b>Safety and Security</b>	Backup and restoration procedures and virus protection to guard individual computers. District-wide acceptable use policy in place.	Basic firewall protection and diligent upgrading of network vulnerabilities added to protect against external threats. Protection against a wide range of malware (viruses, worms,	To Developing Tech, add adequate network and server availability protection for expanded capabilities and to ensure dependable access. Protection of workstations from internal network attacks. Encryption of	Usage authentication added for mobile computer and home/external access requirements. Use of virtual LANs (VLANs) to protect network infrastructure and

			Trojans, rootkits), adware, and spyware. District-wide responsible use policy in place, as well as policy on connecting student/staff-owned devices to school network.	sensitive personal data on local networks. Network supports board policy on connecting student/staff-owned devices (guest devices) on the network.	sensitive data. If guest devices are allowed on the network, guest traffic is on an isolated VLAN and/or guest devices are checked for currency of anti-virus software and operating system security patches.
	<b>School Status</b>		<b>X</b> <b>District supported firewall in place to protect all school and personal devices attached to the network.</b>		

## PARCC Readiness

Below are the PARCC Readiness guidelines along with Paulo Freire Social Justice Charter School's current status for each guideline.

<b>BANDWIDTH</b>	<b>Minimum</b>	<b>Recommended</b>	<b>Paulo Freire Social Justice Charter School</b>
External Connection to Internet	TBD	100 kbps per student or faster	The school meets or exceeds this guideline
Internal School Network	TBD	1000 kbps per student or faster	The school meets or exceeds this guideline

### Desktop, Laptop, Netbook, and Thin Client/VDI Computers

<b>Operating System</b>	<b>Minimum</b>	<b>Recommended</b>	<b>Paulo Freire Social Justice Charter School</b>
Windows	Win XP SP 3	Win 7 or newer	The school meets or

			exceeds this guideline
Mac OS	Mac OS 10.5	Mac OS 10.7 or newer	Does Not Apply
Linux	Ubuntu 9-10, Fedora 6	Linux, Ubuntu 11.10, Fedora 16 or newer	Does Not Apply
Chrome	Chrome OS 19	Chrome OS 19 or newer	The school meets or exceeds this guideline
Memory	512 MB RAM	1 GB RAM	The school meets or exceeds this guideline
Connectivity	Computers must be able to connect to the Internet via wired or wireless networks.	Computers must be able to connect to the Internet via wired or wireless networks.	The school meets or exceeds this guideline
Screen Size	9.5 inch screen size or larger	9.5 inch screen size or larger	The school meets or exceeds this guideline
Screen Resolution	1024 x 768 resolution or better	1024 x 768 resolution or better	The school meets or exceeds this guideline
Input Device Requirements	Keyboard Mouse or Touchpad or Touchscreen	Keyboard Mouse or Touchpad or Touchscreen	The school meets or exceeds this guideline

Headphone/Earphone & Microphones	Headphones/Earphone & Microphone	Headphones/Earphone & Microphone	The school may need to acquire headphones & microphones
----------------------------------	----------------------------------	----------------------------------	---

#### Additional Guidance

- Each computer operating in a thin client environment must meet or exceed minimum hardware specifications, as well as bandwidth and security requirements.
- Computers meeting only the minimum specifications for the 2014-2015 assessment are not likely to be compatible beyond the 2015-2016 assessment. PARCC recommends that schools upgrade from the oldest operating systems and lowest memory levels as soon as possible.
- Windows XP will no longer be supported by Microsoft after April 8, 2014, presenting security and support risks for schools. (<http://windows.microsoft.com/en-US/windows/end-support-help>)
- Computers running Windows XP-Service Pack 3 may require a web browser other than Internet Explorer due to HTML5 compatibility limitations. PARCC will issue specific web browser guidance by October 2013.
- Computers must accommodate the 1024 x 768 screen resolution minimum without panning. PARCC recognizes that some netbook computers may have screen resolutions slightly less than the 1024 x 768 minimum, yet may meet all other minimum requirements. Depending on netbook model specifics, school technology administrators may be able to reset screen resolution to meet PARCC guidelines. By October 2013, following final test design, PARCC will establish a means for schools to evaluate if particular netbook devices are able to display PARCC assessment items without requiring students to scroll or pan.



## TABLETS

Operating System	Minimum	Recommended	Paulo Freire Social Justice Charter School
Android	Android 4.0 (with 512 MB RAM or greater)	Android 4.0 (with 1 GB RAM or greater)	Does Not Apply
Apple iOS	iPad 2 running iOS 6 (with 512 MB RAM or greater)	iPad 2 running iOS 6 (with 512 MB RAM or greater)	The school meets or exceeds this guideline
Windows	Windows 8 (with 512 MB RAM or greater)	Windows 8 (with 1 GB RAM or greater)	Does Not Apply
Memory	By Operating System	By Operating System	The school meets or exceeds this guideline
Connectivity	Computers must be able to connect to the Internet via wired or wireless networks.	Computers must be able to connect to the Internet via wired or wireless networks.	The school meets or exceeds this guideline
Screen Size	9.5 inch screen size or larger	9.5 inch screen size or larger	The school meets or exceeds this guideline

Resolution	1024 x 768 resolution or better	1024 x 768 resolution or better	The school meets or exceeds this guideline
Input Device	Keyboard Touchscreen or Mouse	Keyboard Touchscreen or Mouse	If tablets are used for assessment external keyboards & mice may be required
Headphone/Earphone & Microphone	Headphones/Earphone & Microphone	Headphones/Earphone & Microphone	If tablets are used for assessment external keyboards & mice may be required

#### Additional Guidance

- PARCC has not yet evaluated the compatibility of Windows RT for 2014-2015. Further information will be issued on Windows RT in Version 3.0 of the PARCC Guidelines.
- Smaller tablets (screen size less than 9.5"), e-readers, and smart phones will not be supported and will not be compatible with PARCC assessments for 2014-2015.

## Priority Needs & Action Plan

Being a new charter school opening in September 2013, Paulo Freire Social Justice Charter School has emphasized, and supported through many resources, the availability of technology to all students and staff. The result is a well designed and implemented infrastructure and footprint of technology tools throughout the school and in every classroom to support teaching & learning.

The STaR chart reflects a solid foundation of technology tools, infrastructure and bandwidth. The areas that need the most attention focus on teacher professional development and best practices for integrating the technology into the curriculum.

Below is a list of benchmarks where Paulo Freire Social Justice Charter School landed in the “Early Tech” or “Developing Tech” category. These are areas that will require action plans in the 2013/14 school year to improve upon by September 2014;

### Teaching & Learning

#### Patterns of Student Use

**EARLY TECH - Less than half of students show proficiency in all Massachusetts Technology Literacy Standards and Expectations for their grade.**

As a new school PFSJCS has not yet assessed any students on the MA Technology Literacy Standards. This will begin in the spring of 2014.

#### Content of Training

**DEVELOPING TECH -Training encompasses more complex professional uses (district applications such as attendance and report cards, scanners, cameras) and curriculum**

## **integration strategies.**

As a startup school, the staff training is focused on the core professional uses this year; attendance, grades, parent portal, Smart boards/Smart notebook, Google Apps etc. Throughout the 2014 school year staff development will begin to focus more on the integration of core technology tools into specific content areas.

## Educator Preparation and Development

### Capabilities of Educators

**EARLY TECH - 100% meet TSAT and/or local district teacher technology competencies and implement them into the school environment.**

The TSAT has not yet been administered to teachers. This will be completed during the 2013/14 school year.

## Administrative and Support Services

### Vision and Planning

**EARLY TECH - Minimal technology plan; technology used mainly for administrative tasks such as word processing, budgeting, attendance, grade book**

Currently technology planning is done through the administration with assistance from outside consultation. Over the 2013/14 school year additional staff will be brought into the technology planning process to ensure all aspects of technology use are adequately considered when planning.

Universal Design and Accessible Technology Considerations (e.g., Section 508)

**DEVELOPING TECH - Considerations for universal design and accessible technologies are limited to the Individual Education Program (IEP) process for students with disabilities. Procurement policies for information and instructional technologies do not ensure usability, equivalent access, or interoperability**

**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.**

Over the 2013/14 school year the school will implement procurement policies and procedures to ensure interoperability and equitable access are considerations.

Infrastructure for Technology

E-Learning Environments

**EARLY TECH - 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.**

There are limited interactive learning environments provided currently. School is beginning to explore and integrate additional online learning opportunities for both the students and staff professional development.

## Safety and Security

**DEVELOPING TECH - Basic firewall protection and diligent upgrading of network vulnerabilities added to protect against external threats. Protection against a wide range of malware (viruses, worms, Trojans, rootkits), adware, and spyware. District-wide responsible use policy in place, as well as policy on connecting student/staff-owned devices to school network.**

Basic protection is in place. Over the next year the school will expand security measures to include policies and procedures addressing all mobile devices; both school owned and personal. In addition the school will take additional measures to ensure all student data is secure and encrypted wherever it exists.

## **Summary**

Being a new school with emphasis being placed on equal access to adequate technology Paulo Freire Social Justice Charter School is resourced well with respect to technology. All Classroom are outfitted with a suite of technology that included an interactive whiteboard, Projector, Sound system and instructor computer. All staff are assigned laptops and all students have access to either a Chromebook or a laptop.

The schools infrastructure is new and provides more than adequate bandwidth for the current student population, including wireless access throughout the school.

The areas that the Paulo Freire Social Justice Charter School need to focus on and improve upon over the next one to three years have to do with the leveraging the rich resources of technology to support teaching and learning. The STaR chart evaluation identifies this need and the specific areas to be addressed are outlined in the previous section.

Paulo Freire Social Justice Charter School is well positioned to become a model school for the leveraging technology to support teaching and learning. This three year plan will become the roadmap to successful technology implementation.