

Francis W. Parker Charter Essential School Technology Plan
September, 2010-June, 2015
(Updated January, 2011)

Vision and Implementation Strategies

The Parker School seeks to integrate the use of technology into all aspects of the life of the school in order to enhance teaching and learning, promote effective communication and decision-making in the school, and provide students with the skills required in our technology-dependent society. Students use technology across the curriculum for research, communication, problem solving, and to foster critical thinking and analysis skills. Teachers are expected to use technology effectively in their own work and in their work with students and to receive training appropriate to that end. The school provides ready and equal access to technology for all students, faculty and staff.

Specific technology goals for 2010-2015 include:

- Updating and replacing aging technology and upgrading network infrastructure
- Redesigning the Parker website
- Creating and implementing an intranet to increase web-based instructional support in all classrooms
- Creating an efficient electronic Helpdesk system
- Selecting and implementing a student information system
- Creating a print management system to reduce costs and be more “green”
- Changing the power scheme for effective backup of critical core technology infrastructure
- Overhauling the phone system for better connectivity in the building, and eliminating unused voice mail accounts

The Parker School is committed to achieving the vision represented by this plan and to modifying this plan based upon ongoing future evaluations.

The Parker School’s Technology Team consists of: the Technology Coordinator, the Principal, the Librarian, and a cross-section of faculty. It is the responsibility of the Technology Team to ensure the school’s compliance with the Children’s Internet Protection Act requirements, to evaluate the effectiveness of the school’s technology program, and to make recommendations for the continued development of technology resources.

Needs Assessment

The school monitors the technology marketplace for improvements in the features of products used at the school, in order to improve teaching and learning. Needs

assessments are continually evaluated by the Technology Coordinator and a supporting technology support team.

Parker currently has three computer labs throughout the building. Each classroom is outfitted with at least one PC. Projectors are also located in 75% of the classrooms. All of Parker's computers are connected to the network and the internet. Wireless internet connectivity is also available to the entire school. Two mobile laptop carts are used to transform any classroom into a virtual computer lab. All students and staff have a secured personal folder on the server that is backed up on a nightly basis.

The Parker school has identified several key needs that will be addressed over the next few years.

- The school needs a standardized Student Information System. The school currently has several disjointed databases that result in multiple overlapping data structures and difficult reporting abilities.
- The school's website needs to be redesigned. In conjunction with this the implementation of a community Intranet will also be necessary.
- Computers at the school are currently 4-5 years old and are at the end of life. These systems will need to be replaced. The school is utilizing a virtualized desktop model as the systems are strategically replaced.
- The school will build a media lab available to students for the development of audio and video presentations.
- The Parker wired network will be upgraded to full 1000 MB/s speed connected to each computer. The wireless network will be upgraded to the 802.11n standard as well.
- Implementation of additional computer carts, computer labs, and projectors are also planned for the next few years.

Technology Budget:

The school has budgets for its technology plan FY 2010 – FY 2011 with line items for technology in its operational budget. The budget includes staffing, professional development, and support. Internet services and telephone support are in the technology budget. Telephone services are not included in the technology budget. (See Appendix A for detailed budgets.)

The school has applied for E-rate reimbursement. The technology plan is not dependent on discounts and reimbursements provided by E-rate.

Evaluation:

The school used informal surveys to evaluate the effectiveness of its technology resources through 2010 and will do a formal faculty survey in 2011. The Technology Team will provide monthly feedback to monitor progress in achieving technology goals and to make mid-course corrections in response to new developments and opportunities as they arise. For instance, when the mobile laptop cart was first

introduced, the use of the cart grew exponentially, and it was clear that another cart would enhance instruction and increase full-class computer access. The technology coordinator was able to adjust and budget for the purchase of another cart without waiting for a formal use survey.

Technology Integration and Literacy

In the previous Technology Plan FY 2004 – FY 2007 the Parker School adopted benchmarks for technology use within the school which were achieved by June, 2007. The benchmarks for computer literacy will be reviewed and updated over the next three years. The benchmarks for hardware and software will be revised to reflect advancing state-of-the-art standards. The Technology Team continually evaluates the use of technology in and out of the classroom.

Technology Integration

Outside teaching time: At least 90% of Parker teachers use technology every day, including some of the following areas: lesson planning, administrative tasks, communications, and collaboration. Teachers share information about technology uses with their colleagues during common planning time in professional learning communities. It is mandated that teachers shall read and respond to email daily.

For teaching and learning: At least 90% of Parker's teachers use technology appropriately with students each week, including some of the following areas: research, multimedia, simulations, data interpretation, communications, and collaboration. With the creation of the Parker intranet, this will increase to 90% of teachers using technology daily in their instruction.

Technology Literacy

Faculty are currently reviewing the Massachusetts Recommended PreK-12 Instructional Technology Standards for Grade 8, with the goal of establishing clear expectations for proficiency in the Seventh Seminar course that all entering students take. Each academic domain will plan instruction around different technologies that they use in their programs.

100% of teachers are working to meet the proficiency level in technology, and by the school year 2014-2015, 90% of teachers will have mastered 90% of the skills in the Massachusetts Technology Self-Assessment Tool (TSAT).

Staffing

The school has a full-time equivalent (1 FTE) Technology Coordinator who also serves as an instructional technology specialist for the school. Instructional technology support is also provided by the Technology Team whose members agree to field test new technologies and to provide support to their colleagues. Together with the Technology

Coordinator they identify instructional technology needs and resources for professional development. The school's Academic Dean oversees data management and assessment. The school has three administrative assistants who share the management of the school's data and assessment, FTE .5.

The school's librarian (.5 FTE) manages the school's library and information resources, and provides direct instruction to students on the use of technology information. Instruction on the use of computers is provided to students by their classroom teachers across the curriculum.

Technology Professional Development

All faculty at Parker have two hours of common planning time daily with their colleagues, and they use this time in professional learning communities to plan quality curriculum, instruction, and assessment for their students. Professional development is embedded in this planning time to ensure successful implementation of new technologies in the program. Members of the school's Technology Team will be "early adopters" of new approaches, and will directly support and mentor their colleagues in learning to use new technologies in the classroom. With eight hours of common planning every week, at least 90% of staff will participate in 25 hours of high-quality technology professional development covering technology skills and the integration of technology into instruction. Technology professional development will be sustained and ongoing and include coaching, modeling best practices, mentoring, and study groups. Professional development planning by the Tech Team will include formal and informal assessment of district and teachers' needs, including assessment based on the competencies listed in the Massachusetts Technology Self-Assessment Tool.

Accessibility of Technology

Students per Instructional Computer

The school maintains an average ratio of three students per high-capacity, Internet-connected computer. Based on recent trends the school anticipates that an increase in the use of personal laptops at the school will increase overall usage of computers as Parker.

The school provides students access to portable and/or handheld electronic devices appropriate to their grade level. The school provides AlphaSmarts to students for classroom and home use.

The school permits students to use their personal laptops in school for academic purposes. This increases the inventory of Instructional Computers available to students. Wireless connectivity to the network and internet are provided to each of these.

The school has deployed a standardized universal desktop design for school workstations regardless of make, model, or year of procurement, in order to maximize

access to the general education curriculum for all students. Attention is given to the special needs of students with disabilities, beginning with a needs evaluation at the beginning of students with disabilities first month at Parker.

The school continually evaluates the advancing technology state-of-the-art for means to increase usability, equivalent access, and interoperability.

Internet Access

The school provides wired and wireless connectivity to the Internet in all classrooms in the school.

The school provides bandwidth of at least 100 Mb/s to each classroom. The school plans to increase wired bandwidth in classrooms to 1000 Mb/s by FY 2011. All computers procured since 2005 are capable of handling 1 Gb/s wired network connections.

Networking (LAN/WAN)

The school has a 1 GB/s fiber switched network backbone.

The school provides services for secure file sharing, backups, scheduling, email, and web publishing, internally and through contracted services.

Access to the Internet Outside the School Day

The school works with families to ensure that students have access to the Internet outside of the school day. The school provides about 10 hours per week before and after school access for students to computers and the library.

The school maintains an up-to-date web site that includes information on resources for parents and members of the community. (See <http://www.parker.org>)

Staffing for Technical Support

The school's Technology Coordinator serves as the school's full-time network administrator.

The school makes a commitment to provide timely in-classroom technical support with clear information on how to access the support so that technical problems will not cause major disruptions to curriculum delivery.

The Technology Coordinator teaches and supervises students who provide technology support during the school day. The student group is known as the tekru.

Virtual Learning and Communications

Faculty regularly use web-based and interactive video learning from sources on the Internet. The creation of a Parker intranet will encourage teachers to further incorporate wikis, blogs, and other interactive approaches in their instruction.

The school maintains an up-to-date web site that includes information on resources for parents and members of the community. (See <http://www.parker.org>)

Safety and Security

Parker has an acceptable use policy regarding internet and network use that applies to all students and staff. Students learn about appropriate online behavior in Seventh Seminar and in their Wellness classes. The school complies with federal and state law for archiving electronic communications produced by its staff and students (all email in and out of the Parker system is archived for ten years). The school informs staff and students that any information distributed over the district or school network may be a public record. (See Appendix B Parker Computer Use Policy)

Appendix A: Technology Budgets

| TECHNOLOGY OPERATING BUDGET REQUEST | | | | |
|---|---|---------------------|--|--------------------|
| FISCAL YEAR 2011 | | | | |
| JULY 1, 2010 TO JUNE 30, 2011 | | | | |
| | Prepared by: | Travis Young | Date: | 25-Jan-2010 |
| Qty. | Item: | | Unit Cost | SubTotal |
| | | | | Totals |
| Summer tekru help | | | | |
| 200 | hours - Summer tech maintenance & infrastructure upgrades (7 - 30 hour weeks) | | \$8.82 | \$1,764.00 |
| 14 | hours - NTC room preparations, summer reading program room preparations | | \$8.82 | \$123.48 |
| | | | Total, for Summer tekru help | \$1,887.48 |
| Small Equipment | | | | |
| 1 | Miscellaneous small items | | \$3,307.50 | \$3,307.50 |
| 22 | New Terminal Computers | | \$225.00 | \$4,950.00 |
| 30 | Computer Software Licencing Packages | | \$125.00 | \$3,750.00 |
| 4 | Large printers (replacements and additions) | | \$661.50 | \$2,646.00 |
| 4 | Small printers (replacements and additions) | | \$330.75 | \$1,323.00 |
| | | | Total, for Small Equipment | \$15,976.50 |
| Equipment maintenance | | | | |
| 8 | Equipment replacement due to failure | | \$200.00 | \$1,600.00 |
| 1 | Printer maintenance - (outside service inspect, clean, replace parts) | | \$5,512.50 | \$5,512.50 |
| 1 | Basic Maintenance for Internal Connections (Mitel PBX 12 months) | | \$3,360.00 | \$3,360.00 |
| | | | Total, for Equipment Maintenance: | \$10,472.50 |
| Facilities maintenance | | | | |
| 1 | Additions and/or alternations to network wiring | | \$1,700.00 | \$1,700.00 |
| 1 | Contrator service fee's for PBX rewiring | | \$2,725.00 | \$2,725.00 |
| | | | Total, for Facilites Maintenance | \$4,425.00 |
| Media supplies (assumes printer cartridges and paper in other budgets) | | | | |
| 1 | Tape backup media | | \$1,205.00 | \$1,205.00 |
| 1 | CDROM, diskette, memory stick | | \$275.63 | \$275.63 |
| | | | Total, for Media Supplies: | \$1,480.63 |
| Software Maintenance agreements | | | | |
| 175 | Symantec Endpoint Protection Maintenance agreement w upgrade insurance | | \$22.00 | \$3,850.00 |
| 1 | Firewall Support Contract | | \$200.00 | \$200.00 |
| 1 | Firewall Update Subscription | | \$100.00 | \$100.00 |
| | | | Total, for Software | \$4,150.00 |
| Internet subscription | | | | |
| 12 | High Speed 22Mbps DSL Comcast data link to Internet | | \$150.00 | \$1,800.00 |
| 12 | 1 GB web hosting (\$40/mo) (100MB web hosting free with MECnet subscription) | | \$55.00 | \$660.00 |
| | | | Total, for Data Link subscriptions: | \$2,460.00 |
| | | | | ===== |
| | | | TOTAL: | \$40,852.11 |

Appendix B: Parker Computer Use Policy

Parker Computer Use Policy

The Parker School offers Internet access to its students, faculty, and staff. Access to the school network and Internet service is a privilege, not a right. The intent of this policy is to ensure that users utilize this access in a manner consistent with the purpose of providing this Internet service.

As a member of the Parker School community, I will

- Respect the privacy, safety and confidentiality of myself and others by neither disclosing nor disseminating personal information on the Internet. This shall include email, chat rooms, and all forms of direct Internet communications.
- Respect computer and network equipment. I will not alter or access computer or network configurations without the knowledge and consent of the Network Administrator(s).
- Not download or install software, music or other programs from the Internet onto a school computer.
- Understand that software piracy is a federal offense, and that Parker's network may not be used for copying, downloading, distributing, or storing commercial software not licensed by the Parker School.
- Abide by copyright laws and not plagiarize the works of others.
- Understand that I am a representative of Parker on the Internet and so will display the tact, control, and respect necessary to maintain credibility and respectability for both the school and myself.
- Understand that I am responsible for all activity on my account, even if I am not the one behind the keyboard; and for this reason I will keep my account secure and not share my password with anyone else. I will not knowingly use some else's computer account.
- Understand that Parker is an educational community, and that as such our educational function is our paramount mission. Therefore I will defer my recreational activities to times outside academic hours and to any fellow students or staff needing access for academic work or projects.

- Understand that my actions on the Internet can have far-reaching consequences. I will therefore make deliberate decisions not to engage in behavior that might adversely affect the safety, security, or well-being of myself or be perceived by harassment by others.
- Abstain from accessing inappropriate web sites or computer games that include pornography, obscene images or language or are considered harmful to minors as defined by the Children’s Internet Protection Act (aka CIPA).
- Ask questions regarding computer procedures when I do not know how to do something. Further, if I am unsure of what the consequences of a particular process might be, I will ask before acting.

It should be further understood that users of Parker computing and networking resources cannot assume absolute privacy. Users should expect that network connections will be monitored and computer files may be inspected.

Comments:

CIPA requires that all computers in a school or library must install and use Internet filters to protect users against visual depictions that are harmful, as defined by the Act. Minors, defined as children under the age of 17, cannot for any reason, request that the filters be turned off.

The Parker School has installed filters to comply with this mandate. In addition, faculty members do monitor student use of the computers, and proactively guide students to make appropriate choices. The School, however, does not warrant the effectiveness of the Internet filter and cannot be held liable for damages.

Violations of this policy include but are not limited to:

- *Deliberate access to inappropriate material on the Internet and World Wide Web*
- *Unauthorized online access including “hacking” and other unlawful activities*
- *Unauthorized disclosure, use, and dissemination of personal information*
- *Persistent non-academic use of e-mail, chat rooms, and instant messengers*

The Parker School may, at the direction of the Principal, activate automated measures designed to restrict minors’ access to materials harmful to minors

The Parker School reserves the right to deny, revoke or suspend specific user privileges and/or to take other disciplinary action, including suspension or expulsion from school, for violations of this policy. Additionally, all handbook regulations apply to the use of the school’s Internet service. In the event that there is a claim that a student has violated any of the guidelines in this policy he or she will be provided with written notice of the suspected violation and an opportunity to be heard. The Parker School will advise appropriate law enforcement agencies of illegal activities

conducted through the school's Internet service. The Parker School also will cooperate fully with local, state and/or federal officials in any investigation related to any illegal activities conducted through the school's Internet service.