



Parkway School District

2006-2010 Technology Plan Update

**BOE Approved
2/22/06**

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Introduction

The Parkway School District covers 68 square miles in western St. Louis County. As the third largest school district in the county, Parkway serves an enrollment of 18,994 students in 28 schools. In addition, approximately 4,500 families receive services through the district's Early Childhood Center each year. Parkway has eighteen elementary schools, five middle schools and five high schools, including a non-traditional high school for students who require a more individualized setting.

The total population of the Parkway School District is 141,896. The average household income in the district is \$95,704, and the average home price is \$225,932. The work force in Parkway is made up of the following categories: management and professional, 55.1 percent; sales and office, 29 percent; service, 8.3 percent; production, transportation and material moving, 4.4 percent; and construction, extractions and maintenance, 3.1 percent. The educational attainment of residents over 25 years of age is: high school grad/GED, 14.3 percent; bachelor's degree, 34.2 percent; master's degree, 14.6 percent; graduate or professional degree, 22.4 percent.

Community support is an important part of education in Parkway. Parents and citizens contribute to the district through more than 14 different advisory boards and organizations. These include Parkway's Board of Education, parent teacher organizations, the Education Foundation, and the Alumni Association, which supports the over 60,000 Parkway graduates as well as the students of today. All of these groups, as well as the Parkway faculty and staff, strive to meet the mission of the district, "To reach and teach each student, all students, every day, together."

Parkway schools have been repeatedly honored for academic excellence. The U.S. Department of Education has recognized 14 Parkway schools with its Blue Ribbon Award for Excellence in Education. On the state level, the Missouri Department of Elementary and Secondary Education (DESE) has recognized Parkway for "Distinction in Performance" for the past four years.

Students in Parkway achieve great things, as schools consistently rank in the state's top 10 in performance on Missouri state MAP individual subject tests. In 2005—2006 Parkway had more National Merit Semifinalists than any other public school district in the area.

Parkway's last full MSIP review was in January of 2001, and the district has received MSIP waivers each of the last two years. In April of 2006 Parkway will be reviewed on a limited number of MSIP elements.

The last official CSIP for Parkway is the 2000-2005 plan. The district has provided annual updates in each of the last two years for the plan and is now preparing further updates in conjunction with the upcoming MSIP review.

Technology Profile- Present Situation

The District has in place a large scale Local Area Network (LAN) that connects all of the various campuses back to a central data center located at the Administration Building. This data center houses a variety of equipment that provides network-based services, servers and file storage devices, as well as, providing routing functions and Internet connectivity (45 Mbps Ethernet) throughout the District. In addition, the Central Campus data center houses the District's primary telephone switch and voicemail system. Connectivity for both the data and telephone/voicemail service is provided through District owned and maintained fiber optic cable. This fiber optic cable network is comprised of approximately 40 miles of single-mode fiber optic cable that runs along the public right-of-ways connecting all the campuses. The fiber network has been constructed in a manner that electrically divides and groups the various campuses into six "rings". Utilization of the fiber network is further enhanced by the use of course wave optical multiplexing technology that allows data (at 1Gbps) and telephone traffic (at OC-12) to co-exist over the same physical fiber strand while remaining electrically and operationally separate.

The various campuses are equipped and designed to support this scheme. Each individual campus has a core data switch and telephone switch that directly connects to one of the fiber rings. By providing each campus with data and telephone switches, a wider and more flexible range of technology services may be employed. Classroom and office spaces are wired to support both digital telephones (Cat 3) and 10/100 baseT Ethernet (Cat 5/5e). Some data closets and computer labs have upgraded wiring (Cat 6) to allow for 1000baseT Ethernet connectivity. The computers themselves are a mix of Windows PC's (XP/2000) and Apple (OS X/9) machines with the Apple machines dominating the mix. In addition to the hard-wired workstations, a number of mobile Apple laptop carts, using Apple's Airport technology, are also in use.

The District employs a variety of cellular, cellular direct-connect, and alpha/alpha-numeric paging services to establish rapid communications with school & district administrators, curriculum/staff development, security, and facilities personnel. Wireless services enhance the overall effectiveness of the teaching staff by allowing for immediate contact of essential leadership and curriculum personnel to resolve potential problems before they become disruptive to the educational effort.

Overview of Parkway's Technology Plan

Technological literacy includes computer skills and the ability to use computers and other technology to improve learning, productivity, and performance. These technology skills are as fundamental to a person's ability to navigate through society as traditional skills like reading, writing, and arithmetic. Students graduating this year, next year, and in ten years will quickly step into a rapidly changing, high-tech environment. Most people agree it is essential that students acquire the skills and knowledge necessary to succeed in that environment. So how do we help our students become technologically literate and ensure they have the skills needed to become productive members of society?

To help achieve this goal, we have prepared the following District Technology Plan. The Plan uses the Missouri DESE Rubric, Show Me Standards, MSIP, as well as Parkway's CSIP, Mission Statement, and Guiding Principles as its foundation.

The Technology Plan focuses on five technology focus areas (TFA):

1. Student learning as it relates to the Show Me Standards, including technology literacy
2. Teacher preparation and delivery of instruction
3. Administration/data management/communication
4. Resource distribution and use
5. Technical support

The objective of the plan is to identify key issues, assess our current situation, and provide recommended actions and costs (where appropriate) that will help us accomplish our goals.

The target audience is everyone who will contribute to our efforts to prepare students for the 21st century. Individual schools can also use this "blueprint" as they make their annual plans for integrating technology to enhance student academic achievement.

The planning effort is an ongoing learning process and we will continue to refine and revise the plan as new information becomes available. The Parkway School District views technology as a way to make learning more vibrant, exploratory, investigative, timely, and genuine.

Technology Planning Committee

Parkway School District's Technology Planning Committee is comprised of students, teachers, librarians, administrators, technology department staff, parents, and community members. The planning committee members have varying expertise, which allowed us to address all five Technology Focus Areas (TFAs) effectively.

Organizing a technology planning committee for the Parkway School District is difficult because of its geographic size and the work schedules and responsibilities of the committee members. To avoid scheduling conflicts and provide the ability to plan 24 hours a day, an online planning forum was created. Using an online forum was a new experience for many of the members but it turned out to be a success. The forum allowed us to share ideas, data, documents, links, and other helpful information to assist in the planning process. In addition to our online forum, committee members met in smaller, TFA specific groups, to plan for improving each TFA.

Technology Planning

Over the past three years, the Core Technology Committee has monitored and guided the implementation of our previous plan's objectives and action plans. During that time, our network infrastructure was greatly improved and a process for developing building technology plans was created and implemented. With the improvements to our network and school technology plans, we have the infrastructure, technology resources, and plans in place to fully integrate technology into the curriculum.

As we started planning for the 2006-10 plan, the committee's first responsibility was to review what we had accomplished since our last plan was submitted in 2003. After reviewing our previous plan's progress, committee members analyzed a significant amount of data to determine strengths and weaknesses for each Technology Focus Area. When strengths and weaknesses were identified, Parkway's 2006-10 technology objectives and action plans were developed. The objectives and actions plans are aligned with CSIP, MSIP and Show Me Standards to ensure we are meeting the needs of our student population and community.

Table 1: Technology Planning Committee Members

Name	Affiliation	Category	TFA
Barrett, John	North High School	Teacher	1, 2
Baumann, Eric	West High School	Student	1
Bender, Shannon	Northeast Middle	Teacher	1, 2
Blackmore, Kathy	Instructional Service Center	Director of Curriculum and Development	1, 2
Bradley, Gary	Technology Department	Project Manager	3, 4, 5
Bradley, Ward	Southwest Middle School	Teacher	1, 2
Brandon, Kim	Northeast Middle School	Middle School Principal	1, 2
Bross, Dave	West High School	High School Asst. Principal	1, 2
Brown, Marilyn	Oak Brook Elementary	Computer Resource Specialist	2, 3, 4, 5
Bunton, David	South High School	Student	1
Burger, Shannon	River Bend	Teacher	1, 2
Coates, Dan	North High School	Director of Program Evaluation	1, 2, 3
Crandall, Karen	Wren Hollow Elementary	Teacher	1, 2
Currington, Denise	Sorrento Springs Elementary	Teacher	1, 2
Dudenhoeffer, Julia	Bellerive Elementary School	Teacher	1, 2

Table 1: Technology Planning Committee Members continued

Name	Affiliation	Category	TFA
Eikel, Randy	West Middle School	Middle School Asst. Principal	1, 2
Fitter, Amy	Shenandoah Valley Elementary	Teacher	1, 2
Gerding, Julie	West High School	Teacher	1, 2
Glenn, Laura	West High School	Teacher	2
Gouwens, Lisa	Fern Ridge High School	Teacher	1, 2
Graham, Jean Ann	South High School	Computer Resource Specialist	2, 3, 4, 5
Harnacker, Lisa	Instructional Service Center	Manager of Health Services	3
Hartke, Cathy	Oak Brook	Teacher	1, 2
Hennessy, Sharon	Technology Department	Information Systems Manager	3
Huck, Julie	Barretts Elementary	Teacher	1, 2
Hergerger, Keith	Central High School	Teacher	1, 2
Ijei, Charlotte	Instructional Service Center	Coordinator of Guidance and Counseling	1, 2, 3
Irby, David	Technology Department	Systems Analyst	1, 2, 3, 4, 5
Isselhard, Annette	Ross Elementary	Elementary School Principal	1, 2
Jamieson, Tim	South Middle School	Middle School Asst. Principal	1, 2
Jaskowiak, Cindy	Central Office	Asst. Superintendent for High Schools	1, 2, 3
Jeffer, Karen	Craig Elementary School	Teacher	1, 2
Jerome, Mary	Pierremont Elementary	Computer Resource Specialist	2, 3, 4, 5
Kohnen, Carol	Library Media Services	Coordinator of Library Services, Media, Instructional Technology	1, 2, 3
Krodinger, Pam	Instructional Service Center	Coordinator of CTE	1, 2, 3, 4, 5
Langrall, Becky	North High School	Teacher	1, 2
Larson, Peter	Carman Trails Elementary	Teacher	1, 2
Livingston, Lorie	Pierremont Elementary School	Parent	1, 2, 3, 4, 5
Manning, Teresa	Pierremont Elementary School	Teacher	1, 2
Maxey, Bonnie	Administration Building	Asst. Superintendent for Elementary School and ECH	1, 2, 3
Mazzola, Gary	South High School	High School Principal	1, 2
Mitchell, Jeremy	Central High School	High School Asst. Principal	1, 2
McNichols, Jacki	Claymont Elementary School	Computer Resource Specialist	2, 3, 4, 5
Muckler, Mary	Administration Building	Director of Middle School Education	1, 2, 3
Olsen, Bill	Technology Department	Asst. Director of Technology	4, 5
Paul, Connie	Administration Building	Director of Certified Personnel	2, 3, 5
Pearce, Cortney	Hanna Woods Elementary	Teacher	1, 2
Pendleton, Katie	West Middle School	Teacher	1, 2
Petroff, Susan	Mason Ridge Elementary	Teacher	1, 2
Piening, Mary	West Middle School	Teacher	1, 2

Table 1: Technology Planning Committee Members continued

Name	Affiliation	Category	TFA
Preuss, Deb	Highcroft Ridge Elem. School	Teacher	1, 2
Ritter, Jason	South High School	Student	1
Roberts, Pat	Green Trails Elementary	Teacher	1, 2
Roe, Patty	Claymont Elementary School	Librarian	1, 2
Rooks, Jason	Technology Department	Technology Support Specialist	2, 3, 4, 5
Roth, Jennifer	McKelvey Elementary	Teacher	1, 2
Roth, Lisa	West High School	Computer Resource Specialist	2, 3, 4, 5
Schuermeyer, Greg	South High School	Teacher	1, 2
Schultz, Valerie	Central Middle School	Teacher	1, 2
Self, Darlene	South Middle School	Teacher	1, 2
Shirley, Chris	Oak Brook Elem. School	Elem. School Asst. Principal	1, 2
Shollar, Brian	West High School	Student	1
Sisul, Jennifer	Instructional Service Center	Coordinator of Staff Development	1, 2, 3, 4
Spaunhorst, Sandy	Technology Department	Technology Support Specialist	3, 4, 5
Sprague, Kate	South High School	Computer Resource Specialist	2, 3, 4, 5
Stockwell, Mark	Administration Building	Chief Financial Officer	1, 2, 3, 4, 5
Stone, Carole	Highcroft Ridge Elem. School	Elementary School Principal	1, 2
Swoboda, Tom	Curriculum and Development	Secondary Technology Facilitator	1, 2, 3, 4
VanMater, Pam	Barretts Elementary School	Computer Resource Specialist	2, 3, 4, 5
VanMater, Steve	Technology Department	Director of Technology	1, 2, 3, 4, 5
Wald, Peggy	Curriculum and Development	Elementary Technology Facilitator	1, 2, 3, 4
Waltemade, Kim	Central High School	Teacher	1, 2
Wandishin, Jan	Central Middle School	Computer Resource Specialist	2, 3, 4, 5
Winn, Candice	Ross Elementary School	Teacher	1, 2
Wood, Andrea	ISC	Coordinator of Student Assessment	1, 2, 3
Works, Marie	South West Middle School	Computer Resource Specialist	2, 3, 4, 5
Zahner, Peggy	Henry Elementary School	Teacher	1, 2

Parkway School District Mission Statement

Our Foundation (Corresponds to the DESE Beliefs/Vision)

District Mission Statement

The mission of the Parkway School District is to reach and teach each student, all students, every day...together.

District Technology Mission Statement

The Parkway School District technology mission is dedicated to the preparation of all students to live in, contribute to, and collaboratively communicate in a competitive, technological-based society through the ethical use of technology. Technology in the district supports student learning and teacher preparations through the integration of technology into the school curriculum. The technical infrastructure is efficient, effective and future oriented to support and affect student learning and teaching. Technology is deployed with a proactive stance to meet the technical needs of the end-user within the district as identified through the district's comprehensive improvement goals. To ensure that all students achieve their maximum potential this mission is guided by state and national laws, policies, and procedures.

Five Technology Focus Areas (TFA)

1. Student learning as it relates to the Show Me Standards, including technology literacy
2. Teacher preparation and delivery of instruction
3. Administration/data management/communication
4. Resource distribution and use
5. Technical support

Current Status - Compiling Raw Data

Parkway's technology planning committee analyzed a variety of data to determine strengths and weaknesses for each of the TFAs (Technology Focus Areas) (See table 2 "Compiling Raw Data"). After reviewing standardized assessments, surveys, policies/procedures, technology budget, hardware and software monitoring tools, etc., TFA strengths and weaknesses were identified. The committee compared multiple years of data to assist in determining the progress made since our previous technology plan was submitted (See table 3 "Detailed Committee Review of Previous Technology Plan's Activities, Outcomes and Overall Progress"). Once the strengths and weaknesses were determined, committee members developed objectives and action plans, that when implemented will improve each TFA.

Student Learning and Teacher Development Data

Parkway School District is continuing to improve our methods for storing and analyzing student data in a central location. While working through this endeavor, it has become very apparent that the ability to track a student's achievement over a long period of time is essential. Giving teachers and administrators the means to analyze longitudinal student achievement data would improve their capability to make data-driven decisions in regards to individualized student instruction. Managing all student data (achievement, discipline, etc.) in one central location requires a lot of time and effort. For Parkway, this is a particularly difficult task because our current student data is stored in numerous locations. Steps are being put into place to allow us to store data in a central location and to be more effective in providing our teachers and administrators access to longitudinal student achievement data. Many of these steps are detailed in this plan.

Administration, Resource Distribution and Use, and Technical Support Data

In addition to analyzing data directly related to student achievement and teacher instruction, the technology planning committee examined hardware and software monitoring tools, surveys, etc., to determine the district's needs related to the technology infrastructure, resource distribution and use, and technical support.

Table 2: Compiling Raw Data

Parkway School District used the following sources of data to identify strengths and weaknesses for each TFA. Once strengths and weaknesses were determined, objectives and action steps were developed to help strengthen each TFA. Objectives and action plans for each TFA are listed on pages 38-77.

Data Analyzed	Data Source	Data Origination	Reviewed By
Standardized Assessments <ul style="list-style-type: none"> • Missouri Assessment Program (MAP) • Dominie reading scores • ACT • Terra Nova 	Standardized Assessment	District, State, National	TFA 1
Local Performance Assessments <ul style="list-style-type: none"> • Observations of Students work • Technology Integration Project (TIP) Rubrics of Engagement 	Local Assessment	District	TFA 1, 2
Surveys <ul style="list-style-type: none"> • Program evaluation for Social Studies • Teacher Technology Survey 	Survey	District	TFA 1, 2, 3
Parkway Policies and Procedures <ul style="list-style-type: none"> • Board of Education Policies <ul style="list-style-type: none"> ○ Network Access Policy ○ Electronic Use Policy ○ Copyright Policy ○ Donations Policy • Technology/Instructional Technology Department Procedures <ul style="list-style-type: none"> ○ Filtering Policy/Procedure ○ Web Page Guidelines 	Policies and Procedures/Data Analysis	District	TFA 1, 3, 5
Parkway School District Curriculum <ul style="list-style-type: none"> • Curriculum Guides and Frameworks • Technology Scope and Sequence 	Student and Teacher Standards	District	TFA 1, 2,
MORENET/Shareware/Other Network Evaluation Tools <ul style="list-style-type: none"> • Internet Bandwidth Usage Reports • Internet Traffic by Protocol Report • Telephone Usage Reports • Email Volume Reports • Online Database Usage Reports (NetTrekker.com, Atomiclearning.com, etc.) 	Administrative Networking Tools	District, State	TFA 4, 5

Table 2: Compiling Raw Data *continued*

Data Analyzed	Data Source	Data Origination	Reviewed By
Parkway School District Data Management Tools <ul style="list-style-type: none"> • CIMS (student management) Reports • GradeQuick (grade book software) Reports • Horizon Library System Reports • CIMS (financial, payroll) Reports • eTrust (anti-virus) Reports 	Data Management Tools	District	TFA 1, 3, 4, 5
Parkway School District Plans <ul style="list-style-type: none"> • Comprehensive School Improvement Plan (*Board Goals) • 2003 Technology Plan • 0-30 Teacher Improvement Plan • Building Technology Plans 	Local Assessment	District	TFA 1, 2, 3, 4, 5
Parkway School District Administrative Software <ul style="list-style-type: none"> • Filtering Incident Reports • Helpdesk Support Calls • Helpdesk Email Volume • ISERIES Query • Server Administration Software 	Administrative Software	District	TFA 3, 4, 5
Parkway School District Committee Minutes/Reports <ul style="list-style-type: none"> • Core Technology Committee • Web Services Committee • Technology Facilitations Committee • Technology Integration Pilot 	Local Assessment	District	TFA 1, 3, 4, 5
Parkway School District Technology Budget	Budget	District	TFA 3, 4, 5
Show Me Standards	DESE	DESE	TFA 1, 2
Census of Technology	Survey	District	TFA 1, 4, 5
Teacher Technology Usage Survey	Survey	District	TFA 1, 2, 5
Library Media Specialists Trimester Reports and Library Scheduling Calendars	Data Analysis/ Administrative Software	District	TFA 1
Technology Departments Project Log	Data Analysis/ Administrative Software	District	TFA 3, 4, 5
Parkway School District Bond Allocations for Technology Refresh	Budget	District	TFA 4, 5
Department Personnel Organization Charts	Local Assessment	District	TFA 3, 4, 5
NETS Standards for Teachers and Students	National Standards	National	TFA 1, 2

Table 3: Detailed Committee Review of Previous Technology Plan's Activities, Outcomes and Overall Progress

TFA 1- Student Learning		
Objective I: Upon graduation students will be able to independently use a variety of technological tools and resources including hardware and software in developing Information Literacy Skills.		
Action Steps	Result	Status
Action Step 1: Develop district-wide plan for building technology literacy using the Scope and Sequence document and incorporating the NETS Standards.	<ul style="list-style-type: none"> NETS standards are being used to guide student technology instruction. 	Although no district-wide plan has been developed, the use of NETS is increasing.
Action Step 2: Implement the plan utilizing the leadership of the building technology teams.	<ul style="list-style-type: none"> Building tech teams are taking on a greater leadership role. 	Ongoing development of building tech teams. One representative from each team also serves on the district Technology Facilitation Committee.
Action Step 3: Develop a district-wide plan for classroom integration of technology.	<ul style="list-style-type: none"> No district-wide plan. Curriculum coordinators are facilitating integration into content areas. Building tech teams are also assisting with integration activities. 	Online Curriculum Guides, currently being developed, will include technology integration. This data will enable us to map current technology integration activities.
Action Step 4: Identify by building the student user applications of technology	<ul style="list-style-type: none"> This information is included in many building tech plans 	Continue to require this information as a part of the building technology plans.
Action Step 5: Utilize the bldg tech teams to develop methods for classroom teachers to integrate technology into their curriculum.	<ul style="list-style-type: none"> Many building tech teams sponsor technology training sessions -- before school, after school, during plan times and during professional development times. 	Ongoing. This will be part of TFA2 in our new plan.
Action Step 6: Engage students in research and project development using appropriate technologies as specified in the scope & sequence.	<ul style="list-style-type: none"> Students were engaged in such activities. 	The scope and sequence is being revised to incorporate NETS standards.
Action Step 7: Structure opportunities within each building through assignments and independent research for student individual and collaborative project development.	<ul style="list-style-type: none"> Building tech teams, district technology facilitators, library media specialists and individual teachers are doing this. 	Ongoing. The scope of these activities varies from building to building.
Action Step 8: Review student processes and products to develop "best practice" approach.	<ul style="list-style-type: none"> Curriculum coordinators facilitated this work. 	Ongoing.

Table 3: Detailed Committee Review of Previous Technology Plan's Activities, Outcomes and Overall Progress *continued*

TFA 1- Student Learning		
Objective II: Upon graduation students will be able to independently demonstrate and advocate for ethical behaviors and responsible use of technological resources and will work cooperatively and collaboratively with peers, family, and community.		
Action Steps	Result	Status
Action Step 1: Engage students in the classroom use of technology.	<ul style="list-style-type: none"> Building tech teams, district technology facilitators, library media specialists and individual teachers are doing this. 	Ongoing.
Action Step 2: Structure classroom opportunities for students to “seamlessly” apply technology to their learning.	<ul style="list-style-type: none"> This is especially strong in eMints and TIP (Technology Integration Program) classrooms, because of the availability of computers 	Ongoing
Action Step 3: Engage students in the thinking and application of the ethical use of electronic resources (workshops and classroom teacher presentations concerning copyright, plagiarism and software piracy).	<ul style="list-style-type: none"> Library media specialists are taking the lead in providing this professional development. 	Ongoing
Action Step 4: Engage students in the evaluation and critique of technologically produced products and commercially developed products.	<ul style="list-style-type: none"> Library media specialists and classroom teachers are doing this. 	Ongoing
Action Step 5: Monitor students’ ethical use of technology applying copyright Fair Use guidelines.	<ul style="list-style-type: none"> Library media specialists and classroom teachers are doing this. 	Ongoing
Action Step 6: Create opportunities in the classroom, library media center and other areas for collaborative and cooperative work with technology.	<ul style="list-style-type: none"> Library media specialists and classroom teachers are doing this. 	Ongoing
Action Step 7: Structure student learning to become aware of correct process and procedures of working in groups.	<ul style="list-style-type: none"> Library media specialists and classroom teachers are doing this. 	Ongoing

Table 3: Detailed Committee Review of Previous Technology Plan's Activities, Outcomes and Overall Progress *continued*

TFA 1- Student Learning		
Objective III: Upon graduation students will be able to support learning and research using a variety of technological resources and logical thinking for problem solving and product creation in real world situations.		
Action Steps	Result	Status
<p>Action Step 1: Students should acquire the following skills: Using the electronic library catalog- Using electronic information databases- Using a research model (e.g. Big 6)-</p> <p>Using current software applications such as: M/S Office Appleworks Hyper Studio PowerPoint KidPix Inspiration Internet browsers and research tools</p>	<ul style="list-style-type: none"> Library Media Specialists teach orientation lessons and provide other instruction This is happening in some schools <ul style="list-style-type: none"> Largely in secondary schools Largely in elementary schools Not often used anymore Also Keynote Largely in elementary schools Use is increasing district-wide Use is increasing district-wide 	<p>Ongoing. Teacher surveys indicates that usage of these resources in their classes is increasing</p> <p>Ongoing Ongoing Has been replaced by Keynote 2 Ongoing Ongoing Ongoing Ongoing</p>
TFA 1- Student Learning		
Objective IV: Upon graduation students will be able to evaluate, select and apply technology communications tools for independent and collaborative learning, personal interest, and to develop solutions/products for a variety of audiences.		
Action Steps	Result	Status
Action Step 1: Develop district-wide plan for building technology literacy using Scope and Sequence and NETS.	<ul style="list-style-type: none"> The technology literacy plan is in the process of being developed. 	Ongoing
Action Step 2: Assess student technology skills to provide data for development of the above plan.	<ul style="list-style-type: none"> A district-wide student self-assessment survey was administered in the fall of 2003. 	We may need to assess student technology skills again.
Action Step 3: Develop district-wide plan for global communication and collaborative work.	<ul style="list-style-type: none"> No district-wide plan, but global communication and collaborative work is occurring. 	Developing a plan remains a goal.
Action Step 4: Evaluate distance learning, email opportunities and other electronic avenues to construct student experience opportunities.	<ul style="list-style-type: none"> All of these technologies are in use. 	Ongoing. New technologies are always emerging.

Table 3: Detailed Committee Review of Previous Technology Plan’s Activities, Outcomes and Overall Progress *continued*

<p>Action Step 5: Engage students in independent research and project development using appropriate technology as specified in the scope & sequence.</p>	<ul style="list-style-type: none"> NETS standards are being used to guide student technology instruction. 	<p>Although no district-wide plan has been developed, the use of NETS is increasing.</p>
<p>TFA 1- Student Learning Objective V: Upon graduation, students will be able to select and use technological research tools for accomplishing a variety of tasks, problem solving, supporting learning and researching real world problems.</p>		
Action Steps	Result	Status
<p>Action Step 1: All students will utilize technical resources to complete a research project, which correlates to a topic in their curriculum.</p>	<ul style="list-style-type: none"> Research projects are being incorporated. 	<p>Ongoing. These research projects will become easier to map as we move to the Online Curriculum Guides. .</p>
<p>Action Step 2: Teacher preparation – provide teacher training in the use of technical tools for research. Also provide teachers professional development time to research, locate, analyze and select appropriate resources for project implementation.</p>	<ul style="list-style-type: none"> Building tech teams, district technology facilitators, library media specialists and individual teachers are providing this training. 	<p>This action step is moving to TFA2.</p>
<p>Action Step 3: Support staff: the district w/provide sufficient technology support staff to assist teachers and students in the utilization of technical resources. (Study Required)</p>	<ul style="list-style-type: none"> Still a goal. 	<p>Ongoing. Lack of sufficient funding.</p>
<p>TFA 1- Student Learning Objective VI: Upon graduation, students will be able to evaluate the accuracy, relevance and bias of technological problem solving and decision making tools in real world applications.</p>		
Action Steps	Result	Status
<p>Action Step 1: Develop district-wide plan for building technology literacy using Scope and Sequence.</p>	<ul style="list-style-type: none"> Planning with NETS is increasing. 	<p>Revising the Technology Scope and Sequence to incorporate NETS standards.</p>
<p>Action Step 2: Evaluate student literacy skills in a variety of settings (e.g. library, classroom, group work).</p>	<ul style="list-style-type: none"> Teachers and library media specialists are using observation and other formative assessments to evaluate student literacy skills. 	<p>Ongoing</p>

Table 3: Detailed Committee Review of Previous Technology Plan's Activities, Outcomes and Overall Progress *continued*

Action Step 3: Develop district-wide plan for classroom integration of technology by teachers.	<ul style="list-style-type: none"> This is still a goal 	This will be addressed in TFA 2 on our new plan
Action Step 4: Assess teacher technology literacy skills using a variety of methods including observations, self-assessments and surveys.	<ul style="list-style-type: none"> Self-assessment survey was again administered in the fall of 2005. Principals, coordinators and other administrators continue to assess teacher skills. 	This will be addressed in TFA 2 on our new plan
Action Step 5: Devise a plan that will engage students in a process that requires analysis of technological tools and evaluation of information.	<ul style="list-style-type: none"> Results vary from building to building. 	Ongoing
TFA 2- Teacher Preparation		
Objective I: To develop a systemic plan for delivering instruction to teachers to help them achieve competency (as outlined in ISTE NETS for Teachers) in the use of technology and teaching methodologies using existing resources. (See Appendix E4, E5, E6, E7)		
Action Steps	Result	Status
Action Step 1: Facilitate collaboration between the library media specialists and computer resource specialists under the leadership of the Library/Media and Instructional Technology Coordinator.	<ul style="list-style-type: none"> CRS and LMS met jointly at CRS meetings in 2004. 	Joint sessions did not facilitate collaboration and were discontinued.
Action Step 2: Provide materials and teaching support through the combined efforts of library media specialists and computer resource specialists.	<ul style="list-style-type: none"> At some buildings CRS and LMS provide teaching support together or individually, but this was not achieved at a systemic level district-wide. 	District proposed developing a Technology Facilitation Leader at each school who would work with building technology teams, the CRS and LMS, and teachers to facilitate teaching support for educational use of technology.
Action Step 3: Develop district-wide courses for all teaching phases on the District 0 to 30+ Model (see Appendix F3) to be offered throughout the year on teaching strategies using technology.	<ul style="list-style-type: none"> Optional technology integration courses are included in all phases of the 0 to 30 Professional Development Model. 	Training has occurred but has been inconsistent and not systematic.
Action Step 4: Build awareness of technology integration practices through an administrator development model.	<ul style="list-style-type: none"> In 2004-5 an administrator technology course was offered. 	Staff development is evaluating the administrative course options.

Table 3: Detailed Committee Review of Previous Technology Plan's Activities, Outcomes and Overall Progress *continued*

TFA 2- Teacher Preparation		
Objective II: To draw upon other successful technology integration projects to develop a successful methodology of improving teachers' pedagogical approaches to student learning using technology.		
Action Steps	Result	Status
Action Step 1: Use staff development personnel, area coordinators, and the TIP Pilot-planning group to review eMINTS and the Technology programs as models to assist students in their learning.	<ul style="list-style-type: none"> Some eMINTS strategies were incorporated into TIP. 	Staff Development is using feedback from TIP I and II to revise TIP III for school years 2006-7 and 2007-8.
Action Step 2: Use TAG funds to provide professional development to six school teams consisting of two teachers, library media specialist, computer resource specialist and building administrator and to provide 6 schools with a mobile lab consisting of 15 wireless student laptops for the students and one laptop for each of the two teachers.	<ul style="list-style-type: none"> TAG money was discontinued. TIP was funded by a five-year district bond fund. 	TIP II is currently finishing its second year of implementation. The building teams received training and the mobile labs.
Action Step 3: To develop a two year pilot project using inquiry-based learning techniques along with technology to help students learn.	<ul style="list-style-type: none"> TIP two was adopted as a project, moving forward from its pilot stage. 	Plans are underway for TIP III and IV that will reach every Parkway school.
Action Step 4: Provide TIP teachers with 5 release days throughout the year to attend training sessions on the equipment and teacher strategies for helping students learn.	<ul style="list-style-type: none"> TIP teachers had three release days. 	TIP teachers and LMS had three release days per year.
Action Step 5: Provide on-site assistance by library media specialists and computer resource specialists to assist TIP teachers with teaching strategies for technology integration.	<ul style="list-style-type: none"> CRS and LMS support TIP teachers at each school. 	During year one, school TIP teams met monthly for additional training and support. One school is continuing monthly meetings during year two.
Action Step 6: Provide teachers with monthly, job-embedded visits by facilitators and coordinators throughout the year to assist teachers with class management and teaching strategies for helping students learn.	<ul style="list-style-type: none"> Every TIP teacher has a mentor who works one-on-one with job embedded support. 	TIP mentors have been inconsistent in their support due to being over extended by other duties.

Table 3: Detailed Committee Review of Previous Technology Plan’s Activities, Outcomes and Overall Progress *continued*

<p>Action Step 6: Develop a plan with school staffs to provide less skilled teachers with skill building opportunities in on-site or one-on-one sessions using the building computer resource specialist.</p>	<ul style="list-style-type: none"> This planning has not occurred due to lack of staffing. 	<p>School technology plans have included a plan for building staff development using educational technology.</p>
<p>Action Step 7: Develop a timetable and plan to reassess teacher skill levels.</p>	<ul style="list-style-type: none"> This has not occurred. 	<p>Annual survey about teachers’ use of technology is administered.</p>
<p>TFA 3- Administration/Data Management – Data Analysis</p>		
<p>Objective I: To maintain the timely access, integrity, security, integration, storage and retrieval of district data in a use-friendly method for administrative purposes with all instructional and support departments.</p>		
Action Steps	Result	Status
<p>Action Step 1: To confer yearly with the head of Student Health Services and plan appropriate updates in hardware, software, and infrastructure.</p>	<ul style="list-style-type: none"> All nurses’ computers upgraded through a grant. Future updates will be responsibility of each school. District may require each school to purchase a like computer in all schools at the same time. Annual reviews with head of Student Health Services will notify schools in advance during school technology plan development. 	<p>Completed. Server was also upgraded and moved into the data center.</p>
<p>Action Step 2: To compile data for replacement from the librarians and make updates as possible from the Technology Refresh Fund.</p>	<ul style="list-style-type: none"> As part of 2004 Bond Issue, primary administrative computer in all 28 schools were updated to support new library cataloging system Horizon. Computers (153) released from CTE grant were refurbished and provided to all secondary libraries. 	<p>Completed.</p>
<p>Action Step 3: Deploy CIMS/GT Graphical User Interface to enhance the use of the core CIMS applications for all District Staff.</p>	<ul style="list-style-type: none"> Deployed CIMS/GT graphical user interface for PC users. Different and more robust vendor replacement product is on the drawing board. 	<p>Ongoing deployment.</p>

Table 3: Detailed Committee Review of Previous Technology Plan’s Activities, Outcomes and Overall Progress *continued*

<p>Action Step 4: To work with the Coordinator of Instructional Technology and Library Media Services to plan future technology dialogues between the Instructional Coordinators to support future Curriculum enhancements with technology.</p>	<ul style="list-style-type: none"> Monthly Core Technology Committee meetings are conducted to review integration efforts and share ideas and status among schools. 	
<p>Action Step 5: Common Network Access for all Platforms - Through the use of products such as iFolder, Native File Access, ZEN On Demand Services. Study and recommendations for implementation.</p>	<ul style="list-style-type: none"> iFolder, a proprietary product of Novell, was excluded due to a requirement for a Windows-only client requirement. Other products have recently emerged and can now be considered as limited resources permit. 	<p>Ongoing consideration of new products.</p>
<p>Action Step 6: Consolidate Network Directory Trees - Consolidate our two current network trees into one. This will allow students and teachers to better use and access the resources available on the network.</p>	<ul style="list-style-type: none"> This will allow better utilization of the network resources. 	<p>Completed</p>
<p>TFA 3- Administration/Data Management – Data Analysis</p>		
<p>Objective II: To maintain the timely and user-friendly access to a secure networking infrastructure for district personnel and community.</p>		
<p>Action Steps</p>	<p>Result</p>	<p>Status</p>
<p>Action Step 1: Form a plan to insure the continued purchase of filtering software updates, distribution of Network Access and Electronic Use Policies; and provide for training of district staff. This project is almost complete.</p>	<ul style="list-style-type: none"> Internet site blocking software and support are subscribed to annual with Technology Department funds. New pornographic and obscene and objectionable categories are reviews and blocked nightly by vendor. Schools may submit block request to Technology personnel for other sites that are deemed disruptive to student learning. 	<p>Complete and funds are budgeted annually to maintain support and blocking software and hardware.</p>

Table 3: Detailed Committee Review of Previous Technology Plan's Activities, Outcomes and Overall Progress *continued*

<p>Action Step 2: To establish a yearly checklist of issues which potentially affect the physical network, voice, data, and video security procedures to assure the protection of District hardware and software technology assets.</p>	<ul style="list-style-type: none"> • Initial list of servers and services has been identified. • General service level requirements for each service identified. • Services are being prioritized. • InterMapper product being trialed with plans to purchase. InterMapper will notify appropriate support personnel of problems or jeopardy situation on a proactive basis versus reactive. • Wireless security product from HP is trialed to restrict addition of new wireless routers on network. • MOREnet SPAM filtering added for email. • Subscribe to MOREnet recommended firewall service annually. 	<p>On going</p>
<p>Action Step 3: Form an investigation Committee to evaluation the options of "Parent Connect".</p>	<ul style="list-style-type: none"> • The funds and resources to provide and maintain this environment have been redirected to other major district initiatives with higher priority. 	<p>On hold pending further interest and investigation.</p>
<p>Action Step 4: Establish a process to allow non-Technology Department personnel the ability to perform routine CIMS queries without going through Technology. This will allow sanctioned personnel to collect information in a timelier manner and provide more time for IT staff members to accomplish other tasks.</p>	<ul style="list-style-type: none"> • The resources to provide and maintain this environment have been redirected to other major district initiatives with higher priority. 	<p>On hold pending availability of personnel resources.</p>
<p>Action Step 5: Establish a process to allow password resets without going through Technology personnel.</p>	<ul style="list-style-type: none"> • School technical personnel (Computer Resource Specialist) have been provided the ability to reset passwords for network and certain application access for personnel in their schools. 	<p>Ongoing</p>

Table 3: Detailed Committee Review of Previous Technology Plan’s Activities, Outcomes and Overall Progress *continued*

<p>Action Step 6: Continue deployment of BOE approved SANS which is a cluster of servers and partition disk space for application deployment to reduce the number of isolated, non-standard and separate servers. Allow enhanced services for Intra-district voice and data communications, Internet access, Intranet sharing, video streaming, distance education/learning, video security surveillance, video broadcasting, etc.</p>	<ul style="list-style-type: none"> • SAN for staff file print and email has been functional for three years. • CTE SAN for all middle and high school CTE student files has been function for two years. • X-SAN for student Mac files has been approved, installed and conversion has begun. (Software Problem delayed full deployment). • Backup SAN for staff file, print and email has been installed with conversion scheduled for completion in March. • Student SAN for student PC files has been approved by BOE and is scheduled for availability in April. • Internet link through MOREnet has been increased from 10 megabits to 45. • Upgrade all school switches to 1 gigabit. 	<p>Complete</p> <p>Complete</p> <p>In progress</p> <p>Installed and converting</p> <p>Approved and ordered</p> <p>Complete</p> <p>Installed and converting.</p>
<p>Action Step 7: Move the Novell Servers from the secondary buildings to the Central Data Storage Facilities providing more efficient server clusters.</p>	<ul style="list-style-type: none"> • Almost all school X-servers (Macs) have been consolidated into the data center in preparation for placement in an X-Raid. • Almost all departmental servers have been upgraded and moved to clustered services in the data center. 	<p>Installed and converting</p> <p>90% complete</p>
<p>Action Step 8: Investigate and report the use of Windows Terminal Services to allow older and slower computers in the district to run newer applications thus extending the life of these computers.</p>	<ul style="list-style-type: none"> • Thin-client technology has been used successfully to increase technology access economy. Terminal services technology has proven effective for remote administration of district infrastructure. Experience has proven the life of computers should be accepted as complete at a maximum of six years. 	<p>Investigations complete and new ordering options are in-place.</p>

Table 3: Detailed Committee Review of Previous Technology Plan’s Activities, Outcomes and Overall Progress *continued*

<p>Action Step 9: Multicasting Workstations - Implement multicasting of pc workstations to allow for more rapid deployment of software and reconfiguration to meet educational needs.</p>	<ul style="list-style-type: none"> Multicasting is now effectively used for rapid deployment of a common image, but only using off-hour scheduling to avoid. 	<p>Complete</p>
<p>TFA 3- Administration/Data Management – Data Analysis</p>		
<p>Objective III: To retain, maintain and improve the skills and utility resources of administrative support staff employee</p>		
Action Steps	Result	Status
<p>Action Step 1: To rewrite all position descriptions, allowing for career path growth and salary grade pay and assuring a proper efficient chain of command.</p> <ul style="list-style-type: none"> To Present an organizational chart to the Superintendent and BOE for approval. To review the 32 CRSs (Computer Resource Specialists) functional and responsibilities. To establish a hiring and performance review process including: Library/Media Services, Instructional Technology, IT Technology, and School Administrators. To identify and train backup personnel for critical positions. 	<ul style="list-style-type: none"> Most position descriptions have been rewritten but a number of job and responsibility changes have been implemented due reorganization of the Technology Department. Organization chart completed and provided to CFO bi-annually. Multiple committees have reviewed CRS recommendations. High-level committee will be established to recommend approach due to high turnover in this important school position. Backup personnel identified as part of Technology Department reorganization. 	<p>On going.</p> <p>Completed</p> <p>Initiated</p> <p>On going.</p>

Table 3: Detailed Committee Review of Previous Technology Plan's Activities, Outcomes and Overall Progress *continued*

TFA 3- Administration/Data Management – Data Analysis		
Objective IV: To update the skills of district administrators and support staff to use updated procedures, hardware, software, and other resources as seen appropriate.		
Action Steps	Result	Status
Action Step 1: Evaluate an AS/400 software package called Time Piece to improve the efficiency and accuracy associated with payroll reporting.	<ul style="list-style-type: none"> Investigated TimePiece and Workforce software applications for recording and reporting employee attendance. Chose Workforce software due to functionality and cost. WorkForce (time and attendance) project is part of district goal. 	<ul style="list-style-type: none"> Began training and phased implementation of Workforce software May 2005 to be completed September 2006.
Action Step 2: Activate newly purchased change management software to assure proper and auditable procedures on the AS/400. This is a time management issue.	<ul style="list-style-type: none"> Implemented Aldon Change Management Software in the ISeries(AS/400). 	All programmers are using Aldon Change Management Software.
Action Step 3: Fully deploy existing software to distribute applicable reports through email versus printed format. The goal is to reduce personnel time and paper/form expense. Determine what state and federal reports are required on paper. To update distribution data services with newer technologies such as CD ROM instead of printed copies. This requires the time to utilize recently purchased utilities	<ul style="list-style-type: none"> Deployed software to distribute monthly financial reports electronically via attached PDF documents in email. Deployed software to distribute employee listing electronically to Community School and other curriculum areas. 	Continued review of printed reports, changing to electronic delivery when possible. On going.
Action Step 4: Conduct monthly meetings with all CRSs to provide training and information exchange.	<ul style="list-style-type: none"> Four meeting per year are conducted to provide training, project update and recognition of all CRSs. Additional on-site training is provide as needed for new CRSs and new enhancements. 	On going

Table 3: Detailed Committee Review of Previous Technology Plan’s Activities, Outcomes and Overall Progress *continued*

TFA 3- Administration/Data Management – Data Analysis		
Objective V: To incorporate and share all aspects of administrative computing and communication. (e.g. faculties, maintenance, student health) with all district staff in a timely manner.		
Action Steps	Result	Status
Action Step 1: Collect projects and priorities from all District personnel and distribute in an easily accessible manner (e.g. new bulletin board system).	<ul style="list-style-type: none"> Initial list created but difficult to maintain and access by all users. One of projects on this list is to redesign project tracking access database. 	Upgrade required.
Action Step 2: Provide monthly memos to the BOE concerning the status of existing and projection of new issues.	<ul style="list-style-type: none"> BOE Motion and Friday Memos are provided as update to District Technology Goals and major initiatives. 	On going.
Action Step 3: To provide a study group to produce possible solutions and recommendations to the IT Director.	Recommendations available pending action plans and funding.	
TFA 3- Administration/Data Management – Data Analysis		
Objective VI: To discuss, plan, and recommend a plan to reestablish the equipment matrix for the district to support administrative computing and data concerns.		
Action Steps	Result	Status
Action Step 1: To confer with the Superintendent and BOE officials to study and review the funding options during the hard recent economic downturn.	<ul style="list-style-type: none"> 2004 Bond Issue provided temporary relief. Each school is required to inventory all hardware (primarily computers, printers and projection devices) as part of their annual technology plan. They are to identify a five-year plan to refresh hardware pending funding. A per student allocation is distributed to each school after approval of the plans by Curriculum, Staff Development and Technology. School tech plans provide input to the district tech plan. 	Complete

Table 3: Detailed Committee Review of Previous Technology Plan’s Activities, Outcomes and Overall Progress *continued*

<p>Action Step 2: Provide monthly memos to the BOE concerning the status of existing and projection of new issues.</p>	<ul style="list-style-type: none"> This appears to be a duplicate of an item a few boxes above. 	
<p>TFA 3- Administration/Data Management – Data Analysis Objective VII: To establish technology contacts with other school districts throughout the US of comparable size and with similar challenges, as well as educational institutions (including industry) with which to share issues and solutions.</p>		
Action Steps	Result	Status
<p>Action Step 1: To initiate activity with Nortel to identify other technologies which can benefit education.</p>	<ul style="list-style-type: none"> Nortel moved away from voice over IP and we are using Nortel's recommendation of Course Wave Multiplexing 	<p>Completed</p>
<p>Action Step 2: Contact some of the comparable districts below and share technology plans. Auburn City - Auburn AL San Ramon Valley Unified - Danville, CA Fulton County – Atlanta, GA Wheaton Community Unified 200 - Wheaton, IL Homewood-Flossmoor CHSD 233 - Flossmoor, IL Grand Blanc Community – Grand Blanc, MI Midland Public Schools – Midland, MI. Richardson Independent – Richardson , TX Spring Independent – Houston, TX School District Elmbrook – Brookfield, WI</p>	<ul style="list-style-type: none"> Due to the number of major district initiatives and goals, this activity could not be completed. Discussions with local school districts are conducted on specific topics as needed. Technology personnel attend three or four SBC facilitated sharing sessions with local school districts. A number of technology associated personnel from the schools, curriculum and staff development attend the annual METC conference. Currently there are a number of internal opportunities for schools in Parkway to share with others. Technology Facilitators share ideas with schools on a regular basis. 	<p>No complete.</p>

Table 3: Detailed Committee Review of Previous Technology Plan’s Activities, Outcomes and Overall Progress *continued*

TFA 4- Resources		
Objective I: To provide timely and relevant information for district building technology plans, acquisitions and procedures (i.e. Standards: computer purchases, peripherals, input devices and OS updates.) (Technology 2002-2003 Refresh Cycle).		
Action Steps	Result	Status
Action Step 1: Review our new existing SAN (RAID system) and distribution systems to accommodate the new instructional trends requiring multi-media production files by teachers and students.	<ul style="list-style-type: none"> SAN is installed and functional and supports multimedia files. 	<p>Ongoing Practices: The capacity of our SAN system needs to be continually reviewed</p> <p>Multi-media storage on the SAN involves training.</p> <p>Current SAN is insufficient for growing needs and is being expanded. i.e. Student SAN</p>
Action Step 2: As schools request more powerful multi-media computers and peripherals for instructional purposes a review of minimal standards needs to be made before new purchases are made.	<ul style="list-style-type: none"> The schools are required to use a five-year hardware refresh template as part of their building technology planning process. The Technology Assumptions document is used to support the refresh template. The technology assumptions document explains to school technology teams their responsibility vs. the district’s responsibility in regards to hardware and software purchases, maintenance and support. 	<p>Ongoing Practices: The template is subject to annual review and improvement.</p> <p>The assumptions document is reviewed and updated annually.</p> <p>The assumptions document is included in checklist of items to review with CRSs annually.</p>
Action Step 3: Recommendations to middle and secondary schools to make plans for the replacement of 2500+ lab computers not meeting ISTC multi-media CPU standards.	<ul style="list-style-type: none"> 85% of the 2500 lab computers were updated over the past three years. The number of repair tickets for schools has been reduced with the refresh of new hardware. 	Schools are responsible for keeping their equipment updated using district provided refresh funds, grants, bond funds, and PTO donations.
Action Step 4: A plan is needed to upgrade desktop memory for all the PCs and Macintosh computer able to migrate to either XP or OS X.	<ul style="list-style-type: none"> All appropriate have enough memory to run effectively. 	Any additional memory purchases are based on a machine-by-machine basis.

Table 3: Detailed Committee Review of Previous Technology Plan’s Activities, Outcomes and Overall Progress *continued*

TFA 4- Resources		
Objective II: To provide students and teachers with greater web and school data information resources/exchange available at both home or school.		
Action Steps	Result	Status
Action Step 1: Create a committee of teachers, administrators, and students to discuss the issues of web access, data and files exchange from home and to make recommendations to IT and Staff Development.	<ul style="list-style-type: none"> The web services committee was established and web usage guidelines were drafted and we are positioned to make initial recommendations. 	Ongoing
Action Step 2: To establish a committee to investigate the capabilities of Novell iFolder software with multiple hardware and software OS platforms.	<ul style="list-style-type: none"> iFolder was found not to be compatible with Macintosh use, as it requires a Windows client on the home computer. 	Due to lack of funding, resources, and other district priorities the Technology department is pursuing an alternate solution.
Action Step 3: To establish a committee to determine if the purchase of the AppleWorks Extended licensing program for \$20,000 would resolve the file exchange issues. (Perhaps consolidate with H23 Committee)	<ul style="list-style-type: none"> The Apple Maintenance Plan has provided current Parkway students with a copy of Appleworks and students email files to their personal email account. 	
TFA 4- Resources		
Objective III: To provide the logistical and organization means for teachers, administrators, and support staff to review district, departmental, state and national standards / resources in a timely manner.		
Action Steps	Result	Status
Action Step 1: To form a committee of librarians, CRSs, and teachers to study and recommend an action plan for dispersal and staff development.	<ul style="list-style-type: none"> Technology Facilitations Committee was formed and is comprised of representatives from each school, curriculum and development, and library media. 	TFC has been in place for three years and meets four times annually.

Table 3: Detailed Committee Review of Previous Technology Plan's Activities, Outcomes and Overall Progress *continued*

TFA 4- Resources		
Objective IV: To study if existing technology resources are in alignment with the instructional objectives and/or best used by the building(s) in possession of that technology.		
Action Steps	Result	Status
Action Step 1: To make and distribute a survey of building teachers to determine their satisfaction of with current instructional technologies and suggestions for upgrades.	<ul style="list-style-type: none"> Technology Facilitation Committee has provided a forum for teachers to discuss their technology needs. 	Teacher ideas to integrate technology are supported by Curriculum and Instruction through the software adoption process.
Action Step 2: Create a committee of Purchasing agents, IT, and interested citizens to brainstorm if better methods exist.	<ul style="list-style-type: none"> Identified and contracted with a vendor to dispose of hardware securely and in compliance with environmental disposal laws. A committee was not formed because purchasing identified a suitable vendor. 	Ongoing standard practice.
Action Step 3: Form an investigative committee to give a recommendation of options and costs.	<ul style="list-style-type: none"> Established an effective software adoption process that addresses the concerns listed. 	Complete
Action Step 4: Request that the Superintendent's Technology Vision Committee make a study and recommendation regarding this issue.	<ul style="list-style-type: none"> Software adoption process was implemented. We now have an Apple Maintenance program that provides yearly updates to their core software for three years. Using the Microsoft Select program gives us substantial discounts on Microsoft software. Annual web subscriptions have been purchased. Due to the passing of a bond issue, a number of qualifying and approved titles have been purchased. 	Ongoing

Table 3: Detailed Committee Review of Previous Technology Plan's Activities, Outcomes and Overall Progress *continued*

TFA 4- Resources		
Objective V: To investigate and review as how the implementation of new technologies will affect the resources and distribution of instructional software, text, and media resources in the next five years.		
Action Steps	Result	Status
Action Step 1: The future change over by Cooperating School District (St. Louis) from videotape to video streaming in three years provides a short migration path for an important instructional resource. A yearly report on the progress of this project needs to be done.	<ul style="list-style-type: none"> The network infrastructure has been updated to support video streaming from CSD. 	Usage levels are reported annually to the Board of Education.
Action Step 2: Formation an OS committee to study and recommend the steps necessary for the upgrade to Windows NT and Macintosh OS X.	<ul style="list-style-type: none"> The district formed a software adoption committee that has reviewed requests for new software titles. OS issues with new titles have been addressed and are part of technical suitability for adoption. The district has upgraded most computers to either OS-X (Mac) or to Windows XP Professional; all new software titles must conform to those standard operating systems. The chairperson of the Technology Integration Facilitation committee is a member of the review process, as is a required sponsoring curriculum coordinator. 	Core Technology Committee meets monthly to monitor items as they arise.
Action Step 3: A committee to formulate a plan for the acquisition and dispersal of display devices in an equitable and cost effective manner.	<ul style="list-style-type: none"> Due to bond issue funding we've purchased projectors, over 150 computers, 12 Smartboards, and 10 Mimos. 	Schools are required to provide their teachers display devices using bonds, grants, and PTO funds
Action Step 4: A study by the Superintendent's Technology Vision Council on the feasibility of a 2% yearly technology funding cycle.	<ul style="list-style-type: none"> Fifty percent of technology bond funds are allocated to schools to complete a replacement cycle according to their annual technology planning refresh planning template. 	School teams annually update their plans.

Table 3: Detailed Committee Review of Previous Technology Plan’s Activities, Outcomes and Overall Progress *continued*

<p>TFA 5- Technical Support Objective I: Provide the networking infrastructure that will support the communication and access needs of students, staff, administration, and community.</p>		
Action Steps	Result	Status
<p>Action Step 1: Insure that key networking technical support staff has backups in the event they are not available.</p>	<ul style="list-style-type: none"> • Transferred a force slot from facilities to train as a network analyst to back up our current analyst in the event of an emergency • A current technician is being trained to back up our Macintosh Systems Analyst 	<p>We were unable to hire additional staff but were able to get a transfer from facilities.</p>
<p>TFA 5- Technical Support Objective II: To provide the district (students, staff, and administrators), an efficient and effective method of computer repair, maintenance, and networking management.</p>		
Action Steps	Result	Status
<p>Action Step 1: Improve the prioritization including on-going monitoring of outstanding tickets.</p>	<ul style="list-style-type: none"> • A FileMaker database is used to deploy tickets and track outstanding work orders so that computer repairs are effectively addressed in a timely manner. 	<p>Investigating a more sophisticated web-based work/problem/change ticket system where school technicians can enter tickets.</p>
<p>TFA 5- Technical Support Objective III: To provide the timely and necessary information and training for all district and building technical support staff to accomplish their tasks in a professional manner.</p>		
Action Steps	Result	Status
<p>Action Step 1: Committee study to include IT staff and CRS representative(s). Use veteran CRSs more effectively by sharing their mentoring duties instead of one-on-one. Consider funding a “floating CRS” for training and when positions are temporarily vacant.</p>	<ul style="list-style-type: none"> • Mentoring is still one-on-one. We did not hire a floating CRS. • CRSs are nine-month employees but a number of them are hired over the summer to do major conversions. • Establishing focus groups to discuss technical issues/problems in the schools. • Four general CRS meetings are completed to discuss current technology implementations and training issues. 	<p>High turnover of CRSs and extra attention to integration in the classroom has elevated this issue to a district priority. New methods for training CRSs are being developed.</p>

Table 3: Detailed Committee Review of Previous Technology Plan’s Activities, Outcomes and Overall Progress *continued*

<p>Action Step 2: Committee to investigate and report on what comprises the basic hardware, software tools and source of funding.</p>	<ul style="list-style-type: none"> • School technology teams determine building hardware needs by producing a yearly technology plan that details the use of technology in their buildings. • A detailed hardware replacement spreadsheet is completed to assist tech teams in deciding what hardware will need to be purchased. 	<p>Technology and Curriculum and Development approve building technology plans before refresh funding is made available. This process is ongoing until bond funds are depleted in 2009.</p>
<p>TFA 5- Technical Support Objective IV: Provide a place on the CRS bulletin board to state their on-going concerns either by name or anonymously. Facilitate more effective feedback concerning workshops, help sheets, and questions that seem to go unresolved.</p>		
<p>Action Steps</p>	<p>Result</p>	<p>Status</p>
<p>Action Step 1: Monitor the workloads, working conditions and resources of our technical staff and report those conditions to our district decision-makers for any necessary and appropriate resolutions. (I.e. Network Director, Technology Director, Human Resources, Technology Integration Committee, Superintendent’s Vision Committee)</p>	<ul style="list-style-type: none"> • Recommendations were presented to the Superintendents council but due to four years of cost cutting, we were unable to move forward. 	<p>We still need additional funding to hire or increase staff and/or pay. This issue has been elevated to a district priority.</p>
<p>Action Step 2: Investigate restructuring the CRS levels and adjust pay if needed to retain employees. CRS promotions could be based on competencies, rather than number of years of service and hours of training enabling CRSs to reach higher pay levels faster.</p>	<ul style="list-style-type: none"> • Pay has not been adjusted and we are still experiencing a large turnover of building CRS. CRS still have to go through hours of training to receive pay increase. Skill level is not considered when determining pay of a CRS and pay is mostly determined by years of service in Parkway. 	<p>District cost containment is forcing a stable salary for CRS. Our CRS turnover rate remains 20-50% per year. There has been a committee formed to investigate recommendations for retaining building CRSs</p>
<p>Action Step 3: Assign one person or a “department /organizational division” to oversee CRS training on a continuous basis. To investigate the best methods of training (hands-on or objective based) and resources needed.</p>	<ul style="list-style-type: none"> • The technology department has taken over the training of our CRS. CRS training sessions are held each month by our district technicians. CRS also receive additional training during 4 general CRS meetings 	<p>Ongoing</p>

Current Technology Focus Areas and Goals

TFA 1- Student Learning

Goal 1: Parkway School District will enhance student learning by integrating technology applications into the curriculum.

- Objective 1: Integrate technology into the curriculum.
- Objective 2: Increase the use of curriculum-related technology resources.
- Objective 3: Decrease the inappropriate use of technology by students.
- Objective 4: Investigate both the benefits and impact of implementing a plan to utilize online courses/virtual classrooms into the curriculum.

Goal 2: Parkway School District will increase student technology literacy by incorporating NETS*S (for students) into the curriculum.

- Objective 1: Increase the alignment of technology literacy instruction with NETS*S standards.
- Objective 2: Decide whether NETS*S-aligned computer skills course(s) should be added to the middle school curriculum. Add course(s) if necessary to implement the decision.

Table 4: Strengths and Weaknesses of Student Learning

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Most Parkway students perform above their peers on measures of academic achievement. 2. Most Parkway students are more engaged in their classes because of the integration of technology. 3. Career & Technical Education (CTE) courses teach many computer literacy skills. 4. Students use online training tutorials from atomiclearning to improve their skills with software programs. 5. Students use online resources -- including unitedstreaming videos, full-text/image periodicals, online encyclopedias and other subscription databases -- in their research and their projects. 6. Library media specialists, computer resource specialists and classroom teachers assist students in learning technological skills. 7. Students use technology to produce multimedia presentations and other projects. 	<ol style="list-style-type: none"> 1. Many individual students and many subgroups of students are not performing at grade level. 2. Perhaps because they do not have computers at home, some students are lagging behind their peers in developing technology skills. These students may be less engaged in lessons that incorporate technology. 3. Some students do not observe the Network Access Policy. They use their school Internet access privileges to visit inappropriate sites and to post inappropriate entries on blogs. 4. The district Scope and Sequence needs to be revised to incorporate NETS standards. 5. Some students are not learning basic keyboarding skills.

TFA 2- Teacher Preparation

Goal 1: Parkway School District will provide on-going professional development for teachers that enhances their ability to use technology as a teaching tool.

- Objective 1: Provide professional development and support to teachers to increase their competency in technology integration.
- Objective 2: Train technology leaders in technology integration at each school.
- Objective 3: Embed technology integration in on-line curriculum guides.
- Objective 4: Implement the Technology Integration Project (TIP) into the remaining Parkway schools.

Goal 2: Parkway School District will provide on-going training and support for all staff to improve their knowledge and use of technology.

- Objective 1: To improve training for all staff that increases their knowledge and use of technology.
- Objective 2: Improve CRS training and support.
- Objective 3: Support school and classroom web site development.

Table 5: Strengths and Weaknesses of Teacher Preparation

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. All teachers have access to a high-speed networked computer in their classroom. 2. Technology Facilitation Committee (TFC) facilitates technology training and development opportunities. 3. All teachers have building technology support from their Library Media Specialist, Computer Resource Specialist(s), and the TFC representative. 4. Technology leaders for all software applications have been identified in each building's technology plan. 5. Curriculum and Development departments merged which facilitates the integration of technology and curriculum. 6. Teacher 0 to 30 Course Guide includes opportunities for study of technology as a teaching tool. 7. Technology usage is an integral part of teacher evaluations. 8. Technology Integration Project has concentrated technology integration, mentoring, and a team approach to technology integration. 9. NETS and Show Me Standards will be embedded in new curriculum guides and building technology plans. 10. Building technology plans include a staff development strand based on needs assessment. 11. Teachers are comfortable with the use of word processing. 	<ol style="list-style-type: none"> 1. The District needs to improve strategies to integrate technology into the curriculum systematically. 2. The size of the District makes it difficult to deliver quality staff development that encourages the use of technology to all teachers in a timely manner. 3. Teachers' instructional use of presentation software in instruction needs improvement. 4. Teachers' instructional use of multimedia in instruction needs improvement

TFA 3- Data Management/Communication

Goal 1: The Parkway School District Technology Department will provide administrators and teachers with the tools and training necessary to access and manage data effectively.

Goal 2: The Parkway School District Technology Department will continue to develop and improve recourses necessary for communication between students, teachers and the community.

- Objective 1: The Technology Department will collect requirements for data driven decision making (D3M) system to address district reporting of student assessment data to improve decisions concerning individual student needs.
- Objective 2: The Technology Department will provide the tools for standard collecting and reporting of student discipline and referral data.
- Objective 3: The Technology Department will create a student storage system for cross platform access.
- Objective 4: The District will hire additional Technology Department staff to support district plans for data management and communication.

Table 6: Strengths and Weaknesses of Administration/Data Management/Communication

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Strong process in place for communication amongst schools and departments 2. Provide all employees network storage space 3. Provide all employees with an email account 4. District website provides information about a variety of topics 5. Telephone and voicemail are supplied 6. We have a stable and expandable student, finance, employee, purchasing, fixed assets, and warehouse information/management systems (CIMS) 7. Recently completed the telecom phone tracking system database which is tied into employees allowing us to create an accurate phone directory that is accessible via a web browser 8. Development of administrative tools (PEERS, Gradequick, Workforce etc.) 9. Robust fiber network backbone 10. Robust server environment allowing data, file, print, email, web access and phone services 11. Ability to recover data if it becomes unusable due to server failure, inadvertent deletion or corruption 12. Every teacher has access to a computer in their classroom 13. Continuous updating of software and hardware to maintain and improve a stable environment 	<ol style="list-style-type: none"> 1. Unable to look at longitudinal data on individual student achievement 2. Additional Technology Department staff is needed to process the voluminous amount of requests for information 3. Current reporting tools require special training making the information not easily accessible 4. Lack of standardized method for collecting and displaying discipline data 5. Inconsistencies in identifying students that are enrolled into specialized programs 6. Data is stored across systems and not located in one centralized location

TFA 4- Resource Distribution and Use

Goal 1: Parkway School District will provide access to current technology that directly enhances student achievement, specifically, instructional technology, and technology that increases effectiveness of instructional, administrative, and support staff.

- Objective 1: The district will develop a best-practices model of technology distribution for the learning environment, based on National Education Technology Standards (NETS) essential conditions and directly matched with our own curriculum needs.
- Objective 2: To extend NETS learning improvement to the home, the district will continue to monitor, investigate, and implement as funds permit technologies that would provide access to student storage from home.
- Objective 3: The district will expand the data center space and capacity to maintain the ability to support student and staff needs for technology.
- Objective 4: The district will improve Change Management of technology resources by developing and implementing systems and procedures to make software and system updates available through better-controlled and coordinated processes.
- Objective 5: The Technology Department will develop a plan to determine the feasibility of converting student lab computers from Macs to PCs and begin initial implementation by August of 2006. Deployment of window PCs to other functional areas (i.e. teacher computers) will be determined as interest and need dictate.
- Objective 6: The district will investigate fundamental changes in distribution of services by evaluating risk/rewards and feasibility of changes to Microsoft support methods beginning with anticipated releases of Vista operating system and Office 12 productivity suite in 2006.
- Objective 7: Establish district-wide 5-year refresh of model-compliant student computers (Objective 1) and for all staff computers.

Table 7: Strengths and Weaknesses of Resource Distribution and Use

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Computers (and other vocational technologies) have been used in a variety of instructional programs. 2. Technology committees have been formed to guide instructional practices used in the district 3. School funds, PTO funds, and district/private technology grants have added hundreds of computers across the district 4. Computer per student ratio is roughly 1:5. 5. Web and Spam filters are in place to reduce the distraction of inappropriate material in the district 6. Incorporation of technology refresh into school technology planning 7. School Technology Committees plan accordingly to purchase technology that is most beneficial to their building 8. Owning our own 1 gig. fiber network provides employees and students with reliable access to technology resources and saves the district a substantial amount of money. 9. 45 mbs connection to the Internet 	<ol style="list-style-type: none"> 1. Lack of funding to hire new people and purchase additional equipment 1. Long term stability is difficult due to the ever changing technology needs that place a strain on our already understaffed technology department 1. Flat budget for the last five years 1. Multi-platform environment makes it difficult to maintain a smoothly running network and it requires extra work for every application deployment. 1. Students need access to their technology driven projects both from home and within the district. This involves storage and cross-platform usage/standards. 1. We don't have the resources to explore all of the exciting opportunities that technology could provide students

TFA-5: Technical Support

Goal 1: Parkway School District will continue to strive to provide quality technical support and resources to enhance student learning, facilitate a teacher's ability to deliver quality instruction, as well as, maintain and develop tools that facilitate administrative and managerial tasks.

- Objective 1: The Technology Department will identify and implement software, hardware to monitor all network components for problems or performance issues.
- Objective 2: Develop formalized procedure for purchasing and installing operating systems and software to limit the possibility of application/operating system conflicts.
- Objective 3: Parkway School District will improve data backup procedures by deploying an off-site SAN (Storage Area Network) and X-Raid.
- Objective 4: New releases of iLife and iWorks will be deployed to all Macintosh computers that have the minimum system requirements to run the programs effectively.
- Objective 5: Technology department will examine the current service request system used to deploy technical support to determine if a better method exists.
- Objective 6: New procedures for hiring and retaining the school CRSs (Computer Resource Specialists) will be put in place. (as funding permits)
- Objective 7: The district will add Technology personnel to support the expanded use of technology for instruction, D3M and operational services by August 2007.

Table 8: Strengths and Weaknesses of Technical Support

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Help desk support is available during all business hours 2. District technical support is provided centrally and at the building level 3. There are 6 year-round district technicians 4. The Apple Technology Support Staff has vendor training which qualifies the staff to order vendor parts and make warranty repairs. 5. The Apple Technology Staff provides on-going monthly district technical workshops for the Computer Resource Specialists. 6. Schools have a designated person to assist with phone issues. 7. The Technology Support Staff has Analysts for both Mac and PC's. Out of the District problem solving / technical support is seldom required 8. School CRSs routinely fill district level support jobs after receiving training as a CRS 9. Support staff and instructional staff work together to form building technology plans. 10. There are a number of technology personnel that are highly qualified, well trained and have a number of years in the technology field 11. The technology department has the ability to collaborate with other departments 	<ol style="list-style-type: none"> 1. In some instances, usually because of an urgent need, changes are made without a proper testing environment or documentation 2. Technology Department is short staffed and demands are high 3. Building CRSs are hired at the building level as a non-certified classification, for 9 months, with yearly health and retirement benefits, and a forty-one week salary range between (\$14,350-\$31,570). The district experiences a constant turnover due to the demanding workload and competition from commercial businesses. 4. Training for new CRSs is an "earn as you learn" approach. While the district provides manuals, a help desk, e-mail, a CRS BBS, for support – still the finally structured answer has not yet been found. 5. Lack of funding to add additional support staff and technical support resources 6. Ticket tracking system and the related procedures need improvement 7. Need to hire staff to provide ongoing CRS training 8. Computer Resource Specialists work seven hour a day, nine months a year which doesn't allow for smooth transitions from year to year and makes it hard for them to assist teachers after class

Student Learning TFA—Data Analysis, Objectives and Action Plans

Data Analysis:

Parkway's Technology Planning Committee analyzed a variety of data to determine strengths and weaknesses related to student learning throughout the district. For a list of the data analyzed, see Table 2: *Compiling Raw Data* (pg. 10). Identifying these strengths and weaknesses facilitated the development of our objectives and action plans for TFA1.

The Planning Committee also reviewed our previous technology plan to identify the progress that we have made since our last plan was submitted in 2003.

Goals and Objectives:

After analyzing data and determining our strengths and weaknesses, the following goals and objectives were formulated.

Goal 1: Parkway School District will integrate technology into learning and teaching.

- Objective 1: Integrate technology into the curriculum.
- Objective 2: Increase the use of curriculum-related technology resources.
- Objective 3: Decrease the inappropriate use of technology by students.
- Objective 4: Investigate both the benefits and impact of implementing a plan to utilize online courses/virtual classrooms.

Goal 2: Parkway School District will increase student technology literacy by incorporating NETS*S (National Educational Technology Standards for Students) into the curriculum.

- Objective 1: Increase the alignment of technology literacy instruction with NETS*S standards.
- Objective 2: Decide whether NETS*S-aligned computer skills course(s) should be added to the middle school curriculum. Add course(s) if necessary to implement the decision.

Action Plans:

The action plans to accomplish each objective are on the following pages. When implemented, these action steps will increase student learning in Parkway. The action steps are linked to MSIP, CSIP, and the Show Me standards, to ensure that we maximize our students' potential in our technology rich school environment.

Evaluation:

The divisions and departments responsible for these goals will monitor our progress quarterly. If adequate progress is not being made, corrective strategies will be developed and implemented.

Action Plans and Implementation – TFA 1 – Student Learning

Goal 1: Parkway School District will integrate technology into learning and teaching.

Objective 1: Integrate technology into the curriculum.

TFA 1: Student Learning

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility of:	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.1	4.a	Include the NETS*S in the Online Curriculum Guide system being developed.	CTE Coordinator- Pam Krodinger	\$0	Summer 2006-
6.1	4.a	Include integrated technology activities in the Online Curriculum Guides.	Curriculum Coordinators & Developers	\$0	Summer 2006-
6.1, 6.7	4.a	Provide professional development for teachers around the Online Curriculum Guides; see also TFA2, Goal 1, Objective 3, Action Step 1.	Curriculum Coordinators & Developers	\$0	Summer 2006-
6.1, 6.7	4.a	Require that "Year 3" teachers develop a lesson that integrates technology. <ul style="list-style-type: none"> Review and polish the lesson with the help of the curriculum committee. Post the lesson plan to the Online Curriculum Guide. 	Coordinator of Development- Jennifer Sisul Curriculum Coordinators & Developers	\$0	Ongoing
6.1, 6.7	4.a	Develop technology integration leaders in each building through the Technology Facilitation Committee; see also TFA2, Goal 1, Objective 2.	Technology Facilitators- Peggy Wald & Tom Swoboda	\$0	Fall 2006-
6.4	4.a	Encourage and facilitate the development of teacher and/or classroom web pages to enhance instruction; see also TFA2, Goal 2, Objective 3, Action Steps 3 and 4.	Technology Facilitators- Peggy Wald & Tom Swoboda Systems Analyst- Dave Irby	\$0	Spring 2007-
Show Me Standards: 1.4, 1.7, 1.8, 2.7					

Action Plans and Implementation – TFA 1 – Student Learning

Goal 1: Parkway School District will integrate technology into learning and teaching.

Objective 2: Increase the use of curriculum-related technology resources.

TFA 1: Student Learning

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility of:	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.1, 6.4	4.a	Include the 9 Information Literacy standards and NETS*S in the Online Curriculum Guide system being developed.	Library/Media Coordinator- Carol Kohnen	\$0	Summer 2006-
6.4, 6.8	4.a	Install the NetSupport software on all PCs in lab and library settings in order to improve student-teacher interaction.	Technology	Grants or Bond Funds	Summer 2006 –
6.1, 6.4, 6.8	4.a	Include collaborative projects that utilize technology in the Online Curriculum Guide.	Curriculum Coordinators & Developers	\$0	Summer 2006 -
6.7	4.a	Provide professional development for teachers and librarians around the Online Curriculum; see TFA2, Goal 1, Objective 3.	Curriculum Coordinators & Developers	\$0	Fall 2006 -
6.7, 6.8	4.a	Increase the levels of collaboration among instructional staff (all teachers, teachers on the Technology Facilitation Committee, librarians, district Technology Facilitators).	Library/Media Coordinator- Carol Kohnen Technology Facilitators- Peggy Wald & Tom Swoboda	\$0	Ongoing
Show Me Standards: 1.4, 1.7, 1.8, 2.3, 2.7, 4.6					

Action Plans and Implementation – TFA 1 – Student Learning					
Goal 1: Parkway School District will integrate technology into learning and teaching.					
Objective 3: Decrease the inappropriate use of technology by students.					
TFA 1: Student Learning					
Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation					
MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility of:	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4, 6.7	4.a	Increase student and staff awareness of the district Network Access Policy.	Administrators Library/Media Coordinator- Carol Kohnen	\$0	Summer 2006 -
6.4, 6.7	4.a	Continually publicize the procedure by which staff members can request that a website be blocked.	Administrators Library/Media Coordinator- Carol Kohnen	\$0	Ongoing
6.4, 6.8	4.a	Utilize lab management programs such as NetSupport (PCs) and Remote Desktop (Macs).	Technology	\$0	Summer 2006 -
Show Me Standards: 1.7, 4.4					

Action Plans and Implementation – TFA 1 – Student Learning

Goal 1: Parkway School District will integrate technology into learning and teaching.

Objective 4: Investigate both the benefits and impact of implementing a plan to utilize online courses/virtual classrooms.

TFA 1: Student Learning

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility of:	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.1	1, 2, 4a	Research different options for online curriculum and decide upon which model works best for Parkway.	ADC Principal- Michael Barolak Technology Facilitator- Tom Swoboda	\$0	Spring/ Summer 2006
6.4	1, 2, 4a	After the preferred model has been chosen, Parkway School District will test the hardware and software required to support online curriculum to ensure it works properly.	ADC Principal- Michael Barolak Technology Facilitator- Tom Swoboda	Grants or Bond Funds	Spring/ Summer 2006
6.7	1, 2, 4a	After testing the hardware and software, teachers will be trained on how to implement and integrate online curriculum.	ADC Principal- Michael Barolak Technology Facilitator- Tom Swoboda	\$0	Spring/ Summer 2006
6.4, 9.1, 9.2	1, 2, 4a	Teachers will implement online curriculum with pilot groups of students.	ADC Principal- Michael Barolak Technology Facilitator- Tom Swoboda	\$0	Fall 06
6.1, 6.7	1, 2, 4a	After piloting the program, Parkway School District will assess the success of the use of online curriculum and decide whether or not to continue with the implementation.	ADC Principal- Michael Barolak Technology Facilitator- Tom Swoboda		Spring 2007
Show Me Standards: 1.4, 2.2, 2.3, 2.7, 4.8					

Action Plans and Implementation – TFA 1 – Student Learning					
<p>Goal 2: Parkway School District will increase student technology literacy by incorporating NETS*S (National Educational Technology Standards for Students) into the curriculum.</p> <p>Objective 1: Increase the alignment of technology literacy instruction with NETS*S standards.</p> <p>TFA 1: Student Learning</p> <p>Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation</p>					
MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility of:	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.1, 6.4	4.a	Develop a more explicit and detailed process to use the NETS*S to guide student instruction.	Coordinator of CTE- Pam Krodinger Library Media Coordinator-Carol Kohnen Technology Facilitators-Peggy Wald & Tom Swoboda	\$0	Spring 2006-summer 2007
6.7, 8.7	2.b, 4.b	Refine the process to measure and document the technology literacy of 8 th -grade students.	Coordinator of CTE- Pam Krodinger	\$0	Ongoing
6.2, 8.1, 8.7	2.b, 4.b	Gather and analyze data generated by the new processes.	Curriculum Coordinators	\$0	Ongoing
Show Me Standards: 1.4, 2.7					

Action Plans and Implementation – TFA 1 – Student Learning

Goal 2: Parkway School District will increase student technology literacy by incorporating NETS*S (National Educational Technology Standards for Students) into the curriculum.

Objective 2: Decide whether NETS*S-aligned computer skills course(s) should be added to the middle school curriculum. Add course(s) if necessary to implement the decision.

TFA 1: Student Learning

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility of:	Funding Sources/ Cost Estimates	Timeline/ Completion Date
1.2, 6.1, 8.1	4.a	Study/evaluate whether to add (a) required computer skills course(s) to the middle school. If the decision is that one or more such courses should be required, proceed to action steps 2 and 3.	Coordinator of CTE- Pam Krodinger	\$0	Spring - fall 2006
1.2, 6.1	4.a	Develop a differentiated curriculum for (a) middle school computer skills course(s).	Coordinator of CTE- Pam Krodinger	\$0	Fall 2006 – spring 2007
1.2, 6.7	4.a	Provide staff development for teachers of the new course(s).	Coordinator of CTE- Pam Krodinger	\$0	Spring – summer 2007

Show Me Standards: 1.4, 2.7

Teacher Preparation TFA—Data Analysis, Objectives and Action Plans

Data Analysis:

Parkway's Technology Planning Committee analyzed a variety of data to determine strengths and weaknesses related to teacher preparation. For a list of the data analyzed, see Table 2: *Compiling Raw Data* (pg. 10). Recognizing the strengths and weaknesses of teacher preparation led to the development of objectives and action plans that addressed concerns and maximized strengths.

The Planning Committee also reviewed our previous technology plan to identify the progress that we have made since our last plan was submitted in 2003.

Goals and Objectives:

After analyzing data and determining our strengths and weaknesses, the following goals and objectives were formulated.

Goal 1: Parkway School District will provide on-going professional development for teachers that enhances their ability to use technology as a teaching tool.

- Objective 1: Provide professional development and support to teachers to increase their competency in technology integration.
- Objective 2: Train technology leaders in technology integration at each school.
- Objective 3: Embed technology integration in on-line curriculum guides.
- Objective 4: Implement the Technology Integration Project (TIP) into the remaining Parkway schools.

Goal 2: Parkway School District will provide on-going training and support for all staff to improve their knowledge and use of technology.

- Objective 1: Improve training for all staff that increases their knowledge and use of technology.
- Objective 2: Improve CRS training and support.
- Objective 3: Support school and classroom web site development.

Action Plans:

The action plans to accomplish each objective are on the following pages. When implemented, these action steps will improve Parkway teachers' ability to use technology as an instructional tool. The action steps are aligned to MSIP, CSIP, and the Show-Me standards to insure that we provide the teacher support required to accommodate a technology rich and productive school/work environment.

Evaluation

Curriculum and Development will monitor its progress towards meeting these goals quarterly. If adequate progress is not being made, corrective strategies will be developed and implemented.

Action Plans and Implementation – TFA 2 – Teacher Preparation and Delivery of Instruction

Goal 1: Parkway School District will provide on-going professional development for teachers that enhances their ability to use technology as a teaching tool.

Objective 1: Develop a systemic plan for delivering support to teachers to increase their competency in technology integration.

TFA 2: Teacher Preparation

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4, 8.5	4.a	Increase the number of facilitators integrating technology in the classroom. (Pending funding.)	Human Resources Curriculum & Development	Additional Revenues/\$63,000 per person	Summer 2006
6.7	4.b	Survey teachers annually to develop needs based professional development.	Technology Department	\$0	Yearly
6.7	4.a	Include technology offerings in the 0 to 30 Course Guide, Path B and C offerings, and C&D conferences.	Curriculum Coordinators, Developers	Stipends paid to path B & C out of Staff Dev. Budget	Ongoing
6.8	4.a	Continue to develop Library Media Specialists' skills in appropriate educational uses of technology.	Library/Media Coordinator-Carol Kohlen	\$0	Ongoing
6.1, 6.4	4.a	Include integration resources on the Staff Development Web Site.	Curriculum Coordinators, Developers	\$0	Fall 2006

Show Me Standards 1.2, 1.4, 1.5, 1.7, 1.8, 1.9, 2.7, 3.6

Action Plans and Implementation – TFA 2 – Teacher Preparation and Delivery of Instruction

Goal 1: Parkway School District will provide on-going professional development for teachers that enhances their ability to use technology as a teaching tool.

Objective 2: Train technology leaders in technology integration at each school.

TFA 2: Teacher Preparation

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.7	4.a	Conduct Technology Facilitation Committee (TFC) training meetings four times a year. (see also TFA-1 Goal1, Objective 2, Action Step 3 and 5)	Technology Facilitators-Peggy Wald & Tom Swoboda	Staff Development Budget/\$500 yr	Summer 2006
6.7	4.a	Conduct two 1/2-day training sessions with TFC members.	Technology Facilitators-Peggy Wald & Tom Swoboda	Staff Development Budget/\$5,365 yr	Fall 2006 – Spring 2007
6.1, 6.4, 6.7	4.a	Maintain a website that provides resources for TFC members.	Technology Facilitators-Peggy Wald & Tom Swoboda	\$0	Summer 2006
6.7	4.a	Include professional development for teachers as a part of every building's technology plan.	Building Technology Committees	\$0	Fall 2006
Show Me Standards 1.2, 1.4, 1.5, 1.7, 1.8, 1.9, 2.7, 3.6					

Action Plans and Implementation – TFA 2 – Teacher Preparation and Delivery of Instruction

Goal 1: Parkway School District will provide on-going professional development for teachers that enhances their ability to use technology as a teaching tool.

Objective 3: Embed technology integration aligned to NETS standards in discipline specific course guides.

TFA 2: Teacher Preparation

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.1, 6.7, 8.5	4.a 4.b	Implement professional development for teachers on embedded technology in the course guides. (See also TFA-1 Goal 1, Objective 3, Action Step 4)	Curriculum Coordinators, Developers	\$0	Spring/ Summer 2007
6.7	4.a	Include Technology integration training modules during 1 st and 2 nd year teacher training.	Coordinator of Development-Jennifer Sisul Technology Facilitators-Peggy Wald & Tom Swoboda	\$0	Fall 2006
6.1, 6.4, 6.7	4.a 2.a 2.b	Evaluate embedded technology as part of the curriculum review cycle.	Curriculum Coordinators	\$0	Ongoing
Show Me Standards 1.2, 1.4, 1.5, 1.7, 1.8, 1.9, 2.7, 3.6					

Action Plans and Implementation – TFA 2 – Teacher Preparation and Delivery of Instruction

Goal 1: Parkway School District will provide on-going professional development for teachers that enhances their ability to use technology as a teaching tool.

Objective 4: Implement the Technology Integration Project (TIP) into the remaining Parkway schools.

TFA 2: Teacher Preparation

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
67, 6.8	4.a	Evaluate the professional development of TIP for teachers, administrators, LMS and CRS.	Coordinator of Development-Jennifer Sisul Curriculum Coordinators, Developers	\$0	Summer 2006
6.7	4.a	Revise TIP III professional development sessions based on feedback from TIP I and II evaluations.	Coordinator of Development-Jennifer Sisul Tech Facilitators Peggy Wald & Tom Swoboda	\$0	Fall 2006
6.4, 6.7, 6.8	4.a	Implement TIP III at seven elementary schools.	Coordinator of Development-Jennifer Sisul Tech Facilitators-Peggy Wald & Tom Swoboda	2002 Bond Funds / \$130,500	Fall 2006-Spring 2008
6.4, 6.7, 6.8	4.a	Implement TIP IV at six elementary schools.	Coordinator of Development-Jennifer Sisul Tech Facilitators-Peggy Wald & Tom Swoboda	2002 Bond Funds/ \$130,500	Fall 2008-Spring 2010
Show Me Standards 1.2, 1.4, 1.5, 1.7, 1.8, 1.9, 2.7, 3.6					

Action Plans and Implementation – TFA 2 – Teacher Preparation and Delivery of Instruction

Goal 2: Parkway School District will provide on-going training and support for all staff to improve their knowledge and use of technology.

Objective 1: To improve training for all staff that increases their knowledge and use of technology.

TFA 2: Teacher Preparation

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4	4.a	Evaluate and revise the format of school technology plans.	Technology Department Tech Facilitators- Peggy Wald & Tom Swoboda	\$0	Winter 2006
6.4	4.a	Assist building technology teams develop and implement needs based staff technology training as part of their school technology plans.	Tech Facilitators- Peggy Wald & Tom Swoboda	\$0	Ongoing
6.4, 6.7	4.a	Include technology training in District Workshops, Support Staff Trainings, and C & D workshops. (See TFA-5 Objective V, Action Step 5)	Tech Facilitators- Peggy Wald & Tom Swoboda	\$0	Ongoing
6.1, 6.4, 6.7	4.a	Use the technology website to provide directions and resources for CRSs.	Technology Department	\$0	Fall 2006
6.4, 7.1.	4.a	Provide NetTrekker and Atomic Learning subscriptions to all staff and students.	Technology Department	Technology Department Budget/\$42,000 year	Ongoing
Show Me Standards 1.4, 1.7, 1.10, 4.4					

Action Plans and Implementation – TFA 2 – Teacher Preparation and Delivery of Instruction					
Goal 2: Parkway School District will provide on-going training and support for all staff to improve their knowledge and use of technology.					
Objective 2: Improve CRS training and support.					
TFA 2: Teacher Preparation					
Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation					
MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
8.4	4.a	Develop a task force to study the CRS duties and compensation. (See also TFA-5, Goal 1, Objective VI)	Parkway CFO- Mark Stockwell Technology Department Human Resources Assistant Superintendents & Director of Middle Schools	\$0	Summer 2006
6.7	4.a	Revise CRS training manual	Technology Department	\$0	Summer 2006
6.7	4.a	Increase the CRS training options.	Technology Department	\$0	Fall 2006
6.7	4.a	Follow up CRS training sessions with one-on-one mentoring.	Technology Department	\$0	Spring 2006
6.7	4.a	Evaluate effectiveness of CRS training sessions.	Technology Department	\$0	Spring 2006
6.7	4.a	Assign CRS mentors to new CRSs.	Technology Department	\$0	Ongoing
Show Me Standards 1.4, 1.7, 1.10, 4.4					

Action Plans and Implementation – TFA 2 – Teacher Preparation and Delivery of Instruction					
Goal 2: Parkway School District will provide on-going training and support for all staff to improve their knowledge and use of technology.					
Objective 3: Support school and classroom web site development.					
TFA 2: Teacher Preparation					
Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation					
MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4	4.a	Create the appropriate directory structure for school and teacher WebPages.	Technology Department	\$0	Spring 2006
6.4	4.a	Develop school templates for school websites.	Technology Department	\$0	Ongoing
6.4, 6.7	4.a	Train and support school webmasters to develop and maintain the school website. (See also TFA-1 Goal1, Objective 2, Action Step 6)	Technology Department Tech Facilitators- Peggy Wald & Tom Swoboda	\$0	Ongoing
6.4	4.a	Develop class/department template for teacher websites. (See also TFA-1 Goal1, Objective 2, Action Step 6)	Technology Department	\$0	Ongoing
6.4, 6.7	4.a	Train and support teachers to develop and maintain class websites using Contribute 3.	Technology Department Tech Facilitators- Peggy Wald & Tom Swoboda	Building Funds/\$58 per software license	Ongoing
Show Me Standards 1.4, 1.7, 1.10, 4.4					

ADMINISTRATIVE / DATA MANAGEMENT TFA—Data Analysis, Objectives and Action Plans

Data Analysis:

Parkway's Technology Planning Committee analyzed a variety of data to determine strengths and weaknesses related to data management throughout the district. For a list of the data analyzed, see Table 2: *Compiling Raw Data* (pg. 10). Recognizing our data management strengths and weaknesses facilitated the development of our objectives and action plans.

The Planning Committee also reviewed our previous technology plan to identify strengths and weaknesses and the progress that we made since our last plan was submitted in 2003.

Objectives:

After analyzing data and determining our strengths and weaknesses, the following objectives were formulated.

Goal 1: The Parkway School District Technology Department will provide administrators and teachers with the tools and training necessary to access and manage data effectively.

Goal 2: The Parkway School District Technology Department will continue to develop and improve recourses necessary for communication between students, teachers and the community.

- Objective 1: Collect requirements for data driven decision making (D3M) system to address district reporting of student assessment data to improve decisions concerning individual student needs.
- Objective 2: Provide the tools for standard collecting and reporting of student discipline and referral data.
- Objective 3: Create a student storage system for cross platform access.
- Objective 4: Hire additional Technology Department staff to support district plans for data management and communication.
- Objective 5: Implement professional staff development for support staff via the Professional Employee Evaluation and Review System (PEERS).
- Objective 6: Gather and analyze additional data on student use of technology and student achievement.
- Objective 7: Continue to seek process improvements to reduce paper usage.
- Objective 8: Study the necessity of implementing the Schools Interoperability Framework to synchronize and share data among disparate applications and databases.

Action Plans:

The action plans to accomplish each objective are on the following pages. When implemented, these action steps will increase the effectiveness of data management in Parkway. The action steps are linked to MSIP, CSIP, and the Show Me standards, to insure that we provide the technical support required to accommodate a technology rich and productive school/work environment.

Evaluation

The Core Technology Committee will meet quarterly to evaluate the progress of each objectives and action plan. If adequate progress is not being made, corrective strategies will be developed and implemented.

Action Plans and Implementation – TFA 3 – Administration/Data Management- Data Analysis, Objectives and Action Plans

Goal 1: The Parkway School District Technology Department will provide administrators and teachers with the tools and training necessary to access and manage data effectively.

Goal 2: The Parkway School District Technology Department will continue to develop and improve recourses necessary for communication between students, teachers and the community.

Objective 1: Collect requirements for data driven decision making (D3M) system to address district reporting of student assessment data to improve decisions concerning individual student needs.

TFA 3: Administration/Data Management

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.2, 8.1, 8.7, 9.1, 9.2	2.b, 4.b	Identify the data needed to improve instructional decisions.	Technology Department	\$0	Beginning Fall 2006
6.2, 6.4, 8.7, 9.1, 9.2	2.b, 4.b	Determine the best method to store and manage student data within our current environment.	Technology Department	2004 Bond \$500,000 annually	Spring 2007
6.2, 6.4, 8.7, 9.2	2.b, 4.b	Develop and implement procedures that allow professional staff to easily access student data from their desktop.	Technology Department	\$0	Fall 2007
6.7	2.b, 4.b	Provide training for professional staff on best practices for accessing student data.	Technology Department	\$0	Spring 2008

Show Me Standards 1.4, 2.7

Action Plans and Implementation – TFA 3 – Administration/Data Management- Data Analysis, Objectives and Action Plans

Goal 1: The Parkway School District Technology Department will provide administrators and teachers with the tools and training necessary to access and manage data effectively.

Goal 2: The Parkway School District Technology Department will continue to develop and improve recourses necessary for communication between students, teachers and the community.

Objective 2: Provide the tools for standard collecting and reporting of student discipline and referral data.

TFA 3: Administration/Data Management

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.2, 8.7	1.b, 2.b, 4.b	Develop application for collecting and reporting student discipline.	Technology Department	Title V \$30,000	Spring 2006
6.2, 8.7	1.b, 2.b, 4.b	Phased implementation of application at two elementary, one middle and one high school.	Technology Department	\$0	April thru June 2006
6.2, 8.7	1.b, 2.b, 4.b	Develop reports.	Technology Department	See Action Step 1	April thru June 2006
6.7	1.b, 2.b, 4.b	Training and implementation at all schools.	Technology Department	\$0	July thru September 2006

Show Me Standards 1.4, 2.7

Action Plans and Implementation – TFA 3 – Administration/Data Management- Data Analysis, Objectives and Action Plans

Goal 1: The Parkway School District Technology Department will provide administrators and teachers with the tools and training necessary to access and manage data effectively.

Goal 2: The Parkway School District Technology Department will continue to develop and improve recourses necessary for communication between students, teachers and the community.

Objective 3: Create a student storage system for cross platform access.

TFA 3: Administration/Data Management

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4	4.a	Determine hardware specifications for student storage.	Technology Department	Technology Budget \$25,000	Spring 2006
6.4	4.a	Install hardware and test functionality.	Technology Department	\$0	Spring 2006
6.4, 6.7	4.a	Provide training for professional staff on how students will access the storage using either platform.	Technology Department	\$0	Summer/Fall 2006

Show Me Standards 1.4, 2.7

Action Plans and Implementation – TFA 3 – Administration/Data Management- Data Analysis, Objectives and Action Plans

Goal 1: The Parkway School District Technology Department will provide administrators and teachers with the tools and training necessary to access and manage data effectively.

Goal 2: The Parkway School District Technology Department will continue to develop and improve recourses necessary for communication between students, teachers and the community.

Objective 4: Hire additional Technology Department staff to support district plans for data management and communication.

TFA 3: Administration/Data Management

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
8.4, 8.5	1.b, 2.b, 4.b	Identify projects and man-hours required to complete.	Technology and Human Resources Department	Pending Funding	Summer 2006
8.4, 8.5	1.b, 2.b, 4.b	Present staffing needs to CFO & Superintendent Council.	Technology and Human Resources Department	Pending Funding	Fall 2006
8.4, 8.5	1.b, 2.b, 4.b	Follow district hiring procedures once funding is approved.	Technology and Human Resources Department	Pending Funding	Fall 2006/Spring 2007

Show Me Standards 1.4, 2.7

Action Plans and Implementation – TFA 3 – Administration/Data Management- Data Analysis, Objectives and Action Plans					
<p>Goal 1: The Parkway School District Technology Department will provide administrators and teachers with the tools and training necessary to access and manage data effectively.</p> <p>Goal 2: The Parkway School District Technology Department will continue to develop and improve recourses necessary for communication between students, teachers and the community.</p> <p>Objective 5: Implement professional staff development for support staff via the Professional Employee Evaluation and Review System(PEERS) application.</p> <p>TFA 3: Administration/Data Management</p> <p>Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation</p>					
MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.7	4.b	Roll small group of support staff into current PEERS system as test	Coordinator of Development-Jennifer Sisul Tech Facilitators Peggy Wald & Tom Swoboda Support Staff Facilitator-Elizabeth Mayes	\$0	Spring 2006
6.7	4.b	Determine need for changes in system: Summer 2006	Jennifer Sisul Elizabeth Mayes	Bond \$5000 from \$500,000 allocation	Summer 2006
6.7	4.b	Work with vendor to implement changes in system	Jennifer Sisul Elizabeth Mayes	Bond \$2000 from \$500,000 allocation	Fall 2006
6.7	4.b	Continue to roll groups of support staff into system	Jennifer Sisul Elizabeth Mayes	\$0	Fall 2006
Show Me Standards 1.4, 2.7					

Action Plans and Implementation – TFA 3 – Administration/Data Management- Data Analysis, Objectives and Action Plans

Goal 1: The Parkway School District Technology Department will provide administrators and teachers with the tools and training necessary to access and manage data effectively.

Goal 2: The Parkway School District Technology Department will continue to develop and improve recourses necessary for communication between students, teachers and the community.

Objective 6: Gather and analyze additional data on student use of technology and student achievement.

TFA 3: Administration/Data Management

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.1, 6.2, 8.7	2.b, 4.a, 4.b	Identify students in exceptionally technology-rich classroom environments. A. Develop strategy for generating valid Statistical data. B. Develop and implement procedures Maintaining student records	Coordinator of Development-Jennifer Sisul Tech Facilitators Peggy Wald & Tom Swoboda	\$0	Fall 2006
6.2, 8.7	2.b, 4.a, 4.b	Collect baseline data on the students	Technology, Coordinator of Development-Jennifer Sisul Tech Facilitators Peggy Wald & Tom Swoboda	\$0	Winter 2006
6.2, 8.7, 9.1	2.b, 4.a, 4.b	Gather, disaggregate and analyze achievement data (MAP, ACT, Stanford and other district assessments)	Coordinator of Assessment- Andre Wood	\$0	Fall 2007
6.1, 6.2, 8.7	2.b, 4.a, 4.b	Gather, disaggregate and analyze “engagement” data from curriculum evaluation surveys and student discipline and absenteeism records.	Technology, Curriculum Coordinators	\$0	Ongoing
Show Me Standards 1.4, 2.7					

Action Plans and Implementation – TFA 3 – Administration/Data Management- Data Analysis, Objectives and Action Plans

Goal 1: The Parkway School District Technology Department will provide administrators and teachers with the tools and training necessary to access and manage data effectively.

Goal 2: The Parkway School District Technology Department will continue to develop and improve recourses necessary for communication between students, teachers and the community.

Objective 7: Continue to seek process improvements to reduce paper usage.

TFA 3: Administration/Data Management

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.2, 8.7	2.b, 4.b	Evaluate scheduled and requested reports	Technology Department	\$0	Ongoing
6.2, 8.7	2.b, 4.b	As access to information is provided for professional staff, reduce or eliminate paper reports.	Technology Department	Pending Personnel Resources	Ongoing

Show Me Standards 1.4, 2.7

Action Plans and Implementation – TFA 3 – Administration/Data Management- Data Analysis, Objectives and Action Plans					
<p>Goal 1: The Parkway School District Technology Department will provide administrators and teachers with the tools and training necessary to access and manage data effectively.</p> <p>Goal 2: The Parkway School District Technology Department will continue to develop and improve recourses necessary for communication between students, teachers and the community.</p> <p>Objective 8: Study the necessity of implementing the Schools Interoperability Framework to synchronize and share data among disparate applications and databases.</p> <p>TFA 3: Administration/Data Management</p> <p>Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation</p>					
MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4	4.b	Conduct a needs assessment and define our requirements	Project Manager-Gary Bradley	\$0	Spring 06
6.4	4.b	Document the current and desired infrastructure environment.	Project Manager-Gary Bradley	\$0	Spring 06
6.4	4.b	Evaluate risk mitigation and determine implementation strategy	Project Manager-Gary Bradley	\$0	TBD
6.4	4.b	Evaluate and select technology solutions (zone integration software, SIF agents)	Project Manager-Gary Bradley	\$0	TBD
6.4	4.b	Implement the select technology solutions	Project Manager-Gary Bradley	\$0	TBD
6.4, 6.7	4.b	Train technology staff members on how to implement the systems correctly	Project Manager-Gary Bradley	\$0	TBD
6.7	4.b	Develop plans for supporting and maintaining the chosen technology solution	Project Manager-Gary Bradley	\$0	TBD
Show Me Standards 1.4, 2.7					

Resource Distribution and Use TFA—Data Analysis, Objectives and Action Plans

Data Analysis:

Parkway's Technology Planning Committee analyzed a variety of data to determine strengths and weaknesses related to technology resources distribution and use throughout the district. For a list of the data analyzed, see Table 2: *Compiling Raw Data* (pg. 10). Recognizing our technology resource distribution and use strengths and weaknesses facilitated the development of our objectives and action plans.

The Planning Committee also reviewed our previous technology plan to identify strengths and weaknesses and the progress that we made since our last plan was submitted in 2003.

Objectives:

After analyzing data and determining our strengths and weaknesses, the following objectives were formulated.

Goal 1: Parkway School District will provide access to current technology that directly enhances student achievement, specifically, instructional technology, and technology that increases effectiveness of instructional, administrative, and support staff.

- Objective 1: Develop a best-practices model of technology distribution for the learning environment, based on National Education Technology Standards (NETS) essential conditions and directly matched with our own curriculum needs.
- Objective 2: Support students at home and better extend the learning environment, the district will monitor, investigate, and implement as funds permit, technologies that provide home access of student information for parents and for students.
- Objective 3: Expand the data center space and capacity to maintain the ability to support student and staff needs for technology.
- Objective 4: Improve Change Management of technology resources by developing and implementing systems and procedures to make software and system updates available through better-controlled and coordinated processes.
- Objective 5: Develop a plan to determine the feasibility of converting student lab computers from Macs to PCs and begin initial implementation by August of 2006. Deployment of window PCs to other functional areas (i.e. teacher computers) will be determined as interest and need dictate.
- Objective 6: Investigate fundamental changes in distribution of services by evaluating risk/rewards and feasibility of changes to Microsoft support methods beginning with anticipated releases of Microsoft's Vista operating system and Office 12 productivity suite in 2006.
- Objective 7: Establish district-wide 5-year refresh of model-compliant student computers and for all staff computers.

Action Plans:

The action plans to accomplish each objective are on the following pages. When implemented, these action steps will increase the effectiveness of technology resource distribution and use in Parkway. The action steps are linked to MSIP, CSIP, and the Show Me standards, to insure that we provide the resources required to accommodate a technology rich and productive school/work environment.

Evaluation

The Core Technology Committee will meet quarterly to evaluate the progress of each objectives and action plan. If adequate progress is not being made, corrective strategies will be developed and implemented.

Action Plans and Implementation – TFA 4 – Resource Distribution and Use

Goal 1: Parkway School District will provide access to current technology that directly enhances student achievement, specifically, instructional technology, and technology that increases effectiveness of instructional, administrative, and support staff.

Objective 1: Develop a best-practices model of technology distribution for the learning environment, based on National Education Technology Standards (NETS) essential conditions and directly matched with our own curriculum needs.

TFA 4: Resource Distribution and Use

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.1, 6.4	4a	Develop a method to maintain an ongoing effort to match technology resources with needs as determined by NETS	Core Technology Committee	\$0	Spring 2006
6.1, 6.4	4a	Recommend best practices model for schools to use in their technology planning process.	Core Technology Committee	\$0	Spring-Fall 2006
6.4	4a	Improve access to contemporary technologies, software, and telecommunications networks by monitoring and updating the district infrastructure as needed to operate unconstrained.	Technology Department	Technology Budget	Ongoing
6.4, 8.5	4a	Advocate ongoing financial support, including the use of matching grant funds, Parkway School District will provide increased access to district services that support student achievement.	Technology Dept., Curriculum & Development Dept	\$0	Ongoing

Show Me Standards 1.2, 1.4, 1.8, 2.7

Action Plans and Implementation – TFA 4 – Resource Distribution and Use

Goal 1: Parkway School District will provide access to current technology that directly enhances student achievement, specifically, instructional technology, and technology that increases effectiveness of instructional, administrative, and support staff.

Objective 2: Support students at home and better extend the learning environment, the district will monitor, investigate, and implement as funds permit, technologies that provide home access of student information for parents and for students.

TFA 4: Resource Distribution and Use

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective/ Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4	4a	In order to establish basic system requirements, school technology teams will determine their school's level of interest in having access to student work and other information from home.	Technology Focus Committee	\$0	Spring 2006
6.4	4a	The Technology Department will identify specific system components and products that provide student file access from home.	Technology Department.	\$0	Fall 2006
6.4	4a	The Technology Department will conduct a product review of candidate systems, with representatives from all schools' technology teams invited, to provide feedback prior to final product selection.	Technology Department	\$0	Fall 2006
6.4	4a	The Technology Department will implement the selected system for home file access, including a training phase so that all teaching staff members are able to use the system to improve instruction and learning using the system in conjunction with NETS.	Technology Department	Technology Budget	Fall 2007
6.4, 8.5	4a	For parent access of student information, the district will form a task team with parent representation to investigate needs and ramifications of access of student information from home.	Technology Department	\$0	Fall 2006
6.4, 8.5	4a	The Technology Department will implement parent access as recommended to and approved by administration.	Technology Department	\$0	Spring-Fall 2007
6.4, 8.5	4a	The district will work to optimize communication with parents regarding current and future home access project plans.	Technology Department	\$0	Ongoing
Show Me Standards 1.4, 2.7					

Action Plans and Implementation – TFA 4 – Resource Distribution and Use					
<p>Goal 1: Parkway School District will provide access to current technology that directly enhances student achievement, specifically, instructional technology, and technology that increases effectiveness of instructional, administrative, and support staff.</p> <p>Objective 3: Expand the data center space and network capacity to maintain the ability to support student and staff needs for technology.</p> <p>TFA 4: Resource Distribution and Use</p> <p>Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation</p>					
MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4	4a	Establish data center facility requirements, current and long-term, including power, raised floor, air conditioning, storage, printing area, and staff offices.	Technology Department	\$0	Spring-Summer 2006
6.4	4a	Assess technologies that can be used to consolidate servers, such as the use of ASP services, virtualization technology, etc.	Technology Department	\$0	Spring-Summer 2006
6.4	4a	Use information gathered to create specification and planning information for and expanded data center.	Technology Department	\$0	Fall 2006
6.4	4a	Upgrade schools primary data switches to one gb.	Technology Department	Technology Budget \$160,000	
6.4, 8.6	4a	Fund and implement data center expansion.	Technology Department	Technology Budget	Summer 2007
Show Me Standards 1.4, 2.7					

Action Plans and Implementation – TFA 4 – Resource Distribution and Use

Goal 1: Parkway School District will provide access to current technology that directly enhances student achievement, specifically, instructional technology, and technology that increases effectiveness of instructional, administrative, and support staff.

Objective 4: Improve Change Management of technology resources by developing and implementing systems and procedures to make software and system updates available through better-controlled and coordinated processes.

TFA 4: Resource Distribution and Use

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4	4a	Process improvement team will meet regularly to review, analyze, and plan change management issues	Technology Department	\$0	Ongoing
6.4	4a	Identify elements of processes and systems that have become negatively impacted by technology changes in the district environment.	Technology Department	\$0	Spring 2006
6.4	4a	Identify and select solutions (systems and processes) to correct conditions that are negatively impacted by technology changes.	Technology Department	Technology Department Budget	Summer 2006
6.4, 6.7	4a	Assign project leaders to research, develop, and implement solutions to correct change-related issues.	Technology Department	\$0	Summer 2006
6.4	4a	Create standards, guidelines, and procedures for the Technology Department to communicate within the department and to others who may be impacted by change.	Technology Department	\$0	Summer 2006
Show Me Standards 1.4, 2.7					

Action Plans and Implementation – TFA 4 – Resource Distribution and Use

Goal 1: Parkway School District will provide access to current technology that directly enhances student achievement, specifically, instructional technology, and technology that increases effectiveness of instructional, administrative, and support staff.

Objective 5: Develop a plan to determine the feasibility of converting student lab computers from Macs to PCs and begin initial implementation by August of 2006. Deployment of window PCs to other functional areas (i.e. teacher computers) will be determined as interest and need dictate.

TFA 4: Resource Distribution and Use

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective/ Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4	4a	Identify elements of infrastructure (network and services) to support a standard Microsoft environment, as well as Macintosh computers through a multi-year period of transition.	Technology Department	\$0	Spring 2006
6.4	4a	Prior to start of school, Parkway School District will identify elements of standard workstation images (Windows and Macintosh) for use on all lab computers for the duration of the school year.	Technology Department	\$0	Spring 2006
6.4	4a	Identify new technical tools and techniques to enhance technical support.	Technology Department	\$0	Spring 2006
6.4	4a	Any proposed software additions will be tested, piloted, and approval by Curriculum and by Technology prior to the creation of the annual PC image.	CTE Coordinator-Pam Krodinger	\$0	Spring 2006
6.7, 8.6	4a	Develop training plan for teachers, including cost projection	Technology Facilitators Peggy Wald, Tom Swoboda	\$0	Spring, Summer 2006
6.7, 8.6	4a	Create support policies and training plans for technology support personnel, including cost projection	Technology Department	\$0	Spring, Summer 2006
6.4, 8.6	4a	Present general Windows conversion feasibility and implications and to technology committees and Administration for possible adoption.	Technology Department	\$0	Summer 2006
Show Me Standard 1.4, 2.7					

Action Plans and Implementation – TFA 4 – Resource Distribution and Use

Goal 1: Parkway School District will provide access to current technology that directly enhances student achievement, specifically, instructional technology, and technology that increases effectiveness of instructional, administrative, and support staff.

Objective 6: Investigate fundamental changes in distribution of services by evaluating risk/rewards and feasibility of changes to Microsoft support methods beginning with anticipated releases of Microsoft's Vista operating system and Office 12 productivity suite in 2006.

TFA 4: Resource Distribution and Use

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4	4a	Research support technologies and products to enhance current Wintel support methods through the use of automated and "pushed" (non-manual) installations, updates, and configuration changes.	Technology Department	\$0	Spring 2006
6.4, 8.6	4a	Enumerate products and costs that would be involved in a shift and eventual conversion to a full Microsoft-based desktop environment.	Technology Department	\$0	Spring 2006
8.6	C	Present cost of the proposed conversion to PDC and administration for the purpose of getting feedback and guidance.	Technology Department	\$0	Spring 2006
6.4, 8.6	4a	Present support system implications to technology committees, PCD and Administration for possible adoption.	Technology Department	\$0	Spring 2006
6.4, 6.7, 8.6	4a	Implement system if approved for adoption.	Technology Department	\$0	Fall 2006
Show Me Standards 1.4, 2.7					

Action Plans and Implementation – TFA 4 – Resource Distribution and Use

Goal 1: Parkway School District will provide access to current technology that directly enhances student achievement, specifically, instructional technology, and technology that increases effectiveness of instructional, administrative, and support staff.

Objective 7: Establish district-wide 5-year refresh of model-compliant student computers (Objective I) and for all staff computers.

TFA 4: Resource Distribution and Use

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4, 6.7	4a	When best-practices model for resource distribution is identified, plan school-based adoption.	Core Technology Committee	\$0	2007
8.5, 8.6	4a	Plan transition from current 2004 bond funding of technology refresh to expected ongoing funding.	Parkway School District PTC	\$0	2008, funds permitting
6.4, 8.6	4a	Provide a refresh plan for support staff computers that are not included in school technology plans so that this requirement can be considered in district financial planning	Technology Department	\$0	2009, funds permitting

Show Me Standards 1.4, 2.7

Technical Support TFA—Data Analysis, Objectives and Action Plans

Data Analysis:

Parkway's Technology Planning Committee analyzed a variety of data to determine strengths and weaknesses related to technical support of computer equipment throughout the district. For a list of the data analyzed, see Table 2: *Compiling Raw Data* (pg. 10). Recognizing our technology support strengths and weaknesses facilitated the development of our objectives and action plans.

The Planning Committee also reviewed our previous technology plan to identify strengths and weaknesses and the progress that we made since our last plan was submitted in 2003.

Objectives:

After analyzing data and determining our strengths and weaknesses, the following objectives were formulated.

Goal 1: Parkway School District will continue to strive to provide quality technical support and resources to enhance student learning, facilitate a teacher's ability to deliver quality instruction, as well as, maintain and develop tools that facilitate administrative and managerial tasks.

- Objective 1: Identify and implement software, hardware to monitor all network components for problems or performance issues.
- Objective 2: Develop formalized procedure for purchasing and installing operating systems and software to limit the possibility of application/operating system conflicts.
- Objective 3: Improve data backup procedures by deploying an off-site SAN (Storage Area Network) and X-Raid.
- Objective 4: Deployed new releases of standard district software to all computers that have the minimum system requirements to run the programs effectively.
- Objective 5: Examine the current service request system used to deploy technical support to determine if a better method exists.
- Objective 6: Establish new procedures for hiring and retaining the school CRSs (Computer Resource Specialists). (as funding permits)
- Objective 7: Add Technology personnel to support the expanded use of technology for instruction, D3M and operational services by August 2007.

Action Plans:

The action plans to accomplish each objective are on the following pages. When implemented, these action steps will increase the effectiveness of technical support in Parkway. The action steps are linked to MSIP, CSIP, and the Show Me standards, to insure that we provide the technical support required to accommodate a technology rich and productive school/work environment.

Evaluation

The Core Technology Committee will meet quarterly to evaluate the progress of each objectives and action plan. If adequate progress is not being made, corrective strategies will be developed and implemented.

Action Plans and Implementation – TFA 5 – Technical Support

Goal 1: Parkway School District will continue to strive to provide quality technical support and resources to enhance student learning, facilitate a teacher's ability to deliver quality instruction, as well as, maintain and develop tools that facilitate administrative and managerial tasks.

Objective 1: Identify and implement software and hardware to monitor all network components for problems or performance issues.

TFA 5: Technical Support

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4	4.a	Develop a list of network components to be monitored and a monitoring schedule	Technology Dept.	\$0	Spring 2006
6.4	4.a	Identify software and hardware to monitor network components	Technology Dept.	Technology Budget \$4000 annual maintenance \$400	Spring 2006
6.4	4.a	Implement network monitoring software and processes	Technology Dept.	\$0	Summer 2006
6.4	4.a	Train technical support staff on use of monitoring software	Technology Dept.	\$0	Fall 2006

Show Me Standards 1.4, 2.7

Action Plans and Implementation – TFA 5 – Technical Support

Goal 1: Parkway School District will continue to strive to provide quality technical support and resources to enhance student learning, facilitate a teacher's ability to deliver quality instruction, as well as, maintain and develop tools that facilitate administrative and managerial tasks.

Objective 2: Develop formalized procedure for purchasing and installing operating systems and software to limit the possibility of application/operating system conflicts.

TFA 5: Technical Support

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.1, 6.4	4.a	Software or OS purchases must be approved using the software adoption process	Curriculum and Development and Technology Department.	\$0	Spring 2006
6.1, 6.4	4.a	A standard image will be developed and deployed for labs with like machines; this image may vary between grade levels.	Technology Department & School Staff	Technology Budget \$15,000	On going
6.4, 6.7	4.a	CRSs will be trained on the proper way to install the OS or software	Technology Dept.	\$0	Yearly
6.4, 6.7	4.a	CRSs will receive regular updates on the most effective methods for deploying software in their buildings	Technology Dept.	\$0	Yearly
6.1, 6.4, 6.7	4.a	After the installation of the software, teachers will receive training on how to integrate the new software into the curriculum	Curriculum Coordinators and Developers	\$0	Yearly
Show Me Standards 1.4, 2.7					

Action Plans and Implementation – TFA 5 – Technical Support

Goal 1: Parkway School District will continue to strive to provide quality technical support and resources to enhance student learning, facilitate a teacher's ability to deliver quality instruction, as well as, maintain and develop tools that facilitate administrative and managerial tasks.

Objective 3: Improve data backup procedures by deploying an off-site SAN (Storage Area Network) and X-Raid.

TFA 5: Technical Support

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4	4.a	Install the fiber necessary to connect the off-site SAN	Technology & Facilities	Technology Dept. Budget \$3500	Summer 2005
6.4	4.a	Assemble the necessary hardware and test installation	Technology Dept.	Technology Dept. Budget and Bond funds \$50,000	Winter 2005
6.4	4.a	Run test backups to ensure proper operation of the new fiber and hardware configuration	Technology Dept.	\$0	Winter 2006
6.4	4.a	Test actual back up jobs to ensure complete backups and to allow for proper timing to ensure fastest throughput	Technology Dept.	\$0	Winter 2006
6.4	4.a	Test restore backup data to ensure accurate and complete backups were accomplished	Technology Dept.	\$0	Spring 2006
6.4	4.a	Place the off-site SAN into production by pointing the backups to that device. Monitor and adjust the times and completions	Technology Dept.	\$0	Summer 2006
Show Me Standards 1.4, 2.7					

Action Plans and Implementation – TFA 5 – Technical Support

Goal 1: Parkway School District will continue to strive to provide quality technical support and resources to enhance student learning, facilitate a teacher's ability to deliver quality instruction, as well as, maintain and develop tools that facilitate administrative and managerial tasks.

Objective 4: Deploy new releases of standard district software to all computers that have the minimum system requirements to run the programs effectively.

TFA 5: Technical Support

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4	4.a	Core Technology committee will develop an annual software deployment schedule.	Technology CTE Coordinator-Pam Krodinger	\$0	
6.1, 6.4	4.a	The new software will be installed and tested in one school lab (school to be determined) to insure that it functions correctly in our server controlled lab environment.	Technology Department	\$0	Spring 2006
6.4	4.a	After our initial testing of the software, a disk image will be created and stored on the district SAN (Storage Area Network)	Technology Department	\$0	Summer 2006
6.4,	4.a	CRSs will be trained on how to install the program from the SAN to a workstation.	Technology Department	\$0	Summer 2006, yearly updates
6.4, 6.7	4.a	Instructions on how to effectively install the program building wide will be provided to CRSs.	Technology Department	\$0	Yearly
6.1, 6.4	4.a	CRSs will be trained regarding primary differences with older version of curriculum software	Technology Department	\$0	Fall 2006
6.1, 6.4, 6.7	4.a	Teachers will be trained on how to use the software in the classroom after all installations have been completed.	Curriculum Coordinators and Developers	\$0	Ongoing
Show Me Standards 1.4, 2.7					

Action Plans and Implementation – TFA 5 – Technical Support

Goal 1: Parkway School District will continue to strive to provide quality technical support and resources to enhance student learning, facilitate a teacher's ability to deliver quality instruction, as well as, maintain and develop tools that facilitate administrative and managerial tasks.

Objective 5: Examine the current service request system used to deploy technical support to determine if a better method exists.

TFA 5: Technical Support

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
6.4	4.a	The technology department will review and test various work order applications.	Technology Department	\$0	Summer 2006-
6.4	4.a	System requirements will be consolidated and reviewed prior to final determination of solution to be used.	Technology Department	\$0	Summer 2006
6.4, 6.7	4.a	Once a decision has been made, the work order system will be tested and members of the technology support team will receive training on how to use the system. The current work order system will be in place and used as a backup in case of a system failure	Technology Department	Technology Budget \$10,000	fall 2006 – winter 2006
6.4	4.a	When it is determined that the new system is working properly, the old ticket application and data within will be archived on the district SAN	Technology Department	\$0	Winter 2007- summer 2007

Show Me Standards 1.4, 2.7

Action Plans and Implementation – TFA 5 – Technical Support					
<p>Goal 1: Parkway School District will continue to strive to provide quality technical support and resources to enhance student learning, facilitate a teacher's ability to deliver quality instruction, as well as, maintain and develop tools that facilitate administrative and managerial tasks.</p> <p>Objective 6: Establish new procedures for hiring and retaining the school CRSs (Computer Resource Specialists). (as funding permits).</p> <p>TFA 5: Technical Support</p> <p>Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation</p>					
MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
8.4	4.a	CRS responsibilities will be clearly defined and their work will focus on hardware and software support.	Technology & Building Administrators	\$0	Summer 2006-
8.4	4.a	CRSs will not have classroom responsibilities, which would eliminate the requirement of having 60 college credits hours to be hired. This will stabilize the position by attracting candidates that currently wouldn't be eligible because of the 60-hour requirement (i.e. food services, secretarial, out-of-district technicians, etc.)	Human Resources, Technology Dept. & Building Administrators	\$0	Summer 2007
6.7, 8.4	4.a	CRSs will be assigned and promoted based on a skills and competency test. The test and procedures for taking the test will be completed by August 2007.	Technology Dept., Buildings, CFO-Mark Stockwell, Human Resources	\$0	Summer 2007
6.4	4.a	Identify 5 of the 32 current CRSs to be full time employees who would report to Technology during the summer to complete special projects (lab conversions, establishing new labs, set up labs for new CRSs, document new processes and changes to processes, etc.).	Technology and Human Resources, CFO	Pending Funding	As funding permits
8.4	4.a	CRSs will be paid for 8 hours a day rather than the 7 they currently work.	Human Resources, Technology Dept.	Pending Funding	As funding permits
Show Me Standards 1.4, 2.7					

Action Plans and Implementation – TFA 5 – Technical Support

Goal 1: Parkway School District will continue to strive to provide quality technical support and resources to enhance student learning, facilitate a teacher's ability to deliver quality instruction, as well as, maintain and develop tools that facilitate administrative and managerial tasks.

Objective 7: Add technology personnel to support the expanded use of technology for instruction, D3M and operational services by August 2007.

TFA 5: Technical Support

Review Dates and Correction Strategies: Refer to page 78- Communication, Monitoring and Evaluation

MSIP Standard/ Indicator	CSIP Objective / Strategy	Action Step/Activity (TFA 1 Strengths and Weaknesses. See table 4.)	Responsibility Of	Funding Sources/ Cost Estimates	Timeline/ Completion Date
8.4, 8.5	2.b, 4.a, 4.b	The district will hire a project manager to provide technical training, technical communication to the schools, data mining for D3M, update technical information on Technology Department's web site, and support on-going instructional and operations projects.	CFO, HR, and Technology Dept.	Pending Funding	As funding permits
6.2, 8.4, 8.5, 8.6, 8.7, 9.1, 9.2	2.b, 4.a, 4.b	The district will hire three programming positions to support the expansion of applications services associated with administrative systems for current and new systems and D3M.	CFO, HR, and Technology Dept.	Pending Funding	As funding permits
6.2, 6.4, 8.4, 8.5 8.7	2.b, 4.a, 4.b	The district will hire a network specialist to support applications services and provide database administration for existing and new applications.	CFO, HR, and Technology Dept.	Pending Funding	As funding permits
6.7, 8.4, 8.5	2.b, 4.a, 4.b	The district will hire a help desk specialist to support the increased dependency on technology and provide individual user training and secretarial functions.	CFO, HR, and Technology Dept.	Pending Funding	As funding permits
6.4, 8.4, 8.5	2.b, 4.a, 4.b	The district will hire two field computer senior support specialist, to also serve as Webmaster support for school and departmental web pages.	CFO, HR, and Technology Dept.	Pending Funding	As funding permits
Show Me Standards 1.4, 2.7					

Communication, Monitoring, and Evaluation

Communication

Parkway School District's technology plan will be presented to parents, students, teachers, and community members through the following methods:

- Parkway School District Board of Education
- School Principals
- Curriculum Coordinators
- Parkway School District's Intranet (<http://www.pkwy.k12.mo.us/intra>)
- Electronic Newsletters
- Parkway School District's web site (<http://www.pkwy.k12.mo.us/>)
- Parkway School District's parent/community publications

These same strategies for communication were also used to effectively disseminate information about our previous plan.

Monitoring

The Core Technology Committee, which is comprised of curriculum coordinators and technology department staff, will meet at least four times a year to assess the progress of this plan's implementation. This technology plan will determine the direction of technology in Parkway for the next three years.

Evaluation

The Core Technology Committee will periodically revisit the data used to identify TFA strengths and weaknesses and determine whether or not progress is being made. In addition to revisiting the data listed in this plan, additional surveys will be given to staff and students to provide us with additional data in regard to student learning and teacher preparation. If progress is not occurring or is occurring more slowly than projected, the Core Technology Committee and the persons/department responsible for implementing the objective will develop correction strategies to quickly alleviate the problems and help push the plan forward.

TECHNOLGOY BUDGET Line Item Description	BUDGET	YTD	TOTAL	EXTRA	TOTALS	Account Number	TOTALS							
	FY05-06	FY05-06	FY06-07	FY06-07	FY06-07		FY06-07	Horizontal	A	B	C	D	E	F
	Amount	Amount	Vertical	Vertical	Core+Extra									
OD Consultants	\$84,300	\$84,616	\$86,950	\$38,000	\$124,950	1.	\$86,950	\$16,900			\$51,350	\$0	\$13,700	\$5,000
Services – Internet	\$8,595	\$9,000	\$10,000	\$0	\$10,000	2.	\$10,000				\$10,000			
Services - Special Ntwk	\$71,555	\$53,134	\$55,160	\$5,000	\$60,160	3.	\$55,160	\$15,000			\$40,160			
Main Srvc - Fiber Network	\$21,000	\$9,195	\$26,000	\$11,000	\$37,000	4.	\$26,000				\$26,000			
Repr Srvc - Office Eqpt	\$750	\$0	\$750	\$0	\$750	5.	\$750						\$750	
Main Srvc -Gen Hdw	\$41,300	\$23,875	\$28,700	\$10,000	\$38,700	6.	\$28,700	\$28,700						
Main Srvc - Telecom Ntwk	\$186,755	\$67,912	\$190,000	\$0	\$190,000	7.	\$190,000				\$190,000			
Repr Srvc - PC Hdw Inst	\$2,500	\$0	\$2,500	\$0	\$2,500	8.	\$2,500							\$2,500
Rent - Office Eqpt	\$200	\$246	\$200	\$0	\$200	9.	\$200						\$200	
Main - Gen Sfwr	\$200,680	\$109,155	\$228,150	\$0	\$228,150	10.	\$228,150	\$106,150		\$65,000				\$57,000
Travel – ID	\$5,500	\$1,932	\$5,500	\$0	\$5,500	11.	\$5,500						\$5,500	
Travel – OD	\$20,300	\$14,120	\$23,900	\$0	\$23,900	12.	\$23,900						\$23,900	
Prof Dues	\$2,125	\$1,303	\$2,195	\$0	\$2,195	13.	\$2,195						\$2,195	
Srvc Printing – OD	\$2,600	\$927	\$2,600	\$0	\$2,600	14.	\$2,600	\$2,600						
Telecom - Local & LD Srvc	\$104,000	\$52,773	\$97,000	\$0	\$97,000	15.	\$97,000				\$97,000			
Tele - Installation & Repair	\$8,000	\$731	\$8,000	\$0	\$8,000	16.	\$8,000				\$8,000			
Telecom - Wireless	\$31,000	\$4,745	\$25,200	\$0	\$25,200	17.	\$25,200				\$25,200			
Printing - ID	\$250	\$45	\$250	\$0	\$250	18.	\$250				\$250			
TOTAL PURCHASED SVC	\$791,410	\$433,709	\$793,055	\$64,000	\$857,055		\$793,055	\$169,350	\$0	\$192,510	\$320,450	\$46,245	\$64,500	
General Supplies	\$10,800	\$4,416	\$10,750	\$0	\$10,750	19.	\$10,750	\$150			\$1,500		\$9,100	
Sup - Furn / Equip	\$750	\$1,811	\$750	\$0	\$750	20.	\$750						\$750	
Sup - PC Sfwr Tech	\$2,700	\$1,350	\$2,700	\$1,200	\$3,900	21.	\$2,700		\$2,700					
Sup - Gen Consumables	\$24,690	\$18,428	\$36,550	\$11,500	\$48,050	22.	\$36,550	\$36,350			\$200			
Sup - PC Repr Parts Tech	\$2,200	\$0	\$2,200	\$0	\$2,200	23.	\$2,200		\$2,200					
Sup - PC Lab Repr Parts Inst	\$3,000	\$0	\$3,000	\$0	\$3,000	24.	\$3,000							\$3,000
Sup - PC Hdw Inst (JV)	\$0	\$0	\$0	\$0	\$0	25.	\$0							
Sup - PC Sfwr Inst (JV)	\$0	\$6,292	\$0	\$0	\$0	26.	\$0							
Sup - Periodicals Tech	\$420	\$99	\$2,570	\$43,011	\$45,581	27.	\$2,570						\$420	\$2,150
TOTAL CONSUMABLES	\$44,560	\$32,396	\$58,520	\$55,711	\$114,231		\$58,520	\$36,500	\$4,900	\$0	\$1,700	\$10,270	\$5,150	
CO - New Gen'l Eqpt	\$14,300	\$0	\$4,000	\$228,000	\$232,000	28.	\$4,000							\$4,000
CO - New Gen'l Sfwr	\$0	\$0	\$7,942	\$95,000	\$102,942	29.	\$7,942			\$7,942				
CO - Repl Gen'l Equip	\$0	\$0	\$7,000	\$6,000	\$13,000	30.	\$7,000						\$7,000	
CO - PC Repl Inst (Rf)	\$0	\$5,148	\$0	\$0	\$0	31.	\$0							
CO - PC Repl Hdw Tech	\$6,297	\$1,721	\$4,500	\$4,300	\$8,800	32.	\$4,500						\$4,500	
TOTAL CAPITAL OUTLAY	\$20,597	\$6,869	\$23,442	\$333,300	\$356,742		\$23,442	\$0	\$0	\$7,942	\$0	\$11,500	\$4,000	
Tech. Dept. Total Expenses	\$856,567	\$472,974	\$875,017	\$453,011	\$1,328,028	510 TECHNOLOGY	\$875,017	\$205,850	\$4,900	\$200,452	\$322,150	\$68,015	\$73,650	

Appendix A: Parkway's Guiding Principles

Parkway's Guiding Principles

Early in 1998, the Parkway School District's Board of Education empowered a group of citizens to develop a set of Guiding Principles to help guide the District into the 21st century. A comprehensive planning process was established, with an emphasis on "public engagement" and developing a report that would reflect the values of citizens as applied to issues of importance facing the District. The Guiding Principles, developed as a result of the public planning process, are provided below.

"Parkway's highest priority is to ensure the learning and success of every student."

Our Guiding Principles

- Students And Learning
- Structure And Organization Of Schools
- Developing Resources
- Relationships With The Community

Students and Learning

How should our students be prepared to meet with success as Parkway graduates in the 21st century?

Guiding Principle: #1

Provide a strong foundation of academic knowledge, and emphasize the understanding and use of technology, the importance of democracy, and the need for individual responsibility in a global and diverse society.

Guiding Principle: #2

Develop skills in thinking, problem-solving, effective communication, teamwork, and practical living.

Guiding Principle: #3

Provide an environment that is conducive to learning, promotes a sense of belonging, and encourages responsible behavior among all students.

Guiding Principle: #4

Acknowledge and address the diverse needs, learning styles and abilities of all students.

Structure and Organization of Schools

How might we structure and organize our District and its individual schools in a way that properly balances academics, community preferences and fiscal responsibility to maximize student achievement?

Guiding Principle: #5

Focus on the academic and interpersonal needs of students in determining both school size and class size.

Guiding Principle: #6

Stress fair and equal access to educational programs, services and facilities as the driving force in determining the District's geographic organization.

Guiding Principle: #7

Let the developmental needs of students guide the scheduling of school time.

Guiding Principle: #8

Identify and provide access to supplemental programs and services that nurture and protect a student's ability to learn, without undue cost to the District.

Developing Resources

What are our priorities with regard to the development of the District's resources - human, physical and financial - and how can we best manage these for the benefit of students?

Guiding Principle: #9

Attract, develop and retain a highly qualified, dedicated, and diverse faculty and staff, and evaluate their performance regularly against high and measurable standards.

Guiding Principle: #10

Develop and maintain safe, attractive, cost-effective facilities designed to support the learning process.

Guiding Principle: #11

Use financial resources to achieve goals consistent with the District's mission and guiding principles, and adhere to the highest level of fiscal accountability.

Relationships with the Community

What standards should the District maintain with regard to community services, communication activities and public policy involvement, while continuing to maintain its primary focus on educating students?

Guiding Principle: #12

Communicate issues, concerns and successes with all constituents in a candid, timely and concise manner that facilitates a two-way flow of communication.

Guiding Principle: #13

Contribute to the community's quality of life by building positive relationships between the District and its community and by developing students who are productive, caring and responsible citizens.

Guiding Principle: #14

Provide self-supporting continuing education programs that respond to community needs and interests.

Guiding Principle: #15

Actively influence local, regional, state and federal issues that are relevant to the District's mission, and protect local control of decision-making.

Appendix B: Parkway District Goals**Goal 1- Respect, Connect With, And Care About All Students**

- 1a. Provide baseline data to identify the increase of students who feel a strong connection to their school and respected and cared for by others in their school community.
- 1b. Implement the recommendations of the Discipline and Diversity Review Committee.

Goal 2- Achievement For All

- 2a. Provide baseline data to identify the increase of student reading achievement.
Measure related analysis as compared to local, state, and national standards
- 2b. Provide data to identify the strategies and programs that challenge and improve the performance of students who are achieving below district standards.

Goal 3- Healthy Kids

- 3a. Provide baseline data to identify the increasing percentage of nutritious and healthy food products sold and served to students in Parkway schools
- 3b. Integrate the disciplines of Physical Education, Health Education and Health Services into a unified effort to address the health concerns of Parkway students.
- 3c. Increase the number of developmental assets present in the lives of students attending Parkway schools.

Goal 4 Technology

- 4a. Enhance student learning by integrating technology applications into the curriculum and instructional practices
- 4b. Improve data-driven decision making and efficiency by integrating data management systems and training

Glossary of Abbreviations

CRS- Computer Resource Specialist

CTE- Career Technology Education

TIP- Technology Integration Pilot

TFA- Technology Focus Area

SAN- Storage Area Network