

Kern High School District



Technology Plan

July, 2010 – June, 2013

BOARD OF TRUSTEES

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Introduction

The Kern High School District (KHSD) is headquartered in Bakersfield, California and serves the county of Kern located at the southern end of the San Joaquin Valley. The Kern High School District is California's largest 9-12 high school district with more than 36,000 students and 3,500 employees. The KHSD encompasses about 3,500 square miles, about 43 percent of the total area of Kern County. Founded in 1893, the KHSD currently includes:

- 18 Comprehensive campuses
- 5 Alternative Education campuses
- 2 Career Technical Education sites
- 4 Special Education centers

Committed to utilizing all forms of technology in the educational process, the Kern High School District (KHSD) recognizes the importance of integrating current and emerging technology into a standards-based curriculum. The integration of technology in achieving the educational goals established by the KHSD Board of Trustees is essential. The District is committed to providing support, maintenance of existing instructional technology resources, planning for equipment replacement and infrastructure upgrades. Appropriately planned, implemented and supported, technology offers students new avenues of learning, processing information and problem solving. Additionally, the technology tools available to teachers and administrators foster new methods to deliver instruction, as well as, increasing the efficiency of instructional and non-instructional tasks.

Stakeholders

KHSD Technology Plan was developed through a committee process that adhered to contractual obligations between the KHSD and the Kern High Faculty Association. The Technology Plan committee members included teacher and/or administrative representatives from all school sites. Teachers were represented

by individuals from all department subject areas. Community and parent representation was not included on this committee, but the plan was presented at the Kern High School District Parent Advisory Committee (DPAC). The Technology Plan does provide for the inclusion of these additional stakeholders in the evaluation, monitoring, review and revision of the Technology Plan throughout its three year duration.

This plan contains all the required implementation plan components:

- Curriculum and Instruction
- Professional Development
- Infrastructure, Hardware, Technical Support and Software
- Funding and Budget
- Monitoring and Evaluation

An overview of the current state of technology in the KHSD serves as the foundation for each of the five areas and provides guidance in the development of the goals and objectives included in the Technology Plan.

Technology Plan components were studied, researched and prepared to directly encompass and support the KHSD Strategic Priorities adopted by the Board of Trustees for the years 2009-2011.

This plan covers the time between July 1, 2010 and June 30, 2013.

Goal#1: Provide Effective Instructional and Extra-curricular Programs

Long Term Priorities

- Improve student academic performance in all subject areas, for all subgroups, as measured by local, state, and federal accountability measures
- Increase the percentage of students fulfilling college admission requirements
- Maintain elective offerings to ensure a complete and comprehensive schedule for all students
- Improve graduation rate

Near Term Initiatives

- Broaden focus of curriculum to better prepare students for work, career training, and/or college by implementing "Pathways to Success"
- Explore instructional options such as: (1) Home / school cooperatives (2) Online learning opportunities (3) Additional academies (4) Small charter schools focused on specific areas of interest such as technology & English language acquisition

Goal#2: Maintain and Support An Exemplary Staff

Long Term Priorities

- Recruit, hire, develop, and retain a highly qualified and effective staff
- Maintaining high morale among employees
- Provide preparation focused on state and federal academic standards
- Provide district-wide and school-based staff development opportunities, aligned with District priorities/goals, to enhance employee performance and best practices
- Create professional learning opportunities by promoting collegiality and collaboration

Goal#3: Enhance Student Support Services

Long Term Priorities

- Maintain a safe and supportive school environment
- Continue efforts to encourage regular student attendance and progression to graduation
- Maintain a quality guidance program focused on individual student academic, career, and personal/social success
- Maintain quality facilities and technology systems
- Provide safe and affordable transportation and a quality food service program
- Continue the planning and development of new schools and maximize utilization of existing facilities

Goal#4: Strengthen School/Community Relations

Long Term Priorities

- Encourage parent participation in student achievement
- Expand effective communication with parents, agencies and businesses
- Increase articulation and coordination efforts with feeder districts/schools and with postsecondary institutions
- Maximize resources through joint partnerships and collaboration with state and community organizations
- Participate in public policy formation

Near Term Initiatives

- Expand parent/student educational choices by altering our open enrollment policies, transfer policies, and related practices to facilitate student opportunities to choose unique educational programs of particular interest, regardless of program location

This instructional technology plan incorporates many aspects of other committee work, as well as, District and site level plans and documents. These include:

- KHSD Local Education Agency Plan and Addendum
- Single School Plan for Student Achievement
- Western Association of Schools and Colleges Reports (WASC)
- Course Blueprints, Scope and Sequence
- District-Wide Courses of Study
- Individual Quality Education Investment Act (QEIA) plans

Allowing flexibility and autonomy among individual school sites was an additional aspect of the Technology Plan process. Committee members were mindful of the KHSD practice of supporting site specific decision making in the acquisition and use of technology resources. Consideration was also given to the guidelines, specifications and procedures developed by the Information Systems and Technology (IST) department, as well as, the categorical restrictions of specially funded programs. Hardware and software acquisitions may vary according to site in order to meet the diverse needs of the student populations served at each site.

Instructional Technology Plan Committee:

<i>Name</i>	<i>School</i>	<i>Subject Area</i>
Kay Alexander	District	Teacher, English Resource
Mary Beth Beadling	District	Teacher, Edusoft Resource
Joseph Biron	Foothill	Teacher, Social Studies
Rocio Cantu	Arvin	Teacher, English

Tom Cormack	Kern Valley	Teacher, Math/Science
Nancy DiAngelo	Mira Monte	Teacher, Modern Language
Jay Durant	District	Student Advocate, Special Ed.
Matthew Guinn	Shafter	Teacher, Social Studies
Kitty Hay	East Bakersfield	Teacher, Math
Paul Helman	District	Director, IST
Crystal Hoffman	Nueva Cont.	Teacher, Alternative Education
Seth Hunter	Golden Valley	Teacher, Math
Ricky Ishida	South	Teacher, Health/PE
Jerry Jones	Stockdale	Teacher, Vocational Ed.
Lindsey Kimball-Impagliazo	Frontier	Teacher, Visual-Performing Arts
Katie Kleier	District	Director, Instruction
Craig Morley	Centennial	Teacher, Modern Language
Anne Reynolds	North	Counselor
Connie Sack	District	Director, Instructional Services
Scherrer, Andrew	Bakersfield	Teacher, English
Bob Schneider	District	Community Liason Officer
Leah Shields	District	Teacher, Math Resource
Navdeep Singh	Liberty	Teacher, Science
Jana Sweet	West	Teacher, Social Studies
Nathan Urmston	ROC	Teacher, Vocational Ed.

Dacey Vanderwal	Independence	Teacher, Visual and Perf. Arts
Aaron Whitfield	Highland	Teacher, Math
Samual Yoon	Ridgeview	Teacher, Science

Other contributors, in the areas of finance and technology infrastructure, to this plan include:

- Alice Avery, Director, Data Processing
- Kevin Bell, Network Engineer, SBC
- Paul Bessalio, Director, Budget
- David Chalupa, Director, Fiscal Services
- Woody Colvard, Director, Facilities Planning
- Bruce Constantino, Supervisor, IST
- James Ewalt, Systems Coordinator, Data Processing
- Patrick Sawyer, Lead IST Technician
- Susan Klassen, Senior Account Manager, SBC
- Rod Lancaster, Director, Special Projects
- Jennifer Randel, Technical Writer, Data Processing
- Scott Cole, Director, Research and Planning
- Pipra Stewart, Senior Staff Secretary, IST
- Rick Ruiz, Director, Business Services

Long-range instructional technology planning to keep pace with the proliferation of technology resources, in hardware/software capabilities, as well as, the vast range of resources available on the Internet, is compounded by the rapid growth within the KHSD.

The largest high school district in the state of California, the KHSD encompasses some 3,000 square miles, much of it holding tremendous potential for population growth. The Research and Planning Department has long prepared annual ten-year projections which address growth in both the metropolitan

Bakersfield area, as well as, the District as a whole. While the exact numbers vary from year to year, growth has been a historical constant since the early 1980's. The recent fiscal recession has slowed growth in the metropolitan Bakersfield area. Still, recent enrollment trends show the potential for some limited growth in the future.

Current CBEDS enrollment for 2009-2010 has surpassed 37,000 students. Growth over 2008-2009 enrollment was minimal, but historically has averaged approximately 1500 students per year. Even with current enrollment trends, many of the KHSD comprehensive high schools exceed their design capacity. Portable classrooms have been installed on all campuses with the exception of the newest facilities. Currently 161 such classrooms are in place. An additional 32 portable buildings serve as administrative office or support buildings. Conservative enrollment projections expect enrollment to exceed 45,000 students in the next ten years. Frontier High School opened in the fall of 2006 and is the 16th comprehensive high school in the KHSD. The completion of Frontier marked the sixth comprehensive high school built since 1990 and alleviated crowding in northwest Bakersfield. Voter approval of measure 'N' in the fall of 2004, allows for the construction of an additional four comprehensive high schools, as well as, modernization of existing facilities within the KHSD. Independence High School and Mira Monte High School opened in the fall of 2008 to alleviate crowding in the southwest and southeast respectively. Plans for two additional comprehensive schools have been placed on hold due to a slowing in district growth trends and the current recession that has gripped the nation. Plans for a new continuation site continue. The technology plan goals, objectives and benchmarks are consistent and coordinated to accommodate this rapid growth and expansion within the District.

Program Improvement

In the fall of 2004, the KHSD was designated by the California Department of Education as a program improvement district. KHSD satisfied 32 of 34 criteria under federal 'No Child Left Behind' (NCLB) requirements, a success rate of about 94 percent. The District failed to meet two of the criteria required by NCLB, successfully meeting all criteria is required under NCLB.

Students classified as English Learners failed to meet NCLB criteria on the English tests and special education students fell short of meeting math testing requirements. As a result, the KHSD has developed strategies to improve success rates for both groups. Yearly monitoring is done to analyze achievement and adjust as necessary. To achieve the required 100 percent success, the District will have to improve the scores of students who do not speak English fluently and Special Education students. State figures released in the fall of 2004 reported that 9.2 percent of the KHSD's English Learners were at or above proficiency in English/language arts testing. A 9.3 percentage was required by NCLB. State figures also showed 8.6 percent of the KHSD's students with disabilities were proficient in the math testing. The NCLB required 11.0 percent student proficiency.

The most recent LEA data related to Program Improvement show marked improvement in individual student groups, yet KHSD failed to meet all the NCLB criteria to exit Program Improvement. State figures report that 24 percent of KHSD English Learners were at or above proficiency in English/language arts testing. While this is an approximately 13 percent growth, the target proficiency required for English set by NCLB is now 44.5 percent. State figures also show that 12.2 percent of KHSD's students with disabilities were proficient in the math testing. Once again, growth is evident with this student group- yet they failed to meet the higher math requirement (43.5 percent). An additional consequence of the increased proficiency targets set by NCLB is the addition of other

significant student groups not meeting the requirement. Hispanic, African American, and Socioeconomically disadvantaged students also are now failing to meet the higher requirement. The KHSD is continuing to work in developing strategies to address these issues.

Regardless, the KHSD has demonstrated success on several testing fronts. They included:

- Every site met school wide targets for graduation rate.
- Every site met school wide targets for proficiencies.

As a result of program improvement, KHSD school site and District administrators have participated in the AB75 Principal Training Program in partnership with the Kern County Superintendent of Schools Office. This training is ongoing as part of AB430. Additionally an addendum to the KHSD's Local Educational Agency Plan (LEAP) was prepared and adopted in the winter of the 2004-2005. The addendum included the creation of subject area benchmark committees, establishing scope and sequence components to core subject area courses of study and the adoption of reporting and assessment software.

As a result of Program Improvement and the LEA addendum, KHSD has fully implemented a district benchmark assessment system utilizing the online Edusoft platform. District benchmark committees meet yearly to revise and strengthen content area assessments. Depending on the content discipline, up to eight standards aligned assessments are administered each year. Assessment data is analyzed by department on a school site level as part of the Professional Learning Communities present at each school site. Individual teachers have access to local and state assessment data for students present in their individual classes.

Throughout the development of the Technology Plan, the KHSD Technology Committee was dedicated to incorporating and complimenting efforts to address and exit program improvement.

Current Access to and use of, Technology Resources

During the implementation of Digital High School (DHS), all KHSD grant applications included the commitment to provide each classroom with a computer to teachers and students with Internet access. Several schools installed thin client equipment that supported terminal services. SB 2882 provided many KHSD classrooms with upgraded end-user hardware through grants to acquire multimedia computers. All administrators, teachers, and instructional support personnel have email accounts.

The California School Technology Survey, completed by school sites in 2007 for the California Department of Education, shows that school sites are maintaining the necessary access to the Internet through the use of multimedia computers. School sites report, through the survey, that 100% of classrooms have networked connections to the Internet. A follow up study by IST also found all instructional classrooms connected to the Internet.

Information literacy is currently infused into all English/language arts courses of study. District wide courses of study in keyboarding and computer application courses articulate specific technology skills that correlate with National Education Technology Standards (NETS). Individual school sites may have additional course electives and school specific courses of study that incorporate those standards. There is an identified need to incorporate information literacy into the courses of study of all subject areas. Additionally, the need to include NETS into all subject area courses of study is identified.

It is also recognized that technology plays a large role in developing the 21st Century student. Included in this initiative is Career Technical Education. At the June 2008 board meeting, The Board of Trustees issued the following directive:

- Add to existing graduation requirements to require that each student complete one or more of the following pathways:
 - an approved **college preparatory** course of study, or
 - an approved **career education** pathway that is consistent with the student’s interests, needs, and aspirations, or
 - an approved **individual** pathway designed to meet the student’s academic and career needs and interests

As a result, KHSD graduation requirements will include three pathways to graduation starting with the 2013 graduating class. It is recognized that technology will play a large role in students completing one of the three paths toward graduation.

KHSD also initiated an online learning program starting with the 2009 school year. Utilizing the APEX Learning program, students deficient in credit were offered the option of an online curriculum, with support from classroom teachers, to make up course work. Technology played a critical role in the initial implementation and will continue to play a significant role as the program is developed.

Student Use of Technology

Student use, as reported by the 2009 California Technology Survey, is presented in the table that follows. The data includes twenty four KHSD sites that include: sixteen comprehensive high schools, five alternative education high schools, two special education programs and the Kern Workforce 2000 Academy charter school. The percentage shown reflects the average response for each category.

How far along are you in learning to....	I don't know how to do this.	I can do this but sometimes I need help.	I can do this by myself	I can teach others how to do this
Use a word processor to write and print documents?	15%	26%	34%	26%
Use a spreadsheet to enter and calculate numbers?	23%	35%	33%	9%
Use a spreadsheet to create graphs?	33%	36%	25%	6%
Use a database to enter information?	40%	31%	25%	4%
Use a database to search for and sort information to create reports?	32%	34%	27%	7%
Use drawing or painting software to create pictures?	7%	13%	45%	35%
Use a video camera to make videos?	27%	21%	31%	21%
Use video editing software to edit videos?	50%	30%	13%	7%
Use digital cameras and scanners to get pictures into a computer?	27%	25%	27%	21%
Use image-editing software to enhance pictures	34%	31%	22%	13%
Use presentation software to create presentations?	16%	27%	34%	23%
Use multimedia software to create products?	51%	30%	13%	7%
Use email to send and receive messages?	14%	15%	30%	42%
Use online discussions to gather information?	24%	21%	31%	24%
Use web authoring software to create web pages?	53%	24%	16%	8%
Use CC-ROMS to gather information?	26%	30%	29%	14%
Use online reference software to gather information?	38%	26%	26%	10%
Use search engines to find information on the World Wide Web?	19%	25%	33%	24%
Narrow WWW searches using Boolean operators?	47%	28%	19%	6%
Use graphing calculators to solve mathematical problems?	20%	30%	32%	18%
Use probes and probe software to collect and analyze information?	57%	27%	13%	2%
Use graphic organizers and/or systems thinking software to solve problems	51%	31%	15%	3%

Parental Permission for Student Network-Email-Web-Internet Access

Prior to gaining access to any aspect of the KHSD network, parents must approve and authorize that their student be granted such access. Both student and parent agree to the terms and conditions of the student Acceptable Use Policy (AUP) adopted by the board of trustees. Students receiving parent/guardian authorization are 'tagged' in the mainframe student information system. Network accounts are automatically generated that allow students to store school work on District data storage servers and gain Internet access for educational purposes.

Student Email

Prior to January, 2005, KHSD student email accounts were provided by a third party vendor in a community partnership between the KHSD and the *Bakersfield Californian*. As that partnership concluded, IST staff provided a cost effective solution that brought the ownership of KHSD student email to the District. All KHSD students are eligible for email accounts as approved by local site administrations. Email accounts are provided to KHSD students via Microsoft Exchange Server 2007. The student email system is entirely maintained and managed separately from the KHSD staff email system. To comply with NCLB and CIPA regulations and requirements, all incoming and outgoing student email is scanned and filtered for viruses, electronic security threats and restricted or banned content. Banned content categories are established and enforced by IST and site administrations and include profanity, racism, explicit language, etc. IST currently uses Microsoft Forefront for all virus and content filtering. Students may access their KHSD email account both on campus and at off campus locations. Off school site access provides the same security precautions as students must log on to the Kernhigh.org server. IST also maintains a detailed and unfiltered log of all email sent or received by all students, including a copy of the original email. Student email policies and procedures are contained in the KHSD board adopted AUP for students found in Appendix B of this document.

Student Computer Ratio

DHS and SB2882 grant funding established a 4-1 student to computer ratio goal for all KHSD school sites. With the suspension of DHS TSST funding commitments, many school sites struggle with maintaining the desired ratio. Sites with minimal categorical support for instructional materials have especially struggled to maintain desired ratios. Current student to computer ratios, by site follow:

	2009 Enrollment	# Computers	Ratio
<u>Comprehensive High School</u>			
Arvin High School	2554	831	3.1
Bakersfield High School	2725	753	3.6
Centennial High School	1840	405	4.5
East Bakersfield High School	2304	554	4.2
Foothill High School	2253	641	4.1
Frontier High School	2438	427	5.7
Golden Valley High School	2732	522	5.2
Highland High School	1898	476	4.0
Independence High School	1282	303	4.2
Kern Valley High School	605	284	2.1
Liberty High School	1854	373	4.9
Mira Monte High School	1552	303	5.1
North High School	2180	802	2.7
Ridgeview High School	2433	653	3.7
Shafter High School	1505	495	3.0
South High School	1972	545	3.6
Stockdale High School	2182	449	4.9
West High School	2105	641	3.3

Alternative High School

Central Valley High School	89	28	3.1
Nueva High School	117	111	1.1
Vista High School	255	150	1.7
Vista West High School	338	194	1.7
Summit High School	17	18	0.9
<u>District Average Ratio</u>	37230	9958	3.7

<u>Other KHSD Programs</u>	2009 Enrollment	# Computers	Ratio
ABLE	119		N/A
Workforce 2000 Academy	489		N/A
RCC		37	
SCC		26	N/A
Regional Occupation Center		304	N/A
Bakersfield Adult School		487	N/A

Data Processing and IST staff implemented an asset management and tracking system that integrates the District mainframe computer with web-based technology. IST staff continues to inventory all electronic equipment (computers and peripherals) at all school sites and school support locations. Newly acquired electronic devices and technologies are entered into the tracking system by central warehouse staff as items are received.

Assistive Technology

Assistive technology is evidenced at all KHSD school sites and educational programs. Special Education students are provided necessary technologies as

determined by their Individualized Educational Plan (IEP). Assistive technology is provided to many students both at school and in their home environment. KHSD has placed computers with specialized software and Internet connectivity into many home environments. Computers placed in the home environment are installed, serviced and maintained by IST staff. Such equipment is 'locked down' with no system administrator privileges permitted to students or parents, ensuring compliance with NCLB and CIPA regulations and requirements. Internet content filtering and restrictions are enforced. A comprehensive list of assistive technologies provided by the KHSD is found in the 'infrastructure, hardware, support and software' component of the Technology Plan.

Additional Resources

All school sites, in addition to business/technology classrooms, have one or more multipurpose computer lab(s) available to teachers and students. Configurations at various school sites include: traditional 'hardwired' labs, laptop labs connected to the Internet via wireless technology and thin client labs supported by terminal services technology.

Library media centers at all comprehensive and alternative high schools provide students with additional technology resources and Internet access. KHSD school site libraries are typically open before and after school, as well as, during the lunch periods. Several sites offer extended hours several afternoons or evenings each week. After hours scheduling and funding of supervisory personnel are determined by each local site administration.

School sites have a list of standards to assist in the selection and purchase of end-user hardware and software. Minimum specifications for hardware are established by District IST personnel and published to school sites. All software selections are reviewed by IST personnel prior to acquisition to ensure that the application is compatible with the KHSD network and end-user hardware.

The KHSD website contains a vast amount of information about District programs, procedures and each school site. The District website is managed by a full-time IST web developer who works within the IST Department. Comprehensive and alternative high schools have designated webmasters to produce and maintain site specific websites. KHSD 'webmasters' receive a 3% of salary monthly stipend for this extra duty assignment. Webmasters receive on-going staff development and technical training from the IST application analyst and web developer. Webmasters may create school site sub pages that allow teachers at the site to create and manage their own web pages.

The foundation for the goals and objectives of the KHSD Technology Plan are the 'Strategic Priorities' established and adopted by the KHSD Board of Trustees. The Technology Committee developed four goals for this technology plan that directly link the Curriculum, Professional Development and Infrastructure-Hardware-Support-Software components. Objectives were carefully developed for each component to ensure that a comprehensive, coherent and meaningful Technology Plan was produced.

GOAL # 1 of 4:

Maximize student success by improving student learning and academic performance through the effective use of contemporary and emerging technologies.

Objective 1 of 4: All students will demonstrate improved performance levels in English/language arts, math, science and social studies as measured on a variety of assessments. Such assessments may include: CAHSEE, STAR/CSTs, CELDT, District administered benchmark tests and IEPs.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1:</p> <p>By June of 2011, 20% of students will show growth on multiple assessments in English/language arts, math, science and social studies over the 2010 baseline.</p>	<p>KHSD subject area benchmark committees have developed ‘blueprints’ for each course at each grade level. ‘Blueprints’ establish scope and sequence to meet state adopted content standards in each core subject area.</p>	<p>Benchmark assessments will be conducted multiple times each year as called for in the subject area ‘blueprints.’ Committees will receive assessment data following each benchmark assessment administration to interpret results and revise benchmark assessments and subject area blueprints as required.</p>
<p>Year 2:</p> <p>By June of 2012, 30% of students will show growth on multiple assessments in English/language arts, math, science and social studies over the 2010 baseline.</p>	<p>Internal benchmark assessments will be administered through the Edusoft system for each course in core content areas by District subject area committees.</p> <p>Edusoft will be updated with current student information to facilitate data analysis by district and site administration.</p>	<p>KHSD Division of Instruction will collect assessment data and facilitate benchmark committees on an ongoing basis. The Directors of Instruction and Instructional Services will coordinate all benchmark committee activities.</p>
<p>Year 3:</p> <p>By June of 2013, 40% of students will show growth on multiple assessments in English/language arts, math, science and social studies over the 2010 baseline.</p>	<p>Professional Learning Communities will use Benchmark data in their analysis of standard mastery by students.</p> <p>A web-based teacher portal will be developed to provide a “virtual” collaboration site where best practices can be shared.</p>	<p>The Directors of IST and Data Processing will provide necessary resources for the development and maintenance of the Edusoft student test reporting system.</p>

GOAL # 1 of 4:

Maximize student success by improving student learning and academic performance through the effective use of contemporary and emerging technologies.

Objective 2 of 4: Increase the availability and use of on-line resources for students and teachers. Such resources may include distance learning, video conferencing, collaboration sites, webinars, video conferencing, tutorials, and web-based teaching materials.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1:</p> <p>By June of 2011, 40% of KHSD teachers and students will have accessed internal and/or external web resources that provide content standards based lessons, activities and/or tutorials.</p>	<p>Develop and implement an ongoing web-based environment that provides an 'in house' data base of recommended on line resources that teachers can readily access. On line resource lists may be added to, commented on and evaluated for effectiveness by all teachers.</p>	<p>Log in records will be used to provide frequency of use data. On line written feedback records will determine the addition or removal from on line resource lists.</p>
<p>Year 2:</p> <p>By June of 2012, 50% of KHSD teachers and students will have accessed internal and/or external web resources that provide content standards based lessons, activities and/or tutorials.</p>	<p>An ongoing collaborative review process will be developed by KHSD department chairs to identify valuable on line learning resources for each content area.</p>	<p>The Director of Instruction, Director of IST and District department chair facilitators will coordinate the review process and collect, organize and present data to department chairs and school site administrators.</p>
<p>Year 3:</p> <p>By June of 2013, 60% of KHSD teachers and students will have accessed internal and/or external web resources that provide content standards based lessons, activities and/or tutorials.</p>		

GOAL # 1 of 4:

Maximize student success by improving student learning and academic performance through the effective use of contemporary and emerging technologies.

Objective 3 of 4: Increase the availability of technology to all students at all sites through the extension of library/lab hours, increasing the ratio of technologies to students, and the promotion of District hosted web services and links that directly connect students to on line tutorials and resources.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1:</p> <p>By June of 2011, evaluate current level of use by staff/students. Determine the degree and type of technologies needed at each school site to provide availability to all staff and students.</p>	<p>A survey of current availability of education technology resources beyond the regular school day will be conducted during the spring of 2010. Results will be presented to site administrators by the end of 2010.</p>	<p>Printed summary of current availability of education resources available, by site, collected by IST staff and reported to all site administrators by the Director of IST.</p>
<p>Year 2:</p> <p>By June of 2012, 40% of KHSD schools will provide students with additional access to technological resources beyond the traditional hours of school operation, and have access to additional on-line resources.</p>	<p>School sites will include provisions in their 'Single School Plans for Student Achievement' for access to technology resources beyond the regular school day. Site administrations will develop provisions that best represent and support their specific school community.</p>	<p>Site principals' annually revise 'Single School Plans for Student Achievement.' Plans are then approved by school site councils and submitted to KHSD for approval by the Board of Trustees.</p> <p>Annual completion of a needs assessment survey will be collected and communicated by Instructional Services staff.</p>
<p>Year 3:</p> <p>By June of 2013, 60% of KHSD schools will provide students with additional access to technological resources beyond the traditional hours of school operation, and have access to additional on-line resources.</p>	<p>District IST will work with the Instruction Division and subject area facilitators to develop standards aligned resources to be integrated into a district hosted Learning Management System.</p>	<p>Log-in data will be used to gauge use of a district Learning Management System. The Director of IST will communicate usage reports to site administration each year.</p>

GOAL # 1 of 4:

Maximize student success by improving student learning and academic performance through the effective use of contemporary and emerging technologies.

Objective 4 of 4: All students in all subject areas will have opportunities to develop and use technology skills and tools as identified in KHSD courses, and by the NETS, meeting state and federal requirements.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1:</p> <p>By June of 2011, inclusion of appropriate NETS into courses of study (corresponding with the cyclical revision schedule) in the subject areas of foreign language and fine arts.</p>	<p>KHSD Course of Study Revision Schedule will be followed to incorporate appropriate NETS criteria into each course of study. Information literacy and responsible use of technology resources will be emphasized.</p>	<p>Subject area course of study will be examined by District instruction division directors and the Director of IST to ensure appropriate NETS criteria are included.</p>
<p>Year 2:</p> <p>By June of 2012, inclusion of appropriate NETS into courses of study (corresponding with the cyclical revision schedule) in the subject areas of agriculture, business and home economics.</p>	<p>Department chairs will revise course of study documents according to benchmark blueprints and state adopted content standards.</p>	<p>District subject area facilitators are responsible for leading department chairs in the revision of courses of study, under the direction of assigned instruction division directors.</p>
<p>Year 3:</p> <p>By June of 2013, inclusion of appropriate NETS into courses of study (corresponding with the cyclical revision schedule) in the subject areas of English and social studies.</p>		

GOAL # 2 of 4:

Improve the efficiency in instruction, record keeping and access to student information.

Objective 1 of 2: Improve and refine student assessment reporting tools to speed up data analysis and instructional feedback and to adjust/improve instruction.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1:</p> <p>By June of 2011, 40% of KHSD teachers and administrators will have real time, web-based access to student assessment information that allows for end user manipulation of data.</p>	<p>IST and Data Processing departments will continue support of the Edusoft system. Acquisition and installation of additional software and hardware will be completed as required. Reporting system will provide student assessment information related to STAR/CST, CELDT, CAHSEE and District created benchmark assessments that correspond to academic content standards. Increased integration with the iSeries SIS will be targeted.</p>	<p>Installation records and asset inventories will be maintained to provide progress updates on implementation.</p> <p>End users will evaluate and provide additional on-going feedback on functionality and recommendations of additional information to include in a web-based format.</p>
<p>Year 2:</p> <p>By June of 2012, 60% of KHSD teachers and administrators will have real time, web-based access to student assessment information that allows for end user manipulation of data.</p>	<p>Department Chairs, through the Office of Instruction, will provide on-going feedback regarding the structure, format and functionality of the reporting system for teachers.</p>	<p>Directors of IST and Data Processing are responsible for implementation and will provide quarterly reports on progress to the Superintendent's Office and Principals' Advisory Council.</p>
<p>Year 3:</p> <p>By June of 2013, 80% of KHSD teachers and administrators will have real time, web-based access to student assessment information that allows for end user manipulation of data.</p>	<p>Site administrators, through the Principals' Advisory Council, will provide on-going feedback regarding the structure, format and functionality of the reporting system for administrators.</p>	

GOAL # 2 of 4:

Improve the efficiency in instruction, record keeping and access to student information.

Objective 2 of 2: Student information system will be integrated with web-based teacher access through a single log on. Web-based portals will be incorporated allowing teachers to manipulate and organize student information and plan instruction. Attendance, grade books and student information system reporting will be fully integrated.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1:</p> <p>By June of 2011, Identify specific student information programs housed on the KHSD mainframe computer to develop and implement a web-based 'front end' for teacher and administrator access. Research grade book products that can interface with iSeries in a single log on environment.</p>	<p>Continue to identify additional student information programs housed on the KHSD mainframe computer to develop and implement a web-based 'front end' for teacher and administrator access.</p> <p>IST and Data Processing departments will provide on-going programming and support to integrate KHSD network functions with the District mainframe computer system.</p>	<p>Installation records and asset inventories will be maintained to provide progress updates on implementation.</p> <p>End users will evaluate and provide additional on-going feedback on functionality and recommendations of additional information to include in a web-based format.</p>
<p>Year 2:</p> <p>By June of 2012, pilot school sites will have implemented the web-based 'front end' for student information system programs through a single user network log on.</p>	<p>Needed software and hardware will be acquired and installed on a school-by-school basis to support integrating functionality.</p>	<p>Directors of IST and Data Processing are responsible for implementation and will provide quarterly reports on progress to the Superintendent's Office and Principals' Advisory Council.</p>
<p>Year 3:</p> <p>By June of 2013, a minimum of 50% of school sites will have implemented the web-based 'front end' for student information system programs through a single user network log on.</p>		

GOAL # 3 of 4:

Enhance District and school site information systems to facilitate school and community communication.

Objective 1 of 4: Implement an internal collaboration program/learning management system in support of professional learning communities, harvesting teacher brilliance, and career technical education programs.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1:</p> <p>By June of 2011, evaluate current level of use by staff. Determine the needs of each professional learning community and collaborative groups in the instructional programs.</p>	<p>KHSD has initiated Professional Learning Communities in all content areas. The professional groups will analyze data and share best practices to maximize the level of instruction across the district.</p>	<p>Professional Learning Communities are continually collaborating throughout the school year. The Instruction Division meets with all content instructional leaders once a month. Ongoing needs will be gathered at these meetings and passed onto IST for further SharePoint development.</p>
<p>Year 2:</p> <p>By June of 2012, 40% of KHSD teachers and administrators will have accessed an internal collaboration program in support of professional learning communities and/or instructional programs.</p>	<p>KHSD has implemented MS SharePoint solution as the center piece of a district wide internal collaboration system. This solution enables document management, shared calendaring, and Web 2.0 technology. Professional Learning communities can use this collaborative tool to share ideas, lesson plans, district wide data, and best practices.</p>	<p>The Director of IST and the Director of Data Processing will facilitate the population of each collaborative page with relevant data for group analysis. All page permissions will be managed through the existing Active Directory structure.</p>
<p>Year 3:</p> <p>By June of 2013, 60% of KHSD teachers and administrators will have accessed an internal collaboration program in support of professional learning communities and/or instructional programs.</p>	<p>The Director of IST will meet with all content are leadership to introduce the concept and gather the necessary information to initiate development. IST staff will develop the framework for teachers to use the collaborative network.</p>	<p>The Director of IST will monitor use of the collaborative network and share finding with the Superintendent’s Office and PAC.</p>

GOAL # 3 of 4:

Enhance District and school site information systems to facilitate school and community communication.

Objective 2 of 4: Implement an internal collaborative network to increase the efficiency and consistency for Special Education.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1:</p> <p>By June of 2011, complete a needs analysis within the Special Education Department. Determine the needs of each school site in the development of the district wide system.</p>	<p>KHSD has implemented MS SharePoint solution as the center piece of a district wide internal collaboration system. This solution enables document management, shared calendaring, and Web 2.0 technology. Special Education can use this collaborative tool to share ideas, lesson plans, district wide data, and best practices. This solution will also allow Special Ed. to manage legally required documents for all school sites.</p>	<p>The Director of IST, Special Education Manager, and Student Advocate will meet to create a needs assessment.</p> <p>The Director of IST will confer with the Special Education Manager to create a permissions structure for sensitive data.</p>
<p>Year 2:</p> <p>By June of 2012, 20% of school sites will have fully implemented and be actively using the internal collaborative network.</p>	<p>The Director of IST will meet with Special Education leadership to introduce the concept and gather the necessary information to initiate development. IST staff will develop the framework and permission structure for teachers to use the collaborative network.</p>	<p>The Special Education Manager will inform the Superintendent’s Office and PAC as to the process.</p>
<p>Year 3:</p> <p>By June of 2013, 40% of school sites will have fully implemented and be actively using the internal collaborative network.</p>		

GOAL # 3 of 4:

Enhance District and school site information systems to facilitate school and community communication.

Objective 3 of 4: Consolidate the various district student data systems into one access point, facilitating efficiency in parental communication via email, web interface, or portal.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1:</p> <p>By June of 2011, annually update parental email addresses into the student information system (SIS). Assess development procedure to integrate SIS web front end to a parent portal facilitating school to home communication.</p>	<p>IST and Data Processing departments will provide on-going programming and support to integrate the KHSD staff email system with the required portion of the KHSD SIS housed within the mainframe computer system.</p> <p>Data Processing with assistance from IST's Application Analyst are integrating the SIS database with a web front end to facilitate use of the system.</p>	<p>Installation records and asset inventories will be maintained to provide progress updates to implementation.</p> <p>Email server logs will be reviewed by IST staff to measure level of use.</p> <p>Data Processing/IST will monitor web front end of SIS to facilitate ease of use.</p>
<p>Year 2:</p> <p>By June of 2012, annually update parental email addresses into the student information system. Integrate SIS with parent portal facilitating school to home communication.</p>	<p>Needed software and hardware will be acquired and installed on a school-by-school basis to support integrating functionality. Downstream email servers will be acquired, installed, and maintained by IST staff.</p>	<p>End users will provide valuable feedback to the programmers to improve functionality.</p> <p>Directors of IST and Data Processing are responsible for implementation and will provide quarterly reports on level of use by parents and staff to the Superintendent's Office and the Principals' Advisory Council.</p>
<p>Year 3:</p> <p>By June of 2013, annually update parental email addresses into the student information system. 40% of staff will actively use a portal system to facilitate school to home communication.</p>		

GOAL # 3 of 4:

Enhance District and school site information systems to facilitate school and community communication.

Objective 4 of 4: Continue articulation for online data submission for all KHSD feeder districts.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1:</p> <p>By June of 2011, 60% of feeder districts will submit all demographic, assessment, enrollment, Special Education, other relevant data for students transitioning to high school via an online portal.</p>	<p>The receipt of data in a timely manner from all feeder districts is critical for the Kern High School District. Information relevant to enrollment, staffing, funding, Special Education, and other areas are contained in these data sets.</p>	<p>Data Processing will continue to monitor and maintain the online data submittal system.</p> <p>IST will review email server logs to measure level of use. IST will also monitor file size limits to minimize the barriers to the submittal process.</p>
<p>Year 2:</p> <p>By June of 2012, 80% of feeder districts will submit all demographic, assessment, enrollment, Special Education, other relevant data for students transitioning to high school via an online portal.</p>	<p>Utilizing email and MS SharePoint, Data Processing has developed a mechanism for online submittal of data from the feeder districts. This data is formatted and uploaded into the SIS for use in planning the next school year.</p> <p>The ease of use is critical in this system. Mitigating the barriers to the online submittal process will increase the timely submission of data by the other districts. The earlier the data is received by KHSD, the earlier it can be made available to site administration and Research/Planning.</p>	<p>Data Processing will provide quarterly reports to the Superintendent's Office and Research/Planning on the level of use and timely submission of data.</p>
<p>Year 3:</p> <p>By June of 2013, 100% of feeder districts will submit all demographic, assessment, enrollment, Special Education, other relevant data for students transitioning to high school via an online portal.</p>	<p>The ease of use is critical in this system. Mitigating the barriers to the online submittal process will increase the timely submission of data by the other districts. The earlier the data is received by KHSD, the earlier it can be made available to site administration and Research/Planning.</p>	

GOAL # 4 of 4:

Improve students technological and information literacy skills needed to succeed in the classroom and the work place

Objective 1 of 3: Increase student proficiency in basic keyboarding, computer applications, graphing calculators, presentation tools and other technologies prevalent in higher education and/or the workplace.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1:</p> <p>By June of 2011, 40% of all KHSD classrooms will regularly include the instruction necessary to integrate technology as a tool to apply content knowledge.</p>	<p>KHSD IST will continue to provide support for the integration of technology into the content area and career path curriculum.</p> <p>District wide courses of study will be reviewed to include technology relevant to the specific content area or career path. The Technology Committee will review technology initiatives for inclusion to the district technology standards.</p>	<p>Courses of study and career pathway directive will be review by Directors in the Instructions Division for the inclusion of technology as a tool for learning.</p> <p>Annual completion of a needs assessment survey will be collected and communicated by Instructional Services staff.</p>
<p>Year 2:</p> <p>By June of 2012, 50% of all KHSD classrooms will regularly include the instruction necessary to integrate technology as a tool to apply content knowledge.</p>	<p>Inclusion of industry leaders on the Technology Committee is recognized as important. Local industry leaders will provide input on what technologies are currently being leveraged in the business environment.</p>	<p>Director of IST will monitor the inclusion of industry leaders on the technology committee.</p>
<p>Year 3:</p> <p>By June of 2013, 60% of all KHSD classrooms will regularly include the instruction necessary to integrate technology as a tool to apply content knowledge.</p>		

GOAL # 4 of 4:

Improve students technological and information literacy skills needed to succeed in the classroom and the work place

Objective 2 of 3: Increase student/staff skills in communicating via the Internet through the proper use of blogs, wikis, forums, and other Internet-based forms of communication (Web 2.0).

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
Year 1: By June of 2011, 20% of instructional staff will use Web 2.0 technologies to enhance instruction in the classroom.	A survey of current availability of education web 2.0 technology resources on the KHSD network will be conducted during the fall of 2011. Results will be presented to site administrators for review.	Printed summary of current availability of education resources available, by site, collected by IST staff and reported to all site administrators by the Director of IST.
Year 2: By June of 2012, 30% of instructional staff will use Web 2.0 technologies to enhance instruction in the classroom.	KHSD has implemented MS SharePoint solution as the center piece of a district wide internal collaboration system. This solution includes Web 2.0 technology. Professional Learning communities can use this collaborative tool to share ideas, lesson plans, district wide data, and best practices.	Annual completion of a needs assessment survey will be collected and communicated by Instructional Services staff. Log-in data will be used to gauge use of a district Learning Management System and Internet resources. The Director of IST will communicate usage reports to site administration each year.
Year 3: By June of 2013, 40% of instructional staff will use Web 2.0 technologies to enhance instruction in the classroom.	The Director of IST will meet with all content area leadership to introduce the concept and gather the necessary information to continue development. Internet resources will also be reviewed and provisioned for use.	

GOAL # 4 of 4:

Improve students technological and information literacy skills needed to succeed in the classroom and the work place

Objective 3 of 3: Increase student awareness of Internet shortcomings including validity of information sources and CyberSafety.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1:</p> <p>By June 2011, all KHSD 9th grade Keyboarding classes will present a unit on CyberSafety and Internet literacy. All students/parents will sign the KHSD Acceptable Use Policy (AUP).</p>	<p>KHSD IST is committed to supporting the KHSD purchased i-Safe curriculum for Internet Safety. This web based resource includes video and interactive lessons specifically geared to grade levels.</p>	<p>Director of IST will monitor use of the i-Safe curriculum to determine levels of use by instructional staff. I-Safe provides a management solution that can easily be audited and communicated to school site administration.</p>
<p>Year 2:</p> <p>By June 2012, 40% of all KHSD classes will use Internet literacy instruction as an integral part of research. All students will receive information on Cybersafety as part of the AUP process.</p>	<p>Instruction Division will review curriculum with school site curricular leaders. Courses of study for all classes will be reviewed for inclusion of the i-Safe curricular components.</p>	<p>Instructional services will perform a yearly needs assessment and share finding with the Superintendentancy and Principal's Advisory Council.</p>
<p>Year 3:</p> <p>By June 2012, 50% of all KHSD classes will use Internet literacy instruction as an integral part of research. All students will receive information on Cybersafety as part of the AUP process.</p>	<p>KHSD IST will develop a pamphlet to be distributed with the AUP document as part of the parent approval process.</p>	<p>Parent permission for Internet access will be monitored through the SIS and reviewed quarterly for compliance by the Director of Data Processing.</p>

Professional Development

Goals, Objectives, Benchmarks, Activities and Evaluation

Operating under the umbrella of the instruction division, the department of instructional services is charged with the development, coordination, implementation and evaluation of all KHSD professional development activities and programs. Those activities and programs include:

- Beginning Teacher Support and Assessment (BTSA) – Title II
- KHSD Joint Committee (PAR)
- California Technology Assistance Project (CTAP) Certification
- Operation of the Professional Development Center
- Subject Area Resource Teachers on Assignment
- Blueprint/Benchmark Development and Committees
- Edusoft Teacher and Administrator Training

The department of instructional services identifies several areas of ‘un-tapped’ resources. For the past several years, ‘extra day service pay’ funding resources have been underutilized. Teachers are eligible to earn two additional days of salary for completing District or site approved professional development activities. Funding for one of these days is provided by categorical monies. The second day is funded by KHSD general fund dollars.

Minimal utilization of free on-line resources, such as the Technology Information Center for Administrative Leadership (TICAL) or the California Learning Resource Network (CLRN), has occurred in the KHSD. Participation in the CTAP program has dramatically declined in the past several years causing a critical shortage of CTAP level 3 mentors. Without those mentors, certification of level 1 and level 2 staff has become increasingly difficult. The need to promote the use of and publicize, these resources is recognized by District level administrators.

Teacher Use of Technology

Beginning in the mid-1990s, teachers and administrators have been provided with email accounts managed by IST department staff. The 2007 California Technology Survey verifies that 100% of KHSD teachers and administrators have email accounts. Additionally, the majority of classified employees have KHSD email accounts. Staff email policies and procedures are contained in the KHSD board adopted 'acceptable use policy' for staff found in Appendix A of this document. All KHSD employees using District email acknowledge acceptance of the AUP on an annual basis via electronic signature. Currently all email accounts are managed at the District office level using Microsoft Exchange Server 2007. Sites may maintain downstream Exchange servers to preserve WAN bandwidth. These edge servers remain managed remotely by District office IST personnel.

Each school site has a designated a webmaster to manage the local school's website. The webmaster has local administrative privileges and provides authorship permissions for site staff. The webmaster works closely with the site's technology administrator to monitor the content of all school sub pages. This ensures compliance with KHSD web policies, procedures and AUPs. School webmasters receive professional development training and guidance from the District Web Developer and IST Applications Analyst.

Using the latest California Technology Survey, school sites reported areas of teacher uses of technology. Teacher use was not included in the subsequent surveys as the CTAP survey has become the preferred data collection method in regards to the use of technology by teachers, administrators and students. The California Technology Survey has been indefinitely suspended by the California Superintendent of Public Instruction.

The data reporting functionality provided through the evaluation of Ed Tech profiles is recognized as a valuable tool by the KHSD. AB75 requires that 80% of KHSD teachers and administrators complete CTAP2 surveys and receive a profile. Those profiles will be used to provide additional feedback and possible revision to the Technology Plan on an annual basis. During the preparation of this plan, it was found that few KHSD teachers and administrators had completed the technology assessment profile, supplemental survey, or administrator survey. Therefore, the technology committee determined that the California Technology Survey, dated as it is, provided greater comprehensive reporting for the Technology Plan at this time.

It is recognized that timely assessment of relevant data is important to the further development of the technology plan. IST will be working with all school sites to utilize the Ed. Tech. Profiles and follow up with local surveys that give a clearer picture of KHSD use of technological resources.

Teacher Use of Technology For: Percentage of Sites Reporting Levels of Use (23 Sites)					
	None	More than 0 but less than 25% of teachers	25% to less than 50% of teachers	50% to less than 75% of teachers	75% to 100% of teachers
Create instructional materials/lesson plans	-	9%	9%	43%	30%
Deliver classroom instruction	-	9%	22%	43%	26%
Record student information	-	4%	-	4%	91%
Communicate with colleagues	-	-	-	22%	78%
Communicate with students/parents at home	9%	35%	35%	17%	-
Access model lesson plans/best practices	-	17%	22%	48%	9%
Monitor individual student progress	-	4%	17%	30%	48%

The data supports the development of curricular goals that will increase teacher use of technology for delivering classroom instruction and accessing model lesson plans. Nearly one-third of school sites report fewer than 50% of staff members utilizing technology for those purposes. The implementation of the

SAFARI Montage system has enabled teachers to access standards aligned video content for instructional support. The addition of a comprehensive LMS utilizing Microsoft's SharePoint services will enable teachers to share best practices in a virtual world. This is a focus within the KHSD curricular goals.

While the majority of school sites report a high level of use of technology for communication with colleagues, the use of technology to communicate with students and/or parents remains low. Increasing the use of technology to communicate with students and parents is an identified need that is supported by the survey results. The inclusion of parent email addresses into the SIS has served to increase this communication between the district and home. Further integration of the SIS to a unified grading platform with parent portal is addressed in the curricular objectives.

Similarly, the survey reports high rates of technology use by teachers to record student information though the use to monitor individual student progress is dramatically less. Recognizing that providing teachers with the tools and training necessary to monitor student progress and achievement, the KHSD contracted with Edusoft to provide student assessment and reporting tools, as well as, training to KHSD teachers and administrators. Edusoft assessments have been implemented on all content area served by CST's. This is in conjunction with the ongoing work of District benchmark committees following adopted 'blueprints' that are aligned with subject area content standards. Additionally, the Data Processing and IST departments have begun to converge web-based technology with the District's mainframe student information system. This convergence allows teachers and administrators to organize and analyze student data rather than depend on printed reports or place requests for 'new' programs to be written.

Administrator Use of Technology

Administrator use, as reported by the latest California Technology Survey, is presented in the table that follows. Teacher use was not included in the subsequent surveys as the CTAP survey has become the preferred data

collection method in regards to the use of technology by teachers, administrators and students. The California Technology Survey has been indefinitely suspended by the California Superintendent of Public Instruction.

It is recognized that timely assessment of relevant data is important to the further development of the technology plan. IST will be working with all school sites to utilize the Ed. Tech. Profiles and follow up with local surveys that give a clearer picture of KHSD use of technological resources.

The data includes twenty three KHSD sites that include: fifteen comprehensive high schools, five alternative education high schools, two special education programs and the Kern Workforce 2000 Academy charter school. The percentage shown reflects the number of schools responding in each area.

Administrator Use of Technology Percentage of Sites Reporting Level of Use (23 Sites)					
	None	More than 0 but less than 25% of admin.	25% to less than 50% of admin.	50% to less than 75% of admin.	75% to 100% of admin.
Tool in school financial/personnel management	9%	-	-	9%	83%
Analyze/monitor student achievement data	9%	-	4%	13%	74%
Assist with instructional leadership/management to improve pupil performance	4%	9%	22%	13%	52%
Monitor professional development needs of staff	9%	9%	26%	17%	39%
Communicate with parents via email	-	9%	22%	9%	61%
Communicate with district office or other sites via email	-	-	-	-	100%

Identification as a program improvement district has required KHSD administrators to participate in AB75/AB430 training. Significant technology training is included in these professional development activities.

GOAL # 1 of 4:

Maximize student success by improving student learning and academic performance through the effective use of contemporary and emerging technologies.

Objective 1 of 3: Increase CTAP level proficiencies and certifications among staff. Emphasis on increasing the number of CTAP 3 level mentors available to offer training, mentorship and CTAP certification of new and current teaching staff.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	MONITORING AND EVALUATION
<p>Year 1: By June of 2010, increase by 20% the number of teachers earning CTAP certifications over the 2009 level.</p>	<p>Develop District incentives for staff to earn a CTAP level 3 designation.</p> <p>Annually, evaluate Education Technology survey to identify and develop appropriate training activities.</p>	<p>Needs assessment by site and/or District conducted locally or identified through CTAP annual survey completion.</p> <p>Workshop sign-up records will be used to gauge the level of interest for specific activities.</p>
<p>Year 2: By June of 2011, increase by 40% the number of teachers earning CTAP certifications over the 2010 level.</p>	<p>Promote professional development activities offered through the Kern County Superintendent of Schools CTAP Office, the KHSD and school sites.</p> <p>Offer professional development training to meet the needs of beginning, intermediate and advanced users.</p>	<p>All professional development activities will include evaluation surveys for the specific activity. Responses will be collated and summarized by staff from Instructional Services.</p>
<p>Year 3: By June of 2012, increase by 60% the number of teachers earning CTAP certifications over the 2011 level.</p>	<p>Provide professional development information via the KHSD website.</p> <p>Coordinate professional development activities with appropriate CTAP Teacher Proficiencies and CCTC Standard 16.</p> <p>Encourage all staff to work toward CTAP 2 level, with each site having a CTAP 3 level mentor.</p> <p>Continue to offer teacher incentives for professional development participation. Incentives may be in the form of stipends, professional growth credit toward salary advancement, 'extra day service pay,' and/or release time.</p>	<p>The Director of Instructional Services and Director of IST will be responsible for planning, coordinating and evaluating all professional development activities and training associated with the Technology Plan.</p>

GOAL # 1 of 4:

Maximize student success by improving student learning and academic performance through the effective use of contemporary and emerging technology.

Objective 2 of 3: Provide staff with necessary training to identify, evaluate, use and integrate on-line and locally hosted resources for instruction. Trainings will included, but are not limited to, SharePoint LMS and SAFARI Montage video on demand services. Such training will also develop awareness of media literacy that will enable teachers to provide information literacy instruction in all subject areas.

ANNUAL BENCHMARKS	IMPLEMENTATION ACTION PLAN AND ACTIVITES	EVALUATION AND MONITORING
<p>Year 1: By June of 2011, 20% of teachers will have been trained in evaluation and use of on-line/hosted resources. Trained teachers will have resources readily accessible at their school site. Home access will also be an option for planning purposes.</p>	<p>Include media and information literacy strategies components into course of study revisions in accordance with the revision schedule.</p> <p>District professional development team and IST will plan integrated technology and media/info literacy training for site personnel. Such ‘training of trainers’ will focus on department chairs training others at school sites.</p>	<p>Courses of study will be examined by District instruction division directors and the Director of IST to ensure inclusion of information literacy.</p> <p>Workshop sign-up records will be used to gage the level of interest for specific activities.</p>
<p>Year 2: By June of 2012, 30% of teachers will have been trained in evaluation and use of on-line/hosted resources. Trained teachers will have resources readily accessible at their school site. Home access will also be an option for planning purposes.</p>	<p>Create and maintain links to on-line resources on the District SharePoint system. Adding links will be an on-going project. Department chairs, subject area facilitators and District resource teachers will recommend links to be added.</p>	<p>The department of instructional services, including the Director of Instructional Services and resource teachers on assignment, will provide planning and oversight of training.</p> <p>KHSD web developer is responsible for adding website links to the District website as advised by the directors in the Instruction Division and the Director of IST.</p>
<p>Year 3: By June of 2013, 40% of teachers will have been trained in evaluation and use of on-line/hosted resources. Trained teachers will have resources readily accessible at their school site. Home access will also be an option for planning purposes.</p>	<p>Communicate newly added on-line web links to affected District staff members by department via email and/or SharePoint posting. Continue to offer teacher incentives for professional development participation.</p>	<p>Tracking web links, as they are added, will be conducted by the KHSD web developer and reported to the Director of IST. The Director of IST will summarize and report findings to instruction division directors.</p>

GOAL # 1 of 4:

Maximize student success by improving student learning and academic performance through the effective use of contemporary and emerging technology.

Objective 3 of 3: Provide necessary staff development activities that present teachers with strategies for integrating technology and content area standards. Such training should focus on promoting student performance based on content standards including, but not limited to, standards-based assessment.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1: By June of 2011, 20% of teachers will have staff development opportunities for integrating technology and content area standards.</p>	<p>Annual review of benchmark assessments based of District adopted subject area benchmarks.</p> <p>Technology Staff Development Day by site and/or content area. ‘Extra day service pay,’ release time, or other teacher participation incentive.</p>	<p>Needs assessment by site and/or District conducted locally or identified through CTAP annual survey.</p> <p>Workshop sign-up records will be used to gage the level of interest for specific activities.</p>
<p>Year 2: By June of 2012, 30% of teachers will have staff development opportunities for integrating technology and content area standards.</p>	<p>Edusoft Training will be offered on an on-going basis using a ‘training of trainers’ model.</p> <p>Teachers will continue to be involved in the development of the SharePoint learning management system.</p>	<p>All professional development activities will include evaluation surveys for the specific activity. Responses will be collated and summarized by staff from the professional development department.</p>
<p>Year 3: By June of 2013, 40% of teachers will have staff development opportunities for integrating technology and content area standards.</p>	<p>Integration of technology with content standards will be included in the course of study revision process.</p> <p>Professional development activities will be offered with the greatest level of flexibility. Site and District office training, both during and outside the school day, will continue to be offered to District staff.</p> <p>Continue to offer teacher incentives for professional development participation. Incentives may be in the form of stipends, professional growth credit toward salary advancement, ‘extra day service pay,’ and/or release time.</p>	<p>The Director of Instructional Services , district resource teachers, subject area facilitators and Director of IST will be responsible for planning, coordinating and evaluating all professional development activities and training associated with the Technology Plan.</p>

GOAL # 2 of 4:

Improve the efficiency of instruction, record keeping and access to student information.

Objective 1 of 1: Provide teacher training that will enable teachers to gain access and successfully organize and analyze student information. Integration of student information systems, electronic grading and record keeping systems and Edusoft (or other data management/reporting system).

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1: By June of 2011, 20% of staff will be trained in the use of Edusoft and/or web-based access to student information. Additional training will be provided annually as other aspects of the student information system are converted for teacher use.</p>	<p>IST and Data Processing staff will continue the development of a web-based, windows ‘front-end,’ for the mainframe student information system using the LANSAs framework.</p>	<p>The Directors of IST and Data Processing will provide oversight and direct the training of all District staff.</p>
<p>Year 2: By June of 2012, 40% of staff will be trained in the use of Edusoft and/or web-based access to student information. Additional training will be provided annually as other aspects of the student information system are converted for teacher use.</p>	<p>New features will be promoted to teachers as those features are developed on an on-going basis. After initial training, staff will receive on-line training in the use of new electronic tools as those tools are developed.</p>	<p>Feedback from site technology administrators will be provided to IST and Data Processing staff to determine additional training needs and identify additional mainframe information to be included in the web-based ‘front-end.’</p>
<p>Year 3: By June of 2013, 60% of staff will be trained in the use of Edusoft and/or web-based access to student information. Additional training will be provided annually as other aspects of the student information system are converted for teacher use</p>	<p>Each site’s technology administrator will be trained to train site staff in the use of the web-based, windows ‘front-end’ student information system.</p> <p>Site based staff training in use of the student information systems will correspond with regularly scheduled teacher inservice days at the school sites.</p>	<p>School site ‘staff development day agendas’ will be collected from sites, through the Instruction Division, to ensure inclusion of necessary training.</p>

GOAL # 3 of 4:

Enhance District and school site information systems to facilitate school and community communication.

Objective 1 of 1: Provide teacher training on the development and maintenance of SharePoint services- Learning Management System

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1: By June of 2011, development and maintenance training will have been made available to 30% of KHSD teachers.</p>	<p>The District will create a template for a district wide collaborative network utilizing the SharePoint system. Teacher training in the use of the template will be provided by IST staff, at each school site, on an annual basis.</p>	<p>Sign-up logs and participation levels will be monitored and evaluated by the Director of IST to determine frequency, method and scope of additional trainings.</p>
<p>Year 2: By June of 2012, development and maintenance training will have been made available to 40% of KHSD teachers.</p>	<p>Annual trainings in advanced SharePoint development will be offered at the District level by IST staff and teacher technology leaders.</p>	<p>Annual review of the number of active participation will be conducted by IST department staff. Results of review will be presented to the administration at each site.</p>
<p>Year 3: By June of 2013, development and maintenance training will have been made available to 50% of KHSD teachers.</p>	<p>Provisions will be made so the SharePoint system is available from an outside connection. This will enable staff to access the resource from home.</p>	<p>Annual surveys will be used to determine additional needs. The Director of IST will compile annual summaries for school sites and the District at large.</p> <p>Site technology teachers and administrators will monitor effectiveness of its use.</p>

GOAL # 4 of 4:

Improve students technological and information literacy skills needed to succeed in the classroom and the work place.

Objective 1 of 1: Train staff in the integration of Information Literacy and CyberSafety curriculum into content standard based lessons.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	EVALUATION AND MONITORING
<p>Year 1:</p> <p>By June of 2011, 20% of teachers will have utilized staff development opportunities for the integration of Information Literacy and CyberSafety into content standards based lessons.</p>	<p>District professional development team and IST will plan integrated technology and media/info literacy training for site personnel. Such ‘training of trainers’ will focus on department chairs training others at school sites.</p>	<p>Needs assessment by site and/or District conducted locally or identified through the Ed. Tech. survey.</p> <p>Workshop sign-up records will be used to gage the level of interest for specific activities.</p>
<p>Year 2:</p> <p>By June of 2012, 30% of teachers will have utilized staff development opportunities for the integration of Information Literacy and CyberSafety into content standards based lessons.</p>	<p>Create and maintain links to on-line CyberSafety resources on the District SharePoint system. Adding links will be an on-going project. Video content focused on CyberSafety and Information Literacy will be housed on the SAFARI Montage system. Department chairs, subject area facilitators and District resource teachers will recommend links to be added.</p>	<p>All professional development activities will include evaluation surveys for the specific activity. Responses will be collated and summarized by staff from Instructional Services.</p>
<p>Year 3:</p> <p>By June of 2013, 40% of teachers will have utilized staff development opportunities for the integration of Information Literacy and CyberSafety into content standards based lessons.</p>	<p>Communicate newly added on-line web links to affected District staff members by department via email and/or SharePoint posting.</p> <p>Continue to offer teacher incentives for professional development participation. Incentives may be in the form of stipends, professional growth credit toward salary advancement, ‘extra day</p>	<p>The Director of Instructional Services, District resource teachers, subject area facilitators and Director of IST will be responsible for planning, coordinating and evaluating all professional development activities and training associated with the Technology Plan.</p>

Infrastructure, Hardware, Tech Support, Software Goals, Objectives, Benchmarks, Activities and Evaluation

Content Filtering

Internet content filtering is an integral part of Internet access for KHSD. All Internet access for both students and staff is filtered. Filtering is achieved by using both integrated ISA server rules and SurfControl for ISA server.

Antivirus

Antivirus services are provided using the Microsoft Forefront Suite.

Desktops and Servers

All workstations and servers have antivirus installed as part of the default software installation. The software is configured at installation using a customized installation package. All files are scanned for known viruses. Heuristic scanning is used to detect files with possible unknown viruses.

Email

Incoming email from the Internet is scanned for viruses first at the gateway using Microsoft's Forefront. Each email is scanned by Forefront for viruses. Each sender is also checked against multiple Real Time Black Lists to ascertain if they are on any Spam lists. Suspect attachments are quarantined for review then

deleted after 30 days if not acted upon. Internet email is then scanned again at the Exchange bridgehead using Microsoft's Forefront for Exchange Security Suite. All email and attachments are again scanned and infected emails or attachments are quarantined for review then deleted. All unauthorized file types are removed from the email before it is sent to the user's mailbox.

Management

All Forefront products are managed using a single server. This server is used to maintain all policies and push out virus definitions and product updates.

Rules for Students

Students are restricted to a set of protocols based on the rules configured in the ISA server. Rules are consistent throughout the District so that all students have the same access regardless of their location. Students are restricted to using port 80 in most instances. Port 443 access is provided to select URL designations. The opening of secure access on select websites allows students to complete college applications, FAFSA forms, etc. from any computer on the campus. Content rules are in place to prevent download access to streaming media and compressed files. SurfControl for ISA server provides URL and MIME type filtering.

Rules for Staff

Staff is restricted to a set of protocols based on the rules configured in the ISA server. Rules are consistent throughout the District so that all staff has the same access regardless of their location. Typically staff is restricted to using port 80 and port 443 only. Content rules are in place to prevent access to streaming media and compressed file access. SurfControl for ISA server provides URL and MIME type filtering.

Support – Data/IST Staff Ratio, Etc.

School sites are assigned IST support personnel at a rate that averages 1.0 FTE for comprehensive high schools (typically those exceeding 2,000 students). Alternative high schools, averaging 400 students, are assigned IST support personnel at .3 FTE. As new schools are built, the same formula is used to provide support staff to those schools. Additionally, three Mobile Support Teams (MST's) of two District technicians are equipped with necessary materials, tools and District vehicles. They are dispatched to school sites as determined by supervisory personnel. One of the technicians is designated to provide needed support for students requiring assistive technologies at their homes. An additional IST technician, along with supervisory and clerical personnel, supports District office operations.

The department of IST consists of:

- 1 Director of IST
- 1 Supervisor of IST
- 1 Staff Secretary
- 2 Lead Workers
- 1 Applications Analyst
- 4 IST Support Technician III
- 24 IST Support Technician II
- 1 Web Developer
- 1 IST Support Specialist

Support, operation, programming and maintenance of the KHSD mainframe computer is provided by the Data Processing department.

The department of Data Processing consists of:

- 1 Director of Data Processing
- 1 Program Coordinator
- 1 Systems Coordinator
- 2 Senior Program Analysts
- 1 Program Analyst
- 1 Programmer II
- 1 Research Analyst
- 1 Technical Writer
- 2 Systems Analysts
- 1 Data Control Specialist
- 1 Staff Secretary

All computers running Windows 2000 were removed from the KHSD network to ensure the on-going integrity and security of the WAN and LAN. Microsoft has also discontinued support for the purchase of Windows XP, computers that IST staff were unable to upgrade became obsolete. Regardless, the current minimum standard for all production computers on the KHSD network is Windows XP SP3 Professional. Wherever possible, computers have been upgraded to Windows Vista. Windows 7 is currently being evaluated in a testing environment.

Minimum Computer Specs for new purchases:

- Intel Core 2 Duo 3G Processor
- 2G Ram
- 10/100/1000 NIC
- Sound Blast compatible sound card w/ speakers
- Intel Graphics Media Video card or better
- CD-ROM drive
- USB version 2.0
- 17 inch Flat Panel Monitor
- Optical 2 button w/ scroll wheel

Standard Minimum Software load:

- Microsoft Windows 7 Enterprise
- Microsoft Office Standard
- Forefront Antivirus
- Windows Server CALs
- Adobe Acrobat Reader
- WinZip

All District and school site acquisitions are required to follow specifications established by the IST department. Those specifications establish a system to reduce 'niche' technology items that require high levels of tech support thereby ensuring a more sustainable technology environment.

School Site Internet connectivity

School Name	Speed of Connection
Able Center (High)	Less than 1.54 megabits
Arvin High	3.0 megabits or greater, but less than 10 megabits
Bakersfield High	3.0 megabits or greater, but less than 10 megabits
Centennial High	3.0 megabits or greater, but less than 10 megabits
Central Valley Cont High	3.0 megabits or greater, but less than 10 megabits
East Bakersfield High	3.0 megabits or greater, but less than 10 megabits
Foothill High	3.0 megabits or greater, but less than 10 megabits

Frontier High	3.0 megabits or greater, but less than 10 megabits
Golden Valley High School	3.0 megabits or greater, but less than 10 megabits
Highland High	3.0 megabits or greater, but less than 10 megabits
Independence High	Less than 1.54 megabits
Kern Valley High	1.54 megabits or greater, but less than 3.0 megabits
Kern Workforce 2000 Academy (Charter)	3.0 megabits or greater, but less than 10 megabits
Liberty High	3.0 megabits or greater, but less than 10 megabits
Mira Monte High	Less than 1.54 megabits
North High	3.0 megabits or greater, but less than 10 megabits
Nueva Continuation High	Less than 1.54 megabits
Ridgeview High	3.0 megabits or greater, but less than 10 megabits
Shafter High	3.0 megabits or greater, but less than 10 megabits
South High	3.0 megabits or greater, but less than 10 megabits
Special Services/Constellation	Less than 1.54 megabits
Stockdale High	3.0 megabits or greater, but less than 10 megabits
Summit Continuation	Less than 1.54 megabits
Vista High (Cont.)	Less than 1.54 megabits
Vista West Continuation	Less than 1.54 megabits
West High	Less than 1.54 megabits

Wide Area Network

Wide Area Network (WAN) services are provided via CSME network circuits to each campus and support site. A star topology using the District Office facility as the hub provides a 100M ethernet circuit to each site. DS3 circuits are used at the central location to provide a 1G Ethernet connection to the CSME hub. Three school sites are not provisioned on the CSME network. KHSD newest schools are both served by dual T-1 circuits to the District Office. The sites are part of an expansion plan. Kern Valley High School is also served by dual T-1 circuits and can't be modernized at this time due to its geographic location.

Time Division Multiplexing (TDM) is utilized to provide both CCIS voice trunking and data to the sites that have legacy phone systems. The other sites use Ethernet IP to pass data and VoIP for voice traffic.

Bandwidth prioritization is provided via Cisco routers at both the District Office and at each remote location. Administrative applications such as online attendance are prioritized via protocol or ip address.

Voice Services

Kern High School telecommunication services are provided via a network of NEC NEAX PBX switches. A star topology using a NEAX 2400 Imgxh switch at the core provides CCIS and VoIP links to each campus and support site. Each site utilizes a NEAX 2000 IPS or NEAX 2000 IVS for voice services. All classrooms are equipped with a telephone for internal and emergency calls.

CCIS is provided utilizing Time Division Multiplexing (TDM) or voice over IP (VoIP). CCIS trunking is used to provide a seamless 5 digit dialing plan and 100% feature transparency to all voice stations.

Access to the public switched telephone network (PSTN) is provided at each site for local and emergency service calls. Backup routes to the PSTN are provided over CCIS trunks to the core switch. Long distance calls are routed over the CCIS trunks to the core switch and then to the PSTN via a secure PRI circuit. PIN numbers are required to place a long distance call and security is managed by IST staff.

Voice mail is provided via a centralized Octel Serenade system. Voice mail is available to any station and is provided at the request of site administration.

Mobile Communications

Mobile cell phones coverage is provided through a national provider. Basic cell phones are provided to each school site and district division as part of the Emergency Response Plan. Multiple cell phones are held in reserve in case of a catastrophic emergency. Current KHSD policy restricts phones with data capabilities to school site Principals and the KHSD Police Department. The KHSD also belongs to the Government Emergency Telecommunications Service that provides priority calling in case of a catastrophic emergency.

Administrative Data Systems

Backbone

Data is delivered to each campus and support site via a Cisco 7206 core router. Each site is connected via a Cisco 3825 series router utilizing a 100M Ethernet connection on the CSME network. Bandwidth prioritization is provided by these routers.

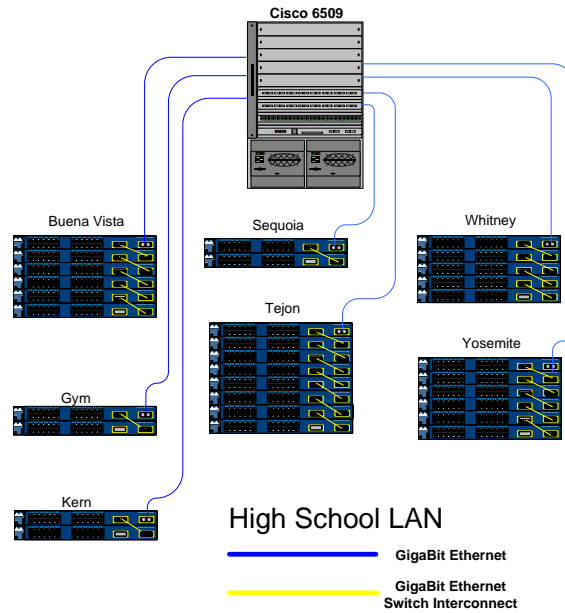
A Cisco 4507 layer 3 switch is used as a back bone switch for both the server farm and the District Office LAN. All servers are connected using copper Gigabit links.

Network services are provided by 51 servers at the District Office. Windows 2003 Server is used as the operating system on all servers. The servers provide a wide range of network services, email, database, file and print services, proxy/cache, content/spam filtering and bandwidth prioritization. Windows Server 2008 is being evaluated in a testing environment.

Remote Campus LAN

LAN Infrastructure

A Local Area Network (LAN) has been installed at each campus and support facility. The LAN is a collapsed backbone utilizing either a Cisco 6500 series or a Cisco 4500 series switch at the core. Stackable Cisco 3500 series switch clusters are used at each wiring closet to provide 10/100/1000Mbps connectivity to the desktop. All remote switch stacks are connected to the core switch by single or multiple Gigabit Ethernet links.

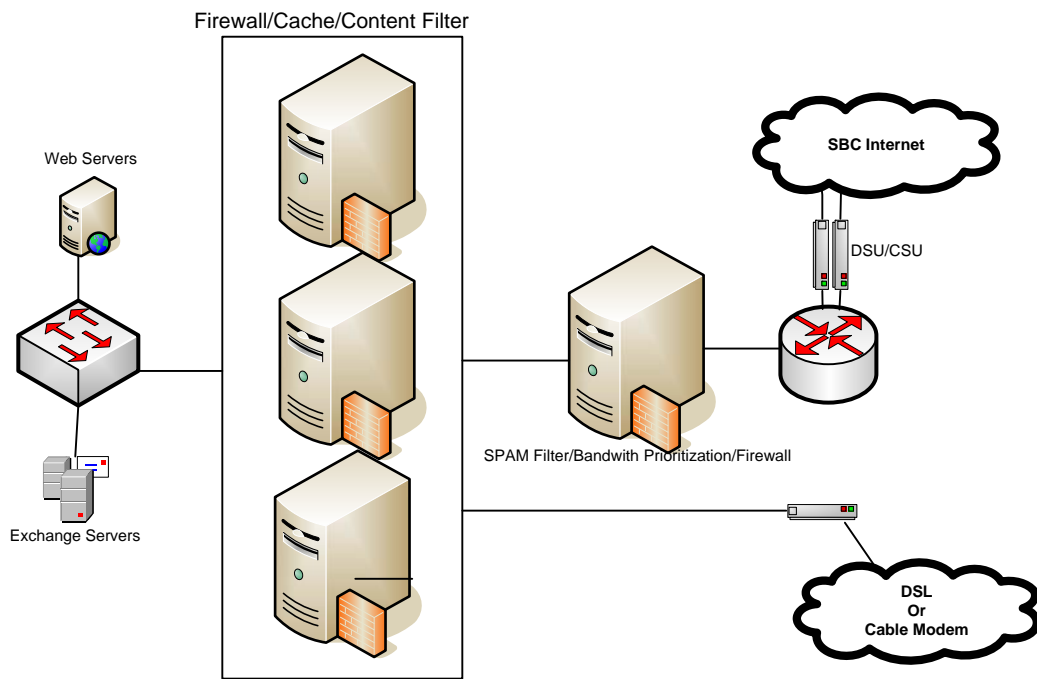


Cable Plant

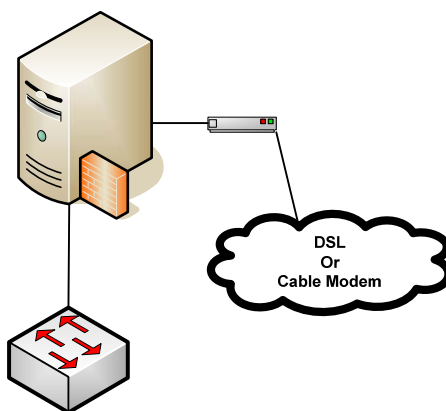
Each building on campus is connected to the LAN using multimode fiber. A Sumitomo Air Blown Fiber plant is used to provide a minimum of 6 strands of fiber per building. Each building has an empty tube conduit available for future growth. Desktop connections use ether Category 5e or Category 6 copper cabling.

Internet Connections

Internet connectivity to the District Office is provided by 10M MIS circuit. A DSL circuit is used as a backup connection. All traffic is routed first through a Cisco PIX firewall, and then through an array of Microsoft ISA servers that provide firewall, cache and content filtering. Microsoft's Forefront is used for Anti-virus on these servers. Bandwidth prioritization is handled by the PIX firewall. SurfControl for ISA Server provides content filtering for each ISA server.



Internet connectivity to each remote campus is provided via individual DSL or Cable Modems installed at each site. All traffic is routed through Microsoft ISA servers that provide firewall, cache and content filtering. SurfControl for ISA Server is used to provide content filtering for all students and employees. Backup routes to the Internet are provided via the District WAN.



Data Processing Department and Functions

KHSD's IBM Power 550 hosts 95% of the processes performed throughout the District. This powerfully integrated machine has the capability to easily integrate with IBM System X servers running the latest Microsoft Windows Server OS.

This machine is set up to work with business-to-business, business-to-consumer, customer relationship management and supply chain management applications from industry-leading providers. An intuitive graphical interface, called Operation Navigator, helps simplify advanced operations through visualization, wizards and operation integration. Languages available to District programmers are RPG (II, III and IV), C, C++, COBOL, PHP, Microsoft .Net Framework and Java.

The Power 550 is ready for logical partitioning, which splits total resources (processors, memory and storage) into virtual machines that can each run their own instance of IBM I AIX or Linux operating systems.

Power i Characteristics

This midrange computer has enterprise-level functionality for small and mid-sized businesses. KHSD's Power 550 has 10 GB of memory and 710 GB of auxiliary storage. It also has two optical libraries, one 8MM tape library, two one gigabyte ethernet adapters and one ECS modem.

Major Applications and Third Party Tools

As previously mentioned, most of the processes in the KHSD are managed on the Power 550.

In-House Systems:

- Student Information System
- Teacher Access Online
- Payroll/Personnel
- Financial
- Transportation
- Maintenance and Operations
- Food Services
- Warehouse Inventory

Third Party Tools:

- ACOM – document management software.
- Help Systems (Sequel) – SQL Business Intelligence Application.
- Help Systems PowerTech - Exit Program Security Suite (Firewall)
- FastFax – Enterprise Fax solution. Send or receive a fax using Microsoft Exchange. Using API commands it also automatically faxes emails to vendors
- Gateway – library/textbook inventory.
- Linoma Software’s RPG toolbox – iSeries productivity tool.
- Real Vision Imaging (RVI) – record archival tool.
- T.L. Ashford’s Barcode400 – barcode labeling software.
- SpoolFlex – Report Conversion. Automatically converts and distributes reports digitally in Excel or PDF formats. Cost of distribution is reduced by eliminating consumables and labor associated with printed reports.
- LANSA RAMP – Rapid Application Development IDE. Allows development of Modern GUI interface while reusing older time tested business logic, giving the users a modern easy to use application and allowing KHSD to minimize training for new employees.
- Planet-J WOW – Web Based SQL Tool. Allows for rapid development of web based applications. Query results can be downloaded as PDF, Excel or Word documents

The Power *i* is known for its ease of use, functionality, reliability, security, scalability and robustness. And, it is an ideal platform for running legacy applications and Client-Server applications capable of using the latest technology in the marketplace, such as LANSA/RAMP, IBM's WebSphere or Microsoft.net.

The dependability of this system is incomparable; downtime only occurs during scheduled maintenance. Security on this machine is superior to other comparable systems and its recovery facilities make retrieval of data an easy task.

Modernization of Kern Applications (MOKA)

Data Processing has begun a project to create a modern application framework that will eventually allow access to all current applications on the Power *i* 550. LANSA RAMP was chosen as the development platform because of its adherence to a common framework and the ability to reface our older terminal based programs. This gives KHSD the ability to present a modern graphic interface without rewriting the existing applications.

MOKA will give KHSD users a modern Windows program and interface. This will increase productivity by eliminating the cumbersome navigation that exists in our older terminal based programs. Moka will also reduce the training time necessary for users to become proficient in the use of KHSD applications.

Assistive Technology/Programs

Description	Program	Approximate # In Use in District
Electronics		
Telex Scholar CD Player	Blind/Dyslexic Student	2
iTalk2 Communicator	Assist Mobility Challenged Students	4
7-Level Communicator Builder	Switch to run software for Limited Mobility Students	7
Alphasmart Device	Allows Blind Students to do Word Processing	8
Dell Laptops for ATC software/hardware		10
Big Mack Switches-Different Colors/Sizes	Communication Device for Severe Student & Mobility Challenged	35
IntelliKeys Guard	Allows Limited Mobility Students to Type	5
Roller Plus Trackball/Joystick	Limited Mobility Students to communicate w/computer	5
Microsoft Optical Mouse/Computer	Visually Impaired Students	1
HP Printers for Boardmaker Software		20
Thermo-Pen	Visually Impaired Students	2
Software – Assistive Technology		
Touch N Type Stick	Visually Impaired Students	3
Staged 4 & 5 Assessment Software/Windows	Psychological Testing/Students	8
Might Math Zoo Zillions	Academic Assist Software for Autistic Students	3
Trudy's Time & Place House	Academic Assist Software for Autistic Students	2
Edmark Reading Level 1 & 2	Academic Assist Software for Autistic Students	7

Talking Nouns & Verbs Software	Academic Assist Software for Autistic Students	2
My House, My Town, My School Software	Academic Assist Software for Autistic Students	2
Kid Pix Deluxe 3	Academic Assist Software for Autistic Students	2
Solo Software	Academic Assist Software for Autistic Students	2
Springboard Application Software	Academic Assist Software for Autistic Students	3
Train Time By Locu Tour Software	Academic Assist Software for Autistic Students	3
Dragon Naturally Speaking 8 Preferred	Speech to Text/Text to Speech - Blind/Orthopedically Challenged	6
Dynawrite	Word Processing Software for Limited Mobility Students	3
Boardmaker	Facilitates Communication w/Flash Cards-Severe Students	8
Kurzweil	Text to Speech for Blind & Limited Mobility Students	6
Picture This for Boardmaker	Addendum for Boardmaker	6
JAWS for Windows (Job Access With Speech)	Screen Reader for Visually Impaired/Limited Mobility Students	4

Hearing Assistive Aids/Hearing Impaired

Phonak Picoforte Hearing Aid Audio Shoe	Enhance Hearing/Hearing Impaired	20-25
MLX Receivers	Enhance Hearing/Hearing Impaired	20-25
Campus STX5 Transmitters	Enhance Hearing/Hearing Impaired	20-25
AS7-MLX Audio Shoe	Enhance Hearing/Hearing Impaired	5
AS3-MLX Audio Shoe	Enhance Hearing/Hearing Impaired	5
Nimh Batteries for Campus S Transmitters	Enhance Hearing/Hearing Impaired	15

AS5-A Phonak Audio Shoe	Enhance Hearing/Hearing Impaired	3
Mics Omni-Dir Lapel	Enhance Hearing/Hearing Impaired	7
Crystal Tone Amplified Telephone	Enhance Hearing/Hearing Impaired	1

Visually Impaired Assistive Technology

Lively Art of Writing - 8 Braille Volumes	Braille Students	1 set
Canes with Roller Tips	Braille Students	4
Micro-vid Translator w/848 Wide Angle Lens	Visually Impaired Student/ABLE	1
Braille Transcription Project/Transcribe Math Books	Braille Students	1 set
Talking Calculators	Braille Students	2
OSCI Braille - Braille Books	Braille Students	4
Anamosa Braille Center - Braille Books	Braille Students	1 set
Braille Note 18 - Electronic Note Taker/Computer	Braille Students	2
Thermoform Braille Duplication Machine - EZ Form	Braille Students	1
Large Print Keyboard	Braille Students	1

Orthopedic Assistive Technology

Liftwalker Based Mobility System	Orthopedically Challenged Students/Severe	1
Swivel Front Wheeled Walker w/Forearm Support	Orthopedically Challenged Students/Severe	4

Handbook for Writers of Research Papers in Braille	Orthopedically Challenged Students/Severe	4
Posture Chairs With Leg/Arm Supports	Orthopedically Challenged Students/Severe	various
Body Point Rear-Pull Harness	Orthopedically Challenged Students/Severe	2
Large Toileting Systems	Orthopedically Challenged Students/Severe	2
Large Abler Mobile Stander	Orthopedically Challenged Students/Severe	4
East Pivot - Transfer Machines	Orthopedically Challenged Students/Severe	3
Rifton Gait Trainer	Orthopedically Challenged Students/Severe	2
Rifton Standers w/seat and table top	Orthopedically Challenged Students/Severe	4

If a student's IEP requires, a PC will be sent home for student use. Internet is provided via a residential DSL connection. If DSL is not available then a cable modem is installed.

Security

The workstation is protected using a layered security approach. The first layer is a DSL/Cable Modem router that provides Network Address Translation (NAT) between the ISA server and the Internet connection. The second layer is the Microsoft Windows server firewall and Microsoft Forefront on the ISA server. The third layer is the Microsoft XP SP3 Firewall. The firewalls are configured to block any inbound connections to the PC. The fourth layer consists of local machine security policies. The workstation is locked down so that the users have only a specific set of privileges. Only approved software is allowed to be installed and run. Microsoft Forefront Client Security is used to provide anti-virus and malware protection.

GOAL # 1 of 4:

Maximize student success by improving student learning and academic performance through the effective use of contemporary and emerging technology.

Objective 1 of 1: Develop, implement and manage a consolidated Internet connection provisioned to all school sites over the WAN that will allow increased end user access to Internet and Intranet resources. Resource types include streaming media, video conferencing, distance learning and other technologies that require significant bandwidth capabilities.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	MONITORING AND EVALUATION
<p>Year 1:</p> <p>By June of 2011, increase by two- fold, above 2010 levels, the ability of LANs to support high bandwidth demand applications at all school sites.</p>	<p>IST staff will evaluate high-bandwidth needs of each site and evaluate LAN capabilities at each site.</p> <p>Site technology administrators and IST staff will evaluate current high yield ISP's including, but not limited to, K12HSN.</p>	<p>IST District and site technicians are responsible for determining and reporting to District IST supervisory personnel upgrades required at each site.</p>
<p>Year 2:</p> <p>By June of 2012, increase by two- fold, above 2011 levels, the ability of LANs to support high bandwidth demand applications at all school sites.</p>	<p>IST supervisory personnel will establish a schedule to upgrade deficient LANs and networking equipment at various sites.</p>	<p>IST supervisory will prepare final scheduling, recommendations and cost estimates to the Director of IST.</p>
<p>Year 3:</p> <p>By June of 2013, increase by two- fold, above 2012 levels, the ability of LANs to support high bandwidth demand applications at all school sites.</p>	<p>District IST staff and site technicians will select, evaluate and acquire hardware and software to meet goals and objectives.</p> <p>Provide vendor or in-house training of District IST staff and site technicians on hardware/software and its implementation, operation and maintenance.</p>	<p>Director of IST will incorporate upgrades into existing IST operational budget or other sources.</p> <p>Director of IST will provide annual report and cost analysis of current and future budgets for connection upgrades to the Associate Superintendent of Business.</p>

GOAL # 2 of 4:

Improve the efficiency of instruction, record keeping and access to student information.

Objective 1 of 1: Complete upgrades to the KHSD Wide Area Network that results in improved speed and delivery of voice and data connections between the District office-school sites and school site-school site.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	MONITORING AND EVALUATION
<p>Year 1:</p> <p>By June of 2011, evaluate WAN upgrade options for Mira Monte and Independence High Schools that brings 10/100 Ethernet MAN connectivity consistent with the current district system.</p>	<p>Site surveys will be conducted by IST personnel to evaluate available conduit and determine sites requiring additional conduit needs.</p> <p>A timeline showing when each site is scheduled for upgrade will be developed by IST, facilities planning and maintenance and operations personnel. Coordination of school modernization, school construction and other construction projects will be a priority to minimize upgrade costs.</p>	<p>The Directors of IST, Facilities Planning, Maintenance and Operations and Business Services will evaluate all surveys and select sites to be upgraded for each year of the plan.</p>
<p>Year 2:</p> <p>By June of 2012, evaluate WAN upgrade options for KHSD to provision 1GB Ethernet MAN to all sites.</p>	<p>The Director of Business Services will evaluate and approve all contracts associated with network upgrades.</p>	<p>Annual progress reports and project revisions will be prepared by IST staff and presented to the Associate Superintendent of Business.</p>
<p>Year 3:</p> <p>By June of 2013, 25% of all KHSD school sites will have 1GB Ethernet MAN connectivity.</p>	<p>Eligibility of projects for ERATE funding will be determined by IST personnel.</p> <p>Appropriate RFP, Erate filings, bidding procedures and timelines will be developed and completed by IST staff.</p>	

GOAL # 3 of 4:

Enhance District and school site information systems to facilitate school and community communication.

Objective 1 of 1: Provide infrastructure solutions and upgrades, to support increased LAN storage demands and allow for increased development of SharePoint and expanded use of a consolidated grading program.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	MONITORING AND EVALUATION
<p>Year 1:</p> <p>By June of 2011, evaluate and adopt a consolidated grading program. Evaluate hardware and software requirements for new system.</p>	<p>IST staff will evaluate and anticipate all future needs of KHSD.</p> <p>IST staff will evaluate specific hardware solutions and an integrations strategy will be developed.</p>	<p>IST District and site technicians are responsible for determining and reporting to District IST supervisory personnel upgrades required at each site.</p>
<p>Year 2:</p> <p>By June of 2012, evaluate and adopt hardware upgrades to support MOSS (SharePoint) growth.</p>	<p>IST staff will select, evaluate and acquire hardware and software to meet goals and objectives.</p>	<p>IST supervisory will prepare final scheduling, recommendations and cost estimates to the Director of IST.</p>
<p>Year 3:</p> <p>By June of 2013, evaluate and adopt hardware upgrades to support consolidated back-up of data. Purchase of additional storage for Equilogic SAN solution.</p>	<p>IST will provide vendor or in-house training to District and site technicians on hardware/software and its implementation, operation and maintenance.</p> <p>Consideration will be given to temporary solutions to various sites. Downstream Exchange servers as one example.</p>	<p>Director of IST will incorporate upgrades into existing IST operational budget, measure 'N' funds or other sources. Director of IST will provide annual report and cost analysis of current and future budgets for LAN upgrades to the Associate Superintendent of Business.</p>

GOAL # 4 of 4:

Improve students technological and information literacy skills needed to succeed in the classroom and the work place.

Objective 1 of 1: Provide school sites with purchasing solutions to maintain a 4:1 ration of students to computer. Maintain a five year refresh rate for computers and a six to eight year refresh of server and switch infrastructure.

ANNUAL BENCHMARKS	IMPLEMENTATION PLAN AND ACTIVITIES	MONITORING AND EVALUATION
<p>Year 1:</p> <p>By June of 2011, evaluate computer counts and age using district asset tracking system. Develop plan to support site purchases of computer resources.</p>	<p>IST staff will use the asset tracking system in the iSeries system to identify electronic assets that are end of life (EOL).</p>	<p>IST District and site technicians are responsible for determining and reporting to District IST supervisory personnel needed equipment at each site.</p>
<p>Year 2:</p> <p>By June of 2012, computer to student ratio will increase by 5% over 2011 levels. Oldest computers will have been replaced with newer models.</p>	<p>IST staff will implement a district wide asset refresh plan to target the oldest systems. Site surveys by the IST staff will facilitate the development of this plan.</p>	<p>IST supervisory will prepare final scheduling, recommendations and cost estimates to the Director of IST.</p>
<p>Year 3:</p> <p>By June of 2013, computer to student ration will increase by 5% over 2012 levels. Oldest computers will have been replaced with newer models.</p>	<p>IST staff will select, evaluate and acquire hardware and software to meet goals and objectives.</p> <p>IST will provide vendor or in-house training to District and site technicians on hardware/software and its implementation, operation and maintenance.</p>	<p>Director of IST will incorporate purchases into existing IST operational budget, site budget, measure 'N' funds or other sources. Director of IST will provide annual report and cost analysis of current and future budgets for LAN upgrades to the Associate Superintendent of Business.</p>

Funding and Budget

Funding, budgets and expenditures for technology within the KHSD falls under two general areas, those incurred by the District IST/Data Processing departments and those incurred by school sites and other District departments. District expenses include infrastructure ('backbone') repair, maintenance and upgrades, as well as, email, telecommunications and new facilities. School sites and other District departments, must fund end-user upgrades in the form of new computers or other peripheral technologies.

The IST department plans and budgets for the replacement of obsolete and damaged 'backbone' equipment. District level servers, back-up systems and telephones are upgraded as emerging technologies replace outdated systems. The adoption and deployment of network system upgrades and new system software are managed at the District level by IST staff. School site administrations are allocated a variety of discretionary and categorical resources to replace obsolete equipment, repair damaged equipment and/or upgrade end-user technologies.

DISTRICT

KHSD has historically considered and evaluated the total cost of ownership and sustainability of technology needs. The current and future anticipated technology needs of the District are carefully planned for. The curricular, professional development and infrastructure goals are designed in a manner that allows for implementation over the entire three year duration of the technology plan. Furthermore, many aspects of KHSD funding and budgeting of technology allows for the District to implement the plan.

All Information Systems/Technology and Data Processing human resource costs are funded through KHSD general revenues. A breakdown of these budgeted costs for 2009-2010 follows:

- Data Processing/IST Salaries: \$3,548,887.40
- Benefits: \$1,492,383.73
Includes retirement, unemployment insurance, workers' comp, medical, OPEB
- TOTAL: \$5,041,271.13

IST support technicians assigned to school sites are NOT charged against school site financial budgets or personnel budgets.

Additional general fund operating budgets allocated for IST and Data Processing totaled \$1,145,000 for FY 2009-2010. This budgeted amount is 10% lower than in previous years due to budgetary cutbacks. Amounts not spent in any given year are rolled over into the subsequent year's budget, allowing for planning and sustainability beyond any given fiscal year.

Obsolete equipment, after complete electronic sanitation of data and other information, is sent to auction. Equipment managed by IST/Data Processing needing replacement is acquired using the annual operational budget of the department. The annual budget has allowed IST/Data Processing to routinely retire equipment prior to the end of its life cycle, or to promptly replace equipment experiencing premature failure.

KHSD leases a licensed FCC regulated television frequency, to a third party for an estimated \$117,000 over the three year period covered by this Technology Plan. These lease payments will be added to the IST operational budget.

Measure 'N,' passed by community voters in the fall of 2004, provided \$219 million for new school construction, modernization, school expansion and other projects outlined in the bond measure. Potential projects associated with technology that are eligible for Measure 'N' funds include:

- Install new technology upgrades, including infrastructure
- Repair and/or replace and upgrade electrical power systems
- Repair and/or replace phones, data, bells, public address, intercom, cable & fiber optic systems
- Provide audio/visual upgrades for auditoriums, gymnasiums, multi-purpose buildings and conference room
- Repair and/or replace and upgrade security systems including hardware and electronic systems
- Repair and/or replace and upgrade science and computer labs

New school construction and the addition of portable classrooms require the acquisition of materials to build out the network infrastructure, as well as, provide end users with technology resources. All technology costs associated with such expansion are incurred by the department of facilities and planning. New school construction funds and District student 'growth' funds include all aspects of network and telecommunications construction. IST and site budgets are not burdened with these additional costs.

As part of the KHSD initiative to expand Career Technical Education opportunities, KHSD has applied for Proposition 1D grants for specific CTE facilities upgrades. All technology costs associated with such expansion of CTE specific facilities will be incurred by the department of facilities and planning as a part of the funding allocation.

PROP 1D RESULTS OF REQUESTS FOR FUNDING

Cycle	Site	Sector	Total	KHSD Share
Cycle 1	Arvin	Manufacturing & Product Devel.	\$2,386,945.00	\$1,193,472.50
Cycle 1	Arvin	Arts, Media, & Entertainment	\$1,793,986.00	\$896,993.00
Cycle 2	Arvin	Engineering and Design	\$145,700.00	\$72,850.00
Cycle 2	Arvin	Agriculture and Natural Resources	\$1,518,945.00	\$759,473.00
Cycle 2	Arvin	Building Trades and Construction	\$608,275.00	\$304,138.00
Cycle 1	Bakersfield	Fashion & Interior Design	\$36,335.00	\$18,167.50
Cycle 2	Bakersfield	Agriculture and Natural Resources	\$1,878,289.11	\$939,144.56
Cycle 3	Bakersfield	Building Trades and Construction	\$3,000,000.00	\$1,500,000.00
Cycle 3	Centennial	Engineering and Design	\$852,380.00	\$426,190.00
Cycle 1	East	Manufacturing & Product Devel.	\$1,475,060.00	\$737,530.00
Cycle 3	East	Building Trades and Construction	\$467,550.00	\$233,775.00
Cycle 3	Foothill	Agriculture and Natural Resources	\$2,014,905.00	\$1,007,453.00
Cycle 3	Foothill	Building Trades and Construction	\$1,745,451.00	\$872,725.00
Cycle 3	Golden Valley	Agriculture and Natural Resources	\$1,491,725.00	\$745,862.00
Cycle 3	Golden Valley	Agriculture and Natural Resources	\$299,802.00	\$149,901.00
Cycle 1	Highland	Engineering and Design	\$39,759.52	\$19,879.76
Cycle 3	Highland	Agriculture and Natural Resources	\$974,274.00	\$487,137.00
Cycle 1	Independence	Building Trades and Construction	\$299,726.33	\$149,863.17
Cycle 1	Independence	Agriculture and Natural Resources	\$770,335.30	\$385,167.65
Cycle 3	Independence	Manufacturing and Product Development	\$487,991.00	\$243,996.00
Cycle 3	Kern Valley	Agriculture and Natural Resources	\$1,193,648.00	\$596,824.00
Cycle 3	Kern Valley	Agriculture and Natural Resources	\$202,375.00	\$101,188.00
Cycle 1	Mira Monte	Agriculture and Natural Resources	\$1,729,352.00	\$864,676.00
Cycle 1	Mira Monte	Building Trades and Construction	\$1,040,966.00	\$520,483.00
Cycle 1	North	Agriculture and Natural Resources	\$422,316.26	\$211,158.50
Cycle 2	North	Agriculture and Natural Resources	\$250,200.00	\$125,100.00
Cycle 2	North	Building Trades and Construction	\$1,297,499.50	\$648,749.75

Cycle 3	North	Manufacturing and Product Development	\$1,258,874.38	\$629,437.19
Cycle 3	Ridgeview	Manufacturing and Product Development	\$304,406.00	\$152,203.00
Cycle 3	Shafter	Agriculture and Natural Resources	\$1,258,282.00	\$629,141.00
Cycle 3	Shafter	Building Trades and Construction	\$2,753,618.00	\$1,376,809.00
Cycle 3	South	Building Trades and Construction	\$2,384,446.37	\$1,192,223.18
Cycle 3	Stockdale	Manufacturing and Product Development	\$614,977.00	\$307,489.00
Cycle 3	Stockdale	Health Science and Medical Technology	\$205,527.00	\$102,764.00
			\$37,203,921.77	\$18,601,963.76

During the implementation of DHS, all school sites were determined to have, or were upgraded to accommodate, the electrical capacity to support student to computer ratios of 4-1. All new school construction and school modernization projects are designed to exceed or maintain that ratio.

Telecommunications, mobile communications, and Internet connections for all school sites and the District office receive priority one E-rate discounts administered by the Schools and Library Division (SLD) of the Universal Service Administrative Company (USAC). KHSD portions of those on-going monthly charges are funded through general District revenues under a utility budget category and not IST/Data Processing department budgets.

Network upgrades and infrastructure goals described in this plan include both one-time and recurring costs. One-time network upgrade costs will be reduced by the savings of purchasing less of other technologies. For example, establishing a Storage Area Network may cost \$200,000, or more, for the KHSD. However, that cost would be mitigated by the lessening need to acquire additional servers and back-up systems at both the District and school site level. IST estimates that school site expenditures on local servers exceeds District office expenditures by 50% or more. Total District and site expenditures will

exceed \$100,000 in any given year. Cost allocating a SANS over five years and across the multiple District sites lessens the long run costs substantially. The gradual implementation of this plan also allows for funding the plan over several budget cycles. Further and frequent examination, analysis and evaluation of these total costs of ownership (TCO) factors will occur through the plan's duration.

The IST department, with the support of the Director of Budget, frequently cost allocates multi-year contracts. One example of this type of cost allocation occurs with multiyear software contracts. A three-year contract could cost the KHSD \$240,000 (single year contracts would have cost \$115,000 per year, or \$345,000 for three years). Without cost allocating the \$240,000 over the three years, the IST budget would suffer significant consequences. KHSD business division will extend the \$240,000, equally, over the three years of the contract – thus only charging the IST budget in the amount of \$80,000 per year.

District level professional development is primarily budgeted and funded through the Beginning Teacher Support and Assessment program (BTSA) and a portion of Title II categorical funds. Combined, those sources have historically provided over \$1,000,000 annually for professional development activities that may include an emphasis on technology. Recent fiscal demands on the District have diminished these funds. Title II priorities and expenditures for professional development are established by the Joint Committee of the KHSD. The Joint Committee is composed of teachers and administrators.

Recent recessionary pressure has impacted district categorical programs. The California Department of Education has enabled districts to sweep certain categorical monies into the general fund to offset reductions in the revenue limit. Restricted monies that do not fall into these categories have seen significant reductions in the current fiscal year. It is projected that these reductions will continue well into the next two or three fiscal years.

SCHOOL SITES

School sites have multiple funding sources for replacing obsolete equipment. Principals' discretionary budgets are funded for 'technology support' and are allocated annually at a rate of:

Base \$4261.00

Base Allocation Per Computer \$14.20

Base Allocation Per CBED Enrollment \$2.85

Additional equipment repair budgets, that may be utilized for technology, exceed \$15,000 annually at most schools.

Non-discretionary and categorical funds that may be utilized for targeted technology expenditures at schools sites include:

Carl Perkins Vocational Education Funding (all sites)

Title 1 (17 sites)

Partnership Academy Funding (11 sites)

Instructional Materials (all sites)

Lottery Funds (all sites)

KHSD has received a portion Microsoft settlement funds as the result of an agreement to settle a class action lawsuit. Eligible schools are those with 40%, or more, of students qualifying for free/reduced lunch, or having feeder schools that qualify at that rate. These funds were allocated to eligible school sites

based on enrollment. The total allocation was then divided into two categories; General Purpose Vouchers (GPV's) and Specific Category Vouchers (SV's).

Initial School Site Settlement Amounts

	GPVs (50%)	SVs (50%)	Voucher Total
Arvin High	\$67,288.95	\$67,288.95	\$134,577.89
Bakersfield High	\$69,422.68	\$69,422.68	\$138,845.36
Centennial High	\$66,323.68	\$66,323.68	\$132,647.36
Central Valley High (Continuation)	\$2,540.16	\$2,540.16	\$5,080.32
East Bakersfield High	\$58,728.59	\$58,728.59	\$117,457.18
Foothill High	\$63,123.08	\$63,123.08	\$126,246.15
Golden Valley High	\$62,132.41	\$62,132.41	\$124,264.82
Highland High	\$52,428.99	\$52,428.99	\$104,857.97
Kern Valley High	\$18,238.38	\$18,238.38	\$36,476.75
North High	\$65,536.23	\$65,536.23	\$131,072.46
Nueva Continuation High	\$5,080.33	\$5,080.33	\$10,160.65
Ridgeview High	\$59,287.43	\$59,287.43	\$118,574.85
Shafter High	\$37,315.01	\$37,315.01	\$74,630.01
South High	\$51,666.94	\$51,666.94	\$103,333.87
Summit Continuation	\$2,540.16	\$2,540.16	\$5,080.32
Vista Continuation High	\$7,620.49	\$7,620.49	\$15,240.98
Vista West Continuation High	\$8,128.52	\$8,128.52	\$16,257.04
West High	\$63,758.12	\$63,758.12	\$127,516.23
LEA Total			\$1,522,320.21

Kern High School District schools eligible for Education Technology K-12 Vouchers are required to adhere to the goals specified in the state-approved Technology Plan. School sites may only utilize vouchers in ways that are: 1) approved products and/or services by the settlement through approved vendors and 2) consistent with the goals of KHSD Technology Plan. KHSD district office administrators in the departments of Information Systems and Technology and/or Business Services must approve all expenditures through the voucher program to ensure adherence to program requirements and Technology Plan goals.

To date, all GPV monies allocated to KHSD schools has been utilized. These purchases went almost exclusively to support the acquisition of new computers and multimedia display devices. This is in support of curriculum goals. A portion of the more restrictive SV category vouchers is still available for the purchase of approved software. IST is developing a plan to expend all voucher monies by the end of the 2012.

Since the suspension of DHS TSST funding, schools are challenged to maintain the student to computer ratios shown in the Curriculum and Instruction component of this plan. This problem is compounded in the current recessionary fiscal environment. Strategic planning towards the allocation of technology resources is critical to the continued support of site systems.

Future grant opportunities for individual school sites, such as Enhancing Education Through Technology (EETT), have the potential to provide assistance in the effort to maintain, or improve, student to computer ratios. Both competitive and non-competitive grants could also provide additional data storage and server upgrades at sites that are successful obtaining grant funds.

Obsolete equipment purchased, maintained and managed by school sites is sold at auction, after complete electronic sanitation and removal of data and information. Acquiring end user computers and peripherals is the responsibility of school site administrators through the use of categorical and/or discretionary funds. While a five year cycle for computers is recommended by IST staff, many schools following a replacement cycle of six to eight years.

SACS – Standardized Account Code Structure

KHSD follows the California School Accounting Manual and utilizes the ‘Standardized Account Code Structure’ (SACS). Internal monitoring and oversight is conducted by the department of fiscal services. All technology purchases are ordered and tracked using the SACS system. The District mainframe computer warehouses all financial system information utilizing SACS.

Funding Priorities for Grants Resulting from the Technology Plan:

1. End user equipment and software that supports curriculum goals
2. Technology professional development activities that support curriculum goals in an amount that equals or exceeds 25% of the grant amount
3. School site servers and equipment that assist in progressing toward curriculum and professional development goals

Grant funds (such as EETT grants) that are received based on this technology plan will not be used to fund or supplement any portion of the District’s historical and ongoing commitment to technology support.

KHSD ESTIMATED THREE - YEAR TECHNOLOGY BUDGET

Object of Expenditure (SACS)	District IST and Site Technology Budgets (KHSD General Fund)			
	2010-2011	2011-2012	2012-2013	
1000-1999 Certificated Personnel Salaries	\$106,283	\$107,345	\$108,418	
2000-2999 Classified Personnel Salaries	\$2,481,669	\$2,510,243	\$2,535,345	
3000-3999 Employee Benefits	\$1,124,894	\$1,237,383	\$1,361,121	
4000-4999 (d) Instructional Mat. (s)	\$320,000	\$320,000	\$320,000	
5000-5999 Services and Other Operating Expenditures	\$90,000	\$90,000	\$90,000	
6000-6999 Capital Outlay	\$100,000	\$100,000	\$100,000	
Total Annual Funds	\$4,559,638	\$4,701,763	\$4,851,676	

THREE YEAR TECH PLAN TOTAL BUDGET \$14,113,077

d = district tech allocation s = sites tech allocation

Assumes 0% annual COLA except 'Employee Benefits' which assumes 10% annual increase.

Assumes 1% in step and column increase for salaries

All numbers assuming no further reductions in staffing or operational support.

Telecom/Internet access assumed under the KHSD utilities budget and subject to ERATE discounts.

Monitoring and Evaluation

Monitoring and evaluation are integrated throughout the KHSD Technology Plan. Each of the objectives found in the curriculum, professional development and infrastructure components includes responsibilities for the implementation, monitoring and evaluation of activities associated with each objective. The Technology Plan requires frequent data collection, review, documentation and reporting that will demonstrate progress toward achieving the objectives developed for each goal. This feedback will identify growth areas and be reported with possible revisions to the Technology Plan being completed on an annual basis.

The incorporation of community members, parents and students on the KHSD Technology Committee is identified as a priority of this plan. Prior to the end of the 2010-11 school year, representatives from those stakeholders will participate in the on-going monitoring and evaluation components of this plan. Strengthening the partnerships with businesses, post secondary educational institutions and the Kern County Superintendent of Schools CTAP office is recognized as providing significant expertise and assistance in monitoring, evaluating and revising the technology plan.

Monitoring the implementation of the KHSD Technology Plan must focus on the successful and timely completion of the activities described for each objective and benchmark. Throughout this plan, strategies are incorporated that allow for purposeful monitoring of the progress toward the achievement of component goals. Those strategies include:

- Identification of tasks
- Responsible individuals
- Timelines for task completion
- Analysis of actual versus expected implementation schedule
- Communication and reporting procedures (feedback)
- Organizational hierarchy

Evaluation of the KHSD Technology Plan must be approached in a manner that places emphasis on the impact of the plan on the instructional program. The contribution that technology makes on student learning and the learning environment is the key factor. Elements of a successful evaluation strategy included throughout this Technology Plan are:

- Measurable benchmarks have been developed
- Evaluation of strategies have been assigned to the appropriate department(s) or individual(s)
- Measures, methods and frequency of data collection have been established
- Reporting procedures have been developed
- Key decision makers have been identified

Reports from the monitoring and evaluation component will be used by the KHSD Technology Committee to determine additional needs and make determinations about plan revision. Plan revisions will be determined and prepared by the technology committee prior to the commencement of the subsequent school year. All plan revisions will be submitted to the local county CTAP office for review and submission to the California Department of Education.

Adult Literacy

KHSD addresses adult literacy through the Bakersfield Adult School (BAS) in the following ways:

Adult Basic Education – Language Arts Classes. Adult Basic Education (ABE)-The classes in ABE are below the high school level. The primary objective is to teach basic literacy skills (e.g., reading, writing, computation, problem solving and interpersonal skills) to enable adults to read, write and speak in English; acquire a high school diploma; get a job and become productive citizens. Students use a variety of software applications to enhance literacy skills including: Learning 100, Skillsbank and Pre-GED software from Steck-Vaughan and Contemporary. Currently, BAS has over 200 students enrolled in these classes.

Star Project. BAS was chosen as one of seven adult schools in California to participate in a special federally funded Pilot Project which focuses on reading instruction for adults reading at the 4th through 9th grade levels, developing evidence-based reading education and translate research findings into teaching processes. Students enrolled in adult literacy/ABE classes at Bakersfield Adult School will benefit from the research-based instructional strategies developed in this pilot project.

CBET: Bakersfield Adult School's CBET Program provides adult English language instruction to parents and members of the community who are then able to give personal one-on-one English language tutoring to students from kindergarten through 12th grade who have limited English proficiency. These adult literacy classes are free to participating adult students. On average, Bakersfield Adult School provides adult literacy services through CBET classes to over 1,200 students per year.

CBET classes, which are part of the Bakersfield Adult School community English as a Second Language (ESL) classes, are free of charge, offered at the following schools and community locations:

- Arvin Congregational Church
500 Campus Drive
Arvin
- Saint Augustine Church
10601 Myrtle Avenue
Lamont
- Alicante School
7998 Alicante Avenue
Lamont
- Fairview Elementary
425 E. Fairview Road
- Golden Valley High School
801 Hoskings Road
- Haven Drive Middle School
341 Haven Drive
Arvin
- Kendrick Elementary School
2200 Faith Avenue
- Planz School
2400 Planz Road
- Golden Oak Elementary School
195 S. Wall, Shafter
- Ranch Market
2225 Niles Street
- Stella Hills Elementary School
3800 Jewett
- So. Chester Partnership
800 Ming Ave

ESL: BAS English as a Second Language (ESL) Department is dedicated to the ideal that our students become lifelong learners with a desire to fulfill their greatest potential. Our mission is to provide the language skills and opportunities for personal and professional growth, social and cultural integration and academic advancement so that students may participate fully in the North American society. ESL teachers supplement instruction with the following “literacy based” software applications: Skillsbank, Oxford Picture Dictionary, Rosetta Stone, English Express Deluxe and Lexia. English literacy classes are offered to meet the needs of non-English speakers, with classes beginning at the literacy level (level 0), through Advanced High classes (level 6). On average, Bakersfield Adult School serves over 6,000 ESL students each year.

EL Civics: *Civic Involvement* is designed to help English learners acquire the skills necessary to become active and informed parents and community members. Students learn how to become active and involved participants in civic affairs through hands-on activities both in the classroom and in the community. Students also explore the many city and county social services and public safety agencies and learn how to access their services. EL Civics topics our students focus on this year are: housing options in the community, resolving housing issues, community educational opportunities, interacting with schools, community resources and services information, community employment & training resources, community healthcare resources and US Government & History. Last year, BAS received a state-recognized “Promising Practice” for their EL Civics Job Shadowing project in which students “job shadowed” the Kern County Board of Supervisors.

Distance Learning: Bakersfield Adult School also offers ESL and GED classes to over 800 students per year via our distance learning program.

Workforce Investment Act (WIA) While the old *Adult Education Act* allowed states to use federal funds for family literacy services, the new law puts family literacy on equal footing with adult basic education and ESL services.

The new law sets three goals for adult education and literacy:

1. Assist adults in becoming literate and obtaining the knowledge and skills necessary for employment and self-sufficiency.
2. Assist adults who are parents in obtaining the educational skills necessary to become full partners in the educational development of their children.
3. Assist adults in completing high school or the equivalent.

Organizations Eligible for Funding

The organizations listed below are eligible to apply to their state agency for federal funds.

- Local education agencies
- Community-based organizations of demonstrated effectiveness
- Volunteer literacy organizations of demonstrated effectiveness
- Institutions of higher education
- Public or private nonprofit agencies
- Libraries
- Public housing authorities
- Consortiums of organizations listed above
- Other nonprofits that have the ability to provide literacy services

Direct and Equitable Access

Like the *Adult Education Act*, the *Workforce Investment Act* requires state agencies to give all of the eligible providers listed above an equal (i.e. “direct and equitable”) opportunity to apply for the funds. The law also requires state agencies to ensure that the same grant/contract announcement and application processes are used for all eligible providers. State agencies must describe what steps they will take to ensure that the direct and equitable access provisions are carried out in the plans they submit to the Secretary of Education.

Literacy for Prisoners

The *Workforce Investment Act* repeals the prison literacy program, which in recent years has received \$4.7 million annually. Under the *Adult Education Act*, states were required to use a minimum of 10 percent of their Adult Education State Grant for corrections education. The *Workforce Investment Act* allows states to use a maximum of 10 percent for this purpose.

Research and Resources

Extensive amounts of research are available describing the impact and effectiveness of technology on educational environments and student learning. The International Society for Technology in Education (ISTE) is an excellent research and resource warehouse for how technology has impacted student learning, curriculum/instruction, professional development and assessment/evaluation. ISTE provides additional research and resources from the Center for Applied Research in Educational Technology (CARET) and the Journal of Research on Technology in Education (JRTE).

Research supporting the approach taken in the KHSD Technology Plan has been developed based on the following three themes:

1. Technology and Student Learning, Achievement and Performance
2. Technology and Teacher Instructional Effectiveness
3. Sustainability of the Technology

Each of these themes will be examined in relation to the goals and objectives established in this Technology Plan. The curriculum, professional development and infrastructure components were directly connected together through the adoption of the same goals for each component. Specific objectives were then developed for each goal, under each component, to articulate the direction KHSD must move to make further progress in educational technology.

The shared goals for the curriculum, professional development and infrastructure components are:

1. Maximize student success by improving student learning and academic performance through the effective use of contemporary and emerging technology.
2. Improve the efficiency of instruction, record keeping and access to student information.
3. Enhance District and school site information systems to facilitate school and community communication.
4. Improve students' technological and information literacy skills needed to succeed in the classroom and the work place.

Technology and Student Learning, Achievement and Performance

The curriculum goals and objectives of this plan are supported by significant amounts of research evidence. Research shows that technology can improve student learning, achievement and performance clearly supporting the objectives established in the curriculum component:

In a review of various studies, the CEO Forum (2001) concluded that technology is most effective when it is integrated in all curriculum areas and assessment. (Goal 1, Objectives 1,2,4) (Goal 2, Objective 1) (Goal 3, Objectives 1, 2) (Goal 4, Objectives 1,2,3)

The use of in-house, free and commercially prepared on-line resources, video clips specifically, were found to improve student performance on standards-based assessments. Boster, et al. (2004), found that streaming media, aligned to specific subject area content standards and accompanied by teacher instruction, produced gains in student standardized test scores. (Goal 1, Objectives 2,3,4) (Goal 4, Objective 1)

Lehrer (1993) found that teacher use of multimedia technology resources has significant impact on student understanding and retention is greater. (Goal 1, Objectives 1, 2) (Goal 4, Objective 2)

Test scores and other assessment can be increased through the incorporation of technology applications. Honey (1999) reports that student performance increased on standardized tests when technology applications were infused into all aspects of the curriculum. (Goal 1, Objectives 1, 2, 3) (Goal 2, Objective 1)

Infusion of technology into all subject areas, access to equipment and teacher training has led to higher test scores in Districts (Mann, 1998). (Goal 1, Objectives 1, 2, 3, 4) (Goal 2, Objective 1,2) (Goal 3, Objectives 1, 2) (Goal 4, Objectives 1,2)

Cradler & Beuthell (2001) identify aligning lesson content with state content standards as a key 'first step' to infuse technology into the curriculum. (Goal 1, Objective 1)

Increasing the available technologies through on-line tutorials, or other software tutorials, allows students to work at their own pace. This provides instant feedback that motivates students, particularly low-performing and handicapped students. Teachers are also provided instant feedback to adjust instruction (Gos & Vaughn, 1994). (Goal 1, Objective 2) (Goal 4, Objectives 1, 2)

Technology and Teacher Instructional Effectiveness

Research evidence and findings support the professional development goals and objectives as presented in this plan. Research shows that technology can improve the effectiveness of the delivery of instruction, provide teachers with student performance information and increase school-to-home communication. The research sustains the goals and objectives established in the **professional development** component:

Technology staff development activities, aligned with content standards, demonstrate high student achievement gains as teacher competency increased (Mann et al., 1998). (Goal 1, Objective 1, 2,3)

Roschelle (2000) reports that teachers have greater motivation to strengthen their own technology skills when staff development, with technology emphasis, is linked to curriculum goals. (Goal 1, Objectives 2, 3)

Teachers participating in the decision making process in the development of technology professional development activities increases participation and motivation levels (Bruder, 1992, Cradler & Cradler, 1995). (Goal 1, Objectives 1, 2) (Goal 3, Objective 1) (Goal 4, Objective 1)

Effective staff development is tailored to the individual needs and specific to a particular program. Topics for training that focus on teacher interest and subject matter are most effective. A trainer of trainer model provides on going individual support for technology (Cradler & Cradler, 1995). (Goal 1, Objectives 1, 2, 3) (Goal 2, Objective 1) (Goal 3, Objective 1) (Goal 4, Objective 1)

Cradler & Cradler (1995) findings suggest that involvement of teachers in the planning of their own learning provides for increased motivation and technology integration. A variety of delivery methods increases participation and integration. (Goal 1, Objectives 1, 2, 3) (Goal 3, Objective 1) (Goal 4, Objective 1)

‘Ready access’ to communications extends the ability of teachers and administrators to share information. Teachers feel that electronic communication is a more efficient use of their time. (CEO Forum, 1999, Cradler, 2002). (Goal 2, Objective 1) (Goal 3, Objective 1)

Fletcher (2002) demonstrates that ‘digital tools’ available to teachers allows for more effective monitoring of student performance and tailoring instruction for individual student needs. (Goal 2, Objective 1) (Goal 3, Objective 1)

Sustainability of the Technology

An extensive research study on sustainability titled *The Sustainability Challenge: Taking Edtech to the Next Level* (Dickard, Ed., 2003) has been published by the Benton Foundation and the Center for Children and Technology. This compilation of research serves as the foundation of the **infrastructure, hardware, tech support, software** and the **funding and budget** components of the KHSD Technology Plan.

Three primary “indicators for sustainability” are identified in the study. The ability to recognize each of the indicators in technology planning shows that the ‘total cost of ownership’ has been carefully weighed and considered. KHSD Technology Plan incorporates each of those indicators. The indicators are:

Developing a Culture of Innovation

The curriculum and professional development components' goals and objectives foster an environment where teacher, administrator and student innovation may develop and thrive.

Institutionalization

KHSD Technology Plan shows a high degree of institutionalization. Technology is embedded in all subject areas, all departments and affects the learning environment of all students. District and site budgets, along with all IST support personnel, are funded annually through the general fund; thereby, independent from one-time monies or categorical program allocations. IST equipment specifications establish a system to reduce 'niche' technology items that require high levels of technical support.

Gathering and Communicating Evidence of Effective Use of Technology

The Technology Plan requires the collection of evidence to support each plan objective. All collected evidence is to be reported to various groups and stakeholders at regular intervals during each year of the plan.

These sustainability indicators provide a solid basis for the KHSD to implement, monitor, evaluate and revise the Technology Plan in the future.

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Appendix A: Acceptable Use Policies and Procedures

Kern High School District computers, the District network to which they are connected, and District-funded Internet connections are provided to enhance productivity, to facilitate professional communication, and to harness the resources of the Internet in the service of the education of the students of the Kern High School District. This policy applies to, and describes the responsibilities and obligations of, all District employees using the District's electronic information resources, including the District's computers, electronic devices, and network.

Kern High School District Computer and Network Acceptable Use Policy for Staff

- I. **Description of the District's Electronic Information Resources.** The District's electronic information resources covered by this policy include the District's computers, electronic devices, and network. These electronic information resources are District property, provided to meet district needs. They do not belong to employees.

- A. **Definition of "District Computers":**

The term "District computer" means any computer, including a laptop or tablet computer, that is owned, leased or rented by the District, purchased with funds from a grant approved or awarded to the District, or borrowed by the District from another agency, company, or entity, whether or not the computer is equipped with a modem or communication peripheral capable of digital connection.

- B. **Definition of "Electronic Devices":**

The term "District electronic device" means any device other than a District computer that is capable of transmitting, receiving, or storing digital media and is owned, leased, or rented by the District, purchased with funds from a grant approved by or awarded to the District, or borrowed by the District from another agency, company or entity, whether or not the electronic device is portable and whether or not the electronic device is equipped with a modem or other communication peripheral capable of digital connection.

District electronic devices include but are not limited to:

- Telephones
- Cellular telephones
- Radios
- Pagers
- Voice mail
- E-mail
- Text messages
- Digital cameras
- Personal digital assistants such as Palm Pilots and Blackberries
- Portable storage devices such as thumb drives (flash memory) and zip drives
- Portable media devices such as compact discs (CD's) and digital versatile discs (DVD's)
- Printers, copiers, scanners, fax machines, or "all in one" peripheral devices

C. Definition of “District Electronic Network”:

The term “District electronic network” means the District’s Wide Area Network (WAN), Local Area Network (LAN), and Internet systems including software, E-mail, and voice mail systems.

II. Computer and Software

Kern High School District computers will be installed and maintained ONLY by authorized staff. Only the administrator at each site designated by the building manager or principal in conjunction with District electronics staff will be allowed to authorize installation or maintenance of either hardware or software on Kern High School District computers.

- A. The District has an obligation to ensure that software on its computers is being used legally according to that software’s license and to ensure that any software installed do not create difficulties on the individual computer or on the District network. Staff members who wish to be authorized to install a particular piece of software on their computers or who wish to have such software installed must certify that they are using the software according to license and must register the license information with the designated administrator at each site.
 - 1. Multiple installations of the same license number will be assumed to violate copyright unless a multiple license provision can be demonstrated.
 - 2. Software not related to the mission of the Kern High School District will not be installed on Kern High School District equipment.
 - 3. ‘Migrating’ to an upgraded computer does not carry with it the right to ‘migrate’ software to that computer unless that software is wiped clean from the original computer.

District technical staff has the capacity to survey individual computers through the network, will remove programs not authorized for installation, and will report the incident to the appropriate site and district administration.

- B. Any password protection whether at the system level or the program level must be registered with the appropriate administrator on site. The District needs the ability to access its own equipment. Care must be taken to ensure that students or other unauthorized individuals cannot change passwords; a screen saver, which can be password, protected SHOULD be password protected to prevent an unanticipated lockout.
- C. Screen savers, sound events, wallpaper and other system additions represent the Kern High School District as well as the individual, when found on Kern High School District systems. These should avoid sexually suggestive material as well as that which might reasonably be construed as being demeaning to individuals or groups. If law, custom, or common sense would indicate that material should not be displayed in the classroom or in an office, it should not be displayed on computers in the classroom or in that office.
- D. No images, sounds, or media of any sort may be added to Kern High School District equipment or to materials produced through Kern High School District Equipment that violate copyright.

III. Local Area, District, and Internet

Electronic information services (Local, District-wide, and Internet) are available to students and staff in Kern High School District. The Kern High School District strongly believes in the educational value of such electronic services and recognizes their potential to support curriculum and to allow staff to efficiently provide educational services. The District goal in providing this service is to promote educational excellence by facilitating research, innovation, communication, and business efficiency. Staff Internet access will be granted through local area networks and District Internet connections. A set of expectations and understandings apply to all using Kern High School District network services as representatives of Kern High School District on the District network and on the Internet through the Kern High School District Internet gateway. These include:

- A. Staff must understand that all the rules of conduct described in the Kern High School District Administrative Code apply during network use.
- B. Employees are prohibited from using the District's computers, electronic devices, network and other electronic resources for transmitting, knowingly receiving, or storing any oral or written communication that is obscene, threatening or disruptive, or that reasonably could be construed as harassment or disparagement of others based on their race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, or sexual orientation.
- C. Employees are prohibited from using the District's computers, electronic devices, and network for transmitting, knowingly receiving, or storing any visual image that depicts actual or simulated torture, bondage, or physical abuse of any human being or other creature, or that is sexually explicit.
 1. "Sexually explicit" means a visual depiction of actual or simulated sex acts, and the unclothed human genitalia, pubic area, anus, buttocks, and female breasts that lacks serious artistic, literary, scientific, or political value.
 2. This prohibition applies to visual depictions of any kind, including screen savers, drawings, cartoons and animations.
- D. Staff must use assigned accounts or passwords to access District computers, electronic devices, and network. No employee shall permit the use of his or her assigned account or password, or use another person's assigned account or password, without the prior express written consent of the employee's supervisor and the designated technology administrator at the employees work site. This must be in support of the educational goals and objectives of the District. Staff must
 1. avoid personal use of e-mail.
 2. not use the network, e-mail system or Internet connection for personal financial gain including commercial advertising.
 3. not use the network, e-mail system, or Internet connection for political or religious advocacy or on behalf of charitable organizations.
 4. not send any message through the network, e-mail system or Internet connection under someone else's name.
 5. not transmit, request, or receive materials inconsistent with the mission and values of the Kern High School District.
 6. not attempt to breach network security or transmit viruses.
 7. not mass distribute e-mail to a site without site administrative approval or mass distribute e-mail in the District without the approval of the Director of IST or the Superintendentcy.
 8. accessing pornographic or other websites that are inconsistent with the mission and values of the District.

- E. Staff must use language appropriate for a public system in all communications.
- F. Staff must respect the copyright and/or software licensing of material received through the Kern High School District network, e-mail system, or Internet connection.
- G. Staff must understand that the public meeting provisions of the Brown Act cannot be subverted through e-mail or network conferencing.

IV. Filters and Other Internet Protection Measures

To ensure that the use of the District's network is consistent with the District's mission, the District uses content and bandwidth software to prevent access to pornographic and other websites that are inconsistent with the mission and values of the District. No employee shall bypass or evade, or attempt to bypass or evade, the District filter system.

V. No Employee Privacy

Employees have no privacy whatsoever in their personal or work-related use of the District's computers, electronic devices, network, and other electronic information resources, or to any communications or other information in the District's electronic information resources or that may pass through District electronic information resources. The District retains the right, with or without cause, and with or without notice to the employee, to remotely monitor, physically inspect, or examine the District's computers, electronic devices, network or other electronic information resources, and any communication or information stored on or passing through the District's electronic information resources, including but not limited to software, data and image files, Internet use, e-mails, text messages, and voice mail. Staff must understand that as a matter of law, any document pertaining to the public business on a publicly funded system is a public record.

VI. Sanctions

Individuals who violate the terms of the *Computer and Network Acceptable Use Policy for Staff* will be subject to a series of sanctions through Information Systems including the installation of restrictive lock-down security on their classroom workstation and restriction or revocation of District network, Internet, and/or e-mail privileges.

Additionally, sanctions may be applied by the Kern High School District Personnel Division in accordance with established discipline policies.

Student Acceptable Use Policy:

Student Access to Kern High School District School Site Networks

The Kern High School District strongly believes in the educational value of technology and recognizes its potential to support curriculum. Two different kinds of technology access are available: access to computers on the District network and Internet access. All students who abide by a set of basic rules will have access to computers on the District network for appropriate class projects and for access to information resources.

Acceptable Use Policies

No students will be allowed to access the Internet unless the student and a responsible parent/guardian sign the Kern High School District Acceptable Use Policy for Internet Use. This form is posted [below](#) and is available for signature at each school site. This policy may be revised by Board action. Revisions to the student AUP will be reviewed in the District summer information packet sent to parents. Parents have the right to withdraw their consent to the District AUP at any time by informing their student's school in writing. District expectations for student access to computers on the District network include the following:

Access and Security

All use of the Kern High School District system must be under the student's own account. Any user identified as a security risk will be denied access to the District network system. Sharing network access (logon and password information) with others or accessing computers and the District network under a log-on and password other than that assigned to the student by Kern High School District Information Systems will result in access being revoked or suspended as well as other consequences as appropriate to the specific situation.

Appropriate Use and Electronic Vandalism

Students will use Kern High School District computers and network resources for school projects. Attempts to use school computers and networks for other purposes will result in suspension or forfeiture of computer and network privileges. Students may not use District computers or networks to store or transmit any material protected by copyright. Any attempt to harm, to destroy, or to gain access to the data of another user as well as the loading, uploading, downloading, or creation of computer viruses will result in the loss of computer services, disciplinary action, and may result in legal referral.

Acceptable Use Policy for Internet Access through the Kern High School District

Internet resources are available to students and teachers in Kern High School District in support of Kern High School District's curriculum mission. Student access at school is provided under staff supervision for educational purposes supplemented by [content and bandwidth management software](#). Attempts to bypass or evade the District filter system will be grounds for loss of Internet privileges. Students are expected to abide by a code of conduct. If you and your student agree to abide by the following, your student will be issued an Internet capable network account and password. Additionally, you will be asked for permission to post your student's work and school contact information on Kern High School District web pages.

Student Code of Conduct for the Kern High School District Internet Access

- 1. Personal Responsibility:** I will accept personal responsibility for reporting any misuse of the network to the staff. I understand that all school site and District rules of conduct apply when I am on the District network or am connected to the Internet.

2. **Acceptable Use:** The use of my assigned account will be in support of education and research and will support the educational goals and objectives of the Kern High School District. I am personally responsible for this provision at all times when using Internet services. In addition, I will abide by the following:
- a. I will not use Kern High School District Internet access to post any web pages to any site for commercial activities, product advertisement, or political advocacy. I understand that any material posted must be reviewed and approved by a teacher prior to being posted. I will not use Kern High School District Internet access to post to personal homepages.
 - b. I understand that Kern High School District has provided Internet access to students for academic purposes and that the bandwidth available for this access is limited. I will only use Kern High School District Internet access for academic research and class projects.
 - c. I am aware that the inappropriate use of electronic information resources can be a violation of local, state and federal laws and that I can be prosecuted for violating those laws.
 - d. I understand that Kern High School District has the right to monitor all Internet access through their network.
3. **Privileges:** I understand that the use of the Kern High School District information system is a privilege, not a right, and that inappropriate use will result in a cancellation of those privileges. The system administrator(s) may close an account at any time deemed necessary.
4. **Network Etiquette and Privacy:** I understand and will abide by the generally accepted rules of network etiquette. These rules include (but are not limited to) the following:
- a. **BEING POLITE:** Never sending or encouraging others to send abusive messages.
 - b. **USING APPROPRIATE LANGUAGE:** I understand that I am a representative of our school and district on the Internet and will use polite and appropriate language.
 - c. **PRIVACY:** I will not reveal my home address or personal phone number or the addresses and phone numbers of other students. While using Internet services through the Kern High School District, I will not reveal my e-mail address or the e-mail address of others. I understand that I may include appropriate contact information on
 - (i) college and scholarship applications.
 - (ii) registration forms for curriculum related activities such as the State Science Fair.
 - (iii) other school related contacts as approved by school site administration.
 - d. **STUDENT E-MAIL: Students requiring KHSD e-mail service through KernHighMail.com, as identified by their school administration, must accept the terms of the following acceptable use policy.**

ELECTRONIC MAIL: Students with Kern High School District Internet privileges have available to them approved free Internet-based e-mail services for educational purposes approved by their school site administration. Students with Kern High School District Internet access may receive a KernHighMail.com e-mail account if deemed necessary by their school's administration. Inappropriate language, harassment, or advocacy of illegal activity in e-mail messages using KernHighMail.com may result in loss of system privileges and/or other disciplinary measures. By initiating the creation of an e-mail account, students affirm the following:

 - (i) I understand that e-mail sent via the Kern High School District Internet connection must be school related and must abide by the guidelines outlined here. I will immediately report any threatening, obscene, or harassing e-mail to school staff.
 - (ii) I understand that I will not share my KernHighMail.com password with others and am responsible for all e-mail sent through my account.

- (iii) I understand that e-mail sent through this account may be scanned for obscene or threatening language and that suspect e-mail may be reviewed.
- (iv) I understand that all e-mail may be permanently stored and reviewed.
- (v) I understand that sending of any material in violation of any law is prohibited. This includes, but is not limited to copyrighted, threatening, or obscene material.

5. **Security:** If I identify a security problem, I will notify school staff at once. I understand that all use of the Kern High School District system must be under my own account and that any user identified as a security risk will be denied access to the network. I understand that sharing my network access (logon and password information) with others will result in my access being revoked as well as other consequences as appropriate to the specific situation.

6. **Vandalism:** Any attempt to harm or destroy data of another user or any other agencies or networks that are connected to the system will result in the loss of computer services, disciplinary action, and may result in legal referral.

Return this form to the administrative office at your KHSD High School if you want your student to use Kern High School District Internet services at school under professional supervision.

I want my student to have Internet access through the Kern High School District system and will support the above code of conduct.

Parent Signature: _____ Date: _____

I have read and agree to abide by the *Student Code of Conduct for the Kern High School District Electronic Community*.

Student Signature: _____ Date: _____
 Student Name (Print) _____ U.I.D. _____

Agreement to the following is not necessary to basic Internet access.

Kern High School District is proud of the work of its students and may wish to showcase this work on school web pages. Kern High School District and individual school sites may wish to highlight individual achievement related to a posted project or to a report on an individual or team accomplishment and may wish to accompany such acknowledgement with a student picture. In some instances, Kern High School District and individual school sites may wish to have students involved in on-line interactive projects; some of these projects may involve posting a student e-mail address. Student home addresses and home phone numbers will NEVER be posted on Kern High School District web pages.

I agree that my student's name, picture, e-mail address, and work may be featured on Kern High School District Web pages.

Student Name: _____
 Parent Signature: _____ Date: _____

Appendix B: National Education Technology Standards for Students- 2007

1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a. apply existing knowledge to generate new ideas, products, or processes.
- b. create original works as a means of personal or group expression.
- c. use models and simulations to explore complex systems and issues.
- d. identify trends and forecast possibilities.

2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

- a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- c. develop cultural understanding and global awareness by engaging with learners of other cultures.
- d. contribute to project teams to produce original works or solve problems.

3. Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information. Students:

- a. plan strategies to guide inquiry.
- b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- d. process data and report results.

4. Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:

- a. identify and define authentic problems and significant questions for investigation.
- b. plan and manage activities to develop a solution or complete a project.
- c. collect and analyze data to identify solutions and/or make informed decisions.
- d. use multiple processes and diverse perspectives to explore alternative solutions.

5. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- a. advocate and practice safe, legal, and responsible use of information and technology.
- b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- c. demonstrate personal responsibility for lifelong learning.
- d. exhibit leadership for digital citizenship.

6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

- a. understand and use technology systems.
- b. select and use applications effectively and productively.
- c. troubleshoot systems and applications.
- d. transfer current knowledge to learning of new technologies.

Appendix C

Criteria for EETT-Funded Education Technology Plans

In order to be approved, a technology plan needs to have “Adequately Addressed” each of the following criteria:

- For corresponding EETT Requirements, see Appendix F.
- If the technology plan is revised, insert the Education Technology Plan Benchmark Review Form (Appendix I) at the beginning of the technology plan.
- Include this form (Appendix C) with “Page in District Plan” completed at the end of your technology plan.

1. PLAN DURATION CRITERION	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. The plan should guide the district’s use of education technology for the next three to five years.	2	The education technology plan describes the districts use of education technology for the next three to five years.	The plan is less than three years or more than five years in length.
2. STAKEHOLDERS CRITERION Corresponding EETT Requirement(s): 7 & 11 (Appendix F)	Page in District Plan	Example of Adequately Addressed	Not Adequately Addressed
a. Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process.	1-6	The planning team consisted of representatives who will implement the plan. If a variety of stakeholders did not assist with the development of the plan, a description of why they were not involved is included.	Little evidence is included that shows that the district actively sought participation from a variety of stakeholders.

3. CURRICULUM COMPONENT CRITERIA Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, & 12 (Appendix F)	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours.	10-17	The plan describes the technology access available in the classrooms, library/media centers, or labs for all students and teachers.	The plan explains technology access in terms of a student-to-computer ratio, but does not explain where access is available, who has access, and when various students and teachers can use the technology.
b. Description of the district's current use of hardware and software to support teaching and learning.	10-17	The plan describes the typical frequency and type of use (technology skills/information literacy/integrated into the curriculum).	The plan cites district policy regarding use of technology, but provides no information about its actual use.
c. Summary of the district's curricular goals and academic content standards in various district and site comprehensive planning documents.	10-17	The plan references other district documents that guide the curriculum and/or establish goals and standards.	The plan does not reference district curriculum goals.
d. List of clear goals and a specific implementation plan for using technology to improve teaching and learning by supporting the district curricular goals and academic content standards.	18-30	The plan delineates clear, specific, and realistic goals and target groups for using technology to support the district's curriculum goals and academic content standards to improve learning. The implementation plan clearly supports accomplishing the goals.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
e. List of clear goals and a specific implementation plan detailing how and when students will acquire technology and information literacy skills needed to succeed in the classroom and the workplace.	18-21	For the focus areas, the plan delineates clear, specific and realistic goals for using technology to help students acquire technology and information literacy skills. The implementation plan clearly supports accomplishing the goals.	The plan suggests how technology will be used, but is not specific enough to determine what action needs to be taken to accomplish the goals.

f. List of clear goals and a specific implementation plan for programs and methods of utilizing technology that ensure appropriate access to all students.	18-21	For the focus areas, the plan delineates clear, specific and realistic goals for using technology to support the progress of all students. The implementation plan clearly supports accomplishing the goals.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
g. List of clear goals and a specific implementation plan to utilize technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.	22-27	The plan delineates clear, specific and realistic goals for using technology to support the district's student record-keeping and assessment efforts. The implementation plan clearly supports accomplishing the goals.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
h. List of clear goals and a specific implementation plan to utilize technology to make teachers and administrators more accessible to parents.	22-27	The plan delineates clear, specific and realistic goals for using technology to facilitate improved two-way communication between home and school. The implementation plan clearly supports accomplishing the goals.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
i. List of benchmarks and a timeline for implementing planned strategies and activities.	18-30	The benchmarks and timeline are specific and realistic. Teachers, administrators and students implementing the plan can easily discern what steps will be taken, by whom, and when.	The benchmarks and timeline are either absent or so vague that it would be difficult to determine what should occur at any particular time.
j. Description of the process that will be used to monitor whether the strategies and methodologies utilizing technology are being implemented according to the benchmarks and timeline.	18-30	The monitoring process is described in sufficient detail so that who is responsible, and what is expected is clear.	The monitoring process is either absent, or lacks detail regarding who is responsible and what is expected.

4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA Corresponding EETT Requirement(s): 5 & 12 (Appendix F)	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. Summary of the teachers' and administrators' current technology skills and needs for professional development.	32-35	The plan provides a clear summary of the teachers' and administrators' current technology skills and needs for professional development. The findings are summarized in the plan by discrete skills to facilitate providing professional development that meets the identified needs and plan goals.	Description of current level of staff expertise is too general or relates only to a limited segment of the district's teachers and administrators in the focus areas or does not relate to the focus areas, i.e., only the fourth grade teachers when grades four to eight are the focus grade levels.
b. List of clear goals and a specific implementation plan for providing professional development opportunities based on the needs assessment and the Curriculum Component goals, benchmarks, and timeline.	36-41	The plan delineates clear, specific and realistic goals for providing teachers and administrators with sustained, ongoing professional development necessary to implement the Curriculum Component of the plan. The implementation plan clearly supports accomplishing the goals.	The plan speaks only generally of professional development and is not specific enough to ensure that teachers and administrators will have the necessary training to implement the Curriculum Component.
c. List of benchmarks and a timeline for implementing planned strategies and activities.	36-41	The benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what steps will be taken, by whom, and when.	The benchmarks and timeline are either absent or so vague that it would be difficult to determine what steps will be taken, by whom, and when.
d. Description of the process that will be used to monitor		The monitoring process is described in sufficient	The monitoring process is either absent, or lacks detail regarding

<p>whether the professional development goals are being met and whether the planned professional development activities are being implemented in accordance with the benchmarks and timeline.</p>	<p>36-41</p>	<p>detail so that who is responsible and what is expected is clear.</p>	<p>who is responsible and what is expected.</p>
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5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district’s teachers, students, and administrators to support the activities in the Curriculum and Professional Development Components of the plan.	42-59	The plan clearly summarizes the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support proposed to support the implementation of the district’s Curriculum and Professional Development Components. The plan also includes the list of items to be acquired, which may be included as an appendix.	The plan includes a description or list of hardware, infrastructure and other technology necessary to implement the plan, but there doesn’t seem to be any real relationship between the activities in the Curriculum and Professional Development Components and the listed equipment. Future technical support needs have not been addressed or do not relate to the needs of the Curriculum and Professional Development Components.
b. Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that could be used to support the Curriculum and Professional Development Components of the plan.	42-59	The plan clearly summarizes the existing technology hardware, electronic learning resources, networking and telecommunication infrastructure, and technical support to support the implementation of the Curriculum and Professional Development Components. The current level of technical support is clearly explained.	The inventory of equipment is so general that it is difficult to determine what must be acquired to implement the Curriculum and Professional Development Components. The summary of current technical support is missing or lacks sufficient detail.
c. List of clear benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components.	60-63	The benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what needs to be acquired or repurposed, by whom, and when.	The benchmarks and timeline are either absent or so vague that it would be difficult to determine what needs to be acquired or repurposed, by whom, and when.
d. Description of the process that will be used to monitor		The monitoring process is described in sufficient detail	The monitoring process is either absent, or lacks detail regarding

whether the goals and benchmarks are being reached within the specified time frame.	60-63	so that who is responsible and what is expected is clear.	who is responsible and what is expected.
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6. FUNDING AND BUDGET COMPONENT CRITERIA Corresponding EETT Requirement(s): 7 & 13, (Appendix F)	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. List of established and potential funding sources and cost savings, present and future.	64-74	The plan clearly describes resources* that are available or could be obtained to implement the plan. The process for identifying future funding sources is described.	Resources to implement the plan are not identified or are so general as to be useless.
b. Estimate implementation costs for the term of the plan (three to five years).	74	Cost estimates are reasonable and address the total cost of ownership.	Cost estimates are unrealistic, lacking, or are not sufficiently detailed to determine if the total cost of ownership is addressed.
c. Description of the level of ongoing technical support the district will provide.	64-74	The plan describes the level of technical support that will be provided for implementation given current resources and describes goals for additional technical support should new resources become available. The level of technical support is based on some logical unit of measure.	The description of the ongoing level of technical support is either vague or not included, is so inadequate that successful implementation of the plan is unlikely, or is so unrealistic as to raise questions of the viability of sustaining that level of support.
d. Description of the district's replacement policy for obsolete equipment.	73	Plan recognizes that equipment will need to be replaced and outlines a realistic replacement plan that will support the Curriculum and Professional Development Components.	Replacement policy is either missing or vague. It is not clear that the replacement policy could be implemented.

e. Description of the feedback loop used to monitor progress and update funding and budget decisions.	73	The monitoring process is described in sufficient detail so that who is responsible, and what is expected is clear.	The monitoring process is either absent, or lacks detail regarding who is responsible and what is expected.
* In this document, the term “resources” means funding, in-kind services, donations, or other items of value.			

7. MONITORING AND EVALUATION COMPONENT CRITERIA Corresponding EETT Requirement(s): 11 (Appendix F)	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. Description of how technology’s impact on student learning and attainment of the district’s curricular goals, as well as classroom and school management, will be evaluated.	75-76	The plan describes the process for evaluation utilizing the goals and benchmarks of each component as the indicators of success.	No provision for an evaluation is included in the plan. How success is determined is not defined. The evaluation is defined, but the process to conduct the evaluation is missing.
b. Schedule for evaluating the effect of plan implementation.	75-76	Evaluation timeline is specific and realistic.	The evaluation timeline is not included or indicates an expectation of unrealistic results that does not support the continued implementation of the plan.
c. Description of how the information obtained through the monitoring and evaluation will be used.	76	The plan describes a process to report the monitoring and evaluation results to persons responsible for implementing and modifying the plan, as well as to the plan stakeholders.	The plan does not provide a process for using the monitoring and evaluation results to improve the plan and/or disseminate the findings.

<p>8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY</p> <p>CRITERION</p> <p>Corresponding EETT Requirement(s): 11 (Appendix F)</p>	<p>Page in District Plan</p>	<p>Example of Adequately Addressed</p>	<p>Example of Not Adequately Addressed</p>
<p>a. If the district has identified adult literacy providers, there is a description of how the program will be developed in collaboration with those providers.</p>	<p>77-81</p>	<p>The plan explains how the program will be developed in collaboration with adult literacy providers. Planning included or will include consideration of collaborative strategies and other funding resources to maximize the use of technology. If no adult literacy providers are indicated, the plan describes the process used to identify adult literacy providers.</p>	<p>There is no evidence that the plan has been, or will be developed in collaboration with adult literacy service providers, to maximize the use of technology.</p>

<p>9. EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA Corresponding EETT Requirement(s): 4 & 9 (Appendix F)</p>	<p>Page in District Plan</p>	<p>Example of Adequately Addressed</p>	<p>Not Adequately Addressed</p>
<p>a. Description of how education technology strategies and proven methods for student learning, teaching, and technology management are based on relevant research and effective practices.</p>	<p>82-89</p>	<p>The plan describes the relevant research behind the plan’s design for strategies and/or methods selected.</p>	<p>The description of the research behind the plan’s design for strategies and/or methods selected is unclear or missing.</p>
<p>b. Description of thorough and thoughtful examination of externally or locally developed education technology models and strategies.</p>	<p>82-89</p>	<p>The plan describes references to research literature that supports why or how the model improves student achievement.</p>	<p>No research is cited.</p>
<p>c. Description of development and utilization of innovative strategies for using technology to deliver rigorous academic courses and curricula, including distance-learning technologies (particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources).</p>	<p>82-89</p>	<p>The plan describes the process for development and utilization of strategies to use technology to deliver specialized or rigorous academic courses and curricula, including distance learning.</p>	<p>There is no plan to utilize technology to extend or supplement the district’s curriculum offerings</p>