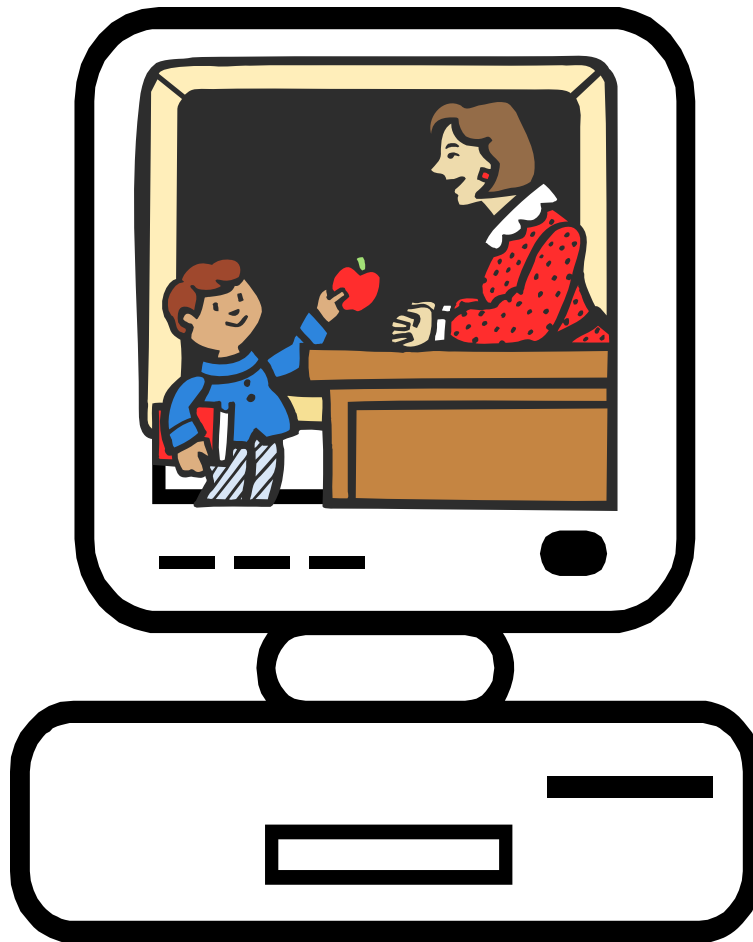


# **MCFARLAND UNIFIED SCHOOL DISTRICT**

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## **Educational Technology Plan** **2005-2010**



**Board Adopted: April 15, 2005**

**CDS 15-73908**

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## Executive Summary

### **Purpose**

The McFarland Unified School District has prepared this 5-Year Instructional Technology Plan, for the years 2005-2010, to articulate a common vision for technology in McFarland schools and identify the strategies that will help schools use technology to promote student achievement of rigorous curriculum standards and the development of critical thinking skills that are essential for academic and workplace success. McFarland Unified School District recognizes that technology is an integral part of our educational curriculum: not a separate goal, but rather a tool used to enhance education within our district.

### **Organization**

The Executive Summary outlines the Plan's Introduction, Planning Parameters, and Needs Assessment and includes the complete five-year goals. The full Plan provides more details and includes McFarland's implementation strategies and timeline as well as appendices with additional support materials and a glossary of terms.

### **Background**

Technology will be implemented, utilized, and upgraded so that upon graduation students are technologically literate life-long learners. Our graduates will be capable of competing in a higher learning institute and the emerging business and technologically minded society of the 21<sup>st</sup> century.

### **Planning Process**

A technology committee was commissioned to develop the 2005-2010 McFarland Unified School District's technology Plan, see Appendix F. The first step in Planning of this Plan was assessing our existing technology. What do we have in place, and how well is it working. The next step was to define the District's needs which enabled the committee to suggest the most efficient solutions to those needs by researching the existing technology options and deciding on ones that meet our needs at a minimum cost. The findings, resources, needs, and available as well as future budget were then written.

The Board extends a special note of appreciation to all those who contributed to this Plan.

## Parameters

### **District's Educational Mission**

The commitment of McFarland Unified School District is to ensure each student a learning environment that focuses on academic excellence encouraging staff/parental involvement and emphasizes respect for positive self-image. Each student will be provided opportunities to develop social and emotional growth while acquiring values and appreciation of individual differences.

### **District Educational Goals**

To continue the District's comprehensive effort to improve teaching and learning for all students in every school, the District has adopted seven strategic Planning goals:

### **Standards & State Guidelines**

The Instructional Technology Plan is guided by the state curriculum standards and supports the educational mission and instructional goals of the McFarland Unified School District. This section summarizes the key educational goals and standards that are the framework for the Strategic Plan. The Plan stresses the importance of adequate and sustained staff development for the integration of technology into the curriculum. It also is consistent with the professional development and student achievement goals, the E-Rate application's guidelines and other state standards, such as the newly adopted teacher credentialing guidelines for technology proficiency.

Subsequent modifications to the statement of this Plan and its contents will be mainly based upon technological advancement, district and community needs and available funds/grants. A yearly review will be performed and the results of that review will adjust or modify this Plan as determined by the review committee.

### **Policy Issues for Technology Planning**

The Plan addresses six major policy issues:

1. Access to technology
2. Use of technology to achieve high standards
3. Long term funding and sustainability
4. Maximization of available resources
5. Long-term commitment from all stakeholders
6. Parents and community as partners

### **Technology Integration**

This Plan addresses two levels of technology integration:

**Technology literacy:** which is the ability to use technology through the mastery of technology skills?

**Technology integration:** This occurs when technological applications are used to facilitate instruction and learning.

## Needs Assessment

### **Background**

This Plan is based on information drawn from many sources and from previous District wide Technology Plans, as well as surveys regarding technology training needs, hardware/software audits, etc.

### **Student and Teacher Access to Technology**

Every teacher, administrator and clerical staff member of the McFarland Unified School District has direct access to his or her own computer, the site LAN, and through the District-wide WAN, access to the Internet through a filtering system.

Currently, our district has  $\approx$ 1,093 computers available to staff and students. Every classroom is equipped with computer access and there are existing computer labs available or currently being created at each school site. The majority of classrooms have 8-10 Internet drops in use. Our student/computer ratio averages 3:1 district-wide, with slightly higher ratio at elementary sites and slightly lower at secondary.

50% of our computers are older than five years. 85% of our classrooms have televisions, VCR's, and printers. All sites have laser printers, scanners, digital cameras, video cameras, overhead projectors and LCD projectors for teacher classroom. Video production equipment is available at Kern Avenue Elementary.

### **Student and Teacher Technology Skills Proficiency**

Our District has adopted the CTAP Region 8 Proficiency continuum as a goal for all our teaching and administrative staff. Of our total staff, currently approximately 60% have Level I, about 37% at Level 2 and 3% at Level 3. Appendix B.

Students at MUSD are introduced to computer skills at an early age. Most of the students in the District except for new arrivals share technology skills at, or slightly higher than the required standards for their grade levels; at the District's elementary schools, students are required to use computers as assessment tools for their reading programs starting in second grade, and to prepare PowerPoint presentations and written reports by the end of fifth grade.

### **Status of Instructional Media**

A variety of software programs are being used throughout our district. While NT for networking, MS Office, Anti-Virus programs and Foolproof security are standard throughout the district, each site has adopted various software programs to meet specific student needs. These include SouthWestern keyboarding for business and adult education students, Mavis Beacon for elementary and middle school computer students, Inspiration

and Kidspiration, the Knowledge Adventure series, Reading Counts, STAR reading, Accelerated Reader, Math Blaster, and Math Tutor.

### **Status of Infrastructure**

Every building at all six sites, including portables, is wired with data cables. All sites are connected through a WAN and each site has a LAN. All elementary sites have or are in the process of achieving full cable television access for each classroom. The High School has close circuit television as well as the Learning Center.

### **Needs**

We recognize the need for: continuing professional development, full-time technical support, a normative and comprehensive computer replacement Plan based on the number of years of service, continuing funding resources to upgrade and replace equipment and software, and before and after-school access to technology for students and community members.

## Effective, Research-Based Methods and Strategies

Throughout the formative stages for our district educational technology Plan, research was and is relied upon for guidance in developing and altering goals and strategies for student learning, teaching, and technology management.

**Strand I: Student Learning, Goal 1—Student Technology Skills Proficiency, and Goal 2—Technology Resources for Learning.** Common technology skills were developed across the grade levels to prepare our students to meet the demands of the workplace. A common set of software programs was adopted with the software programs being closely tied to those most commonly used in the workplace of today.

**Strand II: Professional Development, Goal 1—Teacher Technological Proficiency, and Goal 2—Technology Integration through Professional Development.** Understanding that teacher technology use and application is based on skills; gives us the opportunity to create an environment where training is considered the center of the District's philosophy related to technology and its applications. Teachers are able to use and transmit only what is known, training prepares teachers to expand that knowledge and transmit that knowledge to students.

**Strand III: Family and Community, Goal 1—Parent and Community Involvement, Goal 2—Parent and Community Education and Lifelong Learning, and Goal 3—Partnerships.** "The most successful collaborative services are cost effective over the long run; they bring children and families into systems where they can become empowered; they are culturally competent and committed to responding to the diverse contexts of children and families; and they communicate/connect well with communities." *What We Know From Research and Practice*, School-Linked Comprehensive Services for Children and Families, April 1995. <http://www.ed.gov/pubs/Compre/pt3.html>

**Strand IV: Management and Support, Goal 1—Technical Support and Goal 2—Coordination and Management.** “Schools often fail to achieve technology objectives because they trivialize the concept. As important as it is to understand how to use the technology effectively, it is critical to understand how to avoid the traps. Ignoring the pitfalls can be dangerous because it makes the technology effort just another short-lived improvement program. Successful technology implementation will not be an easy task to achieve for any school or district. It is an ongoing process that requires work and dedication to become truly successful.” *Managing the Use of School Technology: Eight Step Guide for Administrators*, Mohsen Attaran and Ilja VanLaar, California State University Bakersfield.

**Strand V: Evaluation and Assessment, Goal 1—Monitoring Implementation of the Plan, and Goal 2 Impact of Technology on Teaching and Learning.** Teacher training, assessments that focus on standards proficiency attainment, student encouragement to participate in social activities that expand the topics studied at school and motivating students to use technology resources as tools to enhance their knowledge of general and specific topics are the major implications for educators and also for administrators who are the decision makers related to technology resources.

## Goals and Implementation Strategies

### **Strand I: Student Learning**

**Goals #1 - Student Technology Skills Proficiency:** Students will become proficient in the use of multimedia computers and Internet technologies to include the ability to utilize word processing programs, electronic publishing software, spreadsheet programs, programs that enhance communication skills, courseware and related software and Internet search and retrieval programs.

**Goal #2 - Technology Resources for Learning:** All students will have ready access to a standardized baseline of high quality, age level appropriate instructional media that support reading, writing, curriculum content and critical thinking skills in student centered, authentic learning environments. A standardized baseline will promote equitable access; facilitate student and staff training, and lower technical support time.

### **Strand II: Professional Development**

**Goal #1 - Teacher Technological Proficiency:** Staff will work towards personal proficiency in the use of technology to include basic operations of various technologies, personal computer productivity tools, technology literacy applications and the effective use of Internet tools and resources. During the second year of this Plan a survey will be performed to determine the number of teachers that have achieved Level 1 and 2: Personal Proficiencies, or higher, as recommended by the California Technology Assistance Project., Region 8, the McFarland Unified School District Office and the California Commission on Teacher Credentialing.

**Goal #2 - Technology Integration through Professional Development:** Through the establishment of an ongoing, technology embedded professional development program,



teachers will be able to use powerful technology applications that support curriculum standards and promote the progression of critical thinking and problem solving skills with their students. Teachers will be encouraged to take advantage of training opportunities available through our county office of education and CTAP Region 8. The professional development program will reflect research and best practices to include ongoing in-service, peer collaborations, coaching and mentoring and time for reflection. Administrators and support staff will understand how technology can be used in a standards-driven classroom and learn how to support their classroom teachers.

### **Strand III: Family and Community**

**Goal #1 - Parent and Community Involvement:** The district will endeavor to improve home-school communications and involve parents in the decision-making at school and the district.

**Goal #2 - Parent and Community Education and Lifelong Learning:** By building on our school-community partnerships, the schools will provide access to technology and training for families and members of the community. The district will expand opportunities for adult education and instructional programs for families using the resources of the schools.

**Goal #3 – Partnerships:** To promote student learning and parental involvement, schools will continue to strengthen partnerships with parents, community organizations, educational institutions, business community and city/county agencies. The purpose of these partnerships will be to coordinate technology Planning and implementation, develop new applications, reduce costs and extend learning resources and services to families and the greater community.

### **Strand IV: Technology and Network Infrastructure**

**Goal #1 - Technology in the Schools:** All schools will have a standardized set of technology tools that promote student achievement, foster best practices in teaching and ensure cost-effective professional development and technical support. All students and teachers will have reliable and ready access to these technology tools.

**Goal #2 - Administrative Technology:** Administrators, counselors, clerical staff and other support staff will have access to workstations, software and other productivity tools that support communications, decision-making and cost effective services and business practices. With Kern County Superintendent of Schools (KCSOS), or other resources the district will develop and support cost effective centralized information, financial, management and communications applications.

**Goal #3 - Network Infrastructure:** All schools will have school-wide networks that support voice, video and high-speed data. The school network will be connected to the district's broadband network, which will be capable of supporting both instructional and management practices and improve communications within the district and with other partner agencies.

### **Strand V: Management and Support**

**Goal #1 - Technical Support:** The District will develop and maintain an effective, timely and reliable support system in charge of the maintenance, and management of the network and all applications. This support system will assure that all resources are maintained and repaired in a timely and cost effective manner. The district will seek partnerships with KCSOS, other districts, businesses and the community; to provide the necessary levels of support to teachers, students, and community members and other end users. A budget allocation will result necessary to expedite the purchase of replacement equipment, parts, software and to hire external contractors to expand the systems as needed.

**Goal #2 - Coordination and Management:** The district and schools will develop technology standards, processes and procedures to ensure the effective deployment of technology and promote cost effective management practices at all levels. Training seminars as well as specialized workshops will be created to promote staff development. Different partnerships will be created to offer community focused technology training

**Goal #3 – Funding:** The district is committed to securing ongoing, stable funding to support the curriculum resources, staff development, technology tools, infrastructure and technical support which are necessary to implement this five year Technology Plan. During the fourth year of this Plan, a new economic Plan will need to be created following standards, procedures and regulations existent at the time.

### **Strand VI: Evaluation and Assessment**

**Goal #1: Monitoring Implementation of the Plan:** The district will conduct an ongoing formative evaluation and assessment of progress towards the goals to inform decision-making and professional development and to make corrections, additions, and modifications in implementation as needed.

**Goals #2: Impact of Technology on Teaching and Learning:** The extent to which technology impacts student learning, classroom management, and attainment of the MUSD curricular goals will be determined by student performance on multiple measures; CAT6 results, API, and/or AYP. Other performance assessment tools will include staff, parent, teacher, and student surveys. Student portfolios, teacher observation and anecdotal notation will provide additional data.

## Introduction

### Purpose

The McFarland Unified School District has prepared this Instructional Technology Plan to articulate a common vision for technology in McFarland Unified School District schools and identify the strategies that will help schools use technology to promote student achievement of rigorous curriculum standards and the development of critical thinking skills that are essential for academic and workplace success.

### Organization

The Plan is divided into six sections:

- **Executive Summary**, which describes the Plan's strands and the instructional goals for the district.
- **Parameters**, that summarizes the policies and standards that provide the framework for the use of technology.
- **Needs Assessment**, which summarizes the status of technology in McFarland Unified School District schools and outlines the technology related issues identified by teachers, parents, administrators and the community during the needs assessment process.
- **Effective Research-Based Methods and Strategies**, explains how research based technological models will be used in the McFarland Unified School District to develop appropriate educational strategies by creating an internal confluent educational system where technology is not considered an independent and isolated area of instruction, but rather an integral part of the District's educational vision, mission and goals.
- **Goals and Implementation Strategies**, which present the goals and implementation strategies across six areas or strands: Student Learning, Professional Development, Families and Community, Technology and Network Infrastructure, Management and Support, and Evaluation. This section represents the heart of the Plan.
- **Timeline and Benchmarks**, which identifies the projected implementation timeframe and specific objectives that will be used to monitor progress. Should the district be unable to fund the Plan fully, the timeline identifies the sequence or order in which the respective strategies will be phased.

*\* All support materials and relevant policies are included in the appendices.*

## **Background**

This Plan was developed to meet state requirements, allow for the application for grant funding based on the existence of a Plan, and to help insure that goals we wish to achieve are met. We revise our technology Plan to meet changes in standards, technology, and staff development and stakeholders' needs.

This Plan is based on information drawn from many sources. Key steps involved in our Planning process include:

- Review of previous district technology Plans
- A review of the literature to identify best practices
- A survey of school site hardware and instructional media
- A survey of teachers
- A survey of administrators
- Interviews with site and district administrators and representatives from the McFarland community
- School site meetings
- Other district technology Plans
- Experience from other school districts
- CTAP training
- Input from KCSOS personnel

## **Planning Process**

McFarland Unified School District personnel originally created a technology Plan in the early 1990's. Our Plan was last revised in 2002-2003 school year. We are now revising our Plan to reflect changes in state standards, our technology inventory, our student and staff needs, and our District's vision and goals. All stakeholders were invited to a Planning session in January. Those in attendance became our Technology Planning Committee. Appendix F.

- We looked at how technology will support teaching and learning
- Determined the point at which we are now using technology
- Outlined the steps it would take our District to move from where we are now to where we wish to be within the next five years
- We will meet annually to reflect upon and revise our Plan
- If necessary; emergency meetings will be schedule accordingly.

The Board extends a special note of appreciation to all those who contributed to this Plan. See Appendix F for a list of participants.

## Parameters

The Instructional Technology Plan is guided by the state and district curriculum standards and supports the instructional goals of the McFarland Unified School District. This section summarizes the key educational goals and standards that form the framework for the Strategic Plan.

### **District Educational Mission**

The commitment of McFarland Unified School District is to ensure each student a learning environment that focuses on academic excellence encouraging staff/parental involvement and emphasizes respect for positive self-image. Each student will be provided opportunities to develop social and emotional growth while acquiring values and appreciation of individual differences.

### **District Educational Goals**

To continue the District's comprehensive effort to improve teaching and learning for all students in every school, the District has adopted seven strategic Planning goals:

- ❖ Work to provide conditions that encourage student achievement;
- ❖ Promote staff and organizational effectiveness, efficiency and accountability;
- ❖ Develop partnerships of responsibility with students, parents and community;
- ❖ Create and maintain a clean, safe and healthy learning and work environment;
- ❖ Ensure fiscal responsibility and accountability at all levels of the organization;
- ❖ Recruit, develop and retain the most competent and caring individuals at all levels of the organization;
- ❖ Ensure effective working relationship between the Board of Education and the Superintendent.

## State Guidelines

The California Board of Education recently adopted Guidelines recommended by the Commission on Teacher Credentialing to ensure that teacher candidates:

*“... become fluent, critical users of technology to provide a relevant education and to prepare students to be life-long learners in information based, interactive society. The appropriate and efficient use of software applications and related media to access and evaluate information, analyze and solve problems, and communicate ideas is essential to maximizing the instructional process. Such use of technology supports teaching and learning regardless of individual learning style, socio-economic background, culture, ethnicity, or geographic location.”*

The Guidelines define the general knowledge and skills base that teachers should have to accomplish these goals. The Technology Plan is consistent with the California Teacher Credentialing and Educational Standards Guidelines and strives to make technology an integral part of professional development across all curriculum areas.

### **This Plan addresses the following major policy issues for technology Planning**

**Standards:** How can the district make sure that there are high standards for all children and that students have opportunities to complete challenging tasks using technology?

**Funding/Sustainability:** What strategies must be put in place to implement the technology Plan over the long run?

**Coordination:** How can the district coordinate the different policy players and stakeholders to maximize available resources?

**Commitment:** Technology must be viewed as part of a long-term change process that requires the participation of all stakeholders and commitment from the leadership.

**Parents and Community:** The MUSD believes that parents and the community in general can provide support, expertise and resources for the schools. During the duration of this Plan, MUSD will develop diverse strategies to enhance parent and community involvement focusing on how the district can bring parents into partnership with the District to implement this technology Plan?

**Technology Integration:** This occurs when technological applications are used to facilitate instruction and learning. This Plan is based on two major premises:

(a) Technology integration occur when technology is used to foster problem solving and critical thinking skills, to create authentic learning environments and address multiple learning styles in a standards driven classroom.

(b) Technology integration occurs through ongoing technology embedded professional development.

**Technology literacy:** The ability to use technology through the mastery of technology skills such as basic computer operations, proficiency with a number of software applications, ability to use e-mail and conduct on-line searches.

## Needs Assessment

The need most commonly identified by teachers and site administrators in MUSD schools is to provide a consistent and ongoing funding stream for upgrading and adding to the technology MUSD provides to meet student needs.

Resources provided to school sites vary and there is a need to help schools provide up-to-date technology for their schools. The following table demonstrates the present inventory; further in this Plan a comparative table will be included showing updates needed and the costs of providing up-to-date technology to students enrolled in MUSD schools.

Computers with a manufacture date of more than 4 years may be considered obsolete. The acid test for obsolescence is whether or not the computer being evaluated is capable of running current issue operating systems and applications necessary for its intended use. Application suites and individual site technology Plans may allow machines to operate beyond the life expectancy of existing hardware.

The McFarland Unified School District's goal is to ensure that technology is a tool for teaching and learning rather than a burden on the teacher in the classroom. An online help desk structure is in the Planning phase to help in the support of technology in the schools and in the classroom.

There is a need for additional support staff and standardized resources to facilitate timely support and repair as well as a consistent and ongoing funding stream to support this service. Software upgrades should also be a part of these standards.

While the average life a computer has been 2-4 years, new and innovative technologies are being explored to prolong the life of computers by proactively introducing thin client and server-based products. There is a need to establish formal administrative procedures and ongoing source of funding for replacing obsolete equipment used in MUSD student programs. Our goal is to have obsolete equipment replacement guidelines defined by the 2006 yearly meeting.

### MUSD Student and Teacher Access to Technology

Site	Multimedia Comps	Student/Computer Ratio	PC	Mac	Relative Age	Other Technology								
						Alpha Smart Units	Digital Cameras	Digital Video Camera	LCD Projectors	Smart Board	VCRs/DVD Players	Printers/Scanners	PDA's	Servers
McFarland High School	339	2.5:1	293	46	<1 11% 2 17% 3 35% 4 17% 5 + 20%	0	10	2	13	2	25	58	1	4
McFarland Middle School	223	3:1	214	9	<1 29% 2 1% 3 13% 4 0% 5+ 80%	0	6	2	4	0	15	55	0	2
Kern Avenue Elementary School	268	3:1	225	43	<1 19% 2 1% 3 16% 4 0% 5+ 63%	60	8	1	5	0	46	45	3	3
Browning Road Elementary School	174	4:1	172	2	<1 18% 2 0% 3 3% 4 17% 5+ 62%	90	7	0	1	0	37	38	2	3
McFarland Learning Center	89	2:1	87	2	<1 15% 2 19% 3 33% 4 0% 5 + 33%	0	4	0	5	0	9	26	1	1
Migrant Education	81	Varies	41	40	<1 0% 2 0% 3 50% 4 49% 5 + 1%	0	1	1	3	0	3	7	0	1
District Office	15	N/A	15	0	<1 100% 2 % 3 % 4 % 5 + %	0	1	0	1	0	1	16	4	1
<b>TOTALS</b>	<b>1189</b>	<b>District Average 3:1</b>	<b>1047</b>	<b>142</b>		150	37	7	32	2	136	245	11	15



### McFarland Unified School District Computer Distribution Based on Use

	Office	Classroom	Library	In Labs	Total
<b>District Office</b>	15	-	-	-	15
<b>McFarland High School</b>	6		10		
<b>McFarland Middle School</b>	6	152	8	57	223
<b>Browning Road Elementary School</b>	4	143	3	24	174
<b>Kern Avenue Elementary School</b>	9	200	6	53	268
<b>Learning Center</b>	6	42	3	38	89
<b>Migrant Education</b>	7	-	-	74 (Mobile Labs)	81

Based on the table above (page 6) it is determined that on average; 47% of the computers in the district are within the parameters that allow us to classify them as obsolete and in need of replacement. Requesting immediate replacement of those obsolete computers without an appropriate Plan will result on a profound negative economic impact for the district:

Total number of computers in the District ..... 1189  
 Number of computers in need of replacement ..... 550  
 Approximate replacement cost per unit ..... \$2,000  
**\* Total cost of immediate replacement ..... \$1,100,000**

Therefore it does result necessary to create a replacement program focused on the future, meaning a long term Plan based on strategic replacement rather that on an immediate replacement of obsolete equipment. The proposed Plan is explained and demonstrated on the following tables.

EDUCATIONAL TECHNOLOGY PLAN  
MCFARLAND UNIFIED SCHOOL DISTRICT

<b>2005-2006 Projected Technology Implementation Costs</b>		
<b>Expenditure Type</b>	<b>Annual Total Cost of Ownership</b>	<b>Funding Source(s)</b>
Computers for student use (100), Terminal Services licenses, application software and support costs at purchase (calculated cost per unit is \$2,000)	\$200,000	General fund, site funds, Microsoft vouchers if granted
LCD Projectors, cables, and supports for the projectors. calculated at least 3 per site (5 sites)	\$17,000	General funds, site funds
Computers for Admin use Terminal Services licenses, application software and support costs at purchase	\$5,000	General fund, site funds
Required Filtering server and support costs, Virus and Spam filtering equipment.	\$6,500	General fund, site funds
Technology related professional development	\$10,000	General fund, site funds, Microsoft vouchers if granted
Internet connectivity through DCP, costs are for necessary local equipment and connectivity or network support	\$5,000	General fund, E-RATE 90% of cost covered
Intranet connectivity (line charges) for all MUSD school and Program sites	\$3,500	General fund, E-Rate discounts,
Network support costs, servers, routers, etc.	20,000	General fund, E-Rate discounts
Student Information Systems (replacement ,upgrades and staff training)	\$80,000	General fund, Other Resources.
Tech support on site. \$4000 per site (5)	\$20,000	General fund, site funds
<b>Total Estimated Cost of Ownership 2005-2006</b>	<b>\$367,000</b>	Approximate cost per site <b>\$73,400</b> . If the Microsoft Voucher is granted; at least 80% of this cost will be absorbed by it, therefore the cost per site will be reduced to around <b>\$14,680</b> per site for a total of only <b>\$73,400</b> for the whole district for the 2005-2006 year.

EDUCATIONAL TECHNOLOGY PLAN  
MCFARLAND UNIFIED SCHOOL DISTRICT

<b>2006-2007 Projected Technology Implementation Costs</b>		
<b>Expenditure Type</b>	<b>Annual Total Cost of Ownership</b>	<b>Funding Source(s)</b>
Computers for student use (100), Terminal Services licenses, application software and support costs at purchase (calculated cost per unit is \$2,000)	\$200,000	General fund, site funds, Microsoft vouchers if granted
LCD Projectors, cables, and supports for the projectors. calculated at least 3 per site (5 sites)	\$17,000	General funds, site funds
Equipment for new elementary School including Computers for students, teachers, administrators and clerical, TV's, Communications systems, Servers, Phone Services, and network system, and more items not included but needed.	A minimum of \$250,000	General fund, site funds, Microsoft vouchers if granted. E-RATE and any other available resource including grants and stipends existent at the time.
Full Time maintenance and repairs specialist to work in all District sites including but not limited to Schools, offices, and District office.	\$30,000	General fund, site funds, Microsoft vouchers if granted, and available grants, or stipends.
Technology related professional development, one training seminar or workshop per month (10months in the school year) spending a maximum of \$1,000 each	\$10,000	General fund, site funds, Microsoft vouchers if granted
Internet connectivity through DCP, costs are for necessary local equipment and connectivity or network support	\$5,000	General fund, E-RATE 90% of cost covered
Intranet connectivity (line charges) for all MUSD school and Program sites	\$3,500	General fund, E-Rate discounts,
Network support costs, servers, routers, etc.	10,000	General fund, E-Rate discounts
Student Information Systems (replacement ,upgrades and staff training)	\$5,000	General fund, site funds
Tech support on site. \$4000 per site (5).	\$20,000	General fund, site funds
<b>Total Estimated Cost of Ownership 2006-2007</b>	<b>\$550,500</b>	Approximate cost per site (6 sites) <b>\$91,750</b> . If the Microsoft Voucher is granted; at least 80% of this cost will be absorbed by it, therefore the cost per site will be reduced to approximately <b>\$18,350</b> for a total of only <b>\$110,100</b> for the whole district for the 2006-2007 year.

We estimate that the budget needed for years 3, 4 and 5 will continue to increase by approximately 15% per year. However, at this time, it is too far out to accurately estimate. As E-rate and the annually assessment process for this technology Plan require a close examination of data for each component, we will utilize this information to more accurately estimate our year 3, 4 and 5 expenditures following the annual review of the progress of the implementation of the McFarland Unified School District's Technology Plan and the new references and calculations will be included as addendums to this technology Plan.

## Student and Teacher Technology Skills Proficiency

Baseline data established from CTAP<sup>2</sup> assessments and surveys completed by certificated staff, (includes administrators) in 2004 identify the following areas of need for training purposes; productivity skills including word processing, spreadsheets, databases. While the majority of staff surveyed indicated a high level of proficiency with regard to the use of e-mail, there is need for additional training for use of the Internet for research, access to instructional resources on the Internet. Staff noted the need for additional training in area of technology integration to support teaching and learning, as well as the skills to access, manipulate and utilize student data. There is also a need to offer additional training on the use of multimedia presentation software.

Going forward, future training will include skill development on specific programs and applications identified by the CTAP<sup>2</sup> tool and the curriculum component of this Plan, as well as familiarizing staff on how to access resources that support standards based instruction from the internet and how to manipulate and use student data from the student information system; if adopted, by the end of the 2004-2005 cycle.

### MUSD Training Priorities:

1. Staff development to increase teacher and administrator technology proficiency skills and knowledge of technology tools for assessment and communication with learners and their homes. Use of technology integrated into the content standards to help all students achieve standards.
2. Staff development to increase teacher and administrator use of distance-learning to enhance teaching and learning.
3. Staff development to increase teacher and administrator use of "access to instructional resources" on the Internet.
4. Use and manipulation of student data and test scores.
5. All Special Education Teachers will be trained on special needs technology and software to meet learning needs of students.
6. Teachers will be trained on how to integrate technology into core content classes with emphasis on English/Language Arts, Math and ELD courses.
7. Administrators will be trained on the use of technology to manage student data, enhance student learning, and communication with student families and community members.

The priorities mentioned above represent the spectrum of future vision of the District's Office administration. One of the key elements used to reach these priorities is the creation of benchmarks, timeline, and the evaluation instruments required to reach the staff training goals (p.11).

EDUCATIONAL TECHNOLOGY PLAN  
MCFARLAND UNIFIED SCHOOL DISTRICT

Timeline	Activity, Evaluation Instrument(s), Data to be Collected and Evaluator(s); (Site Principals, Program Directors & Tech site representatives)
<p><b>Benchmarks</b></p> <p>1. Standard #9 of the State’s credentialing requirements defines that every future teacher be technology proficient before obtaining a teaching credential, therefore it is expected that new staff members will be at least Level II CTAP certified. This technology Plan is designed to create staff development opportunities so that all of the District’s staff members are trained on how to integrate technology in the core curriculum by implementing the following timeline and benchmarks. Due to the small numbers of some of the staff areas the training will be managed as a unit of training where all members of the unit will participate in every staff development event</p>	
By June 2005	<ul style="list-style-type: none"> <li>• All clerical support will receive training on how to use the student information system, and other related software packages or applications.</li> <li>• All staff and administrator will be assessed for technology skills and use of technology resources.</li> <li>• Review 2004 CTAP<sup>2</sup> results and develop a CTAP training calendar for the year; the goal is to have 25% the teachers certified Level II by June 2006.</li> </ul>
By June 2006	<ul style="list-style-type: none"> <li>• All clerical employees will be trained and proficient on to use the student information system, and other related software packages or applications; future training will be planned based on assessment results.</li> <li>• All Special Education teachers and aides will receive training in the use of adaptive technologies for disabled students in compliance with the A.D.A.</li> <li>• Review 2005 CTAP<sup>2</sup> results and develop a CTAP training calendar for the year; the goal is to have 50% of the teachers certified Level II by June 2007.</li> </ul>
By June 2007	<ul style="list-style-type: none"> <li>• All staff and administrators will receive training in technology integration.</li> <li>• Review staff development logs and perform surveys to develop training calendars on specific staff requested topics or areas.</li> <li>• All Special Education teachers will be proficient on the use of adaptive technologies for disabled students in compliance with the A.D.A.</li> <li>• Review 2006 CTAP<sup>2</sup> results and develop a CTAP training calendar for the year; the goal is to have 75% of the teachers certified Level II by June 2008.</li> </ul>
By June 2008	<ul style="list-style-type: none"> <li>• All staff and administrators will be trained on how to integrate technology into education.</li> <li>• All Special Education teachers will be Assessed on how to use adaptive technologies for disabled students in compliance with the A.D.A. and re-training will be provided as needed.</li> <li>• Review 2007 CTAP<sup>2</sup> results and develop a CTAP training calendar for the year; the goal is to have 75% of the teachers certified Level II by June 2009.</li> </ul>
By June 2009	<ul style="list-style-type: none"> <li>• All staff, administrators and clerical personnel will be assessed for technology skills and use.</li> <li>• Review 2008 CTAP<sup>2</sup> results and develop a CTAP training calendar for the year; the goal is to have 95% the teachers certified Level II by June 2010.</li> <li>•</li> </ul>
By June 2010	<ul style="list-style-type: none"> <li>• Evaluate staff, administrators and clerical personnel assessment results and use them to create the 2010-2015 Technology Plan</li> <li>• Review 2009 CTAP<sup>2</sup> results and apply them to the new technology Plan.</li> </ul>

**Goal**

This technology Plan is designed to prescribe reasonable goals for student technology proficiency; goals that have the potential to be achieved within the 5 year timeline limit considering accessibility to resources and curriculum. This goal is regulated by the California Educational Standards and the ISTE standards.

**OBJECTIVE**

- ❖ Students in the MUSD district will have enough technology access to acquire the needed skills to succeed in the classroom.

BENCHMARKS	PERSON responsible	MONITORING
<p>By June 2005</p> <ul style="list-style-type: none"> <li>• 70% of students will have access to a computer in a lab at least once a week.</li> <li>• Students reading performance will be enhanced by using technology resources to determine Lexiles and reading skills using Reading Counts as an assessment and prescription tool. 70% of students will reach the expected grade level Lexile as prescribed by Reading Counts Software.</li> <li>• Students' Math skills will be enhanced by using software applications specifically Math Tutor and Math Blaster.</li> <li>• Students will use Essential Skills Software for Language Arts development.</li> </ul>	<p>District Technology Coordinator, Site Technology coordinator, Technology Development Director</p>	<p>Meet w/ Sup and tech planning meeting 3 x a year</p>
<p>By June 2006</p> <ul style="list-style-type: none"> <li>• 80% of students will have access to a computer in a lab at least once a week.</li> <li>• Students reading performance will be enhanced by using technology resources to determine Lexiles and reading skills using Reading Counts as an assessment and prescription tool. 70% of students will reach the expected grade level Lexile as prescribed by Reading Counts Software.</li> <li>• Students' Math skills will be enhanced by using software applications specifically Math Tutor and Math Blaster.</li> <li>• Students will use Essential Skills Software for Language Arts development.</li> </ul>		

<p>By June 2007</p> <ul style="list-style-type: none"> <li>• 90% of students will have access to a computer in a lab at least once a week.</li> <li>• Students reading performance will be enhanced by using technology resources to determine Lexiles and reading skills using Reading Counts as an assessment and prescription tool. 70% of students will reach the expected grade level Lexile as prescribed by Reading Counts Software.</li> <li>• Students' Math skills will be enhanced by using software applications specifically Math Tutor and Math Blaster.</li> <li>• Students will use Essential Skills Software for Language Arts development.</li> </ul>		
<p>By June 2008</p> <ul style="list-style-type: none"> <li>• 100% of students will have access to a computer in a lab at least once a week.</li> <li>• Students reading performance will be enhanced by using technology resources to determine Lexiles and reading skills using Reading Counts as an assessment and prescription tool. 70% of students will reach the expected grade level Lexile as prescribed by Reading Counts Software.</li> <li>• Students' Math skills will be enhanced by using software applications specifically Math Tutor and Math Blaster.</li> <li>• Students will use Essential Skills Software for Language Arts development.</li> </ul>		
<p>By June 2009</p> <ul style="list-style-type: none"> <li>• Students reading performance will be enhanced by using technology resources to determine Lexiles and reading skills using Reading Counts as an assessment and prescription tool. 70% of students will reach the expected grade level Lexile as prescribed by Reading Counts Software.</li> <li>• Students will use Essential Skills Software for Language Arts development.</li> <li>• Students' Math skills will be enhanced by using software applications specifically Math Tutor and Math Blaster.</li> <li>• 90% of students will participate on a survey on the use of computers at home,</li> </ul>		<p>Meet w/ Sup and tech planning meeting 3 x a year, and Community Members</p>

### Status of Instructional Media

- Microsoft Office Suite used at each site on most computers (Mac & PC).
- Each school site maintains the freedom to increase their software inventory depending on specific needs.

The following software programs are currently in use (parenthesis indicates current number of licenses maintained):

School Site	Classroom Software
Browning Road	GradebookPlus (site), Kidspiration (50), Inspiration (50), Knowledge Adventure MathBlaster, Vocabulary Blaster, and ReadingBlaster, Essential Skills (9 different Programs), Worksheet Factory, Mavis Beacon (50), SRI and SRC (600), Follett (Automated Library Program).
Kern Avenue	Kidspiration (50), Inspiration (50), Knowledge Adventure MathBlaster, Vocabulary Blaster, and ReadingBlaster, Essential Skills (7 Different Programs), Jackson's Grade Quick, Worksheet Factory, Mavis Beacon (50), KidWorks, SRI and SRC (650), Follett (Automated Library Program).
McFarland High	Making the Grade (site), Synchronize (60), Learning 100 (site), Follett (Automated Library Program), Ghost (239), Photoshop Elements (30)
McFarland Learning Center	Compton's Encyclopedia (site), Grolier's 2000 Encyclopedia (site), SkillsBank (30), South-Western Keyboarding (site), PrintShop (50).
McFarland Middle School	Mavis Beacon (35), Star Reading, Accelerated Reader, Learning 100 (site), Grolier's 2000 Encyclopedia (site), Follett (Automated Library Program).



## Status of Infrastructure

We have complied with all aspects of E-Rate through year 6; are in-process of completing year seven (2004-2005) projects and have applied for year 8 (2005-2006) year funding for classrooms that are planned to be added.

### Current Status

**Year I (1998 -1999)** - Installed six Multimode and six Single-mode Fiber between MDF and IDF locations at all five sites. Installed Voice cable Plant and telephone PBX system at Browning Road, Kern Avenue, McFarland High School and San Joaquin Learning Center. Installed from 8-10 data drops and one voice drop in 97% of classrooms.

District also purchased (with non-E-Rate funds) and implemented wireless bridge technology between sites for WAN connectivity. One T-1 was installed going from the district office to Kern County Superintendent of Schools (KCSOS) office for Internet connectivity. District also purchased all telephone handsets without E-Rate funding.

District received a donation of computers from the local prison that were placed into service at McFarland High School.

During this year, a Grade 4-6 Technology grant was implemented to bring several new computers and a file server into grade level four. DHS Funding brought in new computers on the McFarland High School campus.

**Year II (1999 - 2000)** - Single T-1 installed between four sites and McFarland High School. Single T-1 installed from McFarland High School to KCSOS for ISP services. District implemented Internet filtering using ClearSail Filtering solution at District expense. Approximately 30-50 new computers were purchased for each site from District funding.

**Year III (2000 - 2001)** - Added data network switches to accommodate increased number of site owned computers at Browning Road Elementary, Kern Avenue Elementary and new portables and classrooms at these sites. Installed video cable Plant for classroom distribution of educational video at Browning Road Elementary. District contracted for repair / maintenance of computer hardware. District began to utilize network printers at each site, VIP Funding.

**Year IV (2001 - 2002)** - Brought McFarland High School up to District recommendations of eight student data drops and two teacher data drops per classroom. Plans to add DNS server & Web server. District added approximately 110 new computers District wide.

District also added new computer lab at Kern Avenue Elementary - without E-Rate funds (since this site did not get approved under Year-IV program)

**Year V (2002 - 2003)** - Improved & increased connectivity to classrooms at four sites. This Plan will include new portables Planned for installation and a new computer lab at Browning Road. District also wants to upgrade a portion of the Wireless WAN using non-E-Rate funds. District purchasing approximately 110 new computers District-wide.

**Year VI (2003 - 2004)** – Improved & increased connectivity to classrooms at three sites. This Plan will include new portables Planned for installation at Browning Road, Kern Avenue, and McFarland High School. Installed new 6MM/6SM fiber to new ICs in each of these sites that were created for future growth and to connect these new classrooms into the network. District Plans on ‘phased out’ old computers at several sites and purchased approximately 120 new computers District-wide.

**Year VII (2004 - 2005)** - Plan to improve / increase connectivity to classrooms at two sites. This Plan will include new portables Planned for installation at the Middle School and Kern Avenue and a new computer lab at Browning Road. District also wants to upgrade the Wireless WAN using non-E-Rate funds. District purchasing approximately 100 new computers District-wide

**Year VIII (2005 - 2006)** - Plan to improve / increase internet bandwidth from 1.5 MBps to 10 MBps. Also add connectivity to new classrooms at two sites. This Plan will include new portables Planned for installation at McFarland High School and Browning Road. District will begin upgrade/replacement of older IC switches. District Plans to begin upgrading the Wireless WAN using non-E-Rate funds. District Plans on phasing out more of the old computers and replacing them by purchasing approximately 120 new computers District-wide. District Plans to begin replacing file servers and upgrading from Windows NT 4.0 to Server 2003 as the operating system. District also looking into upgrading the student information system. District wants to install a firewall at the edge of the network.

**Year IX (2006 - 2007)** - Plans to build a new elementary school site. District also wants to continue to upgrade the Wireless WAN using non-E-Rate funds. District Plans on phasing out more of the old computers and replacing them by purchasing approximately 100 new computers District-wide. In addition, will be purchasing new computers for new school site. District wants to upgrade the Content Filter and firewall software.

**Year X (2007 - 2008)** - Plan to complete the new elementary school site. District also wants to upgrade the on-site file servers using non-E-Rate funds. District Plans on phasing out more of the old computers and replacing them by purchasing approximately 100 new computers District-wide

**Year XI (2008 - 2009)** - District Plans on phasing out more of the old computers and replacing them by purchasing approximately 100 new computers District-wide. District would like to begin installation of wireless access points on high school campus for notebook and PDA access.

**Year XII (2009 - 20010)** - District Plans on phasing out more of the old computers and replacing them by purchasing approximately 100 new computers District-wide.

## Needs

District has need for lower cost high capacity Internet connection, improvement of the wireless WAN between sites, an Internet proxy/cache server at edge of network and District / site web site creation and hosting. Improving the current Student Information System is also a major need. District would like to better administer the network to a workstation level. There is a perceived need for a workstation and LAN Management solution for all sites.

## Effective, Research-Based Methods and Strategies

Throughout the formative stages for our district educational technology Plan, research was and is relied upon for guidance in developing and altering goals and strategies for student learning, teaching, and technology management. Participants in the Planning process regularly receive and read a variety of educational technology journals and list serve newsletters including THE Journal, Connected Classroom, CUE Newsletter, Edutopia, Technology & Learning, eWeek, and Converge.

In developing Curriculum goals and strategies some of the key research components used are listed here as they pertain to specific goals.

**Strand I: Student Learning, Goal 1—Student Technology Skills Proficiency, and Goal 2—Technology Resources for Learning.** Common technology skills were developed across the grade levels to prepare our students to meet the demands of the workplace. A common set of software programs was adopted with the software programs being closely tied to those most commonly used in the workplace of today.

Research “in the cognitive sciences suggests that students learn and better retain what they learn when engaged in “authentic” learning tasks. In school practice, this often takes the form of an individual or a small group of students carrying out real world projects using computer and network software tools and databases. In addition to improved subject matter learning, students develop their skills in cooperation, communication, and problem identification with this approach.” *Fostering the Use of Educational Technology: Elements of a National Strategy*, Thomas K. Glennan and Arthur Melmed, Critical Technologies Institute, RAND, 1996.

“It is the role of educators to give students the knowledge they need to succeed. Knowledge today goes beyond rote learning and test performance. It includes the ability to search for information with all available media, to utilize technological tools to accomplish a variety of tasks, and to display their concepts and ideas in three-dimensional form using multimedia. To do this, students must be self-efficacious in the use of computer technology.” Diane M. Dusick, University of Southern California, *Educational Technology Review*, Fall 1998.

**Strand II: Professional Development, Goal 1—Teacher Technological Proficiency, and Goal 2—Technology Integration through Professional Development.**

“Effective integration of computers and other technology requires that teachers (1) become comfortable with the technology itself; (2) explore software, CD-ROM, Internet-based and other curriculum resources to identify those that might enhance and enrich their current curriculum; (3) review their curriculum to determine how best to integrate these technology resources into their lesson Plans' (4) revise the lesson Plans to incorporate the technology resources; (5) experiment with the lessons in the classroom; (6) assess how well things worked; and (7) refine the lesson. The manipulation of the ILS by teachers to ensure good curriculum matching is necessary for students to gain

maximum benefit.” *A Review of the Literature on Computer-Assisted Learning, Integrated Learning Systems, and Outcomes with Respect to Literacy and Numeracy.* New Zealand Ministry of Education, <http://www.minedu.govt.nz/> May 14, 2002.

“How likely students are to experience computers in intellectually powerful ways depends greatly on their teacher’s expertise with computers. To use computers effectively in their classrooms, teachers must have certain levels of expertise in basic computer operations.” *The Future of Children: A Publication of The David and Lucile Packard Foundation, Issue: Children and Computer Technology, Article: Who’s Wired and Who’s Not: Children’s Access to and Use of Computer Technology,* Henry Jay Becker, Fall/Winter, 2000. [http://www.futureofchildren.org/usr\\_doc/vol10no2Art3.pdf](http://www.futureofchildren.org/usr_doc/vol10no2Art3.pdf)

**Strand III: Family and Community, Goal 1—Parent and Community Involvement, Goal 2—Parent and Community Education and Lifelong Learning, and Goal 3—Partnerships.**

“The most successful collaborative services are cost effective over the long run; they bring children and families into systems where they can become empowered; they are culturally competent and committed to responding to the diverse contexts of children and families; and they communicate/connect well with communities.”

*What We Know From Research and Practice, School-Linked Comprehensive Services for Children and Families,* April 1995. <http://www.ed.gov/pubs/Compre/pt3.html>

“Schools will offer programs to strengthen the school/family partnership by providing materials and education for school staff and parents. Training is often critical to the success of family involvement activities. Assistance to parents can include training in (1) understanding the importance of challenging academic standards and how they can help their children meet them, (2) monitoring their children’s progress, or (3) literacy or skills that help parents work with their children.” *Title I Parent Involvement: Partnerships with Families, Schools, and Communities to Support Learning,* Mapping Out the National Assessment of Title I: the Interim Report, 1996. <http://www.ed.gov/pubs/NatAssess/sec5.html>

**Strand IV: Management and Support, Goal 1—Technical Support and Goal 2—Coordination and Management**

“An analysis of the 1992 IEA survey data found that only six percent of all elementary schools and three percent of all secondary schools have full-time computer coordinators. Indeed, only about 40 percent of all schools have even a single employee who allocates time in an official capacity to the operation of computer systems. In schools having access to a wide area network, support is most commonly provided by a part-time network administrator associated with the school, although some WANs are administered at the district level.<sup>31</sup> The extent to which limited support for local- and wide-area networks has retarded the widespread utilization of technology within the public schools remains unclear, but experience within the business sector suggests that

this may indeed represent a significant obstacle.” *Report to the President on the Use of Technology to Strengthen K-12 Education in the United States*, March 1997, President's Committee Of Advisors On Science And Technology Panel On Educational Technology, David E. Shaw, Ph.D., Chairman.

“Schools often fail to achieve technology objectives because they trivialize the concept. As important as it is to understand how to use the technology effectively, it is critical to understand how to avoid the traps. Ignoring the pitfalls can be dangerous because it makes the technology effort just another short-lived improvement program. Successful technology implementation will not be an easy task to achieve for any school or district. It is an ongoing process that requires work and dedication to become truly successful.” *Managing the Use of School Technology: Eight Step Guide for Administrators*, Mohsen Attaran and Ilja VanLaar, California State University Bakersfield.

**Strand V: Evaluation and Assessment, Goal 1—Monitoring Implementation of the Plan, and Goal 2 Impact of Technology on Teaching and Learning.**

“Major implications for educators/decision makers:

Train teachers to become action researchers who can identify, understand, and report on the contextual factors contributing to and/or hindering the success of technology-related interventions in their classrooms.

Select a variety of measures for assessment that align the specific content and skills students are learning with the technologies that they access.

Provide student groups with opportunities to demonstrate their social competencies and collaboration skills using technology-supported assessments.

Present students with performance tasks using simulations, probe ware, and web searches and use scoring rubrics that examine specific attributes of the task.

Use technology to provide students with opportunities to develop 21st Century skills which include seeking, evaluating, and organizing information, and communicating and collaborating with others.”

*Stronger Designs for Research on Educational Uses of Technology: Conclusions and Implications*, G. Haertel, & B. Means, 2000. SRI International: Menlo Park, CA. <http://www.sri.com/policy/designkt/found.html>

*Does it compute? The relationship between educational technology and student achievement in mathematics*. H Wenglinsky, 1998. Princeton, NJ: Educational Testing Service. <ftp://ftp.ets.org/pub/res/technolog.pdf>. This article examines data obtained from the 1996 National Assessment of Educational Progress in an attempt to determine the relationship between computer use and 4th and 8th grade students' mathematics achievement.

## Goals and Implementation Strategies

### **Strand I: Student Learning**

**Goals #1 - Student Technology Skills Proficiency:** Students will become proficient in the use of multimedia computers and Internet technologies to include the ability to utilize word processing programs, electronic publishing software, spreadsheet programs, courseware and related software, Internet search and retrieval programs, and digital communication resources. See Appendix A.

#### **Strategies**

Our district has in place a high school level required course called Keyboarding computer literacy that address word processing, Internet technologies, spreadsheets and electronic publishing. We also have a continuum of technology skills for grades K-8, (revisit / use chart) Appendix A. We will integrate technology skills standards into the curriculum standards. We have developed and do enforce codes of legal and ethical use of technology.

- Integrate educational technology skills standards into the curriculum standards.
- Develop a scope and sequence of technology skills for students that are tied to critical thinking skills to enable students to be successful information navigators, communicators, information processors and producers of knowledge using technology.
- Develop and enforce codes of legal and ethical use of technology.

**Goal #2 - Technology Resources for Learning:** All students will have access to a standardized baseline of high quality, age level appropriate instructional media that supports the state's curricular standards. A standardized baseline will promote access; facilitate student and staff training, and lower technical support time. In order for students to meet the language arts requirements, all students must complete on-line research projects beginning at grade 3.

#### **Strategies**

Please refer to Status of Instructional Media, page 30-31 of this document, for specific software used and Appendix A for K-8 Scope and Sequence. Instructional staff is encouraged and has been using a variety of media sources to enhance their curriculum by using course specific software.

- Define a basic software package for each school level that will include word processing, spreadsheets, etc. Example: our district has adopted MS Office as the standard software package for most applications for students and staff.
- Identify on-line resources or instructional media that contain digitized databases (such as original documents, artifacts, photographs, music) that support curriculum standards. Example: Yahoo!igans used as an elementary level search engine.
- Identify on-line learning resources and lesson Plans that support curriculum content and help create authentic learning environments. Example: High-School Hub;

Yahooligans; Smithsonian; NASA; Kern Avenue Elementary and Browning Road Elementary both have adopted Reading Counts networkable reading program.

- Expand licenses for CD-ROM and on-line reference materials and research databases and, where possible, negotiate licenses to permit teacher and student use from home or community based computers.
- Assign an instructional technology representative to the curriculum adoption committee.

## **Strand II: Professional Development**

**Goal #1 - Teacher Technological Proficiency:** In McFarland Unified, our teachers use on-line attendance accounting and teacher grading programs. This requires that all teaching staff will become personally proficient in the use of technology to include basic operations of various technologies, personal computer productivity tools, technology literacy applications and the effective use of Internet tools and resources. At least 80% of our teachers will achieve at least a Level I Personal Proficiency as recommended by the California Technology Assistance Project (CTAP) Region 8. Teachers already under contract or who have not met Level I proficiency through the credentialing process will be encouraged to attain said proficiencies within the current contractual school year.

Training sessions will be provided during the school day which will include training to help teachers meet the CTAP Region 8 technology standards. Training will be provided by our own Level III Mentor/Leaders and outside consultants. Such training will continue until such time as it is apparent that the majority of our teachers have reached Level II proficiency. Please see Appendix B.

It is recommended that an incentives program be created to recognize and remunerate those that achieve CTAP Level III and serve as mentors to other staff members.

### **Strategies**

- Utilize the KCSOS/CTAP Region 8 Technology Certification Level I Proficiencies as a standard for teacher technology proficiency.
- Develop and enforce codes of legal and ethical use of technology AUP's.
- Demonstrate the value of technology by introducing productivity software grade book applications, Example: our teachers currently use an on-line attendance and message program. Newest technologies, web sites and various tools are routinely shared

**Goal #2 - Technology Integration through Professional Development:** Through an ongoing, technology embedded professional development program, teachers and students will be able to use powerful technology applications that support curriculum standards and promote the progression of critical thinking and problem solving skills. The professional development program will reflect research and best practices to include ongoing in-service, peer collaborations, coaching and mentoring. Administrators and support staff will understand how technology can be used in a standards-driven classroom and learn how to support their classroom teachers

**Strategies**

- Survey teacher technology skills on a regular basis to inform professional development planning, including CTAP<sup>2</sup> on-line survey.
- Utilize the KCSOS/CTAP Region 8 Technology Certification Level II Proficiencies as a standard for teacher technology proficiency.
- All instructional staff will be provided a minimum of 10 hours per year of hands-on technical training. Engage teachers in hands-on work with the same technologies and technology applications that they will use with their students.
- Utilize a range of professional development opportunities through technology such as video and web based instruction - to expand professional development opportunities, address different teacher learning styles and provide teachers with anytime, anywhere training. Example: On-line CTAP.
- Utilize web-based applications, to provide support for new teachers. Example: KCSOS/CTAP Region 8 website provides complete Level I and II training on-line including in some cases more than one video example for each proficiency.
- Introduce technology in the classroom through teachers' favorite lesson Plans. Example: Each site technology representative routinely seeks out and shares ways our site teachers can enhance lessons with various technology tools.
- Provide teacher classroom support through a site instructional teacher-technologist or mentor program. Develop and support a Level III Mentor/Leader at each site certified through the KCSOS/CTAP Region 8 Technology Certification Program. Example: we currently have a teacher/site tech representative at each school site that provides technology mentoring.
- Use KCSOS's Tech Mentors and technology training programs for basic technology training for teachers.
- Develop incentives to encourage professional staff to participate in training opportunities such as in-service credits and/or stipends.

Staff proficiency expectations for the next 5 years

Goal	2005-06	2006-07	2007-08	2008-09	2009-2010	Responsible:
Teacher Technological Proficiency	70%	80%	85% +	85% +	85% +	Level III Staff, CTAP Region 8 training staff, Cal State University Bakersfield
Technology Integration through Professional Development	10 + hours in-service	10 + hours in-service	10 + hours in-service	10 + hours in-service	10 + hours in-service	District and site administrators, site technology reps
Staff Technology Skills Assessment	Bi-annually—CTAP <sup>2</sup>	Bi-annually—CTAP <sup>2</sup>	Bi-annually—CTAP <sup>2</sup>	Bi-annually—CTAP <sup>2</sup>	Bi-annually—CTAP <sup>2</sup>	Site technology reps will oversee

**Strand III: Family and Community**



**Goal #1 - Parent and Community Involvement:** The district will develop and adapt programs to promote parent involvement in the education of their children, and to improve home-school communications by involving parents in the decision-making at school and the district.

MUSD goal is to provide access to technology and training for families and members of our community, thus maximizing the use of technology in the district. Within the McFarland Unified School District area, adult literacy needs will be served through district collaborative efforts. All stakeholders have been included in technology Planning efforts in order to provide for maximum benefit from all funds expended.

Through district collaborations with providers for adult literacy, several options will be available for McFarland's adult learners, all of which will use the technology equipment and facilities available to regular K-12 students during the traditional school day.

**Migrant Education** The MUSD district, through migrant education, promotes that migrant parents and their children work together cooperatively to increase their literacy skills as they learn basic computer skills. A mobile computer lab is available for their use. The mobile lab is also used for Migrant Summer School and other migrant programs. The lab currently consists of 14 Internet ready wireless laptops. The MS Office 2000 suite, keyboarding, and information literacy skills are covered.

**Adult Education Program—** Available for adults in the community wishing to increase their basic literacy skills, learn basic entry-level job skills, and/or earn their high school diplomas. The program operates on the McFarland Learning Center campus and is housed in a fully equipped multimedia and Internet connected computer lab. Software available includes the basic MS Office suite plus SkillsBank, comprehensive courseware that addresses the basic core skills necessary to reach high school equivalency and covers language arts, reading, and writing, mathematics, and information skills.

### **Strategies**

- Keep parents informed; Example: District-wide, on a regular basis a parent newsletter will be distributed.
- Invite families, school board members, business representatives and community in general to open houses at school labs or events featuring student technology projects.
- Host “family technology nights” to demonstrate the role of technology in instructional reform and to allow parents to become more comfortable with technology. Example: McFarland High School counseling staff invites families to open-house financial aid activities where on-line financial aid information services are introduced.
- Expand the use of the schools’ web pages to include parent pages, homework postings, bulletin boards, discussion groups, etc. Example: Our district is in the Planning stages of expanding the district-wide website and a new student

information system which will include parent access to relevant information from each school site, each student, and the district office.

- Engage families and the community through technology-supported community service projects for students.
- **Goal #2 - Parent and Community Education and Lifelong Learning:** By building on our school-community partnerships, the schools will provide access to technology and training for families and members of the community. The district will expand opportunities for adult education and instructional programs for families using resources of the schools. Parent technology training courses will be created to enhance not only student support through those parents, but also to enhance basic computer skills for community members.

### **Strategies**

- Open computer labs for after-school programs, and community programs that engage students and families in meaningful activities.
- Work with Adult Education, libraries, community organizations to expand technology training courses for adults in the community.
- Use technology to promote cross-generational learning projects.
- Incorporate technology into parenting workshops. Example: the Migrant program now has a wireless lab available for its workshops.

**Goal #3 – Partnerships:** To promote student learning and parental involvement, schools will continue to strengthen partnerships with parents, community organizations, educational institutions, the business community, and city/county agencies. The purpose of these partnerships will be to coordinate technology Planning and implementation, develop new applications, reduce costs and extend learning resources and services to families and the greater community.

### **Strategies**

- Form a technology consortium involving city/county agencies, institutions of higher learning, public libraries and community agencies to bring new grants, resources, and expertise to the schools.

## **Strand IV: Technology and Network Infrastructure**

**Goal #1 - Technology in the Schools:** All schools will have a standardized set of technology tools that promote student achievement, foster best practices in teaching and

facilitate cost-effective professional development and technical support. All students and teachers will have access to these technology tools.

**Strategies**

- District technology committee meets on regular basis to discuss all aspects of technology needs in our schools.
- On a site basis, staff is polled for input into technology needs and access.
- Systematic product replacement and software upgrade will be put into place based upon termination of current hardware contracts and updates of commonly used software

**Goal #2 - Administrative Technology:** Administrators, counselors, clerical staff and other support staff will have access to workstations, software and other productivity tools that support communications, decision-making and cost effective services and business practices.

**Strategies**

Regular meetings and training sessions for administration and support staff will be provided by MUSD, KCSOS, and product vendors.

**Goal #3 - Network Infrastructure:** All schools will have school-wide networks that support voice, video and high-speed data. The school network will be connected to the district's broadband network, which will be capable of supporting both instructional and management practices and improve communications within the district and with other partner agencies. Wire new classrooms as acquired to continue to meet technology goals. It is important to mention that the building of a new elementary school is approved and that the school will be provided with top of the line technological resources available at the time of first use

**Strategies**

Services are provided through KCSOS. We have broadband access between all schools and the District office as well as KCSOS.

## **Strand V: Management and Support**

**Goal #1 - Technical Support:** The district will develop and maintain a comprehensive support system to ensure that instructional technology, the network and all applications are supported, maintained and repaired in a timely and cost effective manner. McFarland Unified School District currently employs one technology consultant, 20 hours per week, for the entire district. Each school site has a teacher technology coordinator provided with two hours per week to perform front-line troubleshooting of hardware, software, and connectivity problems.

MUSD recognizes the need for one overall technology resources coordinator, one external consultant, one full-time technician, and several par-time technicians all of them under the direction of the technology coordinator who will be responsible of acquiring, assigning, and distributing resources, and evaluating the implementation of this Plan.

Timeline for increased support, based on available funding:

### **Strategies**

- The district will establish a network of site technology coordinators responsible for meeting on-site technology support.
- The district will hire a full time and several part time technicians who will be in charge of providing solutions to problems beyond those provided by the site coordinators.
- Each site will have a technician that has a minimum of two hours per day of uninterrupted tech time during the regular school day.
- The MUSD will assign a specific budgeted amount to spend on hardware purchase, maintenance, repair, and upgrade.
- Each site administrator will be given a board approved specific budgeted amount for purchase of emerging technologies.
- All computers will be upgraded or replaced within a maximum of 4 years.

**Goal #2 - Management and Coordination:** The district and schools will develop technology standards, processes and procedures to ensure the effective deployment of technology and promote cost effective management practices at all levels.

### **Strategies**

- All hardware and software purchases will be routed through the technology coordinator before transition to District office for purchase.
- Technology committee will meet yearly to assess soft/hardware needs and standards.
- Upgrades and replacement of equipment will be made based on equipment functionality and compatibility with currently used district software.
- Current computers are purchased with three-year warranties to assist with life expectancy. Equipment will be considered for replacement after the three years, with a maximum life expectancy of five years.

**Goal #3 – Funding:** The district is committed to securing ongoing, stable funding to support the curriculum resources, staff development, technology tools, infrastructure and technical support which are necessary to implement the Technology Plan. Funds from categorical programs and grants will be utilized to upgrade technology.

The funds used to improve, upgrade and purchase new technology have been and will continue to be general funds, grant funds, and E-rate discounts. However, there has been no consistent Plan to provide replacement of obsolete equipment in a systematic way.

The MUSD is committed to continuing to provide all students and staff with a high level of technology training and implementation support. MUSD continues to seek a variety of funding sources including grants, donations, and partnerships with other agencies in order to maintain this level of service and support. Once again, the current level of funding is not sufficient to meet the needs of the organization.

In the pursuit of additional funding, MUSD will utilize the grant writing services of its staff. A technology strategy to prolong the usefulness of computer hardware is also a priority of the McFarland Unified School District. Research and implementation of new technology such as server-based applications will be under evaluation to reduce the total cost of ownership in technology. Group purchasing of computers, software licenses and negotiated projects with partners will also be explored to reduce technology costs in the coming years.

### **Strategies**

The district actively participates in and seeks E-Rate, DHS, VIP, Technology Literacy Challenge Grant, local technology grants, and community/business donations.

<b>Funding Source:</b>	<b>Provides for:</b>	<b>Funding Amount:**</b>	<b>Responsible Staff:</b>
E-Rate	Infrastructure throughout district	10% match from district general fund, K-12	Network Administrator, Technology Administrator
Periodic Site Block Grants	Various technology needs	Approximately \$10,000 per site, K-12	Categorical Programs Administrator
Title One	Supplementary supplies and materials, i.e. Software	Approximately \$1.5 million per year, K-12	Categorical Programs Administrator
SIP	School improvement projects—new hardware, software, maintenance of existing equipment	Approximately \$200,000 per year, K-8	Categorical Programs Administrator
K-3 Class Size reduction	Hardware, software, maintenance of equipment	Approximately \$380,000 per year, K-3	Categorical Programs Administrator
Eisenhower Grant	Staff development	Approximately \$20,000 per year, K-12	Categorical Programs Administrator
EIA, Economic Impact Aid	Hardware, software	Approximately \$300,000 per year, K-12	Categorical Programs Administrator
VIP funds*	District technology consultant, site tech mentors, staff development	Approximately \$600,000 per year, K-12	Categorical Programs Administrator
AP Challenge Grant*	Hardware, software, and staff development activities	\$60,000 over 3 year term, 7-12	Categorical Programs Administrator

\*With matching funds from McFarland Unified School District

\*\*District Superintendent to decide on percentage of available funds to be allotted to technology needs.

The McFarland Unified School District will vigorously pursue grants and donations for further funding of our technology projects/Plans.

## **Strand VI: Monitoring and Evaluation**

### **Monitoring Process**

The MUSD will keep an inventory of all site technology equipment. All sites will report progress towards sustaining all existing infrastructure, hardware, technical support, and software components, along with acquisition and installation of needed components on an annual basis. The results of these activities and progress toward meeting the modernization goal will be recorded and reported to the Technology Committee, who will in turn, make any necessary revisions to this section and will create addendums as needed.

The Monitoring process will include technology committee meetings held yearly. Each site tech coordinator and principal, plus designated staff will be in attendance. Each site representative will report on current hardware and software status and needs. The committee will discuss needs for the entire district and distribute funds based on needs priority decisions of the committee. Based on funding, the district may recommend the use of a private external evaluator at the beginning of the third year (2008) to assess the success and implementation of this Plan. The Technology Committee will compile and share results of monitoring and evaluation with all stakeholders on an annual basis through staff and district meetings.

**Goal #1: Monitoring Implementation of the Plan:** The district will conduct an ongoing formative evaluation and assessment of progress towards the goals to inform decision-making and professional development, and to make mid-course corrections in implementation.

#### **Strategies**

At each site staff members have been provided the opportunity to complete CTAP<sup>2</sup> on-line assessments. Informal assessment through feedback to site tech representatives will be ongoing. In addition, site tech representatives will administer annual surveys regarding staff technology and training needs. For example see Appendix G Sample1, and Sample 2.

**Goals #2: Impact of Technology on Teaching and Learning:** The district will develop strategies to assess the impact of a standards-based technology embedded curriculum, taught by well trained teachers.

Technology will be used to create powerful evaluation tools that capture the full range of student learning.

### **Evaluating Technology's Impact on Student Learning**

The extent to which technology impacts student learning, classroom management, and attainment of MUSD curricular goals will be determined by student performance on multiple measures: CAT-6, and API scores. Other performance assessment tools will include staff, parent, teacher, and student surveys. Student portfolios, students' scores on competencies, teacher observation and anecdotal notation will provide additional data.

Each year the Superintendent will meet with site principals and the technology committee to establish, review and monitor annual goals.

**Evaluation Schedule**

The Technology Committee will meet annually to review the technology Plan progress. The committee will report the finding to the Superintendent. The committee will prepare an annual progress and budget summary report each November. This report will be presented to the Board, the Superintendent, and program directors.

**Use of Information from Monitoring and Evaluation**

All information collected available to be used to Plan for:

- ❖ **Classroom instruction**
- ❖ **Acquisition of software**
- ❖ **Hardware and peripherals**
- ❖ **Staff development**

**Responsibilities of stakeholder groups**

Stakeholders (group or individual)	Responsibilities of stakeholder groups			
	Advisory	Implementation	Revisions	Policies
Students	X			
Parents	X			
Site-Based Technical Staff	X	X	X	
Site-Based Instructional Staff	X	X	X	
Site-Based Administrative Staff	X	X	X	
District Technical Consultants	X	X	X	
District Technology Committee	X		X	
District Superintendent	X	X	X	
District School Board	X		X	X
Community and Business Partners	X			

**Strategies**

The district continually assesses student achievement through a variety of methods including CAT-6 scores, local proficiency exams and high school exit exams. The obtained data will be used to compare student scores from classrooms where technology is more fully integrated into the curriculum than in other classrooms.

<b>Goal</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2008-09</b>	<b>2009-2010</b>
Monitoring Plan Implementation	CTAP <sup>2</sup> Staff surveys, feedback	CTAP <sup>2</sup> Staff surveys, feedback	CTAP <sup>2</sup> Staff surveys, feedback	CTAP <sup>2</sup> Staff surveys, feedback
Impact of Technology on Teaching and Learning	Disaggregated data from CAT6, high school exit exams	Disaggregated data from CAT6, high school exit exams	Disaggregated data from CAT6, high school exit exams	Disaggregated data from CAT6, high school exit exams

The District will create three new positions that are described as follows:

1. **Director of Technology Services:** In charge of the management, distribution, and allocation of funds and technology resources in the district.
2. **Technology Technician:** In charge of predictive, preventive and corrective maintenance in the district.
3. **Technology Software / Staff Development (Teacher on Assignment):** In charge of the staff training, strategies development, and evaluation of software.



#### 4. Appendix A

### Technology Curriculum Goals – Grades K-8

The course of study is divided into goals and objectives.

On the table for each objective, **m** means minor emphasis: either introductory or review

**M** means Major emphasis: primary focus on achieving the objective

#### CONCEPT 1 – General Technological Awareness

Objectives	K	1	2	3	4	5	6	7	8
<b>1. Student understands what a computer is</b>									
▪ can identify the parts of a computer	M	M	m						
▪ can explain how a computer operates						m	m	m	m
▪ can start and restart a computer	m	m	M	M					
▪ can explain general rules for using a computer properly	m	m	M	M	m	m	m	m	m
▪ can properly shut down a computer	m	m	M	M					
<b>2. Student understands what a floppy disk is</b>									
▪ can identify the parts of a floppy disk		M	M	m					
▪ can explain how a floppy disk works		m	M	m					
▪ can explain what a floppy disk is used for		m	M	m					
▪ can insert a floppy disk into a computer		m	M	m					
▪ can explain the rules for its proper use		m	M	m	m	m	m	m	m
▪ can eject a floppy disk from a computer		m	M	m					
<b>3. Student understands what a hard disk is</b>									
▪ can explain how a hard drive works		m	m	m	m	M	M	M	m
▪ can explain the proper use of a hard drive		m	m	m	m	m	m	m	M
▪ can explain what the hard drive is used for		m	m	m	m	M	M	M	M
▪ can explain the size of a hard drive in relation to a floppy						m	m	m	m
<b>4. Student understands concepts of RAM and ROM</b>									
▪ can explain what RAM is						m	m	M	M
▪ can explain what RAM is used for						m	m	M	M
▪ can explain what ROM is						m	m	M	M
▪ can explain what ROM is used for						m	m	M	M
<b>5. Student understands the operating system</b>									
▪ can locate the menu bar & pull down each menu	M	M	m						
▪ can identify the active & non-active options in a menu		m	M	M	m				
▪ identify icons for files, system files, programs, folders & disks	m	m	M	M	m				
▪ can identify a mouse and explain how it works	M	M	m						
▪ can move mouse and point to desired location	M	M	m						
▪ can point and click using a mouse	M	M	m						
▪ can point and double click using a mouse	M	M	m						
▪ can click and drag using a mouse	M	M	m						
▪ can select a file using a mouse	M	M	m						
▪ can choose a command from menu bar using mouse	M	M	m						
▪ can open and close window using mouse	M	M	m						
▪ can resize a window using mouse			M	M	m				
▪ can move window using a mouse			M	M	m				
▪ can change view of a window				M	m				
▪ can change name of an icon				M	m				

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▪ can use keyboard shortcuts					m	M	M	M	M
▪ can open file and/or start a program using mouse	M	M	m						
▪ can close a file and/or quit a program using mouse	M	M	m						
<b>6. Student understands general file management techniques</b>									
▪ can backup files to another disk				m	m	M	M	M	M
▪ can create a folder and organize files				m	M	M	M	M	M
▪ can delete a file or folder				m	M	M	m	m	m
▪ can write protect a disk		m	M	m					
<b>7. Student understand how to access &amp; use desk accessories</b>									
▪ can start a desk accessory		m	M	M	m	m			
▪ can use a desk accessory		m	M	M	m	m			
▪ can close a desk accessory		m	M	M	m	m			
<b>8. Student understands computer etiquette</b>									
▪ demonstrates acceptable behavior at computer & in lab	M	M	m	m	m	m	M	M	M
▪ respects the privacy of other's data & work space	M	M	m	m	m	m	M	M	M
▪ respects copyright laws				m	m	m	M	M	M
▪ treats disks & equipment with respect	M	M	M	M	M	M	M	M	M

**CONCEPT 2 – Introduction to Keyboarding**

Objectives	K	1	2	3	4	5	6	7	8
<b>1. Student understands relative position of keys on keyboard</b>	m	M	M	m					
<b>2. Student can identify and use letter and number keys</b>	m	M	M	m					
<b>3. Student can identify and use punctuation &amp; symbol keys</b>		m	m	M	M	m	m		
<b>4. Student can use informal keyboarding skills (left hand on left side of keyboard, right hand on right side of keyboard, thumb on space bar)</b>									
▪ typing words		m	M	M	m				
▪ typing phrases		m	M	M	m				
▪ typing sentences		m	M	M	m				
▪ typing paragraphs		m	m	M	M	m			
<b>5. Student uses shift, caps lock, special (command, option, control, etc.), and arrow keys</b>		m	m	M	M	m			
<b>6. Student uses formal keyboarding skills</b>									
▪ proper posture		m	M	M	M	M	M	M	M
▪ key stroking technique			m	M	M	M	M	M	M
▪ space bar technique			m	M	M	M	M	M	M
▪ return key technique			m	M	M	M	M	M	M
▪ home row keys			m	M	M	M	M	M	M
▪ alphabetic keys			m	M	M	M	M	M	M
▪ punctuation keys			m	M	M	M	M	M	M
▪ typing words			m	M	M	M	M	M	M
▪ typing phrases			m	M	M	M	M	M	M
▪ typing paragraphs			m	M	M	M	M	M	M
▪ typing compositions			m	M	M	M	M	M	M
<b>7. Student can touch type at a rate at least equal to their handwriting rate (5-15 words per minute) accurately &amp; evaluate their speed on a typing test</b>			m	M	M	M	M	M	M

**CONCEPT 3 – Word Processing**

Objectives	K	1	2	3	4	5	6	7	8
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1. Student can access & launch a word processing program		m	M	M	m				
2. Student can enter text		m	M	M	m				
3. Student uses & understands the concept of insertion point/cursor			m	M	M	M			
4. Student understands concept of text word wrap		m	M	M	m				
5. Student can delete text using backspace & delete keys		m	M	M	m				
6. Student can delete, cut, copy, & paste text			m	M	M	M	M	M	M
7. Student can adjust the format of a document (text size, fonts, styles, etc.)			m	M	M	M	M	M	M
8. Student can save & retrieve word processing files		m	M	M	m				
9. Student can use the "save as" feature to create copies or new versions of documents				m	m	m	M	M	m
10. Student can use spell checking feature to assist in proofing document						m	M	M	m
11. Student can use page breaks						m	M	M	m
12. Student can manipulate the layout of document (margins, columns, justification, line spacing, etc.)				m	m	M	M	M	M
13. Student can create, copy, import, position, & manipulate relevant graphics into a word processing document			m	m	M	M	M	M	M
14. Student can switch between two or more open word processing documents					m	m	M	M	M
15. Student can move/copy text & graphics between two or more word processing documents					m	m	M	M	M
16. Student can create and use indents & overhanging indents						m	m	m	
17. Student can use find & replace commands							m	m	m
18. Student can insert, position, remove all types of tabs							m	m	M
19. Student can insert and customize headers & footers							m	m	M
20. Student can create and modify footnotes							m	m	M
21. Student can use thesaurus to modify text content						m	m	m	M
22. Student can add, modify, delete automated title pages							m	m	m
23. Student can add, modify, delete automated glossaries							m	m	m
24. Student can use, create, modify, tables of content & indexes							m	m	m
25. Student can enter and modify page numbers							m	m	m
26. Student can use mechanical/automated hyphenation process							m	m	m
27. Student can create or import spreadsheets & data bases in/into word processing documents						m	m	m	m

**CONCEPT 4 -- Navigating & Capturing Information from CD-ROMs**

Objectives	K	1	2	3	4	5	6	7	8
1. Student understands how a CD-ROM functions		m	m	m	m	M	M	M	m
2. Student can launch a CD-RM from the desktop				m	m	M	M	M	m
3. Student can browse through contents of a CD-ROM		m	m	m	m	M	M	M	m
4. Student can do a title search using CD-ROM				m	m	m	m	M	m
5. Student can do a single field word search using a CD-ROM				m	m	m	m	M	m
6. Student can do a Boolean word search using a CD-ROM							m	m	M
7. Student can create an electronic bookmark							m	m	M
8. Student can capture information from a CD-ROM article & transfer note to a note pad					m	m	M	M	M
9. Student can capture information from several articles on a CD-ROM and copy it to a note pad						m	m	M	M
10. Student can capture information from a CD-ROM and copy it to					m	m	M	M	M

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<b>a word processor</b>									
<b>11. Student can create an outline for a report using information from a CD-ROM</b>					m	m	M	M	M
<b>12. Student can work independently &amp; in teams to access information from CD-ROMs and integrate it into reports</b>									
▪ a language arts report (e.g. fiction review, non-fiction review, movie review, review, art, family, pet, author, experience)					m	m	M	M	m
▪ a math & science report (e.g. Plants, rocks, fossils, problem solving, lab report, field trip, scientist, natural process)					m	m	M	M	M
▪ a social studies report (country, province, state, city, trip, society, local biography, history, current event, celebration)					m	m	M	M	M

**CONCEPT 5 – Integrating Graphics & Text**

<b>Objectives</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>1. Student can draw picture using basic graphic software</b>	m	M	M	M	m				
<b>2. Student can draw a picture using basic graphic software and hand print a title/sentence (or have mentor do it)</b>		M	M	M	m				
<b>3. Student can draw a picture using basic graphic software and type in a descriptive word</b>		m	M	M	m				
<b>4. Student can draw a picture using basic graphic software and type in a descriptive sentence</b>		m	M	M	m				
<b>5. Student can draw a picture using basic graphic software and type in a descriptive paragraph</b>		m	M	M	m				
<b>6. Student can access, capture, and manipulate graphics/clip art</b>		m	m	M	m				
<b>7. Student can use a graphic to illustrate an idea in a document</b>		m	M	M	M				
<b>8. Student can modify and export a graphic into a document</b>			m	m	M				
<b>9. Student can work individually and in teams to create a multi-picture presentation</b>			m	m	M				
<b>10. Student can access, capture, and manipulate graphics, photos, clip art from a variety of sources including other programs, digital cameras, scanners</b>					m	m	M	M	M

**CONCEPT 6 – Using Clip Art**

<b>Objectives</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>1. Students can access, capture, and manipulate graphics/clip art</b>		m	m	M	m	m	m	m	m
<b>2. Student can combine a graphic (original or copies) with descriptive word(s)</b>		m	M	M	M	M	M	M	M
<b>3. Student can combine a graphic (original or copies) with descriptive sentence(s)</b>				M	M	M	M	M	M
<b>4. Student can combine a graphic (original or copies) with descriptive paragraph(s)</b>				M	M	M	M	M	M
<b>5. Student can use a graphic to illustrate an idea in a document</b>				M	M	M	M	M	M
<b>6. Student can modify and export a graphic into a document</b>				m	M	M	M	M	M
<b>7. Student can work individually and in teams to create a multi-picture presentation</b>				m	M	M	M	M	M

**CONCEPT 7 – The Writing Process Using Computers**

<b>Objectives</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>1. Student understands various stages of the writing process</b>			m	m	m	M	M	M	M
▪ can differentiate between Planning, drafting, revising, proofing, and			m	m	m	m	M	M	M

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publishing of an assignment									
<b>2. Student understands the Planning process for stories</b>			m	m	m	m	M	M	M
▪ can create an idea and word bank (plot, setting, dialog, characterization, theme, etc.)			m	m	m	m	M	M	M
▪ can organize the idea bank into lists, groupings, visual web, and technical or traditional outline			m	m	m	m	M	M	M
<b>3. Student understands the Planning process for reports</b>									
▪ can create an idea and word bank (5Ws & H, headline, leads, eyewitnesses, interviews)			m	m	m	m	M	M	M
▪ can organize the idea bank into lists, groupings, visual web, and technical or traditional outline			m	m	m	m	M	M	M
<b>4. Student understands the Planning process for reports</b>									
▪ can create an idea and word bank for reports in Language Arts, Science, Social Studies, Mathematics, etc.			m	m	m	m	M	M	M
▪ can organize the idea bank into lists, groupings, visual web, and technical or traditional outline			m	m	m	m	M	M	M
<b>5. Student understands the Planning process for letters</b>									
▪ can create an idea and word bank for business, family, school, hobbies, correspondence			m	m	m	m	M	M	M
▪ can organize the idea bank into lists, groupings, visual web, and technical or traditional outline			m	m	m	m	M	M	M
<b>6. Student understands the Planning process for poetry</b>									
▪ can create an idea and word bank for a variety of poetic styles			m	m	m	m	M	M	M
▪ can organize the idea bank into lists, groupings, visual web, and technical or traditional outline			m	m	m	m	M	M	M
<b>7. Student can work independently and in teams to complete the writing process from draft through publish for the following kinds of stories</b>									
▪ a short adventure story (e.g. tall tale, folk tale, fable, fairy tale, journey, \mystery, monster, magic, scary, space, or other)			m	m	m	m	M	M	M
▪ a short story about our world (e.g. animals, machines, seasons, sports, origins, family, history, holidays, other places, jobs, or other)			m	m	m	m	M	M	M
▪ a short story about learning (e.g. ABC, counting, shapes, colors, sounds. zoo songs, diary, feelings, growing up, school, or other)			m	m	m	m	M	M	M
<b>8. Student can work independently and in teams to complete the writing process from draft through publish for the following kinds of new articles</b>									
▪ a front page article (e.g. big story, disaster, crime, community, province, government, politics, economy, international, ecology, etc.)			m	m	m	m	M	M	M
▪ a feature article (e.g. editorial, commentary, sports, society, human interest, personal profile, advice, weather, obituary, classified sales, or other)			m	m	m	m	M	M	M
▪ a supplementary article (e.g. outdoors, homemaking, travel & leisure, arts, science & health, calendar, personal/job ads, or other)			m	m	m	m	M	M	M
<b>9. Student can work independently and in teams to complete the writing process from draft through publish for the following kinds of reports</b>									
▪ a language arts report (e.g. fiction review, non-fiction review, movie review, documentary review, art, family, pet, author, experience)			m	m	m	m	M	M	M
▪ a math & science report (e.g. Plants, rocks, animals, habitats, fossils, problem solving, lab report, field trip, scientist, natural process, etc.)			m	m	m	m	M	M	M
▪ a social studies report (country, province, state, city, trip, society,			m	m	m	m	M	M	M

local biography, history, current event, celebration)									
<b>10. Using the correct format, student can work independently and in teams to complete the writing process from draft through publish for the following kinds of letters</b>									
▪ a friendly letter (e.g. family, friend, pen pal, post card, get well, gift thank you, guest thank you, announcement, invitation, sympathy)			m	m	m	m	M	M	M
▪ can distinguish between personal and stationery format for friendly letters a business letter (e.g. general, informative, sales, confirmation, project, job application, college, resume, recommendation, thanks)			m	m	m	m	M	M	M
▪ a business letter (e.g. general, informative, sales, confirmation, project, job application, college, résumé, recommendation, t(hanks)			m	m	m	m	M	M	M
▪ can distinguish between block, traditional, modern, and memo layouts for business letters			m	m	m	m	m	M	M
▪ a consumer and civic letter (e.g. suggestion, to editor, to official, to speaker, to school, inquiry, request, order, complaint, claim, etc.)			m	m	m	m	m	M	M
<b>11. Student can work independently and in teams to complete the writing process from draft through publish for a variety of poetry types (e.g. similes, short verse poems, traditional verse forms, haiku, shape poems, etc.)</b>			m	m	m	m	m	m	M
<b>12. Student can independently and in teams write technical instructions</b>									
▪ can accurately and sequentially describe a series of actions in performing a given activity					m	m	M	M	M
▪ can make inferences and draw conclusions from examples					m	m	M	M	M
▪ can make observations and diagrammatically represent observations, data and results						m	m	M	M
▪ can write an evaluation of problem						m	m	M	M
▪ can clearly write instruction packets						m	m	M	M
▪ can present simplified demonstration or process of a technical concept						m	m	M	M

**CONCEPT 8 – Using Paint or Draw Programs**

Objectives	K	1	2	3	4	5	6	7	8
<b>1. Student can differentiate between paint and draw programs</b>									
▪ can access the drawing and paint tools	M	m	m						
▪ can select tools from the tool window	M	m	m						
▪ can use the tools on the paint layer to draw a picture	M	m	m						
▪ can use the tools on the draw layer to draw a picture	M	m	m						
▪ can use the eraser tool	M	m	m						
▪ can draw lines of different thickness	M	m	m						
▪ can highlight a graphic using lasso or frame/marquee tool			m	m	M	m	m		
▪ can move a graphic to another location on the screen			m	m	M	m	m		
<b>2. Student can use the paint features</b>									
▪ can use the pencil tool	M	m	m						
▪ can use the line tools	M	m	m						
▪ can use the paint bucket	M	m	m						
▪ can use the paint brush	M	m	m						
▪ can change the pattern of the brush or the bucket	M	m	m						
▪ can use eraser tool	M	m	m						

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▪ can use shape tools to draw objects of different shapes & sizes	M	m	m						
▪ can apply special effects such as rotate, stretch, shrink, etc.					m	M	M	M	M
<b>3. Student can use the draw features</b>									
▪ can draw an object using the tools				m	m	M			
▪ can use the selection tools to highlight an object				m	m	M			
▪ can change the size or shape of an object using the handles				m	m	M			
▪ can change an object's pattern				m	m	M			
▪ can move an object				m	m	M			
▪ can duplicate an object			m	m	M				
▪ can group objects						m	m	m	m
▪ can change the stacking order of objects						m	m	M	M
▪ can apply special effects such as rotate, stretch, shrink, etc.						m	M	M	M
<b>4. Student can move between paint and draw layers</b>									
▪ can cut, copy, and past objects between layers				m	m	M	M	m	m
<b>5. Student can export graphic to another program</b>				m	M	M	m	m	m

**CONCEPT 9 – Creating and Using Databases**

Objectives	K	1	2	3	4	5	6	7	8
<b>1. Student can use a database to search for data in a file</b>									
▪ can retrieve a particular record—single file, exact match						m	m	m	M
▪ can retrieve multiple-filed (&) match						m	m	m	M
▪ can retrieve a partial (or) match						m	m	m	M
▪ can retrieve using greater than, less than, & range criteria						m	m	m	M
<b>2. Student can add data to a file</b>									
▪ can add new records to a file						m	m	m	M
▪ can enter new information to one or more fields on an existing record						m	m	m	M
▪ can save updated records on a disk						m	m	m	M
<b>3. Student can sort and print records in a file</b>									
▪ can organize a file by sorting (alphabetically, numerically, chronologically) on a chosen field						m	m	m	M
▪ can print sorted records to use information in reports & for hard copy references						m	m	m	M
<b>4. Student(s) working independently and in teams can design data base</b>									
▪ can determine what data items to use in the data base						m	m	m	M
▪ can determine the type of information to go into each field on the basis of the type of search questions that will be asked							m	m	M
▪ can design the layout of a record based on which field will be searched most frequently and the space necessary for each field							m	m	M
▪ name, save, test, and edit the data base						m	m	m	M
<b>5. Student(s) working independently and in teams can evaluate information in a data base</b>									
▪ can create and answer higher order questions based on data							m	m	M
▪ can use data base to suggest trends in data							m	m	M
<b>6. Student(s) working independently and in teams can identify social issues related to computerized data</b>									
▪ can explain myth information and misrepresentation issues related to data							m	m	M
▪ can outline issues related to privacy and protection from theft and fraud							m	m	M

▪ can outline potential errors in creating, fitting, and using data							m	m	M
<b>7. Student(s) can use a public database to retrieve information</b>				m	m	M	M	M	M

**CONCEPT 10 – Using Spreadsheets**

Objectives	K	1	2	3	4	5	6	7	8
<b>1. Use a spreadsheet to search for information</b>									
▪ can recognize the parts of a spreadsheet								m	m
▪ can move to specific cell on a spreadsheet								m	m
▪ can select a cell or block of cells								m	m
▪ can retrieve using greater than, less than, and range criteria								m	m
<b>2. Add information to a spreadsheet document</b>									
▪ can add new text or numbers to a spreadsheet to see the effect that change has on the rest of the information								m	m
▪ can change or correct information in one or more cells on an existing spreadsheet								m	m
▪ can build a formula into a cell								m	m
▪ can format a cell or cells								m	m
▪ can copy and paste values and formulas to selected cells								m	m
▪ can change the order or rows in a selection by sorting								m	m
▪ can insert or delete rows, columns, or blocks on a spreadsheet								m	m
▪ can save an updated spreadsheet on disk								m	m
<b>3. Sort and print records in a file</b>									
▪ can change the way numbers are displayed								m	m
▪ can realign the content of cells								m	m
▪ can display data in a number of ways								m	m
▪ can emphasize cells with bold type, underlining, or borders								m	m
▪ can display or remove the grid								m	m
▪ can change column widths								m	m
▪ can protect cells from changes								m	m
▪ can set page breaks for printing								m	m
▪ can print a spreadsheet document								m	m
<b>4. Student can work independently or in groups to design a spreadsheet</b>									
▪ can determine what data items to use in the spreadsheet—name, save, test, and edit spreadsheet								m	m
▪ can create a spreadsheet for shopping with accumulated subtotals and totals including both taxable & non-taxable items								m	m
▪ can create a spreadsheet for banking to represent amortization, interest rates, repayment amount, loan amount								m	m
▪ can create a spreadsheet for developing a budget and managing income, expenses, and savings								m	m
<b>5. Evaluate information in a spreadsheet</b>									
▪ can create and answer higher order questions based on Bloom’s taxonomy								m	m
▪ can use a spreadsheet to suggest trends in data								m	m
<b>6. Charting a spreadsheet document</b>									
▪ can plot information and create a line, stack, bar, and or combination chart including titles, scales, and legends								m	m
▪ can create a pie chart including titles, scales, and legends								m	m



**CONCEPT 11 – Principles of Desktop Publishing/Design**

Objectives	K	1	2	3	4	5	6	7	8
<b>1. Understands the foundations of publishing</b>									
▪ can differentiate between scan, skim, and scour						m	m	m	m
▪ can explain the 4 goals for design (grabbing the reader’s attention, drawing the reader in, keeping reader’s attention, making a lasting impression)						m	m	m	m
▪ can use a design preparation checklist						m	m	m	m
<b>2. Understands the general principles of graphic design</b>									
▪ can use proportions effectively						m	m	m	m
▪ can use formal and informal balance effectively						m	m	m	m
▪ can use contrast effectively						m	m	m	m
▪ can use rhythm (contrast, lines, eyes, and apparent motion) effectively						m	m	m	m
▪ can use white space effectively						m	m	m	m
▪ can demonstrate understanding of unity of graphical elements						m	m	m	m
<b>3. Understand typography</b>									
▪ can describe the various attributes of type (size & classification)						m	m	m	m
▪ can use type effectively						m	m	m	m
<b>4. Understands the principles of page layout</b>									
▪ can design for the visual unit						m	m	m	m
▪ can design a practical page layout using a checklist						m	m	m	m
<b>5. Understands page layout techniques</b>									
▪ can use a variety of lead-ins						m	m	m	m
▪ can incorporate a variety of graphical techniques can incorporate a variety of body text techniques						m	m	m	m
<b>6. Student can work independently and in teams to create a document that demonstrates effective use of all of the principles of graphical design (e.g. newsletter, brochure)</b>						m	m	m	m

**CONCEPT 12 – Multimedia**

Objectives	K	1	2	3	4	5	6	7	8
<b>1. Students can create a simple, static single screen</b>									
▪ place text						m	m	M	M
▪ create a graphic using basic graphic tools						m	m	M	M
▪ paste a graphic copied from clip art						m	m	M	M
<b>2. Student can create a series of screens</b>									
▪ Plan and construct a linear sequence which tells a story using text and/or graphics that change on each screen						m	m	M	M
▪ Plan and construct a number of screens, each with different information reporting about a topic/topics						m	m	M	M
<b>3. Students can create animation in a variety of ways</b>									
▪ create a series of screens which change from screen to screen						m	m	m	
▪ have objects manipulated on a screen, moving them around						m	m	m	
▪ use cell-based animation						m	m	m	m
▪ apply a variety of fundamental animation principles with any animation technique						m	m	m	m
<b>4. Students can add a user interface for their projects</b>									
▪ create a button /menu to allow a user to view all the screens						m	m	M	M
▪ create a button/menu to allow view of selected screens						m	m	M	M

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<b>5. Students can create and edit audio</b>									
▪ record a sound and save in digitized form						m	m	M	M
▪ make a digitized sound and delete all unwanted portions						m	m	M	M
▪ apply special effects to a digitized sound						m	m	M	M
<b>6. Students can incorporate CD technology</b>									
▪ insert a music CD and drive it from within a mm project						m	m	M	M
▪ insert a music CD and drive selected sections from within mm project						m	m	M	M
<b>7. Students can incorporate scanner technology</b>									
▪ scan text, graphic, object						m	m	M	M
▪ import scanned image into multimedia project						m	m	M	M
<b>8. Students can incorporate digital camera images</b>									
▪ can effectively use digital camera to capture images						m	m	M	M
▪ can import or download images into multimedia project						m	m	M	M
<b>9. Student can work independently and in teams to develop a multimedia presentation</b>									
▪ a language arts report (e.g. fiction, non-fiction, movie or review, art, family, pet, author, experience)						m	m	M	M
▪ a math & science report (e.g. Plants, rocks, animals, habitats, fossils, problem solving, lab report, field trip, scientist, natural process, etc.)						m	m	M	M
▪ a social studies report (country, province, state, city, trip, society, local biography, history, current event, celebration)						m	m	M	M

**CONCEPT 13 – Electronic Presentations**

Objectives	K	1	2	3	4	5	6	7	8
<b>1. Student understands the terminology of electronic presentation software</b>									
▪ views, templates, color schemes, masters, background items					m	m	m	m	M
<b>2. Student utilizes various attributes of electronic presentations</b>									
▪ can move between the various elements of electronic presentation software (slide, outline, sorter, notes)					m	m	m	m	M
▪ can use the tools to create master (background) elements					m	m	m	m	M
▪ can develop and modify color schemes					m	m	m	m	M
▪ can add text to a slide and then format it					m	m	m	m	M
▪ can add clip art to a slide					m	m	m	m	M
▪ can add graphs to a slide					m	m	m	m	M
▪ can add video clips to a slide					m	m	m	m	M
▪ can build slides					m	m	m	m	M
▪ can control the pace of a show					m	m	m	m	M
▪ can effectively use transitions					m	m	m	m	M
▪ can adjust slide timing					m	m	m	m	M
▪ can change color schemes					m	m	m	m	M
▪ can create templates					m	m	m	m	M
▪ can modify the visual elements of a presentation by changing elements of a template					m	m	m	m	M
<b>3. Students can work independently and in teams to make a presentation utilizing the various elements of electronic presentation software</b>									
▪ a language arts report (e.g. fiction, non-fiction, movie or documentary review, art, family, pet, author,							m	m	m

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▪ a math & science report (e.g. Plants, rocks, fossils, problem solving, lab report, field trip, scientist, natural process)							m	m	m
▪ a social studies report (country, province, state, city, trip, society, local biography, history, current event, celebration)							m	m	m

**CONCEPT 14 – Introduction to Video Concepts**

Objectives	K	1	2	3	4	5	6	7	8
<b>1. Student can perform in front of the camera</b>									
▪ can appear comfortable on camera				m	m	m	M	M	m
▪ can talk to the camera, not the microphone				m	m	m	M	M	m
▪ can interview a guest				m	m	m	M	M	m
▪ can perform a commercial on camera				m	m	m	M	M	m
<b>2. Student can operate a video camera</b>									
▪ can use a tripod at various heights				m	m	m	M	M	m
▪ can mount a camera on a tripod				m	m	m	M	M	m
▪ can turn on camera using battery power				m	m	m	M	M	m
▪ can demonstrate proper hand position using camera on tripod				m	m	m	M	M	m
▪ can make a smooth camera pan				m	m	m	M	M	m
▪ can demonstrate a smooth camera zoom in and out				m	m	m	M	M	m
▪ can demonstrate a technique for hand-held shooting				m	m	m	M	M	m
▪ can use the zoom and focus controls to set up a medium shot of another person				m	m	m	M	M	m
▪ can connect a camera to a monitor so the image appears on monitor				m	m	m	M	M	m
▪ can remove the battery from the camera & plug it in to recharge				m	m	m	M	M	m
▪ can demonstrate a shot using macro				m	m	m	M	M	m
▪ can use manual focus to make an off-center shot shard				m	m	m	M	M	m
▪ can identify and explain the difference between various video formats including playback compatibility				m	m	m	M	M	m
<b>3. Student can set up and use audio comment</b>									
▪ can use an external microphone to improve sound quality				m	m	m	M	M	m
<b>4. Student can record audio and video</b>									
▪ can record a short shot on videotape				m	m	m	M	M	m
▪ can record a short shot on videotape with reasonable audio				m	m	m	M	M	m
▪ can record a still picture from a book on videotape				m	m	m	M	M	m
▪ can record a brief interview with another student				m	m	m	M	M	m
▪ can record a series of shots using in-camera editing							m	m	m
▪ can record a series of shots (without words) that tell a story							m	m	m
▪ can tape a guest speaker can tape a school play or event							m	m	m
<b>5. Student understands principles of video composition</b>									
▪ can compose various shots with appropriate headroom									
▪ can compose a shot demonstrating an understanding of the rule of thirds						m	m	m	m
▪ can identify and solve exposure problems						m	m	m	m
<b>6. Student can Plan video composition</b>									
▪ can create a storyboard that includes a title, 3-4 different shots, and closing credits								m	m

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▪ write a short script in 2-column format									m	m
<b>7. Student can edit video composition</b>										
▪ can dub a videotape from one machine to another									m	m
▪ can perform a rough edit using the pause button on 2 VCRs									m	m
▪ can replace dialogue using audio dub function									m	m
<b>8. Student can produce the following:</b>										
▪ a short interview									m	m
▪ a short news report									m	m
▪ a short (1 minute) video, which may include music or sound but no word, based on a theme									m	m
▪ a 90 second news report with cutaways (in-camera editing)									m	m
▪ a 30 second television commercial (in-camera editing)									m	m
▪ produce a short 2-3 minute interview with cutaways (in-camera editing)									m	m
▪ produce a short silent movie (in-camera editing)									m	m
▪ produce a multi-segment television program									m	m
▪ produce a 30 second TV commercial with post-production editing									m	m
▪ produce a short 2-3 minute interview with cutaways (in-camera editing) with post-production editing									m	m
▪ produce a short drama									m	m
▪ produce a music video									m	m
▪ produce a documentary									m	m
<b>9. Students can work independently and in teams to integrate curriculum based information into a presentation video</b>										
▪ a language arts report (e.g. fiction, non-fiction, movie or documentary review, art, family, pet, author, experience)									m	m
▪ a math & science report (e.g. Plants, rocks, fossils, problem solving, lab report, field trip, scientist, natural process)									m	m
▪ a social studies report (country, province, state, city, trip, society, local biography, history, current event, celebration)									m	m

**CONCEPT 15 – Telecommunications**

Objectives	K	1	2	3	4	5	6	7	8
<b>1. Student can use local server to access online Internet services to retrieve information</b>									
▪ understands keywords such as listserv, hot computer, HTML, web page			m	m	m	m	m	m	M
▪ can logon and logoff			m	m	m	m	M	m	m
▪ can navigate the main menu			m	m	m	m	M	m	m
▪ can send and receive electronic mail			m	m	m	m	m	m	M
▪ can use listserv to subscribe to and unsubscribe from mail services			m	m	m	m	m	m	M
▪ can use client tools to send and receive mail			m	m	m	m	m	m	M
<b>2. Student can use a variety of Internet data retrieval tools</b>									
▪ can use a variety of search engines			m	m	m	m	m	m	M
▪ can create a bookmark			m	m	m	m	m	m	M
▪ can navigate appropriate, pre-selected sites			m	m	m	m	m	m	M

## APPENDIX B

McFarland Unified School District Staff CTAP Technology Proficiency Attainment					
	School	Teacher Name	CTAP I	CTAP II	CTAP III
1.	Kern Avenue Elementary	CABALLERO	X		
2.	Kern Avenue Elementary	GALVEZ	X	X	
3.	Kern Avenue Elementary	ALVAREZ	X	X	
4.	Kern Avenue Elementary	MALDONADO	X		
5.	Kern Avenue Elementary	ROBLES	X		
6.	Kern Avenue Elementary	SAUNDERS	X	X	
7.	Kern Avenue Elementary	DIAZ	X		
8.	Kern Avenue Elementary	ROBLES	X	X	
9.	Kern Avenue Elementary	WENGER	X		
10.	Kern Avenue Elementary	ROMERO	X		
11.	Kern Avenue Elementary	AVELAR	X	X	
12.	Kern Avenue Elementary	SANCHEZ	X		
13.	Kern Avenue Elementary	NAVA	X	X	
14.	Kern Avenue Elementary	TAFOYA	X		
15.	Kern Avenue Elementary	MAYES	X		
16.	Kern Avenue Elementary	WIEBE	X		
17.	Kern Avenue Elementary	MENDOZA	X	X	
18.	Kern Avenue Elementary	GOMEZ	X	X	
19.	Kern Avenue Elementary	HENDERSON	X		
20.	Kern Avenue	MALDONADO			

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	Elementary				
21.	Kern Avenue Elementary	GONZALEZ	X		
22.	Kern Avenue Elementary	SULENSKI	X	X	
23.	Kern Avenue Elementary	MACHADO	X		
24.	Kern Avenue Elementary	LITTRELL	X	X	
25.	Kern Avenue Elementary	AGABASHIAN	X		
26.	Kern Avenue Elementary	RUIZ	X	X	X
27.	Learning Center	CROW	X	X	X
28.	Learning Center	BLOOM	X	X	
29.	Learning Center	MULLIGAN	X	X	
30.	Learning Center	ROMANINI	X		
31.	Learning Center	CLARKE	X		
32.	Learning Center	SPARKS			
33.	Learning Center	MURILLO			
34.	Browning Road	AYON	X		
35.	Browning Road	BANGI	X		
36.	Browning Road	DOMINGOS	X	X	
37.	Browning Road	GENTRY	X	X	
38.	Browning Road	FLORES	X		
39.	Browning Road	VALLES	X	X	
40.	Browning Road	FLORES	X		
41.	Browning Road	FELIX	X		
42.	Browning Road	ORTEGA	X		
43.	Browning Road	RODERICK			
44.	Browning Road	RODRIGUEZ			
45.	Browning Road	SANCHEZ	X		
46.	Browning Road	DAVIS	X		
47.	Browning Road	ESTRADA	X		

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48.	Browning Road	EVANS			
49.	Browning Road	GONZALEZ			
50.	Browning Road	MALDONADO			
51.	Browning Road	TREVIÑO	X		
52.	Browning Road	DENIS	X	X	
53.	Browning Road	GRANT	X	X	
54.	Browning Road	MACKEY			
55.	Browning Road	PEARSON	X		
56.	Browning Road	PEREZ	X		
57.	Browning Road	WATTS	X		
58.	Browning Road	CARRILLO-ELOTLAN	X		
59.	Browning Road	CHAMBERS			
60.	Browning Road	ENGSTROM	X	X	X
61.	Browning Road	GOERTZEN	X	X	
62.	Browning Road	CAMPBELL	X	X	
63.	Browning Road	MIRANDA	X		
64.	Browning Road	SAWYER	X		
65.	Browning Road	PEREZ	X	X	
66.	Browning Road	MARTFEL	X		
67.	Browning Road	MCBEATH			
68.	Browning Road	BREYER	X		
69.	Middle School	DIAZ			
70.	Middle School	DOYLE	X	X	
71.	Middle School	FERNANDEZ	X	X	
72.	Middle School	HENDERSON			
73.	Middle School	MARTINEZ	X		
74.	Middle School	MATA			
75.	Middle School	OROPEZA	X	X	
76.	Middle School	PULLAM	X	X	



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77.	Middle School	ROBLES	X	X	
78.	Middle School	SCHULTZ			
79.	Middle School	SOLIS	X	X	
80.	Middle School	TRZAKSA	X		
81.	Middle School	ALIPPI			
82.	Middle School	AYON			
83.	Middle School	COCKRELL			
84.	Middle School	HANIFL			
85.	Middle School	HIGGINBOTHAM			
86.	Middle School	JARA	X		
87.	Middle School	LOPEZ	X	X	
88.	Middle School	ROBERTS			
89.	Middle School	SAMANIEGO			
90.	Middle School	JOHNSON			
91.	Middle School	ALVARADO			
92.	Middle School	ARVIZU			
93.	Middle School	CARTER			
94.	Middle School	DU			
95.	Middle School	GARZA			
96.	Middle School	R. JOHNSON	X	X	
97.	Middle School	MILLER			
98.	Middle School	OZUNA			
99.	Middle School	PERREAULT			
100.	Middle School	REED			
101.	Middle School	SHIMER			
102.	Middle School	VINCENT			
103.	High School	BARNARD			
104.	High School	BENNETT			
105.	High School	BOWMAN			

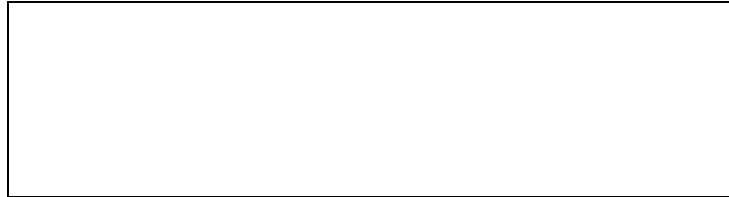
EDUCATIONAL TECHNOLOGY PLAN  
MCFARLAND UNIFIED SCHOOL DISTRICT

106.	High School	BOWMAN			
107.	High School	BOWMAN			
108.	High School	BUJANDA-MEDINA			
109.	High School	CANTU			
110.	High School	CHAIRES	X		
111.	High School	CLANAHAN			
112.	High School	DIAZ			
113.	High School	ELLIOT			
114.	High School	GONZALEZ			
115.	High School	GONZALEZ	X	X	
116.	High School	GOOD	X	X	X
117.	High School	HANNA	X		
118.	High School	HOWZE	X	X	
119.	High School	HUNGERFORD	X	X	X
120.	High School	LEVENSON	X	X	X
121.	High School	LEWY			
122.	High School	LOYA	X	X	
123.	High School	MCFARLAND			
124.	High School	MEIER			
125.	High School	MURRIETA			
126.	High School	PIERSON			
127.	High School	RIDGEWAY			
128.	High School	ROWLAND	X		
129.	High School	SEPULVEDA	X	X	
130.	High School	SPRIESTERBACH			
131.	High School	STAN-BOWMAN			
132.	High School	STEWART			
133.	High School	WENGER			
134.	High School	WHEALY	X	X	

135.	High School	BRAY			
136.	High School	BREYER			
137.	High School	CHAVEZ	X		
138.	High School	LOVERIN	X		
<b><u>Survey Findings:</u></b>					
<b>57 (41%) Staff members are not CTAP certified at all.</b>			<b>81</b>	<b>39</b>	<b>6</b>
<b>81 (59%) Staff members have their CTAP level I certification.</b>					
<b>39 (28%) Staff members have their CTAP level II certification.</b>			<b>59%</b>	<b>28%</b>	<b>4%</b>
<b>6 (4%) Staff members have their CTAP level III certification.</b>					

**APPENDIX C: Internet Acceptable Use Policy**  
McFarland Unified School District- Student / Family /Community  
Agreement

\*\* If a student; print a label from the student information system that includes all of the information related to the school and the student



McFarland Unified School District (MUSD) may offer Internet access to students. This document contains the **Acceptable Use Policy** (AUP) for student and family use of the computer system. It must be signed by each student prior to using the Internet or email. Students under the age of 18 must also have the signature of a parent or legal guardian.

**A. Educational Purpose**

**School site computer system is:**

- For educational purposes such as classroom activities, career development, and limited high-quality self-discovery activities.
- Established as a public access service or a public forum. MUSD has the right to restrict the material accessed or posted through the system.
- Not to be used for commercial purposes. You may not offer, or provide for sale, products or services through the computer system.

**B. Student Internet Access**

- Students have access to Internet resources.
- Students may have email access through a classroom account or through an individual account.
- Student created Web pages hosted by MUSD must be pre-approved by School Administration before posting on the Internet/Intranet. Material on the Web page may relate to your school, community or personal interests that are appropriate in an educational environment.
- Students may not access public Internet Chat Rooms.
- Students may access District hosted Internet Chat Rooms under teacher supervision

**C. Unacceptable Uses**

**Personal Safety**

- Do not post personal contact information about yourself or other people. This includes your address, telephone, school address, work address, etc.
- Do not agree to meet with someone you have met online.
- Disclose to your teacher or other school employee any message you receive that is inappropriate or makes you feel uncomfortable.

**Illegal Activities**

- Do not attempt to gain unauthorized access to the MUSD computer system or to use MUSD computer system to gain unauthorized access to other computer systems.
- Do not go beyond your authorized access. It is illegal to attempt to log in through another person's account or access another person's files even if only for the purposes of "browsing".
- It is illegal to attempt to disrupt the computer system or destroy data by spreading computer viruses or by other means.
- Do not use the MUSD computer system to engage in any other illegal acts, such as arranging for a drug sale, engaging in criminal gang activity, or threatening the safety of persons, etc.
- Or any activity to be an unreasonable disruption to school activities per Ed Code 48900, section k.

### **System Security**

- You are responsible for your individual account/file; take precautions to prevent others from being able to use your account. *Under no conditions should you provide your password to another person. Sharing of access is prohibited.*
- Immediately notify your teacher or the system administrator if you have identified a possible security problem. Do not look for security problems; this may be seen as an illegal attempt for you to gain access.

### **Inappropriate Language**

- **Restrictions against inappropriate language apply to all public messages, private messages, and material posted on Web pages or in email.**
- Do not use obscene, profane, lewd, vulgar, rude, inflammatory, threatening, or disrespectful language.
- Do not engage in personal attacks, including prejudicial or discriminatory attacks; do not post information that could cause damage or a danger of disruption.
- Do not harass (act in a manner that distresses or annoys) another person.
- Do not knowingly post false or defamatory information about a person or organization.

### **Respect for Privacy**

- Do not re-post a message that was sent to you privately without permission of the person who sent you the message.
- Do not post private information about another person.

### **Respecting Resource Limits.**

- Do not post chain letters or engage in "spamming". Spamming is sending an annoying or unnecessary message to a large number of people.
- Check your email frequently; delete unwanted messages promptly.

### **Plagiarism and Copyright Infringement**

- Do not plagiarize works that you find on the Internet. Plagiarism is taking the ideas or writings of others and presenting them as if they were yours. **Plagiarizing is a crime and is against the law.** This includes images, sound bytes, and video.
- Respect the rights of copyright owners.

### **Inappropriate Access to Material**

Do not use MUSD computer system to access material that:

- Is profane or obscene (pornography).
- Advocates illegal acts.
- Advocates violence or discrimination towards other people.

If you mistakenly access inappropriate information, immediately tell a teacher.

Your parents/legal guardian should instruct you if there is additional material that they think it would be inappropriate for you to access.

## **D. Your Rights**

### **Free Speech**

- Because the MUSD computer system is a limited public forum (like a school newspaper) restrictions may be placed on the expression of your ideas. School Administrators retain the right to determine the appropriateness of all materials.

### **Search and Seizure**

- All contents of your personal files are accessible to School Administrators at all times.
- The MUSD computer system is monitored frequently. Discovery that you have violated this AUP or the law will result in immediate termination of your access.
- Parent(s)/legal guardian(s) have the right to see the contents of their student's files.

## **E. Limitation of Liability**

MUSD makes no guarantee that the computer/Internet functions or services provided will be error-free or without

defect. MUSD will not be responsible for any damage you may suffer, including but not limited to, loss of data or interruptions of service. MUSD is not responsible for the accuracy or quality of the information obtained through or stored on the system. MUSD will not be responsible for financial obligations arising through the unauthorized use of the system.

## F. For Your Information

Whenever you do something on a network you leave “electronic footprints”. School Administrators frequently follow those “footprints”. If inappropriate activity is traced to your sign-on account, on the first offense you will receive a warning, a meeting with your parents/legal guardians and School Administration, and must submit a 250-word paragraph discussing an assigned Internet-use related topic. The second offense will result in loss of the Internet access for a minimum of 18 weeks. **The third offense will be cause of permanent suspension of Internet use, and possible school suspension or expulsion as determined by the school and District administration.**

If an illegal activity occurs through the use of the Internet or MUSD technology use as defined in this AUP the previous aforementioned consequences will be superseded by the California Education Code and State and Federal Laws accordingly.

## Required Signatures

### Student

I understand and will abide by the provisions and conditions of this contract. I understand that any violations of the AUP provisions will result in disciplinary action, the revoking of my user account, or appropriate legal action. I also agree to report any misuse of the information system to the School system administrator.

•Student Name (Please Print) \_\_\_\_\_

•Student Signature \_\_\_\_\_ Date: \_\_\_\_\_

### Parent or Guardian

Students under the age of 18 must also have the signature of a parent or guardian who read this contract. As the parent or guardian of this student, I have read this AUP and understand that it is designed for educational purposes. I understand that it is impossible for MUSD to restrict access to all controversial materials, and I will not hold MUSD responsible for materials acquired on the network.

I accept full responsibility for supervision if and when my child’s Internet use is not in a school setting. I hereby give my permission to issue an account for my child.

Parent or Guardian Name (Please Print) \_\_\_\_\_

As an adult user, I accept and agree to abide by the same standards and rules established for students.

• Parent Signature: \_\_\_\_\_

Date: \_\_\_\_\_

### Community Members

Community members may be allowed to use MUSD resources. In those cases Community members, are required to comply with the requirements stated in this AUP. When reading this AUP, replace the term “student”, for the term “community member” if it applies to your case.

• Community Member Name:: \_\_\_\_\_

Date: \_\_\_\_\_

## APPENDIX D: ACCEPTABLE USE AND INTERNET POLICIES

### McFarland Unified School District

#### ALL PERSONNEL

Computer, Telephone and Network Acceptable Use

### *Computer and Network Environment*

The McFarland Unified School District has created extensive networks with information, telephone and computing resources for employee and student use. In addition, the McFarland Unified School District provides a large and continuously growing number of computer workstations, printers, peripherals, software, training and supplies to all sites. These items are provided to allow employees to perform tasks effectively in meeting the goals and needs of the McFarland Unified School District.

By nature, design, and function, the McFarland Unified School District's computer network and resources must provide a relatively "open" environment. While automatic and procedural security controls are in place to prevent or reduce unauthorized access to these resources, the primary responsibility for maintaining the security of this information and its resources lies with the employee.

Improper use of any of these resources can cause problems related to the needs of some or all employees and students in the McFarland Unified School District. Violation of specific local, state, and federal laws referenced later in this document may call for prosecution under the law including fines and imprisonment. The McFarland Unified School District may take disciplinary action against employees for misuse of computer, network, and information resources.

### **Privacy of McFarland Unified School District Records – Student, Staff, and Business Information**

Both student and employee records are protected by various state and federal laws –

*State Statutes:*

Education Code, section 67100  
Information Practices Act of 1977 (Civil Code section 1798)  
Public Records Act (Gov. Code section 6250)  
Penal Codes, Section 502

*Federal Statutes:*

Federal Family Educational Rights and Privacy Act of 1974  
Federal Privacy Act of 1974  
Electronic Communications Privacy Act of 1986

It is probable that during employment with the McFarland Unified School District, employees will have access to either student or employee and business information that is confidential. It is the responsibility of employees to safeguard confidential information from unauthorized persons. Employees shall not seek to use personal or confidential information for their own use or personal gain. Employees must take all reasonable precautions to ensure privacy is maintained under the law while handling information in any form, including but not limited to voice, electronic (disk file, diskette, CD ROM, magnetic tape, email,

etc.), paper, photograph, and microfiche information. Included under this precaution is the disposal of any privacy related materials.

### **Ownership**

It must be understood that the McFarland Unified School District's business information, telephone, network, computer and software resources, peripherals and supplies are McFarland Unified School District property, provided to meet McFarland Unified School District needs. They do not belong to individuals, but are only "loaned" for the purposes required for their position while you are employed by the McFarland Unified School District.

### **Use of Telephones, Cell Phones, and Voicemail**

Telephones and/or cell phones are provided to conduct the business of the McFarland Unified School District. In many cases, voice mail is also provided. These services are intended to provide a means of communication for employees to contact parents and students, agencies, vendors, other institutions and government officials. When using these services, employees should always reflect a businesslike and professional demeanor. Private use of the phones should be kept to a minimum and should not encroach on or displace time spent from performing work duties. Phone use for personal business (e.g., commercial business) may require reimbursement to the McFarland Unified School District for any charges incurred.

### **Use of Personally Owned Software or Equipment**

The McFarland Unified School District attempts to ensure that all hardware and software meet specific standards which will operate without causing disruption of the McFarland Unified School District's computer and network resources. Therefore, the use of personally owned software or software that can be downloaded from the Internet as well as personally-owned computer hardware is not permitted except where authorized in writing by the McFarland Unified School District administration. Internet File-Sharing sites will not be permitted due to possible viruses, malicious software and spam related problems.

### **Software Copyright Law**

Violations of copyright law have the potential of exposing the McFarland Unified School District substantial risk of liability for damages. Employees are prohibited from installing any software without having proof of licensing. Employees may not install software licensed for one workstation on multiple machines. Employees should be aware that if, for example, a department purchases a new workstation, the program must also purchase new software licenses for the software that will be installed on it. If the computer being replaced will be retired from use, the software may be removed from it and transferred to a new workstation.

### **Use of the Internet**

The Internet provides an extremely valuable resource for learning and communicating with people throughout the world. It can be a marvelous tool to enhance student and staff education and productivity. Unfortunately, the Internet also contains a large amount of information that is inappropriate for use in an educational institution.

While it is hoped that employees will enjoy the use of Internet resources, it must be emphasized that these resources are provided at McFarland Unified School District expense to enhance job function and



maximize job effectiveness. Employees are not to let personal use of the Internet encroach on or displace time spent performing their work duties. Inasmuch as every transaction completed on the Internet represents to the world our District and everything it stands for, it is imperative that employees not use the Internet in such a way as to bring civil or criminal liability or public reproach upon the McFarland Unified School District.

Materials obtained from the Internet may be copyrighted. However, with proper citation, limited educational use may be permitted under the Principle of Fair use as contained in U.S. copyright law. These materials may not be redistributed on the Internet or in any other manner without written consent of the copyright owner or as prohibited by law. Materials are protected by copyright whether they bear copyright information or not.

The McFarland Unified School District retains the rights to set the parameters of what and how much information is permitted via the Internet into the district network/Intranet in order to provide a safe/secure network.

The use of public Internet Chat Rooms is prohibited by employees on district provided technology. The use of District hosted Chat Rooms and educationally related chat rooms (administration approved) are permissible in relation to direct educational services and/or professional development.

### **Use of Computer Resources**

The computing resources of the McFarland Unified School District are used by students and employees. In order to ensure that these resources are available and working properly, personal use of these resources must not negatively impact others.

For example, no one may attempt to access computer systems or their resources unless proper authorization has been granted. No one may attempt to maliciously alter, erase, damage, destroy or make otherwise unusable or inaccessible any data, software, computer, or network system. Attempts or actions of this nature may constitute a felony and may result in any combination of disciplinary action and/or prosecution and fines including litigation costs and payment of damages under applicable local, state, and federal statutes.

### **Your Computer Account**

In order to utilize the McFarland Unified School District's computer and network resources, employees will be assigned "user IDs" and passwords. Based on an employee's position and his or her supervisor's authorization, the employee may be provided with access levels which allow him or her to view, create, alter, delete, print, and transmit information.

Employees are responsible for maintaining the security of their personal account and may not release it for use by any other individual. Employees must accord a user account the same significance as a hand-written signature. Failure to do so by releasing this information to another individual may be considered false representation and result in disciplinary action.

This means that it is extremely important that employees use a password that cannot be guessed by others through knowledge about the employee. For example, employees should never use personal names such as children or pets or names that begin or end with numbers. Never use Social Security Numbers, bank PINs or words which can be found in any dictionary, names spelled backwards, or adjacent keys on a computer keyboard (i.e., QWERTY). All of the aforementioned provide an easy way for a hacker to

break into a computer system and, using employee rights and privileges, cause damage and destruction. Employees must also never write down user IDs or passwords unless stored in the employee's personal possession or other location away from the place of work. Even then, the ID or password should be written in such a way that no clue is given as to the purpose for its use. Employees should contact their site administration if they suspect someone else may have accessed their account. It is a simple matter to change a password in a few seconds, but may take days to reconstruct damaged records or computer systems if someone breaks in with employee account rights! Where an employee has the ability to change his or her own password, the employee should make a habit of periodically changing passwords for these accounts. Employees should never leave their workstation unattended while signed on to any account; doing so allows anyone to sit at an employee's workstation and, using the employee's rights and privileges, perform destructive acts.

Under certain circumstances, user IDs and passwords may be shared by a group of employees where doing so makes information access convenient with a minimum of administrative overhead. Examples include McFarland Unified School District-subscribed online services that teachers may wish to access from outside of the McFarland Unified School District network. Group IDs and passwords should be held in confidence and never shared with students. If an employee suspects that the security of such information has been compromised, the employee should notify the network administrator at once.

Only assigned employees may have direct publishing (write privilege) access to McFarland Unified School District and individual schools web, mail, and servers in general. Those who assume responsibility for posting information must never delegate these responsibilities. Passwords may not be stored where students may have access to them. Passwords should be periodically changed.

### **Computer Viruses**

The computer industry faces a continuing onslaught of malicious viruses, worms, and other damaging programs that attack computer and network resources. The McFarland Unified School District attempts to maintain anti-virus software in order to minimize impact of these viruses, but it is your responsibility to take precautions to protect your computer and all others throughout the McFarland Unified School District.

Employees should be very aware of opening email attachments. When in doubt, they should NOT be opened.

Likewise, employees should not download any software from the Internet unless directed to and authorized by the McFarland Unified School District Administration. It is not unknown for even a very respectable company to unknowingly release products which include hidden or unknown viruses. Employees should not share any downloaded software with others until they have verified that it does not harbor viruses or malicious software, and the software has been approved by the administrator of the designated site/department.

### **Electronic Mail**

The McFarland Unified School District encourages the use of electronic mail (email) to enhance communication and business activities. Users of this service need to be aware however that this technology is still developing, and policies like this one are necessary to ensure appropriate use and to prevent or limit disruptions to work activity and computer services.

- **Cautions About The Use Of Electronic Mail**

The nature of electronic mail at this date makes it susceptible to misuse. Users need to be aware that sensitive or private information can be easily forwarded to other individuals the originator never intended, both within the McFarland Unified School District as well as externally throughout the world.

In addition, while email accounts may be password protected, it is up to the individual user to ensure that a password is set and that the password is one that cannot be easily guessed or “hacked”.

Because of backup procedures in force with the McFarland Unified School District, the fact that you have “deleted” an email message does not necessarily mean that it cannot be retrieved.

Users of the McFarland Unified School District’s email services need to be aware that use of these services is a privilege granted with the expectation that it will be used for business purposes and in a professional and courteous manner similar to other forms of communication. All email sent or received by individuals through McFarland Unified School District employee accounts is the property of the McFarland Unified School District and may be requested by your supervisor and examined.

There is no guarantee that email received was in fact sent by the purported sender, since it is a simple matter, although a violation of this policy, to disguise the sender’s identity. Furthermore, email that is forwarded may be modified by the forwarder. As with any document, if you receive a message which appears unusual or which you feel may be questionable, check with the purported sender to verify authorship and authenticity. While encryption of email is a potential solution to ensure authenticity, it is an emerging technology that is not in widespread use and rather difficult to use consistently. Technology will mature such that it becomes practical and easy to use in the near future.

While the McFarland Unified School District does not have the time nor inclination to monitor or read individual email messages, in the event that questionable or inappropriate use is suspected or known, such email may be examined and may be cause for disciplinary action ranging from revoking your email account up to termination. Users should also be aware that in the general course of business, System Administrators and email operators may require observation of messages in order to verify system operation.

- **Email – State, Federal, And Copyright Laws**

In addition to this policy, use of the McFarland Unified School District’s email services is subject to all applicable Federal and State communications and privacy laws as well. In particular, users need to be aware that attaching programs, sound, video, and images to email messages may violate copyright laws, and data files containing employee and/or student information is subject to all privacy laws.

- **Email Restrictions**

District hosted Electronic mail (E-mail) may **not** be used for:

- Unlawful activities

- Spam mail or mail “bombs”
- Use that violates McFarland Unified School District, state or federal policies
- Any other use which interferes with computing facilities and services of the McFarland Unified School District

- **Email and Representation**

Users shall not give the impression that they are representing, giving opinions or otherwise making statements on behalf of the McFarland Unified School District unless they are appropriately authorized, explicitly or implicitly, to do so. Where appropriate and based on context, an appropriate disclaimer would be, “These are my own statements and views and do not represent those of the McFarland Unified School District.”

- **Email – False Identity**

Employees shall not employ a false identity in sending email or alter forwarded mail out of the context of its original meaning.

- **Email – Misuse of Computing Services**

Email services shall not be used for purposes that could reasonably be expected to cause, either directly or indirectly, excessive strain on McFarland Unified School District computing facilities, or cause interference with others’ use of email, email systems, or any computing facilities or services. For example, attaching large files over one (1) megabytes and sending these to multiple users or repeatedly to the same user is a violation of this policy.

- **Email – Security And Confidentiality**

The confidentiality of electronic mail cannot be assured. Users should exercise extreme caution in using email to communicate confidential or sensitive material.

- **Email – Virus Dangers**

As mentioned, proper precautions must be taken to guard against the infection of computers and files by viruses. Likewise, using email attachments to distribute viruses and/or worms and other damaging software is commonplace today.

- **Email – Archiving And Retention**

The McFarland Unified School District maintains an ongoing backup schedule of computer data in order to ensure that these facilities may be restored to use in the event of damage and/or destruction. Because of this practice, email may be stored on backup media for extended lengths of time. Messages which a user assumes to be deleted may be able to be restored if demanded by the appropriate McFarland Unified School District authority or by a Court of Law.

Each user should consider whether they want to archive their personal messages to their workstation's hard drive or other disk media on some sort of regular basis, as there is always the possibility that information may be lost due to software or hardware problems.

While the McFarland Unified School District maintains a backup of all email, it is not feasible nor our practice to restore lost or damaged Email.

## AGREEMENT

**I understand and will abide by the provisions and conditions of the McFarland Unified School District Acceptable Use Policy (AUP) for personnel. I understand that any violations of the AUP provisions may result in disciplinary action, the revoking of my user account, or appropriate legal action. I also agree to report any misuse of the McFarland Unified School District Acceptable Use Policy to the appropriate administrator.**

### Required Signatures

Name: \_\_\_\_\_

Position: \_\_\_\_\_

Classified: \_\_\_\_\_ Certified: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Administrator Signature: \_\_\_\_\_

Date: \_\_\_\_\_



**Appendix E**  
**McFarland Unified School District**  
**Publications, Video, Internet Consent and Release Agreement**

District students and employees who work at/for or attend schools in the McFarland Unified School District (MUSD) are occasionally asked to be a part of school and/or District publicity, publications and/or public relations activities. In order to guarantee privacy and ensure you comply or agree with your child's participation, the District asks that you sign this form and return to the District Office or the school your child attends.

The form referenced below indicates approval for the administrator's, employees' or student's name, picture, art, written work, voice, verbal statements or portraits (video or still) to appear in school publicity or District publications, videos or on the District's website. For example, pictures and articles about district or school activities may appear in local newspapers or district publications. These pictures and articles may or may not personally identify the employee or student. The district may also use the pictures and/or videos in subsequent years.

McFarland Unified School District agrees that the employee's or student's name, picture, art, written work, voice, verbal statements, portraits (video or still) shall only be used for public relations, public information, school or district promotion, publicity, and instruction.

**Employees, Students and Parents/Guardians understand and agree that:**

- No monetary consideration shall be paid
- Consent and release have been given without coercion or duress
- This agreement is binding upon heirs and/or future legal representatives
- All rights of any nature are hereby granted worldwide and in perpetuity to MUSD
- If the Employee, Student and Parent/Guardian wish to rescind this agreement they may do so at any time with written notice.

On my behalf or On behalf of the child whose name address are written below, I hereby waive any rights to fees, royalties or other compensation, which may arise from my or the child's participation in the programming, under the laws of the United States or any state there of, or under the laws of any nation or jurisdiction.

**Please check one:**

- I grant the consent and release. **(District Employees)**
- I expressly represent that I have the authority; either as a parent or legally appointed guardian to execute the consent and release on behalf of the student whose name is written below. **(District Students)**

This release form applies solely to McFarland Unified School District publications and programming and is not transferable to any commercial media enterprise. McFarland Unified Schools does not have control of commercial media use of pictures/statements, which are taken without parental permission.

**If a Student and/or Parent/Guardian; Please Complete the Following and Return to Your Child's School:**

Name of Child: \_\_\_\_\_ School: \_\_\_\_\_

Name of Parent or Guardian: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_, CA. Phone: ( ) \_\_\_\_\_ - \_\_\_\_\_

\_\_\_\_\_  
Date: \_\_\_\_\_

Signature of Parent or Legal Guardian

**If a District employee; please Complete the Following and Return to the District Office**

Name: \_\_\_\_\_ Department: \_\_\_\_\_

Signature: \_\_\_\_\_ Date \_\_\_\_\_

## **Appendix F**

### **McFarland Unified School District Board of Trustees**

Mr. Rey De Leon, School Board Member  
Mr. Donald Chandler, School Board Member  
Mr. Jim Kasiner, School Board President  
Mr. Ramon Melendez, School Board Secretary  
Mr. Arturo Muñoz, School Board Member

### **2005-2010 Technology Plan Committee**

Mr. Jim H. Schiffman, Superintendent  
Mr. Ermelinda Ozuna, Assistant Superintendent  
Mr. William Young, Business Manager  
Mr. Rick Gildez, District Technology Consultant

#### **Browning Road School**

Mr. Mario Torres, Principal  
Mr. Chris Breyer, Teacher, Site Technology Representative  
Mr. Mathew Roderick, Teacher  
Alma Davis, Teacher

#### **Kern Avenue School**

Mrs. Maria Gonzalez-Salgado, Principal  
Mr. Smith Efada, Vice Principal  
Mr. Javier Ruiz, Site Technology Representative

#### **McFarland High School**

Ms. Tamra Wallace, Principal  
Ms. Darlene Good, Library Media Teacher  
Mr. William Hungerford, Teacher, Site Technology Representative  
Mr. Edward Levenson, Teacher

#### **McFarland Learning Center**

Mr. Robert Mena, Principal  
Mr. Mike Clarke, Teacher, Site Technology Representative

#### **McFarland Middle School**

Mr. Rick Chavez, Principal  
Mr. Joel Lopez, Teacher, Site Technology Representative

## APPENDIX G Sample 1

### **McFarland Unified School District Yearly Teacher Technology Survey**

This survey establishes baseline data about technology skills of teachers in the McFarland Unified School District. Individual respondents will not be identified and individual responses will remain confidential. Please rank each statement on the scale indicated.

**Please rank the following statements from "Almost Never" to "Almost Always"**

School Name: \_\_\_\_\_

	Almost Never	Sometimes	Usually	Almost Always
I am able to open and exit programs; including starting up and shutting down the computer properly.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to save and retrieve a file from the hard drive; including saving the file to a designated folder.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to print to a desktop printer and to a network printer, including using print preview to modify my product prior to printing.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to create directories and folders; including changing files names, deleting files, copying files, and navigating a folder hierarchy.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to load, preview, evaluate, and use software for instruction; including selecting the most appropriate software for classroom objectives.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
	Almost Never	Sometimes	Usually	Almost Always
I am able to perform the following operations in a word processing program select, cut, copy, paste, change size/style, and spell check text.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to format paragraph text, columns, tables, margins, and tab settings.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always



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I am able to import clip art and special characters into a variety of programs; including word processing, spreadsheets, and web pages.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to make backup discs; including file backups and system backups.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to access the Internet; including performing searches, setting bookmarks, following links, and saving a web page.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
	Almost Never	Sometimes	Usually	Almost Always
I am able to use word processing software to prepare class materials, including tests, handouts, and other materials.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to prepare lesson Plans that involve the specific use of software to accomplish classroom goals.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to use create a presentation and deliver the presentation using appropriate software.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to work with more than one software program at a time; including toggling between all open programs as needed.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to adhere to software licensing agreements and comply with copyright law and guidelines.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
	Almost Never	Sometimes	Usually	Almost Always
I am able to apply electronic search strategies, including the use of keyword searches and using Boolean operators.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to use varied communication tools (e-mail, groupware, fax, chat, and threaded discussions) to participate in group projects.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to participate in electronic communities as a learner, initiator,	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always

contributor, or mentor.

I am able to use basic design principles to create products appropriate for a defined audience.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to create charts and tables using spreadsheets and databases; including publishing the information in the most appropriate form.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
	Almost Never	Sometimes	Usually	Almost Always
I am able to use multiple technology tools; including CD-ROM, video cameras, VCRs, scanners, digital cameras, etc.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to locate graphics (including web and clip art sources); including inserting and manipulating graphics (sizing, grouping, arranging, etc.).	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to use a database; including adding records, sorting records, adding fields, editing fields, and creating simple layouts.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to use a database and a word processing program to create a mail merge and mailing labels.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
	Almost Never	Sometimes	Usually	Almost Always
I am able to use a spreadsheet; including entering data, adding functions and formulas, editing cell and sheet, and sorting information.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to use e-mail; including send/receive, forward/reply, save/archive, create/use address books, and send attachments.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to use and understand technology terminology appropriately as it relates to my job.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to create using multimedia authoring programs; including creating linear/ nonlinear programs incorporating	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always

text, graphics, audio, and video.

I am able to use interactive virtual environments, such as virtual reality or simulations.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
	Almost Never	Sometimes	Usually	Almost Always
I am able to locate/ retrieve information from remote sources; including using distant data for analysis.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to publish information in a variety of ways and for a variety of audiences.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to employ a process to determine that product and process can be evaluated using a rubric or criteria.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to use technology to make my class more active and more interesting for students.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to use administrative software; including grade reporting and/ or attendance software.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
	Almost Never	Sometimes	Usually	Almost Always
I am able to use sophisticated data collection strategies (i.e. -- using online surveys in conjunction with database activities).	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to evaluate technology projects based on a rubric developed jointly with students.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to experiment with technology to create unique and different products.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always
I am able to perform simple troubleshooting tasks; minimizing dependence on technical support.	<input type="checkbox"/> Almost Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Usually	<input type="checkbox"/> Almost Always

Thank you! For your valuable time and input.

## APPENDIX G Sample 2

**McFarland Learning Center**  
**Technology Training Needs Survey**

**Staff Member** \_\_\_\_\_

Please check standards, or individual proficiencies within standards, for which you would like to receive training this year. Return to Cheryl as soon as possible. Thank you!

### CTAP Region 8, Level I

Prof. No.	Proficiency Standard	To be Addressed in Portfolio <i>and</i> Narrative
1.1	Print Media	<input type="checkbox"/> access, use WP <input type="checkbox"/> change fonts (print before & after) <input type="checkbox"/> spell check (print before & after) <input type="checkbox"/> desktop publishing
1.2	E-mail	<input type="checkbox"/> address e-mail <input type="checkbox"/> send and reply to e-mail <input type="checkbox"/> send and open attachments <input type="checkbox"/> explain parts of e-mail address
1.3	Collaborate	<input type="checkbox"/> threaded discussions <input type="checkbox"/> list servers <input type="checkbox"/> online chat <input type="checkbox"/> audio/video conferencing
1.4	Ethical/Legal	<input type="checkbox"/> discern copyrighted info from e-resources <input type="checkbox"/> know district software/copyright guidelines and limits of fair use <input type="checkbox"/> staff AUP <input type="checkbox"/> student AUP <input type="checkbox"/> net etiquette – chat rooms, confidentiality, publishing names & pictures of minors
1.5	Cross Platforms or Applications	<input type="checkbox"/> change preferences in program <input type="checkbox"/> cut/copy/paste between documents and applications <input type="checkbox"/> find/replace text <input type="checkbox"/> save in various file formats <input type="checkbox"/> select printer <input type="checkbox"/> print specific pages
1.6	Proper Equipment Care & Use	<input type="checkbox"/> connect/disconnect 2 or more peripherals or display devices <input type="checkbox"/> perform simple maintenance such as scandisk, defrag <input type="checkbox"/> use software from disk, hard drive, CD-ROM, network <input type="checkbox"/> install and run new software (as district policy allows)
1.7	Terminology	<input type="checkbox"/> refer to components of computer system by name <input type="checkbox"/> understand and describe basic processes and operations of computer system
1.8	Trouble-shooting	<input type="checkbox"/> repair/troubleshoot simple platform problems (control panels; extensions; startup programs; stuck disks; check network or hardware connections— as district policy allows) <input type="checkbox"/> set up, activate, restart, shut down, warm boot machine <input type="checkbox"/> know how to deal with freezes, hang-ups

1.9	Software/ Resource	<ul style="list-style-type: none"> <li><input type="checkbox"/> list criteria for evaluation of software</li> <li><input type="checkbox"/> cite sources of information for software evaluation</li> <li><input type="checkbox"/> explain how selection of software/electronic resources supports instructional objectives</li> </ul>
1.10	Electronic Research	<ul style="list-style-type: none"> <li><input type="checkbox"/> choose periodical indices, e-encyclopedia, Internet resources appropriate to task</li> <li><input type="checkbox"/> launch browser</li> <li><input type="checkbox"/> add URL</li> <li><input type="checkbox"/> bookmark that site</li> <li><input type="checkbox"/> choose between search engines, periodical indices, standard search tools</li> <li><input type="checkbox"/> use 2 or more search engines using Boolean logic to find information (show search results)</li> <li><input type="checkbox"/> use “save as” or copy/paste to download information from Internet (screen shot of “save” or data pasted into word processing document)</li> <li><input type="checkbox"/> use e-encyclopedia and/or periodical index to find appropriate info.</li> </ul>
1.11	Lesson Plan	<p>Describe effective lesson Plan to meet content standards and include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> content to be taught</li> <li><input type="checkbox"/> alignment with state content standards</li> <li><input type="checkbox"/> student learning styles and/or special needs</li> <li><input type="checkbox"/> selection of relevant, effective software and hardware</li> <li><input type="checkbox"/> technology resources and learning environments available in classroom, library, media center, computer labs, etc.</li> <li><input type="checkbox"/> assessment of student learning</li> </ul>
1.12	Use grading program, spreadsheet, or database to manage records	<p>Possible artifacts include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> book/resource checkout list</li> <li><input type="checkbox"/> progress reports or report cards</li> <li><input type="checkbox"/> class assignment summaries</li> <li><input type="checkbox"/> missing work reports</li> <li><input type="checkbox"/> parent conference reports</li> <li><input type="checkbox"/> student information database</li> <li><input type="checkbox"/> seating charts</li> <li><input type="checkbox"/> other spreadsheets or databases</li> </ul>
1.13	Assess Authenticity, Reliability, Bias of Data Gathered	<ul style="list-style-type: none"> <li><input type="checkbox"/> describe why information offered by a particular Internet site or electronic resource may or may not be reliable</li> <li><input type="checkbox"/> Provide one-page narrative artifact to support argument</li> </ul>

### CTAP Region 8, Level II

Prof.No.	Proficiency Standard	To be Addressed in Portfolio <i>and</i> Narrative
2.1	Communicates through e-media	<ul style="list-style-type: none"> <li><input type="checkbox"/> presentations incorporating images and sound</li> <li><input type="checkbox"/> web pages</li> <li><input type="checkbox"/> electronic portfolios</li> <li><input type="checkbox"/> hypermedia projects</li> </ul>
2.2	Collaborate with others	<ul style="list-style-type: none"> <li><input type="checkbox"/> sustained communication with parents, students, colleagues (mailing lists; video conferencing; online staff development; voice mail; homework hotline)</li> <li><input type="checkbox"/> student projects that utilize digital tools to interact with subject matter experts or collaborate with others</li> </ul>

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2.3	Collaborate with other teachers, mentors, librarians, resource specialists, other experts to support tech-enhanced curriculum	<ul style="list-style-type: none"> <li><input type="checkbox"/> collaborate on lessons, units, projects that incorporate use of technology (e.g. interdisciplinary, cross-grade level, etc.)</li> </ul>
2.4	Contribute to site-based Planning, local decision-making, use and acquisition of tech resources	<ul style="list-style-type: none"> <li><input type="checkbox"/> participate in Planning sessions with teachers, administrators, and/or parents that involve the use or acquisition of technology at your site</li> <li><input type="checkbox"/> be an active member of your site's technology committee</li> <li><input type="checkbox"/> attend conferences, workshops, in-services on technology in education</li> </ul>
2.5	Demonstrate competence in evaluating the authenticity, reliability, and bias of data gathered	<ul style="list-style-type: none"> <li><input type="checkbox"/> incorporate into a project or lesson evaluation of data from perspectives of reliability, authenticity, and bias</li> </ul>
2.6	Design, adapt, or use lessons which promote the effective use of technology in teaching and learning	<p>Include effective lesson Plans you have used to meet content standards that include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> content to be taught</li> <li><input type="checkbox"/> alignment with the state content standards</li> <li><input type="checkbox"/> student learning styles and/or special needs</li> <li><input type="checkbox"/> selection of relevant, effective software and hardware</li> <li><input type="checkbox"/> technology resources and learning environments available in classroom, library, media center, computer labs, and other locations</li> <li><input type="checkbox"/> assessment of student learning</li> </ul>
2.7	Design, adapt, or use lessons which address the students' needs to develop information literacy and problem solving skills as tools for lifelong learning	<ul style="list-style-type: none"> <li><input type="checkbox"/> develop and teach learning units or lessons that encompass information literacy skills, using technology to increase each student's ability to Plan, locate, evaluate, select, and use information to solve problems and draw conclusions</li> <li><input type="checkbox"/> determine outcomes and evaluate the success or effectiveness of the process used</li> <li><input type="checkbox"/> develop and use performance-based rubric for project/lesson to demonstrate success</li> <li><input type="checkbox"/> help students to become self-directed learners</li> <li><input type="checkbox"/> determine outcomes and evaluate success or effectiveness of process used</li> </ul>
2.8	Demonstrate knowledge and understanding of legal and ethical issues concerning use of computer-based technology	<p>Respond effectively and appropriately to a range of ethical, legal, and responsibility issues, including but not limited to:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> intellectual property concerns</li> <li><input type="checkbox"/> privacy concerns</li> <li><input type="checkbox"/> copyright issues</li> <li><input type="checkbox"/> security and safety issues</li> <li><input type="checkbox"/> use of proper "net etiquette"</li> <li><input type="checkbox"/> your school's/district's AUP</li> </ul>

2.9	Locate or develop Internet-based learning exercises and research projects relevant to lesson Plans and incorporate them into course curricula	Demonstrate the following skills <ul style="list-style-type: none"><li>❑ incorporate online (or Internet derived) projects/lessons into a core subject</li><li>❑ incorporate primary source documents from Internet into curricular area (photos, text, songs, etc., from National Archives, Smithsonian, Library of Congress, or similar resource)</li></ul>
2.10	Use a computer application to manipulate and analyze data	<ul style="list-style-type: none"><li>❑ use assessment tools and strategies to evaluate student achievement</li><li>❑ create charts and reports from spreadsheet and/or database</li></ul>
2.11	Use technology as a tools for assessing student learning and for providing feedback to students and their parents	Possible examples <ul style="list-style-type: none"><li>❑ example of how you used technology to assess student learning in a lesson</li><li>❑ electronic portfolios</li><li>❑ student multimedia projects with a rubric</li><li>❑ video of student performance</li><li>❑ student web pages with a rubric</li><li>❑ individual learning reports for parents and students</li></ul>
2.12	Monitor and reflect on results of using tech. in instruction and adapt lessons accordingly	<ul style="list-style-type: none"><li>❑ reflect on lessons included in your Level 2, describing successes, failures, and adjustments you would make next time</li><li>❑ include examples of best practices and research findings to be incorporated in the future</li></ul>

Suggestions: \_\_\_\_\_

**Please identify the four major standards from above that are your highest priority:**

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_

## Appendix H

### 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
<b>a. The Plan should guide the district’s use of education technology for the next three to five years.</b>	<b>3, 4, 5, 6</b>	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.
<b>2. STAKEHOLDERS CRITERION</b> Corresponding EETT Requirement(s): 7 & 11 (Appendix F)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Not Adequately Addressed</b>
<b>a. Description of how a variety of stakeholders from within the school district and the community-at-large participated in the Planning process.</b>	<b>60</b>	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.



<b>3. CURRICULUM COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, & 12 (Appendix F)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours.	<b>6, 7</b>	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.	<b>12, 13</b>	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.	<b>12</b>	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.	<b>12, 13, 20, 29</b>	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.

<p>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.</p>	<p><b>12, 20, 30-42</b></p>	<p>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.</p>	<p>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.</p>
<p>f. List of clear goals and a specific implementation Plan for programs and methods of utilizing technology that ensure appropriate access to all students.</p>	<p><b>12, 20, 30-42</b></p>	<p>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.</p>	<p>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.</p>
<p>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.</p>	<p><b>12, 20, 30-42</b></p>	<p>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.</p>	<p>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.</p>
<p>h. List of clear goals and a specific implementation Plan to utilize technology to make teachers and administrators more accessible to parents.</p>	<p><b>10, 11, 20</b></p>	<p>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.</p>	<p>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.</p>

i. List of benchmarks and a timeline for implementing planned strategies and activities.	<b>11, 20</b>	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.	<b>11, 20</b>	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.
<b>4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 5 & 12 (Appendix F)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
a. Summary of the teachers' and administrators' current technology skills and needs for professional development.	<b>21, 43-48</b>	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.

<p>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.</p>	<p><b>11</b></p>	<p>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.</p>	<p>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.</p>
<p>c. List of benchmarks and a timeline for implementing planned strategies and activities.</p>	<p><b>11, 20</b></p>	<p>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.</p>	<p>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.</p>
<p>d. Description of the process that will be used to monitor 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><b>20, 21</b></p>	<p>The monitoring process is described in sufficient detail so that who is responsible and what is expected is clear.</p>	<p>The monitoring process is either absent, or lacks detail regarding who is responsible and what is expected.</p>

<b>5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 6 & 12 (Appendix F)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
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.	<b>23, 24, 25</b>	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.

<p>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.</p>	<p>14, 23, 24, 25</p>	<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>5, 7, 8, 9</p>	<p>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.</p>	<p>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.</p>
<p>d. Description of the process that will be used to monitor whether the goals and benchmarks are being reached within the specified time frame.</p>	<p>27</p>	<p>The monitoring process is described in sufficient detail so that who is responsible and what is expected is clear.</p>	<p>The monitoring process is either absent, or lacks detail regarding who is responsible and what is expected.</p>
<p><b>6. FUNDING AND BUDGET COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 7 &amp; 13, (Appendix F)</p>	<p><b>Page in District Plan</b></p>	<p><b>Example of Adequately Addressed</b></p>	<p><b>Example of Not Adequately Addressed</b></p>
<p>a. List of established and potential funding sources and cost savings, present and future.</p>	<p>25, 26</p>	<p>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.</p>	<p>Resources to implement the Plan are not identified or are so general as to be useless.</p>

b. Estimate implementation costs for the term of the Plan (three to five years).	<b>7, 8, 9</b>	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.	<b>5, 25</b>	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.	<b>5</b>	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.	<b>25, 26</b>	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.			

<b>7. MONITORING AND EVALUATION COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 11 (Appendix F)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
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.	<b>28, 29</b>	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.	<b>27, 28</b>	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.	<b>27</b>	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.



<b>8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY CRITERION</b> Corresponding EETT Requirement(s): 11 (Appendix F)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
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.	<b>21, 22, 23</b>	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.	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.
<b>9. EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA</b> Corresponding EETT Requirement(s): 4 & 9 (Appendix F)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Not Adequately Addressed</b>
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.	<b>16, 17, 18</b>	The Plan describes the relevant research behind the Plan's design for strategies and/or methods selected.	The description of the research behind the Plan's design for strategies and/or methods selected is unclear or missing.

<p>b. Description of thorough and thoughtful examination of externally or locally developed education technology models and strategies.</p>	<p><b>16, 17</b></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><b>16, 17, 18</b></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>