

# EDUCATION TECHNOLOGY PLAN

JULY 1, 2007 – JUNE 30, 2012



## SAN JOSE UNIFIED SCHOOL DISTRICT

CDS CODE: 4369666

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#### **San Jose Unified School District**

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San Jose, CA 95126

## **Appendix J – Technology Plan Contact Information**

### **Education Technology Plan Review System (ETPRS) Contact Information**

County & District Code: **43 -69666**

LEA Name: **San Jose Unified School District**

Salutation: **Mr**

First Name: **Kurt**

Last Name: **Kuhlmann**

Job Title: **Manager of Instructional Technology**

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Job Title: **Assistant Superintendent**

1<sup>st</sup> Backup E-Mail: **Bill\_Erlendson@sjusd.org**

2<sup>nd</sup> Backup Name: **Karen Fuqua**

2<sup>nd</sup> Backup E-Mail: **Karen\_Fuqua@sjusd.org**

Job Title: **Manager of Public Relations/Community Development**

Required information in the ETPRS

# Table of Contents

**Appendix J:** ..... **Prior page**

**Acknowledgments** ..... **1**

**Appendix I: Benchmark Review Form** ..... **2**

**District Summary and Plan Duration** ..... **4**

**District Profile** ..... **6**

**District Technology Overview** ..... **7**

**Curriculum Driven Technology Goals** ..... **10**

**Professional Development and Implementation** ..... **62**

**Infrastructure, Hardware, Technical Support, and Software** ..... **83**

**Funding and Budget** ..... **91**

**Monitoring and Evaluation** ..... **95**

**Effective Collaborative Strategies with Adult Literacy Providers to Maximize  
the Use of Technology Criterion** ..... **107**

**Effective, Research-Based Methods, Strategies, and** ..... **109**

**Appendix C: Criteria for EETT Funded Education Technology Plans**..... **117**

## **School Board of Trustees**

**Jorge González - Board President**  
**Richard Garcia**  
**Pamela Foley**  
**Veronica Grijalva Lewis**  
**Leslie B. Reynolds**  
**Rebecca Murday – Student Board Member**

## **District Educational Technology Plan Team**

### **District Administrators**

**William Erlendson, PhD. Assistant Superintendent**  
**Karen Fuqua – Manager of Public Relations/Community Development**

### **Curriculum / Data Personnel**

**Jeanne Herrick – Director of Curriculum**  
**Marcy Lauck – Manager of Continuous Improvement**

### **Instructional Technology**

**Kurt Kuhlmann – Manager of Instructional Technology**  
**Nancy Stephenson - Instructional Technology Specialist**

### **Technology Personnel**

**Paul Rische - Director of Technology Services**  
**Mitzi Macon – Manager of Technology Services**

### **Financial Personnel**

**Ann Jones – Chief Financial Officer**  
**Edgar Manalo – Mandated Cost Analyst**

### **Teachers**

**Robert Ball – Instruction Technology Resource Teacher**  
**Cliff Herlth - Technology Resource Teacher**  
**Emalie McGinnis – EETT Resource Teacher**  
**Steve Motter - Technology Resource Teacher**  
**Felicia Webb - Technology Resource Teacher**

## **Government Agencies**

**CTAP Region 5, EdTechProfile Plan Coordinator – Diana Paradise**

## **Community Group & Businesses**

**Randy Phelps – Apple Education**

California Department of Education  
Appendix I – Education Technology Plan Benchmark Review  
For the grant period ending June 30, 2012

CDS # 4369666  
San Jose Unified School District

The objectives in the 2003 Technology Use Plan for San Jose Unified School District have all been met.

The curriculum content area objectives focused on access to equipment, software and training. All of our elementary, middle and high schools meet or exceed all of the objectives in section D: Curriculum Focus Content Areas. The Objectives 1 through 3 details access to software, equipment, and online resources. San Jose Unified School District has installed in every classroom connectivity to the Internet. Each classroom has at least one computer for the teacher but most have several workstations for the student. Each school has at least one computer-training center. SJUSD has an ongoing hardware replacement program to ensure all computers and network equipment is current.

The District supported software applications accommodates the diverse needs of students and accelerates their learning. Section E, F, G, and H Objectives address both standards and access for students, parents and staff and record keeping. All objectives have been met in these sections. The Web access and online GradeBook access for parents is now in place. In Section J the objectives are monitoring and assessment. An on-going system to provide accurate needs assessment, Edusoft, coupled with our data warehouse to provide SJUSD with real-time data has been implemented. Staff software training to facilitate administrative tasks of Edusoft, including test preparation, is now part of SJUSD ongoing professional development.

All objectives in the professional development section have been met. Accurate and current database of high quality, standards-based professional development opportunities has been implemented with our FileMaker server for the NTSS and On-Line Registration System. District wide awareness of and access to professional development opportunities are both published on our web site and our email system. A wide variety of Professional Development opportunities for educators to meet the diverse needs of all students has been implemented through various departments including the Instructional Technology Department.

A system that provides on-going training for use of appropriate instructional software has been implement by both the Instructional Technology and Technology Services Departments. Enhanced staff communications has been implement by using our FirstClass email system. Use of on-line Professional Growth Plans will facilitate meeting credential and other professional enhancement programs are being developed. Equitable access to professional development opportunities is provided has been implemented for all teachers and classified staff.

The applicant certifies that the information described above is accurate as of the date of this document. Should the applicant be selected for a random EETT review, the information stated above will be supported by adequate documentation.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above certifications.

William Erlendson, PhD, Assistant Superintendent, San Jose Unified School District

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SIGNATURE

DATE

# San Jose Unified School District

## Technology Use Plan

The San Jose Unified School District Technology Plan 2007 - 2012 focuses on using technology to enhance student achievement and learning. The district has a history of using technology to make learning an active, enjoyable, rewarding, and successful experience for teachers and students alike. This plan adheres to that purpose and aims into the future by directly targeting the district's student achievement and learning objectives as defined by the San Jose Unified School District, proficiencies, and the Board of Education. Multiple participants from all levels of the district, including teachers, administrators, staff, a school board member, and parents, came together to form the Technology in the Curriculum Committee (TICC). The TICC assessed current needs and reviewed research and trends on technology, teaching, learning, and instruction. The result is a plan focused on improving student achievement and learning.

The San Jose Unified School District Technology Plan has two main goals:

**Goal 1:** To enhance student achievement and learning by engaging students in curriculum-integrated technology use that is rich in standards, thinking, and application of skills.

**Goal 2:** To use technology to support increased performance on the California High School Exit Exam (CAHSEE) and school report cards.

The keys to raising student achievement are to provide students with a solid foundation of basic skills and to motivate them to learn. Technology can help accomplish this goal. It engages students and fires their imaginations. It helps teachers stimulate young minds in ways that make a profound and lasting difference. Numerous research studies on the impact of technology on student achievement have demonstrated this finding with remarkably similar results. A review of the literature resulting from these studies supports the following conclusions:

- ❑ Students, especially those with few advantages in life, learn basic skills—reading, writing, and arithmetic—better and faster if they have a chance to practice those skills using technology.
- ❑ Technology engages students, and as a result, they spend more time on basic learning tasks than students who use a more traditional approach do.
- ❑ Technology offers educators a way to individualize curriculum and customize it to the needs of individual students so all children can achieve their potential.
- ❑ Students who have the opportunity to use technology to acquire and organize information show a higher level of comprehension and a greater likelihood of using what they learn later in their lives.
- ❑ By giving students access to a broader range of resources and technologies, students can use a variety of communication media to express their ideas more clearly and powerfully.
- ❑ Technology can decrease absenteeism, lower dropout rates, and motivate more students to continue on to college.
- ❑ Students who regularly use technology take more pride in their work, have greater

confidence in their abilities, and develop higher levels of self-esteem.

The San Jose Unified School District program will use technology for decision making in all aspects of the program through a comprehensive 'Cycle of Inquiry' assessment process that is research based and data-driven to inform the planning, implementation, and evaluation of the project. The assessment process will use technology to generate data and decisions at the following levels teacher/student, professional development, Administrative/District as well as EL as outreach and communication with parents of students and the community.

**Data collection methods and decision-making processes include:**

**Teacher / Student**

- Individual records to track progress will be developed for each targeted student.
- Student work samples will be collected and analyzed during core team meetings. Conclusions and decisions for action will be archived in meeting minutes and made available online to teachers.
- Teacher surveys logging standards-aligned lessons integrating technology.
- EdTechProfile Student Technology Use Survey, an online technology based assessment tool, will be used as pre-and post-test by students, teachers and administrators to monitor levels of classroom technology use.
- Software management tools will be used for reporting/management systems. Student reports will be used regularly by teachers to evaluate student progress, and monthly assessments using reporting will be used for discussion at bi-monthly meetings to evaluate effectiveness and progress.

**Professional Development**

- Principal/coordinator/evaluator checklist of observed lessons from Walkthrough database will be used to evaluate technology lesson implementation and recommendations for professional development.
- Teachers will receive ongoing professional development in data collection and analysis of student progress through technology assessment tools.

**Communication / Collaboration**

- Teachers will work with parents to incorporate technology resources for monitoring homework and classroom progress of students through websites and adult technology training.

## DISTRICT PROFILE

San José Unified School District is a large urban school district serving about 32,000 students from kindergarten through grade twelve. Located fifty miles south of San Francisco, in the heart of the Silicon Valley, the public school district is one of 19 districts within the boundaries of the City of San Jose. Embracing the major portion of the city, the boundaries of San Jose Unified include a geographic area of over fifty square miles. As the eleventh largest urban school district in California, San Jose Unified has twenty-seven elementary schools, six middle schools, and seven high schools. The student population is 29% Anglo, 50% Hispanic, 13% Asian, 3% Black and 5% other. Like many California urban school districts, it faces significant challenges in providing equitable, high quality education for a population of students who vary widely in linguistic, cultural and socioeconomic background. Over 61% of the district's students represent a growing non-white student population with 50% of the non-white students of Hispanic origin. Nearly 26% of the student population has limited English proficiency. Hispanic students, in particular, score substantially below grade level norms in reading and mathematics.

| <b>San Jose Unified School District 2005-06 School Data</b> |       |       |          |       |       |
|---|-------|-------|----------|-------|-------|
|   | Asian | Black | Hispanic | Other | White |
| Elementary  | 15%   | 3%    | 53%      | 3%    | 26%   |
| Middle  | 15%   | 3%    | 51%      | 2%    | 29%   |
| High School   | 18%   | 3%    | 44%      | 2%    | 32%   |
| Community Day   | 2%    | 4%    | 75%      | 8%    | 11%   |
| Alternative   | 5%    | 4%    | 71%      | 2%    | 18%   |
| Continuation  | 4%    | 6%    | 67%      | 3%    | 20%   |

| <b>San Jose Unified School District, Students by Ethnicity 2005-06</b> |              |                  |
|--|--------------|------------------|
|  | District     |                  |
|  | Enrollment   | Percent of Total |
| American Indian  | 700          | 2.2%             |
| Asian  | 3952         | 12.5%            |
| Pacific Islander   | 172          | .5%              |
| Filipino   | 610          | 1.9%             |
| Hispanic   | 16000        | 50.6%            |
| African American   | 1028         | 3.2%             |
| White  | 8878         | 28.1%            |
| Multiple/No Response   | 306          | 1.0%             |
| <b>Total</b>   | <b>31646</b> | <b>100.00%</b>   |

| <b>San Jose Unified School District, Student &amp; Teacher Data 2005-06</b> |       |
|---|-------|
| English Learners  | 8017  |
| Fluent-English-Proficient Students  | 6946  |
| Students Redesignated FEP   | 677   |
| Graduates (prior year)  | 1819  |
| UC/CSU Elig Grads (prior year)  | 1195  |
| Dropouts (prior year, grade 9-12)   | 175   |
| 1 Yr Drop Rate (prior year, grade 9-12)                                     | 1.8%  |
| 4 Yr Drop Rate (prior year, grade 9-12)                                     | 7.3%  |
| % Fully Credentialed Teachers   | 94.4% |
| Pupil Teacher Ratio   | 20.2  |
| Avg. Class Size   | 23.7  |
| Free or Reduced Price Meals   | 42.4% |
| CalWORKs (formerly AFDC)  | 31501 |

# EDUCATION TECHNOLOGY PLAN OVERVIEW

## San Jose Unified School District

### Mission Statement

The purpose of the San Jose Unified School District is to prepare students from a diverse community with the attitudes, knowledge, and skills required to learn and to become productive and responsible citizens who:

- Value themselves and others;
- Think critically and creatively, and solve problems individually and collaboratively using multiple technologies;
- Determine personal goals necessary for lifelong learning, productive employment, and competition in a global economy;
- Demonstrate personal and recognized achievement in the following areas:
  - Integrated English language study (reading, writing, speaking, listening and understanding) and one additional language;
  - Interdisciplinary study of math and science
  - Interdisciplinary study of applied arts and career/occupational options;
  - Interdisciplinary study of civilizations and cultures emphasizing history, literature, geography, economics, politics and fine arts;
  - Interdisciplinary study of health, including mental and physical fitness;

The San Jose Unified School District Technology Plan 2007 is a five-year plan that focuses on using technology to enhance student achievement and learning. Without this aim, little purpose exists for purchasing and implementing technological innovations. Our Education Technology Plan is intended to serve as both a guide for technology related decision-making and an instrument to monitor and evaluate progress toward identified goals and objectives. An updated assessment of district technology status, needs, and resources has been completed for each section of our revised tech plan and has guided the development of our new technology goals, objectives and implementation activities

The district has a history of using technology to make learning an active, enjoyable, rewarding and successful experience for teachers and students alike. The previous District Technology Plan has been implemented, and most of its ideals and goals have been accomplished. This plan adheres to the spirit of that original document and aims into the future. The result is a vision using best practices in educational technology to enhance student achievement and learning. Throughout the development of the District Technology Plan 2007, the Technology in the Curriculum Committee has focused on the district's student achievement targets and researched best practices for technology integration. The team considered the visible future in which rapidly changing technologies open exciting new opportunities for student learning. The team took a broad approach to planning by viewing the district as a system and integrating the perspectives of administration, curricula, instruction, library media, operations, information systems, and educational technology.

Our goals and objectives were established to meet the identified needs of integrating technology to improve student learning, providing equitable technology access and support, providing

secure, timely information flow between home, school, and community, and providing coordinated, ongoing high quality educational technology professional development.

The San Jose Unified School District (SJUSD) educational technology plan covers five years, from July 1, 2007 through June 30, 2012. It will serve as the primary tool to guide the district's acquisition, sustainability, and integration of technology to support the district's curricular goals. This plan will be monitored by district curriculum, data, and technology administrators, school administrators and school media specialists during monthly education support meetings and reviewed and revised annually by technology stakeholders after the state releases achievement data for district school sites. Any modifications required through such review will be communicated to both the district Superintendent and school board. The district director of Information Technology will then work with the Superintendent to implement any required revisions directly with site-based administrators.

Our District's original Technology in the Curriculum Committee (TICC) has become our implementation oversight team. The group is comprised of district and site representatives who are responsible for implementing the plan, including district curriculum, data, and information technology staff, site administrators, teachers. The Technology in the Curriculum Committee originally convened in the spring of the 2005/06 school year to serve as a strategic planning committee for technology plan. Since then, the team has met monthly. San Jose Unified School District email system allows us to use a conference as a mechanism for ongoing input and updates regarding the objectives, funding, budgets, and curricular guidelines contained within our technology plan. In addition, progress was reviewed at monthly district education support meetings with site administration to:

- Evaluate the draft technology plan and make adjustments if needed.
- Gather and evaluate district technology data with regard to hardware, wiring, resources, professional development and projects.
- Collect and analyze survey, technology, and student achievement data.
- Identify and update common technology needs and issues.

As stakeholders developed our technology plan, the following key questions were addressed:

- Are the district and schools' visions for student success aligned to today's knowledge-based, Digital Age? Are administrators committed to the vision?
- Is student academic achievement improving where technology is being used effectively?
- Are students demonstrating proficiency in technological literacy?
- Are educators proficient in implementing, assessing and supporting a variety of effective practices for teaching and learning?
- Do students and school staff have robust access to technology - anytime, anywhere - to support effective designs for teaching and learning?
- Is the digital divide being addressed through resources and strategies that ensure that all students are engaging in an educational program aligned to the district's vision of technology integration?

**District Curriculum Personnel** – the Superintendent, Assistant Superintendents, Director of Testing & Data, and the Director of Curriculum

Representatives on our Technology in the Curriculum Committee (TICC) team promote, direct, and facilitate the technology team's development of broad and inclusive goals and objectives for curriculum, resources, and operations that integrate 21<sup>st</sup> century skills into the overall vision for student achievement and into every aspect of learning, teaching, and administrating. Curriculum personnel define and unpack clear and specific standards-aligned academic objectives by grade and subject; support research-based best practices and instructional programs; develop student assessment and data monitoring systems and monitor school performance and make adjustments based on school performance.

**District Technology Personnel** –the Director of Information Technology and the district's Instructional Technology Manager and staff.

Representatives on our Tech Plan team provide overall coordination of the technology implementation and oversight team, funding resources, and the implementation of the goals and objectives set forth in this updated technology plan.

**District Financial Personnel** – the Director Fiscal Services and staff

Representatives on our Tech Plan team provide coordination of technology funds and budget issues.

**Site Administration** – Site Principals and Assistant Principals

Representatives on our Tech Plan team provide site-based updates on tech plan implementation and needs; monitor teacher performance and student learning; make adjustments based on teacher and student performance; ensure the use of adopted materials, research-based best practices and instructional programs; provide input on how technology can better support the teaching of standards-aligned academic objectives.

**Site Teachers** –Teachers representation from our Elementary, Middle, High School, Alternative and Continuation Schools

Representatives on our Tech Plan team provide input on efforts and outcomes using research-based technology programs and practices to support the district curricular goals and academic content standards and improve teaching and learning.

**Government Agencies** – representatives from the California Technology Assistance Project (CTAP) Region 2

Representatives on our Tech Plan team offered technical assistance in the data analyses and revision of our goals and objectives, professional development planning and implementation, EETT Formula Funding, E-rate, compliance issues, hardware, software, and infrastructure.

The San Jose Unified School District continues to solicit and expand our partnerships with stakeholders to enhance the infusion of educational technology into the curriculum. Our district recognizes that schools alone do not have the resources or expertise to keep pace with rapidly

changing technology. We believe that these partnerships will help us serve the growing needs of an increasingly technical and global education system and society.

The following people served on the District Technology Planning Team and spent countless hours developing the ideas contained herein and assisted in drafting this plan. Their efforts are greatly appreciated.

- |   |  |
|---|--|
| <input type="checkbox"/> <b>Robert Ball</b>     | <input type="checkbox"/> <b>Kurt Kuhlmann</b>    |
| <input type="checkbox"/> <b>Shirley Bell</b>    | <input type="checkbox"/> <b>Marcy Lauck</b>      |
| <input type="checkbox"/> <b>Bill Erlendson</b>  | <input type="checkbox"/> <b>Mitzi Macon</b>      |
| <input type="checkbox"/> <b>Karen Fuqua</b>     | <input type="checkbox"/> <b>Edgar Manalo</b>     |
| <input type="checkbox"/> <b>Kelli Gutierrez</b> | <input type="checkbox"/> <b>Paul Rische</b>      |
| <input type="checkbox"/> <b>Cliff Herlth</b>    | <input type="checkbox"/> <b>Nancy Stephenson</b> |
| <input type="checkbox"/> <b>Jeanne Herrick</b>  | <input type="checkbox"/> <b>Steve Motter</b>     |
| <input type="checkbox"/> <b>Ann Jones</b>       | <input type="checkbox"/> <b>Felicia Webb</b>     |

The District Technology Planning Team is indebted to numerous individuals and groups for support, ideas, criticism, encouragement, and contributions. Particular credit is directed toward the Board of Education and the district administration.

Most important to acknowledge are the visionaries whose desire, work, and dedication to enhancing student achievement through educational technology makes a difference for our students every day.

## Curriculum Driven Technology Goals

The San Jose Unified School District Technology Plan 2007-2012 focuses on using technology to enhance student achievement and learning. The district has a history of using technology to make learning an active, enjoyable, rewarding, and successful experience for teachers and students alike. This plan adheres to that purpose and aims into the future by directly targeting the district's student achievement and learning objectives as defined by the San Jose Unified School District, proficiencies, and the Board of Education. Thirty-three participants from all levels of the district, including teachers, administrators, staff, a school board member, and parents, came together to form the Technology in the Curriculum Committee (TICC). The TICC assessed current needs and reviewed research and trends on technology, teaching, learning, and instruction. The result is a plan focused on improving student achievement and learning.

The plan is organized into five sections:

- Vision and Rationale
- Technology Goals and Objectives for Enhancing Student Achievement and Learning
- Implementation Plan
- Budget
- Appendix

## Current Technology Access

The following describes the technology access available in classrooms, library/media centers, or labs for all students, including special education, GATE, English Language Learners, both during and after school hours. Access to appropriate site-based technology resources has been evaluated through district inventory records, annual California School Survey responses, and CBED data. The 2005-06 data has been summarized below.

| San Jose Unified School District, Technology by School Type 2005-06  |     |
|--|-----|
| <b>District<br/>Students per Computer</b>  |     |
| <b>Elementary</b>  | 2.9 |
| <b>Middle</b>  | 2.6 |
| <b>High</b>  | 2.5 |
| <b>Continuation</b>  | 2.7 |
| <b>Alternative</b>   | 2.9 |
| <b>Source:</b> California Department of Education, Educational Demographics Office (CBEDS, sifade03 4/26/06, sifgl 7/6/06, pubschls 6/4/06) In addition to computers available for use by students, those used by staff for instructional activities are also included when counting computers at the various schools. This count is then divided by student enrollment to arrive at a students-per-computer figure. |     |

However, according to our current California Technology Survey and district records, our student to computer ratio for computers four years old or newer is 13:1. All teachers at all 26 SJUSD k-12 schools in our district have access to a minimum of one multi-media laptop computer with internet access in their classrooms as well as in their Library/Media Centers, and/or Computer Labs, before, during, and after school hours.

### *Elementary Schools*

| Allen @ Steinbeck:  |                     |
|---|---------------------|
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 151                 |
| Total # of computers* 4 years old or newer with Internet access   | 40                  |
| # of computers* in Classrooms   | 96                  |
| # of computers* in Library/media centers  | 10                  |
| # of computers* in Computer Labs  | 75                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

| Almaden:  |                     |
|---|---------------------|
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 81                  |
| Total # of computers* 4 years old or newer with Internet access   | 57                  |
| # of computers* in Classrooms   | 80                  |
| # of computers* in Library/media centers  | 7                   |
| # of computers* in Computer Labs  | 37                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|  |                     |
|--|---------------------|
| Bachrodt:  |                     |
| <b>All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:</b> |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )   | 118                 |
| Total # of computers* 4 years old or newer with Internet access  | 17                  |
| # of computers* in Classrooms  | 70                  |
| # of computers* in Library/media centers   | 28                  |
| # of computers* in Computer Labs   | 33                  |
| # Available times for Student access to computers before and after school  | 7:30–8am / 2:45–5pm |

|  |                     |
|--|---------------------|
| Booksin:   |                     |
| <b>All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:</b> |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )   | 91                  |
| Total # of computers* 4 years old or newer with Internet access  | 102                 |
| # of computers* in Classrooms  | 146                 |
| # of computers* in Library/media centers   | 7                   |
| # of computers* in Computer Labs   | 35                  |
| # Available times for Student access to computers before and after school  | 7:30–8am / 2:45–5pm |

|  |                     |
|--|---------------------|
| Canoas:  |                     |
| <b>All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:</b> |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )   | 70                  |
| Total # of computers* 4 years old or newer with Internet access  | 94                  |
| # of computers* in Classrooms  | 131                 |
| # of computers* in Library/media centers   | 5                   |
| # of computers* in Computer Labs   | 24                  |
| # Available times for Student access to computers before and after school  | 7:30–8am / 2:45–5pm |

|  |                     |
|--|---------------------|
| Carson:  |                     |
| <b>All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:</b> |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )   | 57                  |
| Total # of computers* 4 years old or newer with Internet access  | 0                   |
| # of computers* in Classrooms  | 27                  |
| # of computers* in Library/media centers   | 5                   |
| # of computers* in Computer Labs   | 20                  |
| # Available times for Student access to computers before and after school  | 7:30–8am / 2:45–5pm |

|  |     |
|--|-----|
| Anne Darling:  |     |
| <b>All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:</b> |     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )   | 240 |
| Total # of computers* 4 years old or newer with Internet access  | 15  |
| # of computers* in Classrooms  | 135 |
| # of computers* in Library/media centers   | 15  |
| # of computers* in Computer Labs   | 0   |

|   |                     |
|---|---------------------|
| # Available times for Student access to computers before and after school | 7:30–8am / 2:45–5pm |
|---|---------------------|

|   |                     |
|---|---------------------|
| Empire Gardens:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 26                  |
| Total # of computers* 4 years old or newer with Internet access   | 58                  |
| # of computers* in Classrooms   | 85                  |
| # of computers* in Library/media centers  | 3                   |
| # of computers* in Computer Labs  | 35                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Galarza:  |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 57                  |
| Total # of computers* 4 years old or newer with Internet access   | 0                   |
| # of computers* in Classrooms   | 105                 |
| # of computers* in Library/media centers  | 4                   |
| # of computers* in Computer Labs  | 31                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Gardner:  |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 144                 |
| Total # of computers* 4 years old or newer with Internet access   | 20                  |
| # of computers* in Classrooms   | 136                 |
| # of computers* in Library/media centers  | 5                   |
| # of computers* in Computer Labs  | 0                   |
| 7:30–8am / 2:45–5pm   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Grant:  |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 199                 |
| Total # of computers* 4 years old or newer with Internet access   | 89                  |
| # of computers* in Classrooms   | 152                 |
| # of computers* in Library/media centers  | 3                   |
| # of computers* in Computer Labs  | 32                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |     |
|---|-----|
| Graystone:  |     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 66  |
| Total # of computers* 4 years old or newer with Internet access   | 133 |
| # of computers* in Classrooms   | 36  |
| # of computers* in Library/media centers  | 10  |
| # of computers* in Computer Labs  | 124 |

|   |                     |
|---|---------------------|
| # Available times for Student access to computers before and after school | 7:30–8am / 2:45–5pm |
|---|---------------------|

|   |                     |
|---|---------------------|
| Hacienda:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 57                  |
| Total # of computers* 4 years old or newer with Internet access   | 125                 |
| # of computers* in Classrooms   | 101                 |
| # of computers* in Library/media centers  | 7                   |
| # of computers* in Computer Labs  | 36                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Hammer @ Galarza:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 33                  |
| Total # of computers* 4 years old or newer with Internet access   | 0                   |
| # of computers* in Classrooms   | 33                  |
| # of computers* in Library/media centers  | 0                   |
| # of computers* in Computer Labs  | 0                   |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Los Alamitos:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 90                  |
| Total # of computers* 4 years old or newer with Internet access   | 80                  |
| # of computers* in Classrooms   | 117                 |
| # of computers* in Library/media centers  | 10                  |
| # of computers* in Computer Labs  | 35                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Lowell:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 67                  |
| Total # of computers* 4 years old or newer with Internet access   | 98                  |
| # of computers* in Classrooms   | 78                  |
| # of computers* in Library/media centers  | 5                   |
| # of computers* in Computer Labs  | 38                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |     |
|---|-----|
| Horace Mann:  |     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 175 |
| Total # of computers* 4 years old or newer with Internet access   | 25  |
| # of computers* in Classrooms   | 30  |
| # of computers* in Library/media centers  | 18  |
| # of computers* in Computer Labs  | 0   |

|   |                     |
|---|---------------------|
| # Available times for Student access to computers before and after school | 7:30–8am / 2:45–5pm |
|---|---------------------|

|   |                     |
|---|---------------------|
| Olinder:  |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 79                  |
| Total # of computers* 4 years old or newer with Internet access   | 50                  |
| # of computers* in Classrooms   | 66                  |
| # of computers* in Library/media centers  | 1                   |
| # of computers* in Computer Labs  | 31                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Reed:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 73                  |
| Total # of computers* 4 years old or newer with Internet access   | 60                  |
| # of computers* in Classrooms   | 87                  |
| # of computers* in Library/media centers  | 3                   |
| # of computers* in Computer Labs  | 32                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| River Glen:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 132                 |
| Total # of computers* 4 years old or newer with Internet access   | 10                  |
| # of computers* in Classrooms   | 85                  |
| # of computers* in Library/media centers  | 8                   |
| # of computers* in Computer Labs  | 34                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Schallenberger:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 142                 |
| Total # of computers* 4 years old or newer with Internet access   | 68                  |
| # of computers* in Classrooms   | 124                 |
| # of computers* in Library/media centers  | 13                  |
| # of computers* in Computer Labs  | 32                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |     |
|---|-----|
| Simonds:  |     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 77  |
| Total # of computers* 4 years old or newer with Internet access   | 83  |
| # of computers* in Classrooms   | 115 |
| # of computers* in Library/media centers  | 5   |
| # of computers* in Computer Labs  | 40  |

|   |                     |
|---|---------------------|
| # Available times for Student access to computers before and after school | 7:30–8am / 2:45–5pm |
|---|---------------------|

|   |                     |
|---|---------------------|
| Terrell:  |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 104                 |
| Total # of computers* 4 years old or newer with Internet access   | 58                  |
| # of computers* in Classrooms   | 117                 |
| # of computers* in Library/media centers  | 5                   |
| # of computers* in Computer Labs  | 34                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Trace:  |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 114                 |
| Total # of computers* 4 years old or newer with Internet access   | 74                  |
| # of computers* in Classrooms   | 131                 |
| # of computers* in Library/media centers  | 3                   |
| # of computers* in Computer Labs  | 34                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Washington:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 263                 |
| Total # of computers* 4 years old or newer with Internet access   | 19                  |
| # of computers* in Classrooms   | 159                 |
| # of computers* in Library/media centers  | 7                   |
| # of computers* in Computer Labs  | 22                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Williams:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 152                 |
| Total # of computers* 4 years old or newer with Internet access   | 28                  |
| # of computers* in Classrooms   | 160                 |
| # of computers* in Library/media centers  | 5                   |
| # of computers* in Computer Labs  | 37                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Willow Glen:  |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 126                 |
| Total # of computers* 4 years old or newer with Internet access   | 29                  |
| # of computers* in Classrooms   | 80                  |
| # of computers* in Library/media centers  | 12                  |
| # of computers* in Computer Labs  | 34                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

**Middle Schools**

|   |                     |
|---|---------------------|
| Burnett:  |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 535                 |
| Total # of computers* 4 years old or newer with Internet access   | 23                  |
| # of computers* in Classrooms   | 80                  |
| # of computers* in Library/media centers  | 18                  |
| # of computers* in Computer Labs  | 108                 |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Castillero:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 268                 |
| Total # of computers* 4 years old or newer with Internet access   | 41                  |
| # of computers* in Classrooms   | 204                 |
| # of computers* in Library/media centers  | 36                  |
| # of computers* in Computer Labs  | 15                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Bret Harte:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 110                 |
| Total # of computers* 4 years old or newer with Internet access   | 89                  |
| # of computers* in Classrooms   | 98                  |
| # of computers* in Library/media centers  | 10                  |
| # of computers* in Computer Labs  | 64                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Hoover:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 181                 |
| Total # of computers* 4 years old or newer with Internet access   | 232                 |
| # of computers* in Classrooms   | 117                 |
| # of computers* in Library/media centers  | 15                  |
| # of computers* in Computer Labs  | 210                 |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| John Muir:  |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 919                 |
| Total # of computers* 4 years old or newer with Internet access   | 71                  |
| # of computers* in Classrooms   | 170                 |
| # of computers* in Library/media centers  | 32                  |
| # of computers* in Computer Labs  | 0                   |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| River Glen:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 132                 |
| Total # of computers* 4 years old or newer with Internet access   | 10                  |
| # of computers* in Classrooms   | 85                  |
| # of computers* in Library/media centers  | 8                   |
| # of computers* in Computer Labs  | 34                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Willow Glen:  |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 288                 |
| Total # of computers* 4 years old or newer with Internet access   | 40                  |
| # of computers* in Classrooms   | 101                 |
| # of computers* in Library/media centers  | 10                  |
| # of computers* in Computer Labs  | 97                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

**Comprehensive High Schools**

|   |                     |
|---|---------------------|
| Gunderson:  |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 1130                |
| Total # of computers* 4 years old or newer with Internet access   | 70                  |
| # of computers* in Classrooms   | 0                   |
| # of computers* in Library/media centers  | 30                  |
| # of computers* in Computer Labs  | 50                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Leland:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 245                 |
| Total # of computers* 4 years old or newer with Internet access   | 296                 |
| # of computers* in Classrooms   | 177                 |
| # of computers* in Library/media centers  | 24                  |
| # of computers* in Computer Labs  | 234                 |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Lincoln:  |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 268                 |
| Total # of computers* 4 years old or newer with Internet access   | 0                   |
| # of computers* in Classrooms   | 108                 |
| # of computers* in Library/media centers  | 70                  |
| # of computers* in Computer Labs  | 67                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|  |                     |
|--|---------------------|
| Pioneer:   |                     |
| <b>All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:</b> |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )   | 187                 |
| Total # of computers* 4 years old or newer with Internet access  | 263                 |
| # of computers* in Classrooms  | 270                 |
| # of computers* in Library/media centers   | 90                  |
| # of computers* in Computer Labs   | 60                  |
| # Available times for Student access to computers before and after school  | 7:30–8am / 2:45–5pm |

|  |                     |
|--|---------------------|
| San Jose:  |                     |
| <b>All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:</b> |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )   | 419                 |
| Total # of computers* 4 years old or newer with Internet access  | 15                  |
| # of computers* in Classrooms  | 0                   |
| # of computers* in Library/media centers   | 15                  |
| # of computers* in Computer Labs   | 128                 |
| # Available times for Student access to computers before and after school  | 7:30–8am / 2:45–5pm |

|  |                     |
|--|---------------------|
| Willow Glen:   |                     |
| <b>All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:</b> |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )   | 350                 |
| Total # of computers* 4 years old or newer with Internet access  | 0                   |
| # of computers* in Classrooms  | 90                  |
| # of computers* in Library/media centers   | 66                  |
| # of computers* in Computer Labs   | 76                  |
| # Available times for Student access to computers before and after school  | 7:30–8am / 2:45–5pm |

**Continuation High School**

|  |                     |
|--|---------------------|
| Ed Options:  |                     |
| <b>All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:</b> |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )   |                     |
| Total # of computers* 4 years old or newer with Internet access  |                     |
| # of computers* in Classrooms  |                     |
| # of computers* in Library/media centers   |                     |
| # of computers* in Computer Labs   |                     |
| # Available times for Student access to computers before and after school  | 7:30–8am / 2:45–5pm |

|  |  |
|--|--|
| Liberty:   |  |
| <b>All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:</b> |  |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )   |  |
| Total # of computers* 4 years old or newer with Internet access  |  |
| # of computers* in Classrooms  |  |
| # of computers* in Library/media centers   |  |
| # of computers* in Computer Labs   |  |

|   |                     |
|---|---------------------|
| # Available times for Student access to computers before and after school | 7:30–8am / 2:45–5pm |
|---|---------------------|

|   |                     |
|---|---------------------|
| San Jose Community Day:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  |                     |
| Total # of computers* 4 years old or newer with Internet access   |                     |
| # of computers* in Classrooms   |                     |
| # of computers* in Library/media centers  |                     |
| # of computers* in Computer Labs  |                     |
| 7:30–8am / 2:45–5pm   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Gunderson plus:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  |                     |
| Total # of computers* 4 years old or newer with Internet access   |                     |
| # of computers* in Classrooms   |                     |
| # of computers* in Library/media centers  |                     |
| # of computers* in Computer Labs  |                     |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Leland Plus:  |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 7                   |
| Total # of computers* 4 years old or newer with Internet access   | 19                  |
| # of computers* in Classrooms   | 4                   |
| # of computers* in Library/media centers  | 0                   |
| # of computers* in Computer Labs  | 21                  |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Lincoln Plus:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 3                   |
| Total # of computers* 4 years old or newer with Internet access   | 7                   |
| # of computers* in Classrooms   | 5                   |
| # of computers* in Library/media centers  | 0                   |
| # of computers* in Computer Labs  | 0                   |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|   |                     |
|---|---------------------|
| Pioneer Plus:   |                     |
| All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas: |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )  | 17                  |
| Total # of computers* 4 years old or newer with Internet access   | 0                   |
| # of computers* in Classrooms   | 16                  |
| # of computers* in Library/media centers  | 0                   |
| # of computers* in Computer Labs  | 0                   |
| # Available times for Student access to computers before and after school   | 7:30–8am / 2:45–5pm |

|  |                     |
|--|---------------------|
| San Jose Plus:   |                     |
| <b>All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:</b> |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )   |                     |
| Total # of computers* 4 years old or newer with Internet access  |                     |
| # of computers* in Classrooms  |                     |
| # of computers* in Library/media centers   |                     |
| # of computers* in Computer Labs   |                     |
| # Available times for Student access to computers before and after school  | 7:30–8am / 2:45–5pm |

|  |                     |
|--|---------------------|
| Willow Glen Plus:  |                     |
| <b>All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:</b> |                     |
| Total # of computers* 4 years old or newer ( <i>*instructional use</i> )   | 1                   |
| Total # of computers* 4 years old or newer with Internet access  | 0                   |
| # of computers* in Classrooms  | 23                  |
| # of computers* in Library/media centers   | 0                   |
| # of computers* in Computer Labs   | 0                   |
| 7:30–8am / 2:45–5pm  | 7:30–8am / 2:45–5pm |

### 3b. Current Technology Integration in Curriculum

The following data offers a snapshot of hardware /software use and typical frequency and technology / information literacy skills integrated in the curriculum in our district from the 2005-06 EdTechProfile I-assessment certificated staff survey data. Complete CUSD data is available in our district EdTechProfile I-assessment reports.

#### SJUSD District Elementary School Technology Integration

At our elementary schools, technology is being integrated primarily in the classroom in core curriculum for word processing, reinforcement and practice, online research, and creating reports or projects. (See details in charts below)

#### SJUSD District Elementary School Software Used:

Accelerated Reader, Reading Counts, Microsoft Office Suite, Internet resources, iMovie, iPhoto, iTunes, Pages, KeyNote, Macromedia, FrontPage, Dreamweaver, Expression Engine, GradeBook II, and CLRN approved curriculum based software.

| <b>How often do Elementary teachers use the following technology tools for classroom instruction.</b> | <b>Daily</b> | <b>2-4 days a week</b> | <b>Between once a week and monthly</b> | <b>Less than monthly</b> | <b>Available, but I never use it</b> | <b>Not available</b> |
|---|--------------|------------------------|--|--------------------------|--------------------------------------|----------------------|
| Computers and Peripherals (scanner, printers, etc.)   | 77%          | 13%                    | 6%                                     | 2%                       | 1%                                   | 0%                   |
| Video based presentation devices (VCR/DVD, laser disc player, LCD projector, etc.)                    | 7%           | 12%                    | 42%                                    | 24%                      | 11%                                  | 3%                   |
| Video based creation tools (video camera, digital camera, etc.)                                       | 3%           | 10%                    | 26%                                    | 26%                      | 22%                                  | 13%                  |
| Internet  | 24%          | 19%                    | 27%                                    | 17%                      | 12%                                  | 1%                   |
| Email   | 37%          | 12%                    | 8%                                     | 10%                      | 26%                                  | 7%                   |
| Hand-held electronic devices (PDA, GPS, heart monitor, etc.)  | 1%           | 3%                     | 5%                                     | 4%                       | 14%                                  | 73%                  |

| <b>How often and in what subject areas Elementary teachers use technology tools for instruction.</b> | <b>Daily</b> | <b>2-4 days a week</b> | <b>Between once a week and monthly</b> | <b>Less than monthly</b> | <b>Available, but I never use it</b> | <b>Not available</b> |
|--|--------------|------------------------|--|--------------------------|--------------------------------------|----------------------|
| Reading/Language Arts  | 23%          | 31%                    | 28%                                    | 12%                      | 3%                                   | 3%                   |
| Mathematics  | 15%          | 25%                    | 31%                                    | 14%                      | 8%                                   | 7%                   |
| Science  | 3%           | 14%                    | 31%                                    | 25%                      | 12%                                  | 15%                  |
| History/Social Science   | 2%           | 14%                    | 26%                                    | 27%                      | 15%                                  | 17%                  |
| PE/Health  | 0%           | 3%                     | 7%                                     | 17%                      | 36%                                  | 37%                  |
| Fine Arts  | 1%           | 4%                     | 11%                                    | 17%                      | 26%                                  | 41%                  |
| Business/Computer Science  | 1%           | 4%                     | 9%                                     | 5%                       | 21%                                  | 60%                  |
| Foreign Language   | 2%           | 4%                     | 3%                                     | 5%                       | 20%                                  | 66%                  |
| Home Economics   | 0%           | 0%                     | 2%                                     | 2%                       | 21%                                  | 75%                  |
| Industrial Arts  | 0%           | 0%                     | 2%                                     | 2%                       | 21%                                  | 75%                  |
| Careers  | 0%           | 0%                     | 4%                                     | 7%                       | 21%                                  | 69%                  |

| <b>In what ways and to what degree Elementary teachers use technology tools (computers, video, Internet, and hand-held devices) at their school.</b> | <b>Daily</b> | <b>2-4 days a week</b> | <b>Between once a week and monthly</b> | <b>Less than monthly</b> | <b>Never</b> |
|--|--------------|------------------------|--|--------------------------|--------------|
| Create instructional materials   | 31%          | 35%                    | 24%                                    | 7%                       | 4%           |
| Deliver classroom instruction  | 9%           | 26%                    | 29%                                    | 20%                      | 16%          |
| Manage student grades and attendance   | 73%          | 7%                     | 5%                                     | 4%                       | 10%          |
| Communicate with parents or students   | 20%          | 27%                    | 26%                                    | 10%                      | 17%          |
| Gather information for planning lessons  | 20%          | 33%                    | 32%                                    | 10%                      | 5%           |
| Access model lesson plans and best practices   | 14%          | 24%                    | 34%                                    | 20%                      | 9%           |

| To what degree do Elementary teachers use the following technology tools at your school to support and improve home/school communication? | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Never |
|---|-------|-----------------|---------------------------------|-------------------|-------|
| Voice Mail  | 6%    | 9%              | 11%                             | 9%                | 65%   |
| School web site with class related information, such as assignments, grades, upcoming events, parental information, etc.                  | 8%    | 9%              | 16%                             | 12%               | 55%   |
| Video Conferencing  | 0%    | 0%              | 1%                              | 2%                | 97%   |
| Electronic Grading System   | 9%    | 5%              | 55                              | 6%                | 75%   |
| Online Student Assessments  | 3%    | 7%              | 18%                             | 13%               | 58%   |

| Elementary Teachers have their students use technology tools (computers, video, Internet, and hand-held devices) for classroom assignments in the following locations. | Library media center | Computer Lab | Classroom or other instructional areas | My students don't use technology tools. | Total Responses |
|--|----------------------|--------------|--|---|-----------------|
| My students use technology tools in  | 19%                  | 38%          | 42%                                    | 0%                                      | 100%            |

| How often Elementary teachers require students to use technology tools for classroom assignments. | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Available, but I never use it |
|---|-------|-----------------|---------------------------------|-------------------|-------------------------------|
| Computers and peripherals (scanner, printer, etc.)  | 52%   | 22%             | 14%                             | 6%                | 2%                            |
| Internet  | 24%   | 21%             | 24%                             | 18%               | 12%                           |
| Email   | 40%   | 10%             | 8%                              | 10%               | 26%                           |
| Hand-held electronic devices (PDA, GPS, heart monitor, etc.)                                      | 2%    | 2%              | 4%                              | 4%                | 14%                           |

| How often Elementary teachers assign students in their typical classroom, work that involves using technology tools. | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Never |
|--|-------|-----------------|---------------------------------|-------------------|-------|
| Word processing  | 20%   | 22%             | 24%                             | 12%               | 16%   |
| Reinforcement and practice   | 8%    | 9%              | 22%                             | 22%               | 30%   |
| Research, using the Internet and/or CD-ROMs  | 8%    | 1%              | 3%                              | 8%                | 49%   |
| Creating reports or projects   | 1%    | 0%              | 2%                              | 3%                | 73%   |

| How often Elementary teachers assign students in their typical classroom, work that involves using technology tools. | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Never |
|--|-------|-----------------|---------------------------------|-------------------|-------|
| Demonstrations or simulations  | 4%    | 12%             | 31%                             | 21%               | 32%   |
| Correspondence with experts, authors, students from other schools, etc., via email or Internet                       | 11%   | 22%             | 28%                             | 15%               | 23%   |
| Solving problems or analyzing data   | 1%    | 10%             | 26%                             | 23%               | 40%   |
| Graphically presenting information   | 1%    | 7%              | 23%                             | 28%               | 41%   |

## San Jose Unified School District Middle School Technology Integration

At our Middle Schools, technology is primarily integrated in reading/language arts, math, and science in the classroom, library media center, and computer labs for word processing, reinforcement and practice, online research, and creating reports or projects. (See details in charts below)

### SJUSD District Middle School Software Used:

Microsoft Office Suite, Internet resources, iMovie, iPhoto, iTunes, Pages, KeyNote, Macromedia, FrontPage, Dreamweaver, Expression Engine, GradeBook II, and CLRN approved curriculum-based software.

| How often Middle School teachers use the following technology tools for classroom instruction. | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Available, but I never use it | Not available |
|--|-------|-----------------|---------------------------------|-------------------|-------------------------------|---------------|
| Computers and Peripherals (scanner, printers, etc.)  | 84%   | 9%              | 5%                              | 1%                | 0%                            | 0%            |
| Video based presentation devices (VCR/DVD, laser disc player, LCD projector, etc.)             | 12%   | 26%             | 29%                             | 21%               | 10%                           | 3%            |
| Video based creation tools (video camera, digital camera, etc.)                                | 0%    | 9%              | 24%                             | 28%               | 27%                           | 11%           |
| Internet   | 29%   | 21%             | 25%                             | 13%               | 10%                           | 1%            |
| Email  | 84%   | 9%              | 5%                              | 1%                | 0%                            | 0%            |
| Hand-held electronic devices (PDA, GPS, heart monitor, etc.)                                   | 12%   | 26%             | 29%                             | 21%               | 10%                           | 3%            |

| In what ways and to what degree Middle School teachers use technology tools (computers, video, Internet, and hand-held devices) at their school. | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Never |
|--|-------|-----------------|---------------------------------|-------------------|-------|
| Create instructional materials   | 42%   | 29%             | 18%                             | 7%                | 3%    |
| Deliver classroom instruction  | 26%   | 26%             | 23%                             | 17%               | 8%    |
| Manage student grades and attendance   | 93%   | 3%              | 1%                              | 0%                | 3%    |
| Communicate with parents or students   | 45%   | 25%             | 22%                             | 4%                | 4%    |
| Gather information for planning lessons  | 38%   | 30%             | 18%                             | 9%                | 4%    |
| Access model lesson plans and best practices   | 24%   | 22%             | 28%                             | 17%               | 9%    |

| To what degree do Middle School teachers use the following technology tools at your school to support and improve home/school communication? | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Never |
|--|-------|-----------------|---------------------------------|-------------------|-------|
| Voice Mail   | 14%   | 17%             | 16%                             | 13%               | 41%   |
| School web site with class related information, such as assignments, grades, upcoming events, parental information, etc.                     | 28%   | 11%             | 14%                             | 18%               | 29%   |
| Video Conferencing   | 0%    | 0%              | 2%                              | 6%                | 92%   |
| Electronic Grading System  | 76%   | 7%              | 7%                              | 2%                | 7%    |
| Online Student Assessments   | 10%   | 9%              | 18%                             | 17%               | 46%   |

| To what degree do Middle School teachers use the following technology tools at your school to support and improve home/school communication? | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Never |
|--|-------|-----------------|---------------------------------|-------------------|-------|
| Voice Mail   | 14%   | 17%             | 16%                             | 13%               | 41%   |
| School web site with class related information, such as assignments, grades, upcoming events, parental information, etc.                     | 28%   | 11%             | 14%                             | 18%               | 29%   |
| Video Conferencing   | 0%    | 0%              | 2%                              | 6%                | 92%   |
| Electronic Grading System  | 76%   | 7%              | 7%                              | 2%                | 7%    |
| Online Student Assessments   | 10%   | 9%              | 18%                             | 17%               | 46%   |

| Middle School Teachers have their students use technology tools (computers, video, Internet, and hand-held devices) for classroom assignments in the following locations. | Library media center | Computer Lab | Classroom or other instructional areas | My students don't use technology tools. |
|---|----------------------|--------------|--|---|
| My students use technology tools in   | 34%                  | 29%          | 37%                                    | 0%                                      |

| How often Middle School teachers require students to use technology tools for classroom assignments. | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Available, but I never use it |
|--|-------|-----------------|---------------------------------|-------------------|-------------------------------|
| Computers and peripherals (scanner, printer, etc.)   | 12%   | 15%             | 30%                             | 20%               | 19%                           |
| Internet   | 9%    | 11%             | 29%                             | 25%               | 20%                           |
| Email  | 10%   | 3%              | 11%                             | 15%               | 39%                           |
| Hand-held electronic devices (PDA, GPS, heart monitor, etc.)   | 2%    | 1%              | 4%                              | 8%                | 24%                           |

| How often Middle School teachers assign students in their typical classroom, work that involves using technology tools. | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Never |
|---|-------|-----------------|---------------------------------|-------------------|-------|
| Word processing   | 9%    | 14%             | 36%                             | 25%               | 16%   |
| Reinforcement and practice  | 10%   | 9%              | 28%                             | 22%               | 32%   |
| Research, using the Internet and/or CD-ROMs   | 6%    | 8%              | 37%                             | 28%               | 21%   |
| Creating reports or projects  | 4%    | 9%              | 35%                             | 31%               | 21%   |

| How often Middle School teachers assign students in their typical classroom, work that involves using technology tools. | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Never |
|---|-------|-----------------|---------------------------------|-------------------|-------|
| Demonstrations or simulations   | 2%    | 5%              | 24%                             | 29%               | 39%   |
| Correspondence with experts, authors, students from other schools, etc., via email or Internet                          | 2%    | 3%              | 10%                             | 24%               | 61%   |
| Solving problems or analyzing data  | 4%    | 7%              | 19%                             | 27%               | 43%   |
| Graphically presenting information  | 2%    | 4%              | 24%                             | 30%               | 40%   |

### **SJUSD District High School Technology Integration**

At our High Schools, technology is primarily integrated in reading/language, history/social science and mathematics in the classroom, library media center, and computer labs for word processing, reinforcement and practice, online research, interactive tutorials and creating reports or projects. (See details in charts below)

### **SJUSD District High School Software Used:**

Microsoft Office Suite, Internet resources, including: netTrekker, United Streaming, Discovering Collection, Reference Center Gold, Infotrac Student Edition, Online Encyclopedias, career software, iMovie, Macromedia, FrontPage, Dreamweaver, Freedom web publishing software, GradeBook II and Parent Viewer, and CLRN approved curriculum based software

| How often High School teachers use the following technology tools for classroom instruction. | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Available, but I never use it | Not available |
|--|-------|-----------------|---------------------------------|-------------------|-------------------------------|---------------|
| Computers and Peripherals (scanner, printers, etc.)  | 86%   | 9%              | 3%                              | 1%                | 1%                            | 0%            |
| Video based presentation devices (VCR/DVD, laser disc player, LCD projector, etc.)           | 20%   | 23%             | 30%                             | 16%               | 7%                            | 4%            |
| Video based creation tools (video camera, digital camera, etc.)                              | 11%   | 8%              | 18%                             | 21%               | 24%                           | 18%           |
| Internet   | 43%   | 20%             | 17%                             | 11%               | 8%                            | 1%            |
| Email  | 46%   | 15%             | 12%                             | 12%               | 13%                           | 2%            |
| Hand-held electronic devices (PDA, GPS, heart monitor, etc.)                                 | 6%    | 5%              | 9%                              | 8%                | 12%                           | 59%           |

| How often and in what subject areas High School teachers use technology tools for instruction. | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Available, but I never use it | Not available |
|--|-------|-----------------|---------------------------------|-------------------|-------------------------------|---------------|
| Reading/Language Arts  | 16%   | 9%              | 11%                             | 3%                | 4%                            | 57%           |
| Mathematics  | 9%    | 8%              | 6%                              | 4%                | 6%                            | 67%           |
| Science  | 9%    | 7%              | 5%                              | 2%                | 7%                            | 71%           |
| History/Social Science   | 11%   | 7%              | 8%                              | 2%                | 5%                            | 66%           |
| PE/Health  | 5%    | 2%              | 2%                              | 2%                | 6%                            | 83%           |
| Fine Arts  | 10%   | 3%              | 7%                              | 2%                | 7%                            | 73%           |
| Business/Computer Science  | 3%    | 1%              | 3%                              | 1%                | 7%                            | 85%           |
| Foreign Language   | 5%    | 4%              | 4%                              | 4%                | 6%                            | 77%           |
| Home Economics   | 1%    | 0%              | 2%                              | 1%                | 7%                            | 88%           |
| Industrial Arts  | 3%    | 0%              | 2%                              | 2%                | 7%                            | 86%           |
| Careers  | 5%    | 2%              | 4%                              | 5%                | 6%                            | 78%           |

| In what ways and to what degree High School teachers use technology tools (computers, video, Internet, and hand-held devices) at their school. | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Never |
|--|-------|-----------------|---------------------------------|-------------------|-------|
| Create instructional materials   | 50%   | 29%             | 15%                             | 4%                | 2%    |
| Deliver classroom instruction  | 31%   | 31%             | 19%                             | 10%               | 9%    |
| Manage student grades and attendance   | 93%   | 4%              | 2%                              | 0%                | 0%    |
| Communicate with parents or students   | 49%   | 26%             | 21%                             | 3%                | 1%    |
| Gather information for planning lessons  | 47%   | 31%             | 15%                             | 6%                | 2%    |
| Access model lesson plans and best practices   | 30%   | 24%             | 25%                             | 16%               | 5%    |

| To what degree do High School teachers use the following technology tools at your school to support and improve home/school communication? | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Never |
|--|-------|-----------------|---------------------------------|-------------------|-------|
| Voice Mail   | 23%   | 21%             | 24%                             | 13%               | 19%   |
| School web site with class related information, such as assignments, grades, upcoming events, parental information, etc.                   | 44%   | 19%             | 15%                             | 10%               | 12%   |
| Video Conferencing   | 2%    | 1%              | 4%                              | 5%                | 89%   |
| Electronic Grading System  | 87%   | 6%              | 5%                              | 1%                | 2%    |
| Online Student Assessments   | 21%   | 10%             | 20%                             | 11%               | 38%   |

| High School Teachers have their students use technology tools (computers, video, Internet, and hand-held devices) for classroom assignments in the following locations. | Library media center | Computer Lab | Classroom or other instructional areas | My students don't use technology tools. |
|---|----------------------|--------------|--|---|
| My students use technology tools in:  | 38%                  | 31%          | 31%                                    | 0%                                      |

| How often High School teachers require students to use technology tools for classroom assignments. | Daily | 2-4 days a week | Between once a week and monthly | Less than monthly | Available, but I never use it |
|--|-------|-----------------|---------------------------------|-------------------|-------------------------------|
| Computers and peripherals (scanner, printer, etc.)   | 23%   | 18%             | 25%                             | 20%               | 9%                            |
| Internet   | 18%   | 18%             | 24%                             | 21%               | 13%                           |
| Email  | 20%   | 11%             | 18%                             | 21%               | 22%                           |
| Hand-held electronic devices (PDA, GPS, heart monitor, etc.)                                       | 6%    | 4%              | 5%                              | 9%                | 17%                           |
| Word processing  | 17%   | 21%             | 32%                             | 19%               | 11%                           |
| Reinforcement and practice   | 18%   | 16%             | 27%                             | 18%               | 22%                           |
| Research, using the Internet and/or CD-ROMs  | 10%   | 18%             | 35%                             | 23%               | 14%                           |
| Creating reports or projects   | 11%   | 11%             | 40%                             | 26%               | 13%                           |
| Demonstrations or simulations  | 8%    | 12%             | 26%                             | 26%               | 28%                           |
| Correspondence with experts, authors, students from other schools, etc., via email or Internet     | 4%    | 7%              | 16%                             | 27%               | 45%                           |
| Solving problems or analyzing data   | 8%    | 13%             | 25%                             | 24%               | 30%                           |
| Graphically presenting information   | 6%    | 12%             | 26%                             | 25%               | 31%                           |

**Summary of the district’s curricular goals and academic content standards as spelled out in various district and site comprehensive planning documents**

San Jose Unified School District has established clear curricular goals tied to the academic content standards monitored by various district and site-based assessment systems, and referenced in comprehensive planning documents and efforts. The common underlying purpose of all our district improvement plans is to improve student achievement of the state content standards.

Our 2005-06 student achievement data indicates that our rigorous academic goals and objectives, aligned to both the content and cognition levels identified in the California Adopted Academic Content Standards and Frameworks, are having a positive impact at our schools. (See Student Achievement data next page)

**Progress on the Academic Performance Index (API) 2005-06 Reporting Cycle**

**LEA:** San Jose Unified School District

**County:** Santa Clara

*Data Resource:*

[http://ayp.cde.ca.gov/reports/APIBase2006/2006APR\\_Dst\\_AYP\\_Report.aspx?allcde=4369666](http://ayp.cde.ca.gov/reports/APIBase2006/2006APR_Dst_AYP_Report.aspx?allcde=4369666)

## 2006 AYP Criteria Summary

Our district met most of the 2006 Adequate Yearly Progress (AYP) Criteria: 45 of its 46 AYP Criteria

### *AYP components*

Participation rate  
Percent proficient (AMOs)

API as additional indicator  
Graduation rate

### *Met 2006 AYP criteria*

Yes  
No (English-Language Arts)  
Yes (Mathematics)  
Yes  
Yes

## Annual Measurable Objectives (AMOs) 2006-07

### DISTRICT PERCENT PROFICIENT

|   | English - Language Arts        |                       | Mathematics                    |                       |
|---|--------------------------------|-----------------------|--------------------------------|-----------------------|
|   | Percent At or Above Proficient | Met 2006 AYP Criteria | Percent At or Above Proficient | Met 2006 AYP Criteria |
| <b>LEA-wide</b>   | 51.1                           | Yes                   | 55.0                           | Yes                   |
| <b>African American or Black (not of Hispanic origin)</b> | 42.9                           | Yes                   | 42.1                           | Yes                   |
| <b>American Indian or Alaska Native</b>                   | 51.5                           | Yes                   | 52.3                           | Yes                   |
| <b>Asian</b>  | 83.0                           | Yes                   | 87.7                           | Yes                   |
| <b>Filipino</b>   | 62.5                           | Yes                   | 65.4                           | Yes                   |
| <b>Hispanic or Latino</b>                                 | 30.8                           | Yes                   | 37.4                           | Yes                   |
| <b>Pacific Islander</b>                                   | 50.0                           | Yes                   | 55.5                           | Yes                   |
| <b>White (not of Hispanic origin)</b>                     | 72.7                           | Yes                   | 72.0                           | Yes                   |
| <b>Socio-economically Disadvantaged</b>                   | 28.0                           | Yes                   | 36.1                           | Yes                   |
| <b>English Learners</b>                                   | 22.9                           | No                    | 35.3                           | Yes                   |
| <b>Students with Disabilities</b>                         | 23.0                           | Yes                   | 24.9                           | Yes                   |

Data Resource: [http://ayp.cde.ca.gov/reports/APIBase2006/2006APR\\_Dst\\_AYP\\_Report.aspx?allcds=4369666](http://ayp.cde.ca.gov/reports/APIBase2006/2006APR_Dst_AYP_Report.aspx?allcds=4369666)

### THE FUTURE

Technology must be used to enable students to enhance their learning, for the changing world in which they now live and the ever-changing world in which they will live in the future.

We must transform all formal institutions of learning, from pre-K through college, to insure that we are preparing students for their future, not for our past. Schools that ignore the trends shaping tomorrow will cease to be relevant in the lives of their students, and will quickly disappear (Thornburg, 1998, p. A17). Technologies continue to converge. Specialized devices of the past are being integrated into small handheld units that serve a multitude of tasks. This is the world in which children will be educated. However, it would be misguided to believe that the ever-changing world will not change even more rapidly in the future, than it has in the recent past.

The workplace of adults has changed markedly with the introduction of the microcomputer and related information technologies. Likewise, the workplace of students, which is the school, must reflect similar technological changes. In the business of education, teachers must strive to make students active educational “workers” and prepare them for lifelong learning in a world of change. Technology is a major part of that world. Students must not be placed in jeopardy by not having opportunities to use the tools of our time and their future.

## **Vision and Rationale: Technology goals and objectives for enhancing student achievement and learning**

These objectives are derived from the San Jose Unified School District Strategic Plan, SJUSD Curriculum and Content Standards, SJUSD Lifelong Learning Standards.

The San Jose Unified School District Technology Plan has two main goals:

- To enhance student achievement and learning by engaging students in curriculum-integrated technology use that is rich in standards, thinking, and application of skills**
- To use technology to support increased performance on the California Student Assessment Program, CAHSEE, and school report cards**

The goals are divided into sub-goals that further define each goal. Following are nine objectives, which are the action items needed to accomplish the goals.

### **Objective 1: Enhance student achievement and learning by engaging students in curriculum-integrated technology use that is rich in standards, thinking, and application of skills.**

In these days of high accountability and high-stakes testing where students are required to think and apply prior knowledge in problem solving, the use of technology is more important than ever. Technological tools provide students the capability to learn and apply knowledge and skills in ways that parallel what is being required.

Technology enhances student learning. Research has shown technology is best used to facilitate students’ critical thinking, collaboration, and meaning construction. In addition, research shows technology encourages a positive attitude toward learning, heightens motivation, and increases student attendance. However, to realize these benefits, technology must be available where students are, in sufficient quantity, for them to use to do work. This requires a model where technology is interconnected with access to resources outside the boundaries of the classroom. Such technology provides students and staffs the opportunity to access, sort, communicate, apply, and synthesize information and knowledge.

The International Society for Technology in Education (ISTE) suggests, in the National Educational Technology Standards (NETS), that: the most effective learning environments meld traditional approaches and [active-student-as-knowledge-worker approaches] to facilitate

learning of relevant content while addressing individual needs. The resulting learning environments should prepare students to:

- Communicate using a variety of formats**
- Access and exchange information in a variety of ways**
- Compile, organize, analyze, [validate] and synthesize information**
- Draw conclusions and make generalizations based on information gathered**
- Use information and select appropriate tools to solve problems**
- Know content and be able to locate additional information as needed**
- Become self-directed learners**
- Collaborate and cooperate in team efforts**
- Interact with others in ethical and appropriate ways (ISTE, 1998, p. 2)**

These active learning environments represent a shift from traditional ones. Without melding these environments and integrating technology, our students will not perform well on today's high-stakes tests or have the skills they need to be successful throughout their lives.

### **Traditional learning (knowledge networking) environments student achievement and learning rationale**

Teacher-centered instruction    Active student-centered learning    Single sense stimulation  
Multisensory stimulation    Single path progression    Multipath progression    Single media  
Multimedia    Isolated work    Collaborative work    Information delivery    Information exchange  
Passive learning    Active, exploratory, inquiry-based learning    Factual, knowledge-based    Critical thinking and informed decision-making    Reactive response    Proactive/planned action    Isolated, artificial context    Authentic, real-world context (ISTE, 1998, p. 2)

#### **1.1 Embed content standards and proficiencies into learning with technology as a tool.**

Using technology to help students learn and process content provides rich learning opportunities. Content standards must be embedded into instruction, learning, and assessment utilizing technological tools, while focusing on higher level learning processes.

A student whose use of technology occurs in his/her classroom on a regular basis, and is used to solve meaningful problems will be more technologically fluent than a student whose use of technology is limited to special projects in a computer lab setting. Students must have not only classroom access to technology, but they must also have meaningful tasks that require the daily use of technology. "Technological fluency is a step beyond technological literacy. To be fluent in technology use means that we can sit down at a computer and use it as easily as we can pick up and read a book in our native language" (Thornburg, 1998, p. A17). To acquire that level of fluency, students must view technology as a tool that is regularly used and available for learning.

#### **1.2 Ensure the use of technology in all content areas.**

Technology is a powerful tool for integrated learning in all curricular areas. As students are provided with regular access to technology, the district must ensure that access is guaranteed across all content areas. Putting the right tools in the right places for the right jobs means using a variety of technologies based on content area and student groups. San Jose Unified must ensure that appropriate integrated technology is available for all and that technology use goes beyond the computer.

Technology must be available in a critical mass to be an effective tool for learning and productivity. Although technology is changing and evolving, computers will remain the core technology used in classrooms. Other supporting technologies, including printers and display devices, must be readily available to support student achievement and technological objectives

### **1.3 Explore new ways for students to learn using technology.**

With new technologies, comes the ability to access, organize, and communicate information in ways that weren't even possible a few short years ago. These technologies may necessitate a change in teaching and learning. Daniel Burrus states that the change we hate is the change we did not see coming that affects us personally (November, 1999). The district must prepare for the changing opportunities technology provides for students and teachers.

Solutions, which include hardware, software, model curriculum, and professional development, are effective tools for infusing technology into instruction and curriculum. However, solutions should be selected carefully to help meet the district and the individual school's student learning goals. Additionally, solutions must be developed and implemented in all curricular areas for all learners.

Careful consideration must go into the placement of solutions. Solutions must be placed in classrooms where teachers are ready to integrate technology into their daily teaching activities. As a result, solutions should be "To prepare students to be active members of the community and productive members of the work-force, classrooms in all regions of the country and in all communities must be equipped to provide children with stimulating, technology-supported educational environments (CEO Forum, 1997, Appendix)." implemented and built upon over time so that as teachers become ready to use technology, they will have the tools necessary to do so. Professional development is a necessary component of a solution. To be effective, teachers must understand how to use and integrate new hardware and software into the curriculum.

### **1.4 Engage students in active learning environments, facilitated by the use of technology that applies to the real world.**

The term technology is often considered synonymous with computers. However, many information and communication technologies can be utilized to accomplish student-learning goals. Putting the right tools in the right places for the right jobs means using a variety of technologies. The district needs to look beyond the use of computers to find other technologies that will meet student achievement objectives

In addition to mastering the basic skills of reading, writing, and arithmetic, every student, to be prepared for the world in which he lives, must master the three C's:

- Communication
- Collaboration
- Creative problem solving (Thornburg, 1998, p. A16)

Technology should be integrated to support curricular goals of increased student achievement and learning. It is critical that the focus on integration is on how to use technology to teach and learn the curriculum. Technology integration can be accomplished through a variety of district committees and programs:

- ❑ All district curriculum reviews must consider how technology can support curricular goals as well as how the curriculum should change because of available technologies.
- ❑ Instruction must be grounded in standards and the recognition that students learn differently. Therefore, it is advantageous to individualize learning opportunities so that every student will gain the knowledge and skills embedded in the standards. Technology can support the individualization instruction for the attainment of standards.
- ❑ The Teaching, Learning, and Technology Specialists and District Curriculum Coordinators must work closely together to integrate technology, plan professional development opportunities, and review curriculum. The CEO Forum (1999, p. 11) states, "by combining the best of traditional learning with the unprecedented information and resources made available through technology, teachers can better prepare their students to succeed."
- ❑ All professional development opportunities throughout the district should include training on how technology can be integrated into content. Teachers must learn to teach with technology, not just about technology.

### **1.5 Ensure San Jose unified school district students are technologically and informationally fluent.**

"Technological fluency is a step beyond technological literacy. To be fluent in technology use means that we can sit down at a computer and use it as easily as we can pick up and read a book in our native language" (Thornburg, 1998, p. A17). Technological fluency is now a standard expected of San Jose Unified students when they graduate. The Congressional Institute for the Future says that of the fifty-four jobs with the highest growth potential by 2005, only eight do not require techno fluency. None of the eight pays more than twice the minimum wage (CEO Forum, 1999).

In addition to technological fluency, students must also be informationally fluent. In recent years, there has been exponential growth in information. It cannot be assumed that just because students can access the Internet and other electronic resources that they know what to

do with the information when they get it. Students need to understand and use the six A's of information fluency:

- Ask the right questions
- Access information
- Analyze information
- Authenticate information
- Apply information
- Assess what's going on (Jukes, 1999)

Because of the ease of information access, it is now more critical than ever that students have regular practice with the six A's so that information fluency becomes natural and happens automatically.

### **1.6 Develop students into lifelong learners.**

Estimates indicate that students will have between 10 and 14 career changes in their lifetime. These changes are not just job changes, but Goal 1: Enhance Student Achievement and Learning "In the earliest part of the 21<sup>st</sup> century, we're going to view those people who are media illiterate, informationally illiterate, technologically illiterate, the same way that we view people in 1999 who cannot read or write the printed word." (Jukes, 1999, Online) complete career switches. The importance of job security is quickly being replaced by employment security, so employees must be able to adapt and learn as changes occur.

Never has life-long learning been so important to students. Increasingly, students must be taught how to learn. Information changes so quickly that not all the knowledge needed to complete a task or do a job can be known. In the past, all educational content was relevant to students when they entered the workforce. This assumption is no longer valid. Instead, students must have basic skills in reading, writing, and numeracy, and be able to apply these skills to the process of learning and problem solving. This change will guarantee students will have what they need when they enter higher education or the workforce. Students must be able to learn new skills, access specific content, and then apply skills to putting knowledge to work.

A strong back, the willingness to work, and a high school diploma were once all that was needed to make a start in America. They are no longer. A well-developed mind, a passion to learn, and the ability to put knowledge to work are the new keys to the future of our young people, the success of our businesses, and the economic well-being of the nation (SCANS, 1991, p.1).

### **1.7 Prepare students for their future in a technological world.**

"We are preparing students for jobs that don't exist yet, using technology that hasn't been invented yet, solving problems that we haven't thought of yet." (Jukes, 1999, Online) The Secretary of Commerce, Larry Irving, estimates that 60% of the jobs available at the beginning

of this century require skills held by only 20% of the workforce (CEO Forum, 1999). This discrepancy occurs because few people have the technology skills necessary for a technologically advanced workforce.

“Nobody today can avoid technology; it has penetrated every aspect of life from home to the job. Those unable to use it face a lifetime of menial work” (SCANS, 1991, p. 15). These facts indicate that careful thought must go into how students are educated for their future. They must be technologically and informationally fluent and prepared to learn for a lifetime when they leave San Jose Unified Schools in order to be successful throughout their lives.

## **Objective 2: Use technology to support increased performance on the California Student Assessment Test (CASHEE) and school report cards**

### **STUDENT ACHIEVEMENT AND LEARNING RATIONALE**

Technology serves many roles to support increased performance on (CASHEE) tests. It is a tool to help teachers teach and to help students learn and practice the skills that are assessed. It provides a mechanism for students to practice test-taking skills and to facilitate teachers’ sharing of strategies and resources. Technology is not the panacea; instead, it is a contributor to new and existing strategies that will support increased performance on (CASHEE). Specifically, technology helps teachers differentiate, remediate, and/or extend instruction; assess student learning; and increase student motivation, engagement, and interest.

Whatever the role of technology, professional development is the key to ensuring that technology is properly integrated for the maximum impact. A study conducted by Harold Wenglinsky of Educational Testing Service examined the role technology played on the National Assessment of Educational Progress (NAEP) tests. Wenglinsky found that teachers’ professional development in technology and the use of computers to teach higher-order thinking skills were both positively related to academic achievement in mathematics on standardized tests. In fact, for eighth-graders, both professional development and computer use for higher-order thinking skills were associated with more than a one-third of a grade level increase. The same study showed that the use of computers to teach lower-order thinking skills was negatively related to academic achievement (Wenglinsky, 1998).

An enhanced student-learning environment where multiple technology uses are applied will not happen by only providing a critical mass of hardware and software. “The transformation of classroom technology from hardware, software, and connections into tools for teaching and learning depends on knowledgeable and enthusiastic teachers who are motivated and prepared to put technology to work on behalf of their students” (CEO Forum, 1999, p.5). Ongoing professional development is an absolute necessity. A recent research study conducted by Harold Wenglinsky of Educational Testing Service showed that technology, when used appropriately, can have a positive impact on student achievement. District Technology Plan, Technology Goals and Objectives. However, inappropriate use of technology can have a negative effect on achievement. As a result, Wenglinsky recommends that policy makers ensure teachers are properly trained in the most appropriate instructional methods for use with technology

(Wenglinsky, 1998). In a well-documented research project (Apple Classrooms of Tomorrow [ACOT], 1991), teachers and students were immersed in a technology-rich environment. A high level of support and professional development was provided for the participants. Even in this environment, researchers found that teachers' implementation of technology in classrooms went through several stages over several years. Researchers termed these stages "The Evolution of Thought and Practice" (Dwyer, 1991).

- Entry Establishing order, learning software, and hardware
- Adoption Using technology to support familiar teaching methods
- Adaptation Increasing productivity and technology use
- Appropriation Technology becoming a natural tool that students use and upon which teachers depend
- Innovation Using technology to build new learning environments

## **2.1 Integrate technology with curriculum to teach and reinforce CASHEE skills**

Technology can be integrated with the curriculum to teach and reinforce CASHEE skills. For example, students are required to create an outline during the prewriting stage of the writing test. There is software available that can support this process by allowing students to create concept maps on the computer and then transform that map into an outline.

Students are also asked to correct mechanical errors in text, which can be practiced using other available software. In math, students are asked to write convincing arguments about their solutions to problems. Technology can support this skill by allowing students to engage in collaborative simulations where they write convincing arguments about results obtained through the simulation. (See Appendix B for specific examples.)

## **2.2 Use technology to assess student learning and inform instruction**

Technology can be used to inform instruction at every stage of the learning process. It can be used to assess students at the beginning of the year or when new students enter the district in order to determine where instruction should begin. It can also be used throughout the learning process to assess students' attainment of skills. Technology is ideal in either situation because it provides teachers with immediate feedback and summary data about the learning of an individual as well as groups of students. Programs can be purchased to do this, and/or expertise and resources within the district can be used to create tools to assess skills. The programs that support this allow students to answer questions on the computer and provide the students with immediate feedback telling them which questions were correct, which ones were wrong, and the correct answer. Later, the teacher can retrieve the students' records either individually or as a whole class. Either way, the teacher can then use the information to guide instruction, addressing the strengths and weaknesses of the students.

With the effective use of networks, online learning communities can be established that allow teachers to tap into expertise outside of their immediate geographical learning community. In a learning community, teachers are engaged in applying effective teaching methods and tools to help all students improve learning. Because the focus is on student learning and not on one

specific method or theory, learning communities allow for the integration of many professional development strands into one process.

### **2.3 Integrate technology into SJUSD professional development.**

Professional development is the key to integrating technology into the curriculum. Technology must be an integral part and an essential tool at all grade level and subject level professional development so teachers understand how technology can be used as a tool to support skills and goals. To provide ongoing support, Student Achievement Specialists must continue to plan individually with teachers to develop lessons that use technology to support student achievement.

All of these stages exist in San Jose Unified Schools, but the goal must be to help teachers move as quickly as possible to the innovation stage where technology is used most effectively. “Teachers’ integration of the use of technology into the curricula is a major determinant of technology’s contribution to student learning, once access to computers is provided (U.S. Department of Education, 1999, p. 68).” To make this integration happen, San Jose Unified must continue with an aggressive, structured, ongoing professional development program situated in classrooms. Strong professional development is the key to ensuring success.

The U.S. Department of Education (1996, Online) states, “at least 30 percent [of the overall technology budget] is necessary for teachers to have the training and support they need to use technology effectively to improve student achievement.” The importance of professional development demands that San Jose Unified Schools maintain funding at this level.

#### **Provide staffing at all levels to adequately support professional development.**

##### **Student Achievement Specialist**

The Instructional Technology Resource Teacher (ITRT) provides ongoing, onsite support for technology integration by using a variety of strategies with teachers and providing them an assortment of opportunities to learn about technology integration. A major role of the ITRT is to plan technologically infused instruction with teachers. This approach should allow teachers to collaborate with their peers and develop lessons and strategies for use together. All professional development must ensure that teachers have time to evaluate and revise current instructional strategies as they integrate new technological strategies into their classroom. Because this process takes time and is ongoing, it is critical that the Instructional Technology Resource Teacher works closely with teachers to continually assess and support their needs.

The ITRT should be staffed by a licensed teacher at a minimum ratio of one full-time Instructional Technology Resource Teacher for every 5,500 students. All schools should be staffed at a minimum of a .5 FTE. Many small schools do not have the resources to support that level of staffing, therefore, the district must provide a minimum level of staffing. The ITRT must be available to meet professional development needs within the district during the regular school day. Therefore, his/her ITRT time must remain flexible. In order to maximize

the Instructional Technology Resource Teacher's time and expertise, the school or district's technician should handle technical support, troubleshooting, and network issues.

### **Instructional Technology Resource Teacher**

Instructional Technology Resource Teacher (ITRS) provides consultative services to school sites, thereby focusing technology use on student learning. The ITRS supports the Instructional Technology Resource Teacher in training teachers how to integrate technology into the classroom curriculum based on researched best practices. He/She also helps the schools develop and infuse effective short and long-term technology goals into the school improvement plans. The ITRS works closely with curriculum coordinators to integrate technology, plan professional development opportunities, and review curriculum. Additionally, these specialists assist in the evaluation of technology at the site level, as well as evaluating the direction and effectiveness of the district technology plan.

Instructional Technology Resource Teacher must make sure they “use instructional methods to promote learning for adults which mirror the methods to be used with students (Loucks-Horsley, et al, 1996).” Technology Support Specialist. It is important to have regular on-site technical support to ensure technology is available for classroom use. The Instructional Technology Resource Teacher (ITRS) is responsible for setting up and upgrading computers and technology, installing software, configuring technology for network use, administering servers, troubleshooting problems, and coordinating repairs with the district level technician.

Currently, Instructional Technology Resource Teachers are spending time troubleshooting equipment, keeping networks running, and providing technical support. They are serving as expensive technicians and can more cost-effectively be used as educational technology leaders and professional developers.

A non-certified, full-time Technology Support Coordinator (TSC) should be staffed at a minimum ratio of one for every 500 students. This person's salary should be aligned to the Staff Support salary schedule and based on the individual's qualifications.

### **2.4 Facilitate the online sharing of successful strategies, lessons, and resources.**

The district intranet and extranet can support sharing of strategies, lessons, and resources that teachers have developed. Many curriculum coordinators and teachers are creating effective strategies for improving CASHEE scores; however, they don't always have a way to share those strategies across the district. A moderated area on the intranet and/or extranet can be established to facilitate this sharing. Teachers must be encouraged to add resources they developed and seek out additional strategies to increase student performance.

## **2.5 Leverage technology to provide practice cashee tests and test taking skills.**

Many programs are available and others are being developed that have sample CASHEE tests. Students can practice taking CASHEE sample tests and gain experience on the format of the test and the questions before they actually take the test. Technology can be used to administer these tests instead of taking up valuable teacher time for this task. While some students are working on a computer practicing test-taking skills, the teacher can be working with smaller groups on the development of content specific skills.

## **2.6 Develop online cashee skill development modules and classes for students.**

Technology can support online CASHEE skill development modules and classes. These modules/ classes offer teachers the ability to individualize instruction based on available data and student needs. The modules/ classes must be highly interactive and motivating for students. By using technology and multimedia, CASHEE skills can be taught and practiced in a manner that actively engages students in content. Students would be able to access these modules/ classes from school or home. This model may be especially beneficial in moving students from the proficient to the advanced category.

### **OBJECTIVE 3: Extend media centers electronically throughout the school to support increased student achievement and learning.**

#### **STUDENT ACHIEVEMENT AND LEARNING RATIONALE**

Historically, libraries have been the repositories for information resources in schools. As technology becomes more prevalent, the role of the school media center is changing. By providing students and staff access to current information in a variety of media formats including digital, technology is transforming the media center. The media center of tomorrow is not just a physical place where students and teachers go to search for information, but also consists of electronic information connected worldwide. Although digital information will not completely replace printed material, students and staff need greater access to digital resources in and from our libraries. Because networked digital information is accessible from any desktop, the media center can be extended to the classroom, to an online news service across the country, or to another school halfway around the world. With this pervasive information access, students must be informationally literate, be able to evaluate information critically and competently, and use information accurately and creatively (American Library Association [ALA], 1998).

#### **3.1 Provide media centers with electronic resources students and teachers can access up-to-date curricular information both in the media center and throughout the school.**

Each school's media center should provide access to a variety of electronic information resources including those online. Access to library holdings, electronic information resources, online databases, and like resources should be available through the network to each desktop in the building. Home access to databases should be made available whenever possible. Additionally, there should be sufficient computer access throughout the building to access the electronic resources provided by the media center. Objective 3: Extend Media Centers electronically throughout the School "Library programs should be funded to have adequate

professional and support staff, information resources, and information technology. Such conditions are necessary if not sufficient alone to generate higher levels of academic achievement (Lance, 2000).”

#### **OBJECTIVE 4: Expand the electronic culture in the district to reinforce connected learning communities**

An electronic culture utilizes electronic tools, connects the tools through networks, integrates functions to eliminate duplication of effort, and provides as many services online as possible. An electronic culture allows the communication of information and access to resources, both inside and outside the district. Networks connecting computers together provide the heart of such an electronic culture. Harasim (1990) identifies a number of advantages shared by network systems. They free the learner from the constraints of geographic location and time. They also encourage collaboration and active participation on the part of learners by allowing students and teachers to collaborate with others.

When electronic communication becomes the expected norm and permeates an organization, productivity and cost-effectiveness increases. John Kao of Stanford University (1996, p.6) recognizes one of the most exciting outcomes of an electronic culture. He states, “Creativity increases exponentially with the diversity and divergence of those connected to a network.” San Jose Unified should capitalize on the potential of an electronic culture.

##### **4.1 Facilitate instruction and collaboration among students and staff through the use of email**

Email is an efficient and powerful communication tool that allows information to be delivered directly to the user. This information delivery system leverages time for staff.

As the use of networks expands the walls of the classrooms, students must have the opportunity to communicate in this new world. Students need to be able to exchange ideas with adults and peers. The National Educational Technology Standards for Students (2006, p.43) state that students “move away from reliance on textbooks to the use of multimedia or online information (digital content) offers many advantages, including cost savings, increased efficiency, improved accessibility, and enhancing learning opportunities in a format that engages today’s web-savvy students.”

##### **4.2 Engage teachers and staff in online collaboration and sharing of instructional and learning resources.**

A wealth of instructional and curricular ideas resides in our teachers. Additionally, many quality ideas for instruction exist on networked resources outside the district. Sharing of expertise online will strengthen curriculum and instruction across the district. Such shared teaching resources will also be of great benefit to teachers new to the district.

#### **4.3 Integrate management functions to make student records available online to teachers' desktops and parents' home computers**

Making student records available online enables schools and teachers to have access to vital information. Ready access to student data with the ability to manipulate it in various ways (for example into a student profile) can assist greatly in defining students' strengths and needs, informing instruction, and making strategic building and classroom decisions. Providing parents online access to student information such as attendance and grades allows parents to monitor their child's progress. Keeping parents informed, at a time and place that is convenient to them, can strengthen the role of the parents in their child's education.

#### **4.4 Place all important district documents and forms online for ready access**

Placing district documents and forms online makes them widely available throughout the district. Additionally, online documents are easily and readily accessible. Expand the Electronic Culture in the District affordably updated. All forms should be standardized in format and placed online for easy access.

#### **4.5 Complete the installation of video networks in all**

Schools, including monitors in all classrooms. A standardized video network is necessary to be able to communicate over a video WAN. All elementary and most high school video networks were installed as a part of the previous technology plan.

#### **4.6 Establish a video wide area network in the district**

A video WAN would allow teachers and students to share resources and expertise across the district while eliminating the problems of travel and distance. The video WAN can be used for professional development by connecting teachers with professional developers. In order to prepare for a video WAN, the district must complete the installation of standardized monitors in all schools.

#### **4.7 Establish a partnership with our cable television provider for use of a public access channel**

Having a public access channel would provide the district with direct access into the homes of parents and community. Video programming could be cablecast throughout the community to educate and inform parents and community members.

#### **4.8 Position San Jose Unified Schools as a provider of electronic learning services.**

District resources can provide technology training for the business community and parents, online learning for students and staff, and services to pre- schoolers, home schoolers, private schools, and other school districts. Establishing San Jose Unified School District as an electronic learning provider can create a revenue stream.

## **OBJECTIVE 5: Student achievement and learning rationale**

In recent years, online learning opportunities for K-12 and higher education have expanded. In fact, many colleges and universities are teaching classes and entire degree programs online. With this trend in higher education and the expansion of online classes into K-12 education, education will not be confined to a school, classroom, teacher, or time.

San Jose Unified School District must be proactive in developing, implementing, and assessing high-quality, interactive courses to ensure that San Jose Unified students receive a quality education online. These courses must be aligned to state standards and district proficiencies, and must be approved by the executive directors. In addition, online education has to be connected to the student's school of attendance so that classes taken online are part of the student's educational program. By providing online learning opportunities for students to access at home or school, San Jose Unified can leverage technology to adapt teaching and learning to our student's individual needs.

### **5.1 Craft online courses for students to enhance student achievement and learning**

Online courses for students can expand learning opportunities by providing access to courses that may not be available in a student's school of attendance. They also provide students with more flexibility in scheduling, allowing them to pursue a variety of academic interests. By providing online learning opportunities for students to access at home or school, San Jose Unified can leverage technology to adapt teaching and learning to our student's individual needs.

The district should start by offering a maximum of five online courses for high school students in the first year of offerings and then increase that by five additional courses per year as needed. Online courses should be expanded as the need arises.

### **5.2 Train teachers in online education principles**

Teaching online is a different experience than classroom teaching. Online instructors must be trained in new pedagogy and techniques appropriate to the online environment. In addition, instructors must be well versed in technology and course content, and connect personally with students. Professional development to prepare teachers for an online learning and teaching environment must be provided to ensure a successful online learning program.

Before they teach their first course, teachers need engagement in an extensive professional development program for one year. During that year, teachers should be developing the instructional and technological aspects of their course. Teachers developing and/or teaching an online course need to be provided with .20 FTE to plan.

## **5.2 Staff appropriate positions to support online learning environments**

Online learning demands different staffing than traditional learning environments. Appropriate staffing must be provided to ensure program effectiveness.

Teachers are needed to plan and teach online courses. Since there will be an initial increase in the amount of time it takes to plan for and teach quality online courses, teachers need to be provided extra time to develop and implement courses. Once teachers gain new skills and practice in teaching in an online environment, the time requirements to plan and teach should return to that of a traditional classroom.

A site coordinator is critical to the success of students in an online program. The site coordinator may be the only person students have face-to-face interaction with during the course.

## **5.4 Provide tools to support online learning environments.**

Staff must have access to necessary hardware and software to teach courses, and students must have access to necessary hardware and software to take courses. Although the tools may vary by course, availability and cost need to be considered when developing new courses. Additionally, hardware and software must be in place at the district level to house these courses.

Students' home access may become a limiting factor in online learning. Examining ways to help students access the technology they need to work on online classes outside of the school day is needed.

## **5.5 Expand course offering to students outside of our district**

Since online courses remove the limitations of time and place, San Jose Unified should expand course offerings to students outside of the district as a way to generate revenue.

**OBJECTIVE 6: Employ supporting strategies for effective technology use and integration**  
Teachers, students, and administrators using technology for instruction, learning, and productivity must have current, well maintained technology and ready access to technical support. Maximizing the district's investment in hardware, software, and professional development requires supporting strategies.

## **6.1 Enhance systematic district-level technology support for technology**

While a good part of day-to-day technical support can come from the building Technical Support Coordinator (see key strategy 2.3), district level support is needed to assist with software, hardware, and network repairs, which are beyond the expertise of the building Technical Support Coordinator.

San Jose Unified uses a team approach to district level technical support. A team consists of a Network Specialist, three Computer Support Specialists, and a Help Desk person. The following district-level technical support needs continued funding:

The Help Desk is the first line of support for the building Technical Support Specialist. The staff at the Help Desk should be familiar with instructional software and hardware to answer instructional technology questions. The Help Desk should maintain a database of reported problems and solutions in order to facilitate solving problems as they arise. If the problem cannot be solved at the Help Desk, it is referred to the district support team.

District-level technical support personnel should be available to troubleshoot and repair problems that cannot be solved in the building or through the Help Desk. As with the Help Desk, they should understand instructional uses of technology in order to determine how to prioritize problems.

The district-level technical support people need ongoing training to ensure they are proficient at troubleshooting, maintaining, and repairing hardware, operating systems, software, servers, networks, and solving other advanced technical problems. They also need to be able to train the building Technical Support Coordinator on basic troubleshooting and repairs.

In addition, a repair tracking system needs to be in place to track the status of repair on any particular technology item.

## **6.2 Upgrade existing networks to handle and facilitate growth of the district's electronic culture**

Advances in technology have resulted in increased bandwidth speeds, which allow more information to be communicated over networks. Resources such as curriculum guides, forms, calendars, lesson plans, and online professional development and learning are being added to network servers on a regular basis. More applications in the district are requiring access over our local area and wide area networks. This is especially true as the trend for Web enabled applications continues. Access to this information must be ready, convenient, and reliable. San Jose Unified School District must proactively upgrade existing local area and wide area

networks to accommodate new technologies and the use of networked resources, communications, and an electronic culture. Upgrades cannot wait until the networks are saturated and performance declines or becomes erratic.

### **6.3 Replacement plan for updating aging hardware and software**

San Jose Unified has a systematic replacement plan to account for aging technology. The current funding structure ensures that new technology is purchased and placed in classrooms yearly.

### **6.4 Repurpose older, less powerful hardware to a place where it will be used effectively**

Until aging technologies become inoperable, they still have a purpose in the appropriate setting. Therefore, these technologies need to be placed where their uses can be maximized. The tendency to move older computers from a lab setting into the classroom and place newer, more powerful computers in the lab is not always advisable. Students need to have ready access to the correct tool for the job. If computers that are more capable are in large computer labs, student access on a timely basis can be limited.

San Jose Unified School District utilizes a variety of budgets and funding sources to acquire technology. Hardware tends to become “owned” by the particular site, department, or entity from whose budget it was purchased. When technology resources sit idle because they no longer meet needs, the technology needs to be repurposed. Technology should be relocated around the district to meet needs without cost to the receiving school, department, or entity.

### **6.5 Install electrical circuits necessary to support the technology infrastructure.**

As technology is implemented, the proper electrical circuitry needs to be in place to make the technology usable. This cost must be considered as new technology is installed. Schools should consider this as a part of building budgets and capital reserve requests.

### **6.6 Apply standards for software, hardware, and networking acquisitions.**

Standardization of software and hardware can make training, technical support, and hardware repair and replacement more cost-effective. Standardization is especially important when linking schools by wide-area voice, video, and data networks. Standardization of productivity software also facilitates communication in an electronic culture. As Web-enabled applications become more prevalent, they should be adopted. District Technology Plan, Technology Goals and Objectives Standards shall be applied to the following areas:

- Productivity software (integrated packages, word processors, spreadsheets, databases)
- Networks and network-related hardware (servers, network management software)
- Workstation hardware configurations
- Vendor/brands of hardware

- Server hardware and software configurations
- Network protocols on local area networks
- Specifications for local area networks
- Donated equipment and gifts

These standards will be maintained and communicated by Information Systems and developed in partnership with the Office of Technology and the Purchasing Department. They will be published and distributed annually and will be revised as changes in technology warrant. Recommendations for changes in, additions to, or deletions from, established standards should be considered on a periodic basis. The district has made a commitment to providing support for all approved acquisitions. Many vendors of administrative and large enterprise software solutions now comply with standards that ensure applications for administrative educational use are able to pass data back and forth in a seamless manner. Any future applications purchased in the district should take this into consideration, unless it is impossible to find a compliant application to meet a particular need.

#### **6.7 Avoid accepting donations of older hardware and technology systems.**

Many times businesses and corporations want to donate obsolete technology to schools. Since the equipment is often outdated and of little use, the cost of bringing the equipment up to operating standards is more than the equipment is worth. San Jose Unified students need the power and use afforded by up-to-date equipment. Before accepting donated equipment, schools and departments should consult with the Office of Technology. Hardware not meeting district standards and approval will not be serviced or supported: Employ Supporting Strategies for Effective Technology Use.

#### **OBJECTIVE 7: Provide ongoing funding for technology that is adequate, equitable, and stable.**

The evolving nature of technology makes stable funding essential. For technology to be effective in enhancing student achievement, all students and staff must have access to current technologies, and all staff must be trained in the use of these technologies. In addition, like other capital investments, technology requires maintenance, support, and replacement over time.

San Jose Unified School Board Policy supports adequate, stable funding for technology. “The Board believes that the annual capital reserve budget (after insurance fund contribution) should include specific allocations for technology to provide equitable, ongoing funding for building and district long range planning. In addition, the Board encourages the involvement of the San Jose Unified Foundation in sponsoring pilot projects for technology and believes that future budget and bond initiatives should include provisions for technology expenditures.”

#### **7.1 Fund technology use from appropriate long-term, shorter-term, and operating budgets**

When funding technology, life expectancy and life cycle must be considered. Certain types of technologies lend themselves to funding from long-term investments. These include technology and resources with a longer life such as wide area networks, local area networks, video networks, phones, electronic mail, and voice mail. Others, because of life span, are better funded from shorter-term dollars. These include technologies such as computers, VCRs, camcorders, monitors, display devices, and storage devices

### **7.2 Use a partnership model to cooperatively fund technology from centralized and decentralized budgets**

Certain technology resources are appropriately provided at the district level to ensure continuity, connectivity, articulation, and cost-effectiveness. These resources include district-wide vision, articulation, planning, and professional development as well as networks, hardware repair, and price negotiations. Other resources are more appropriately provided at the site level. These resources include additional site staffing, release time for professional development directed to site goals, and program evaluation. Therefore, a partnership of funding is necessary to support the educational technology needs of the district.

### **7.3 Continue to furnish substantial per pupil funding for technology from regular district budgets.**

Per pupil funding assures that resources reach the site level where they, with direction from the district, can be applied to student achievement. However, many small elementary schools cannot keep pace with technology needs because per pupil funding does not provide adequate resources. These schools cannot establish a critical mass of technology or replace out-of-date hardware fast enough to keep pace with larger schools. Because of this problem, a minimum level of funding for small schools must be maintained.

### **7.4 Technology support should be funded from operating budgets. This support includes professional development, and staffing, as well as technical support and repair, software maintenance, and ongoing fees**

## **OBJECTIVE 8: Evaluate and assess the value added of technology use in the district to ensure its application to enhance student achievement and learning through researched best practices**

San Jose Unified School District has made a substantial investment in educational technology and must ensure that all technology is used to effectively enhance student achievement and add value to the educational experience. However, evaluating the impact of technology on student achievement is not a simple matter. Many factors impact student achievement. As with the use of all devices, materials and curriculum, instructional effectiveness depends on how they are used. The diversity of technology further complicates assessment. As a result, schools are caught in the struggle of trying to isolate the innovation in order to show its effect on student achievement and learning.

Examining the impact of technology on student achievement and learning should not be limited to improved test scores, but instead examine the value the technology use brings to the educational experience. Research shows technology encourages a positive attitude toward learning and motivation and decreases student attendance problems. These factors must also be examined when evaluating the effectiveness of technology in enhancing student achievement and learning.

While the pressure continues to develop answers about how technologies may contribute to student learning, there has been increasing recognition that technology is a crucial player in a more complex process of change that cannot be accomplished by technological fixes alone. As a result, researchers are increasingly asking questions about how technology is integrated into educational settings; how new electronic resources were interpreted and adapted by their users; how best to match technological capacities with students' learning needs; and how technological change can interact with and support changes in many other parts of the educational process, such as assessment, administration, communication, and curriculum development (Honey, McMillian Culp, and Carrigg, 1999, p. 3). The real evaluation of the effectiveness of technology in enhancing student achievement and learning will come from the site level. The district must provide guidelines and assistance on educationally valid evaluation procedures.

### **8.1 Conduct technology evaluations to compare current school and district technology use with best practice research directed toward student achievement**

Technology evaluations are conducted on an on going basis. We will then use current research about best practice as a standard for comparison of educational technology use. As we continue in our evaluations, uses of equipment not reflecting best practice will be adjusted.

### **8.2 Provide training and tools for staff to effectively assess and evaluate technology use at the site level**

Site staff should be provided the tools and the professional development needed to make assessment a part of technology implementation.

### **8.3 Capitalize on evaluations conducted by other educational organizations, and actively participate in local, regional, state and national technology organizations and projects**

Research and evaluations of the effectiveness of technology on student achievement already exist. San Jose Unified should not waste time and money reinventing valid, reliable research findings. Research can play an important role in providing educational practitioners with concrete suggestions on why and how to use technology with their students.

In addition, participating in existing technology organizations and projects allows San Jose Unified to leverage our resources and expertise.

## **Objective 9: Evaluate and Assess the Value Added of Technology**

Use Implementing this vision for technology requires time. A phased implementation is necessary to ensure success. The chart indicates the approximate time line for implementing the goals of the technology plan. Because this is a continuation of the previous technology plan, many goals are already in place and ongoing

Our school board adopts key goals annually. These goals, which are tied to and support, the adopted state approved content standards in all academic areas. These key goals support the LEA plan on the district level. Each of our schools ties its site-based curricular goals directly to the district's LEA Plan and school board's key goals in site-based comprehensive school plans and School Accountability Report Cards (SARC).

Based on our student data, federal and state mandates, and research-based best practices, our district's current key curricular goals are:

- ❑ All schools in the district will meet or exceed the NCLB Annual Measurable Objectives (AMO's) for student proficiency, including all ethnic/racial, socio-economically disadvantaged and students with disabilities subgroups with the state content standards in English / Language Arts and Math. By 2010-2011, all students in the district will be proficient or better with English/Language Arts and Math grade level content standards.
- ❑ All schools in the district will meet or exceed the state's Annual Performance Index (API) growth target as well as the API growth targets for each numerically significant ethnic/racial, socio-economically disadvantaged and students with disabilities subgroups at the school.
- ❑ By 2011-12, all students will be taught by highly qualified teachers.
- ❑ The district will work with site administration to collect and analyze school and student data and develop continuous cycles and plans for school improvement including: improving curriculum, improving instruction, improving student support & intervention, improving the monitoring of student achievement, and improving home/ school/ and community partnerships.
- ❑ All students will be educated in learning environments that are safe, drug-free, conducive to learning and conducive to building student's internal and external resources.

These district goals and corresponding specific measurable objectives that support them can be found in the following district and site comprehensive planning documents.

Our state adopted academic standards, curriculum, pacing guides, assessments, interventions and professional development plans are articulated in our District Curriculum and Assessment Plan that is updated and modified each year. A copy of this guide is provided to each principal and teacher at the specified grade level(s) annually.

The San Jose Unified School District's *Goals 2020 - Strategic Plan* represents a working document to guide the improvement of student achievement and the quality of instruction for all students. The Strategic Plan includes measurable district strategies that call for: integrating state

standards and assessment; improving teaching and learning; providing high quality professional development; providing equitable access to digital age skills and technology; nurturing linkages among district schools, parents, families, and communities; providing governance, funding, evaluation, and accountability.

To meet the District's Strategic Plan goals and objectives, each school site develops a *School Accountability Report Card* (SARC) that targets specific achievement goals for their school, with an action plan and evaluation component to measure success. Beginning with the 2007-2008 planning cycle, each school site included a technology component in their SARC that identifies the site's focus in relation to technology integration, implementation, and professional development.

Other district and site comprehensive planning documents and data that establish and/ or guide our standards-based curriculum include:

- The district adopted State Content Standards for K-12.
- The district LEA plans.
- No Child Left Behind compliance / implementation documentation.
- CDE and Federal district wide school achievement data from annual AYP, API, and STAR results.
- The CDE's Academic Performance Survey (APS) and District Assessment Survey (DAS)
- The CDE's state board approved K-12 content standards.
- The District's Master Plan for English Language Learners (ELL) describes the policies for identifying, assessing, and reporting students who have a primary language other than English. This ELL Master Plan provides details on the reclassification procedure and the English Language Development and instructional programs to be provided for ELL students to assist them in meeting and/or exceeding district content standards and graduation requirements.
- The District's Gifted and Talented (GATE) Plan provides challenging curriculum and instruction to gifted and talented students capable of achieving significantly beyond the level of their peers. The GATE plan supports the provision of services that are integrated into the regular school day as differentiated learning experiences that are based on the core curriculum.
- The Policy and Procedures handbook which details the District's philosophy and goals, and policy and procedures regarding students, instruction, promotion and retention, equity, administration, personnel, community relations, business, and much more.
- Site-based SARC, WASC and CCR self-study reviews and actions plans. School Improvement Program (SIP), categorical programs, Intermediate Intervention/Underperforming Schools Program (II/UPS), and other program goals, which vary from site to site
- Our district Educational Technology Plan

### **Curricular Driven Technology Goals and Implementation Plans, Benchmarks, Timelines, Monitoring, and Evaluation**

All of the Curriculum Component Criteria elements are included in the curricular driven action plan charts in the Component 3 pages that follow. Our curricular driven technology plans include

clear, specific, realistic goals and measurable objectives that will support our district's curriculum goals and student achievement of the state approved content standards.

Here is a summary of our goals. The details can be found in the charts that follow.

**To Improve Teaching and Learning**

**Goal 1:** Our K-12 schools will use technology to support the district curricular goal of ALL students attaining proficiency or better with ELA content standards by the 2013-14 school year.

**Goal 2:** Our K-12 schools will use technology to support the district curricular goal of ALL students attaining proficiency or better with Math content standards by the 2013-14 school year.

**For Student Acquisition of Technology and Information Literacy Skills**

**Goal 3:** All district students will acquire the National Education Technology grade level standards for students (NETS) to support achievement of the academic standards in the classroom, district curricular goals, and ultimately for lifelong learning and success in our digital society.

**For Appropriate Access to Technology for All Students**

**Goal 4:** All district students will have equal access to technology to support achievement of the academic standards in the classroom, district curricular goals, and ultimately for lifelong learning and success in our digital society.

**To Make Student Record Keeping & Assessment More Efficient and Useful**

**Goal 5:** Our district will support district and site use of technology to improve student achievement data collection, analysis, reporting, and research/ data driven decision-making.

**To Make Teachers and Administrators More Accessible to Parents.**

**Goal 6:** Our district and schools will use technology to improve two-way communication betw

## District Technology Action Plan July 1, 2007 – June 30, 2012

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| <b>Goal 1 - District Curriculum Goal Supported by Technology - E/LA &amp; Technology</b>   |
| Our k-12 schools will use technology to support the district curricular goal of ALL students attaining proficiency or better with ELA content standards by the 2011-12 school year.<br><b>Target Group:</b> All students including special education, English Learner, and GATE students.  |
| <b>Specific Measurable Objective by June 30, 2012</b>  |
| <b>Objective: 1a:</b> By the 2011-12 school year, A minimum of <b>75%</b> of all students (grades 2-11) will score proficient or above on the English-Language Arts portions of the STAR: CST test by 2011-2012 school year supported by state and district approved instructional resources, technology-based supplemental resources, professional development, student achievement data analysis, and collaboration time.<br><b>Annual Benchmarks -</b><br><b>Year 1: minimum of 50%</b> in the 2007-08 school year <b>Year 3: minimum of 60%</b> in the 2009-10 school year<br><b>Year 2: minimum of 55%</b> in the 2008-09 school year <b>Year 4: minimum of 70%</b> in the 2010-11 school year<br><b>Year 5: minimum of 75%</b> in the 2011-12 school year.   |
| <b>Evaluation Instrument(s) &amp; Data</b>   |
| <b>Instruments:</b> Quarterly Grade level assessments; Annual STAR/CST test results in English/Language Arts; CAHSEE<br><b>Data:</b> Percentage scoring proficient or above<br><br><b>Instrument:</b> Grade/subject level district professional development and collaboration meeting times / agendas / participation records and outcomes.<br><b>Data:</b> % of teachers participating: Calibrated and articulated standards-aligned Grade/subject level objectives and assessments across the district and standardized list of District supported research based programs and practices.<br><br><b>Instrument:</b> Ongoing Classroom Observations by site admin./ principal aligned to teachers' evaluation schedule<br><b>Data:</b> Teachers' use of standards-aligned learning objectives, instructional and intervention time, research based programs, practices and arrangements.<br><br><b>Instrument:</b> Annual Site Academic Software Survey:<br><b>Data:</b> Curriculum-based state and district approved software and productivity software being used at each site.<br><br><b>Instrument:</b> Annual CTAP-squared I-assessment:<br><b>Data:</b> teacher's self assessed technology and integration skills<br><br><b>Data reviewers</b><br>District curriculum, data, and technology administrators and school admins. will analyze annually in late August / September after state releases data. |

| Goal 1: Objective: 1a - E/LA & Technology Implementation Action Steps  | Use of Technology   |
|--|---|
| 1. Annually, purchase and ensure state adopted instructional materials (k-8 ), standards-aligned textbooks (9-12) and supplemental curriculum-based technology resources (adopted and/ or CLRN approved) are being used in the classroom.  | Adopted Text Supplemental Tech resources including publisher software and websites.   |
| 2. Annually, provide professional development on adopted curriculum and technology resources (such as AB 466 E/LA for teachers, AB 75 training for site admins.)   | CLRN and district approved curriculum software such as, <i>Accelerated Reader, Cognitive Tutor, Vantage, Criterion, Larsons Mathematics, Reading Counts, iMovie, iPhoto, iTunes, Keynote, Pages, Garage Band, Macromedia, Dreamweaver, GradeBook II, Edusoft.</i> |
| 3. Beginning in fall 2007 and every year thereafter, provide systematic professional development and collaboration time for site administration and teachers to align standards-based instruction and quarterly assessments horizontally and vertically through grade levels in the district, review data, | Microsoft Office and other productivity   |

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| learn and share best practices including the use of technology.  | software.<br><br>Online resources including netTrekker, United Streaming, Criterion, CyberHigh, Vantage Learning<br><br>Peripherals such as LCD projectors, digital cameras, video cameras, and printers. |  |
| 4. By fall 2007, design and distribute an annual site academic software usage survey.  |   |  |
| 5. By fall 2007, create and distribute a matrix of CLRN approved E/LA curriculum and intervention software that is supported by the district.  |   |  |
| 6. Beginning in the fall 2007 and annually thereafter, provide professional development on district/ CLRN approved curriculum software and online resources as needed. Track usage with annual software survey.  |   |  |
| 7. Continue to leverage funding to increase access to technology resources, hardware, and peripherals for students and teachers.   |   |  |
| 8. Continue to provide CTAP Online Technology productivity and integration training as needed.   |   |  |
| 9. Continue to monitor instructional time for adopted program (k-8) and standards-aligned text (9-12).   |   |  |
| 10. Continue to monitor targeted intervention time aligned with adopted program (k-8) and standards-aligned text (9-12). Targeting the lowest performing students.   |   |  |
| 11. By June 2008, fully credentialed <i>Highly Qualified Teachers</i> in all classrooms.   |   |  |
| 12. Ongoing district support and professional development opportunities on the integration of E/LA skills and standards across the curriculum including in career tech courses.  |   |  |
| <b>Monitoring</b>  |   |  |
| District curriculum, data, and technology administrators and school site administrators track the development and implementation of all activities and accomplishments monthly and report progress at our monthly district/ site admin meetings. Modifications to our district activities will be made as needed in order to insure that we meet or exceed this measurable objective.  |   |  |
| <b>Timeline:</b> Most of the aforementioned actions are already underway annually in the district at all grade levels and will continue to be planned for and implemented after annual data driven needs assessments and data analyses take place for each school, annually no later than October 1.   |   |  |
| <b>Person(s) responsible:</b> District admins, the District Instructional Technology Manager, the District Curriculum Director, the District Testing and Assessment Director, the District Technology Director, school site admins, and site media specialists/mentors are responsible for the planning, development, implementation, and evaluation of all the aforementioned activities. Site administrators and teachers are responsible for completing all necessary professional development, ensuring student instruction is based on standards-aligned objectives, and research based programs, practices and arrangements. |   |  |

## District Technology Action Plan July 1, 2007 – June 30, 2012

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| <b>Goal 2- District Curriculum Goal Supported by Technology – Math &amp; Technology</b>  |
| Our k-12 schools will use technology to support the district curricular goal of ALL students attaining proficiency or better with Math content standards by the 2011-12 school year.<br><b>Target Group:</b> All students including special education, English Learner, and GATE students.   |
| <b>Specific Measurable Objective by June 30, 2011</b>  |
| <b>Objective: 2a:</b> By the 2011-12 school year, a minimum of 75% of all SJUSD students (grades 2-11) will score proficient or above on the Math portions of the STAR: CST test by 2011-2012 school year supported by state and district approved instructional resources, technology-based supplemental resources, professional development, student achievement data analysis, and collaboration time.<br><b>Year 1: minimum of 50%</b> in the 2007-08 school year <b>Year 3: minimum of 60%</b> in the 2009-10 school year |

**Year 2: minimum of 55%** in the 2009-10 school year      **Year 4: minimum of 70%** in the 2010-11 school year  
**Year 5: minimum of 75%** in the 2011-12 school year.

**Evaluation Instrument(s) & Data**

**Instruments:** Quarterly Grade level assessments; Annual STAR/CST test results in Math; CAHSEE  
**Data:** Percentage scoring proficient or above with the content standards.

**Instrument:** Ongoing Classroom Observations by site admin./ principal aligned to teachers’ evaluation schedule  
**Data:** Teachers’ use of standards-aligned learning objectives, instructional and intervention time, research based programs, practices and arrangements.

**Instrument:** Annual Site Academic Software Survey:  
**Data:** Curriculum-based state and district approved software and productivity software being used.

**Instrument:** Annual CTAP-squared I-assessment:  
**Data:** teachers’ self assessed technology and integration skills

**Data reviewers**  
District curriculum, data, and technology administrators and school admins. will analyze annually in late August / September after state releases data.

| <b>Goal 2: Objective: 2a - Math &amp; Technology Implementation Action Steps</b>   | <b>Use of Technology</b>   |
|--|--|
| 1. Annually, purchase and ensure state adopted instructional materials (k-8), standards-aligned <i>textbooks (9-12)</i> and supplemental curriculum-based technology resources (adopted and/ or CLRN approved) are being used in the classroom.  | Adopted Text Supplemental Tech resources including publisher software and websites.<br><br>CLRN and district approved curriculum software such as, <i>Accelerated Reader, Cognitive Tutor, Vantage, Criterion, Larsons Mathematics, Reading Counts, iMovie, iPhoto, iTunes, Keynote, Pages, Garage Band, Macromedia, Dreamweaver, GradeBook II, Edusoft.</i> |
| 2. Annually, provide professional development on adopted curriculum and technology resources ( <i>such as AB 466 Math for teachers, AB 75 training for site admins.</i> )  |  |
| 3. Annually, provide systematic professional development and collaboration time for site administration and teachers to align standards-based instruction and quarterly assessments horizontally and vertically through grade levels in the district, review data, learn and share best practices including the use of technology. | Microsoft Office and other productivity software.<br><br>Online resources including netTrekker, United Streaming, Criterion, CyberHigh, Vantage Learning   |
| 4. By fall 2007, design and distribute an annual site academic software usage survey.  | Peripherals such as LCD projectors, digital cameras, video cameras, and printers.  |
| 5. By fall 2007, create and distribute a matrix of CLRN approved Math curriculum and intervention software and online resources that is supported by the district. Track usage with annual survey.   |  |
| 6. Annually provide professional development on district/ CLRN approved curriculum software and  |  |

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| online resources as needed.   |  |
| 7. Continue to leverage funding to increase access to technology resources, hardware, and peripherals for students and teachers.  |  |
| 8. Continue to provide CTAP Online Technology productivity and integration training as needed.  |  |
| 9. Continue to monitor instructional time for adopted program (k-8) and standards-aligned text (9-12).  |  |
| 10. Continue to monitor targeted intervention time aligned with adopted program (k-8) and standards-aligned text (9-12), targeting the lowest performing students.  |  |
| 11. By June 2008, fully credentialed <i>Highly Qualified Teachers</i> in all classrooms.  |  |
| <b>Monitoring</b>   |  |
| District curriculum, data, and technology administrators and school site administrators track the development and implementation of all activities and accomplishments monthly and report progress at our monthly district/site admin meetings. Modifications to our district activities will be made as needed in order to insure that we meet or exceed this measurable objective.  |  |
| <b>Timeline:</b> The aforementioned actions are already underway annually in the district and will continue to be planned for and implemented after annual data driven needs assessments take place for each school annually no later than October 1.   |  |
| <b>Person(s) responsible:</b> District admins, the District Instructional Technology Manager, the District Curriculum Director, the District Testing and Assessment Director, the District Technology Director, school site admins, and District Curriculum Specialists, are responsible for completing all necessary professional development, ensuring student instruction is based on standards-aligned objectives, and research based programs, practices and arrangements. |  |

### District Technology Action Plan July 1, 2007 – June 30, 2012

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| <b>Goal 3 - District Technology Skills and Information Literacy Goal</b>  |
| All students in our district will acquire the National Education Technology grade level student profile standards (NETS) to support achievement of the academic standards in the classroom, district curricular goals, and ultimately for lifelong learning and success in our digital society.<br><b>Target Group:</b> All students including special education, English Learner, and GATE students.   |
| <b>Specific Measurable Objective by June 30, 2012</b>   |
| <b>Objective: 3a</b> - All students (grades k-12) will pass the NETS based grade band technology assessments by 2011-2012 school year. Teachers will learn to integrate the student NETS skills in their academic curriculum assignments. Students will learn the NETS skills (including technology productivity tools and information literacy) as appropriate, during their curricular assignments. Teachers and students will be held accountable through end of year NETS exit assessments/ portfolios (k-2, 3-5, 6-8) and the high school graduation computer competency assessment (for 9-12).<br>The Six <u>NETS</u> Strands each have scaffolded grade level (Pre K – 2, 3 – 5, 6 – 8, 9 – 12) specific standards and performance indicators. <ol style="list-style-type: none"> <li>1. Basic operations and concepts</li> <li>2. Social, ethical, and human issues</li> <li>3. Technology productivity tools</li> <li>4. Technology communications tools</li> <li>5. Technology research tools (Information Literacy)</li> <li>6. Technology problem-solving and decision-making tools</li> </ol> <b>Year 1: minimum of 50%</b> in the 2008-08 school year <b>Year 3: minimum of 90%</b> in the 2009-10 school year<br><b>Year 2: minimum of 85%</b> in the 2009-10 school year <b>Year 4: minimum of 95%</b> in the 2010-11 school year<br><b>Year 5: minimum of 100%</b> in the 2011-12 school year. |

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| <b>Evaluation Instrument(s) &amp; Data</b>  |
| <p><b>Instrument</b> Annual Standardized District NETS based Grade level Exit assessment/ survey based on student profile NETS standards which include technology skills and information literacy.; Annual High school graduation computer competency assessment:<br/> <b>Data:</b> Percentage passing assessment</p> <p><b>Instrument:</b> Annual CTAP-squared I-assessment<br/> <b>Data:</b> teachers' self assessed technology and integration skills</p> <p><b>Data reviewers</b><br/> District Technology Director, school site admins., and school site tech coordinators will analyze end of school year results annually in June.</p> |

| <b>Goal 3: Objective: 3a - Technology Skills &amp; Information Literacy</b>   | <b>Use of Technology</b>  |
|---|---|
| <b>Implementation Action Steps</b>  |   |
| 1. By fall 2007, adopt grade level NETS based standards for k-12 student technology skills and information literacy.  | Adopted Text Supplemental Tech resources including publisher software and websites.   |
| 2. Beginning in the fall 2007 and annually thereafter, provide Professional Development opportunities (from the District, CTAP Online, and CTAP Region 2) to K-12 teachers on integrating the student NETS grade level skills and standards in their curriculum. Provide incentives for PD completion.  | CLRN and district approved curriculum software such as, <i>Accelerated Reader, Cognitive Tutor, Vantage, Criterion, Larsons Mathematics, Reading Counts, iMovie, iPhoto, iTunes, Keynote, Pages, Garage Band, Macromedia, Dreamweaver, GradeBook II, Edusoft.</i> |
| 3. By fall 2007, Students will begin systematically learning the NETS skills including technology productivity tools and information literacy, as appropriate, during curricular assignments.   | Microsoft Office and other productivity software.<br><br>Online resources including netTrekker, United Streaming, Criterion, CyberHigh, Vantage Learning  |
| 4. By spring 2008, design and begin administering annually the standards-aligned grade span NETS based exit assessments / portfolios for grades 2, 5, and 8.  |   |
| 5. By spring 2008, align and revise High School Computer Competency exit exam with NETS based standards for grades 9-12 and begin administering annually  | Peripherals such as LCD projectors, digital cameras, video cameras, and printers.<br><br>CTAP Online Professional Development   |
| <b>Monitoring</b>   |   |
| District curriculum, data, and technology administrators and school site administrators track the development and implementation of all activities and accomplishments monthly and report progress at our monthly district/site admin meetings. Modifications to our district activities will be made as needed in order to insure that we meet or exceed this measurable objective.  |   |
| <b>Timeline:</b> The timeline for the aforementioned actions are included in the Action Steps listed above.   |   |
| <b>Person(s) responsible:</b> District admins, the District Instructional Technology Manager, the District Curriculum Director, the District Testing and Assessment Director, the District Technology Director, school site admins, and site media specialists/mentors are responsible for the planning, development, implementation, and evaluation of all the aforementioned activities. Site administrators and teachers are responsible for completing all necessary professional development, ensuring student instruction is based on standards-aligned objectives, and research based programs, practices and arrangements.. |   |

**District Technology Action Plan July 1, 2007 – June 30, 2012**

**Goal 4 - District Goal for Appropriate Access to Technology**

All students in our district will have equal access to technology to support achievement of the academic standards in the classroom, district curricular goals, and ultimately for lifelong learning and success in our digital society.

**Target Group:** All students including special education, English Learner, and GATE students.

**Specific Measurable Objective by June 30, 2012**

**Objective: 4a** – By June 30, 2012 our district average student to computer ratio will be 2.5 to 1 or better. (CDE defined up to date multimedia computer four years old or newer as per annual California School Technology data and district records).

**Year 1: minimum of 50%** in the 2007-08 school year    **Year 3: minimum of 90%** in the 2009-10 school year  
**Year 2: minimum of 85%** in the 2008-09 school year    **Year 4: minimum of 95%** in the 2010-11 school year  
**Year 5: minimum of 100%** in the 2011-12 school year.

All students will have access to technology to support achievement of the academic standards in the classroom, district curricular goals, and ultimately for success in the workplace including special education, English Learner, and GATE students. The technology goals and objectives for these student sub groups are the same as for all other students (see Goal 3) although the programs and methods for achieving the objective may be adapted to best meet their needs. Students with an active Individualized Education Program will have appropriate access to technology hardware, peripherals, and software including assistive technology as deemed appropriate and defined by the IEP site team and the students’ IEP goals. English Learners will have appropriate access to technology hardware, peripherals, and software needed to support their English language acquisition as well as their achievement of the academic standards. Students identified as Gifted and Talented (GATE) will have appropriate access to technology hardware, peripherals, and software needed to support their advanced curriculum.

**Evaluation Instrument(s) & Data**

**Instrument:** Annual CBEDS:

**Data:** average student to computer ratio by school and district wide

**Instrument:** Annual California Online Tech Survey:

**Data:** average student to computer ratio by school.

**Instrument:** Annual District Supplemental Tech needs and service survey including IEP, EL, and GATE program directors and educators in the district:

**Data:** Technology Accessibility to all students including special technology needs (IEP, EL, and GATE) and feedback on new district communication and collaboration strategies.

**Data reviewers**

District Technology Director, school site admins., and school site tech coordinators will analyze end of school year results annually in June.

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|--|---|
| <p>1. Annually leverage technology funding and grants to provide new computers and Computers for Classrooms to provide like new refurbished computers to schools and teachers participating in district Ed Tech professional development and to district schools with the highest student to computer ratio (as space permits).</p>  | <p>Adopted Text Supplemental Tech resources including publisher software and websites.</p>  |
| <p>2. Annually in the spring, systematic supplemental survey and review of school technology hardware and software accessibility and inventories including adaptive equipment, EL support software, and GATE technology resources from evaluation surveys. Data is used to develop a matrix of site technology obsolescence, purchase, installation priorities and schedules.</p>  | <p>CLRN and district approved curriculum software such as, <i>Accelerated Reader, Cognitive Tutor, Vantage, Criterion, Larson's Mathematics, Reading Counts, iMovie, iPhoto, iTunes, Keynote, Pages, Garage Band, Macromedia, Dreamweaver, GradeBook II, Edusoft.</i></p> |
| <p>3. Annually install new computers and remove outdated computers at sites on a rotating schedule during designated breaks in the school year.</p>  | <p>Microsoft Office and other productivity software.</p>  |
| <p>4. Beginning in the 2007-08 school year, conduct ongoing research on creative space saving solutions for desktop computers, thin clients, and wireless laptop carts. Report all findings to site administration at monthly meetings.</p>  | <p>Online resources including netTrekker, United Streaming, Criterion, CyberHigh, Vantage Learning</p>  |
| <p>5. Beginning in the 2007-08 school year, cultivate ongoing two-way communication between district Special Education program directors and educators, site administrators, and the district Tech Director (via e-mail/phone) and meet annually to determine appropriate technology access and assistive technology needs of IEP students.</p>  | <p>Peripherals such as LCD projectors, digital cameras, video cameras, and printers.</p>  |
| <p>6. Beginning in the 2007-08 school year, cultivate ongoing two-way communication between district English Learner program directors and educators, site administrators, and the district Tech Director (via e-mail/phone) and meet annually to determine appropriate access to technology hardware and software needed to support EL students' English language acquisition as well as their achievement of the academic standards.</p> |   |
| <p>7. Beginning in the 2007-08 school year, cultivate ongoing two-way communication between district Gifted and Talented (GATE) program directors and educators, site administrators, and the district Tech Director (via e-mail/phone) and meet annually to determine appropriate access to technology hardware, peripherals, and software needed to support GATE students' advanced curriculum.</p>                                      |   |
| <p>8. By fall 2007, all students enrolled in district after school programs will have access to Internet connected computers and curricular technology integration / homework support.</p>   |   |
| <p><b>Monitoring</b></p>   |   |
| <p>District curriculum, data, and technology administrators and school site administrators track the development and implementation of all activities and accomplishments monthly and report progress at our monthly district/site admin meetings. Modifications to our district activities will be made as needed in order to insure that we</p>  |   |

meet or exceed this measurable objective.

**Timeline:** The timeline for the aforementioned actions begins during the first year of our five-year tech plan July 2007 –June 2012 and will continue annually.

**Person(s) responsible:** District admins, the District Instructional Technology Manager, the District Curriculum Director, the District Testing and Assessment Director, the District Technology Director, school site admins, and site media specialists/mentors are responsible for the planning, development, implementation, and evaluation of all the aforementioned activities. Site administrators and teachers are responsible for completing all necessary professional development, ensuring student instruction is based on standards-aligned objectives, and research based programs, practices and arrangements.

## District Technology Action Plan July 1, 2007 – June 30, 2012

### Goal 5 - District Goal for Using Technology for Student Data Collection, Analysis, Reporting, and Decision Making

The district will support district and site use of technology to improve student achievement data collection, analysis, reporting, and decision-making.

**Target Group:** All district k-12 schools.

#### Specific Measurable Objectives by June 30, 2012

**Objective 5a:** By June 2012, 100% of teachers will use technology to analyze assessment data make data-driven decisions to meet individual student academic needs and target student intervention needs.

By June 2012, 100% of district sites will have implemented and integrated student assessment and data management system such as *Edusoft*.

**Annual Benchmarks**

**Year 1:** 80% of the k-12 schools / teachers in the district by June 2008. **Year 2:** 85% of the k-12 schools / teachers in the district by June 2009. **Year 3:** 90% of the k-12 schools / teachers in the district by June 2010. **Year 4:** 95% of the k-12 schools / teachers in the district by June 2011. **Year 5:** 100% of the k-12 schools / teachers in the district by June 2012.

**Objective: 5b:** By June 2011, 100% of the k-12 schools in the district will have access to the complete student information suite and necessary training to use: *GradeBook II*, and *Parent Viewer* or equivalent.

**Annual Benchmarks**

**Year 1:** 80% of the k-12 schools / teachers in the district by June 2008. **Year 2:** 85% of the k-12 schools / teachers in the district by June 2009. **Year 3:** 90% of the k-12 schools / teachers in the district by June 2010. **Year 4:** 95% of the k-12 schools / teachers in the district by June 2011. **Year 5:** 100% of the k-12 schools / teachers in the district by June 2012

#### Evaluation Instrument(s) & Data

**Instrument:** Electronic usage tracking reports

**Data:** % of district schools using standards-based computerized student progress reports and report cards.

**Instruments:** District EduSoft training participation records, GradeBook II / Parent Viewer usage records

**Data:** % of teachers completing, GradeBook II, Edusoft and Parent Viewer training;

**Instrument:** District integrated student assessment and data management system training participation records and usage records

**Data:** % of school sites and teachers using integrated student assessment and data management system to inform instruction.

**Data reviewers**

District Technology Director, school site admins., and school site tech coordinators will analyze end of school year results annually in June.

| <b>Goal 5: Objective: 5a,b Student Data Collection, Analysis, Reporting, and Decision Making Implementation Action Steps</b>   | <b>Use of Technology</b>  |
|--|---|
| 1. During the 2007-8 school year and every year thereafter until we meet our 2011-12 school year objective, the district will continue its rollout of an integrated student assessment platform at selected school sites. Participating teachers will get necessary training.  | CIMS, <i>GradeBook II</i> , and <i>Parent Viewer</i> .<br><br><i>Edusoft</i> . EASE-e (TetraData) |
| 2. Annually, provide systematic professional development and collaboration time for site administration and teachers to improve student achievement assessment, data collection, analysis, reporting, and data driven decision, align standards-based instruction, learn and share best practices in instruction and intervention, including the use of technology and develop quarterly assessments horizontally and vertically through grade levels in the district. |   |
| 3. CIMS student suite integration is underway. All schools currently are using the student information system to report attendance. The other two components <i>GradeBook II</i> and <i>Parent Viewer</i> will continue to be rolled out at district sites, with priority given to schools with the hardware, infrastructure, and site administration support necessary to fully implement.  |   |
| <b>Monitoring</b>  |   |
| District curriculum, data, and technology administrators and school site administrators track the development and implementation of all activities and accomplishments monthly and report progress at our monthly district/site admin meetings. Modifications to our district activities will be made as needed in order to insure that we meet or exceed this measurable objective.   |   |
| <b>Timeline:</b> The timeline for the aforementioned actions are included in the Action Steps listed above.  |   |
| <b>Person(s) responsible:</b> District admins, the District Instructional Technology Manager, the District Curriculum Director, the District Testing and Assessment Director, the District Technology Director, school site admins.  |   |

## District Technology Action Plan July 1, 2007 – June 30, 2012

|   |
|---|
| <b>Goal 6 - District Goal for Improving Parent Access to Teachers and Administrators</b>  |
| The district office and schools will use technology to improve two-way communication between home and school.<br><b>Target Group:</b> Parents of all students including special education, English Learner, and GATE students.  |
| <b>Specific Measurable Objective by June 30, 2012</b>   |
| <p><b>Objective: 6a:</b> By June 2010, all schools will offer parents password protected, online access to their student’s attendance, assignments and grades through a web-based system such as CIMS’s <i>Parent Viewer</i>.</p> <p><b>Annual Benchmarks -</b><br/> <b>Year 1:</b> 90% of schools by June 2008.      <b>Year 3:</b> 100% of schools by June 2010.<br/> <b>Year 2:</b> 95% of schools by June 2009.      <b>Year 4:</b> 100% of schools by June 2011.<br/> <b>Year 5:</b> 100% of SJUSD schools by June 2012</p> <p><b>Objective: 6b</b> By June 2010, all district site administrators and teachers will have access to a classroom phone, voice-mail, and a district e-mail account and will provide this information to all parents at back to school night and via the school website.</p> <p><b>Annual Benchmarks -</b><br/> <b>Year 1:</b> 90% of schools by June 2008.      <b>Year 3:</b> 100% of schools by June 2010.<br/> <b>Year 2:</b> 95% of schools by June 2009.      <b>Year 4:</b> 100% of schools by June 2011.<br/> <b>Year 5:</b> 100% of SJUSD schools by June 2012</p> |
| <b>Evaluation Instrument(s) &amp; Data</b>  |
| <p><b>Instruments:</b> Ongoing District SASI / <i>Parent Viewer</i> “how to access” communications and/ or trainings, parent password requests, and usage records.<br/> <b>Data:</b> % of parents trained; % of parents requesting passwords; % of parents using <i>Parent Viewer</i>.</p> <p><b>Instrument:</b> Monthly Site Admin reports to district on implementation status of standards-based progress report mailings.<br/> <b>Data:</b> % of district schools that have implemented standards-based progress report mailings.</p> <p><b>Instrument:</b> District and site based equipment and e-mail account records<br/> <b>Data:</b> % of teachers with access</p> <p><b>Instrument:</b> School website and communication artifacts.<br/> <b>Data:</b> evidence of efforts to improve two-way communication<br/> <b>Data reviewers</b><br/> District Technology Director, school site admins., and school site tech coordinators will analyze end of school year results annually in June.</p>  |

| <b>Goal 6: Objectives: 6a,b - Improving Parent Access to Teachers and Administrators</b><br><b>Implementation Action Steps 5</b>   | <b>Use of Technology</b>   |
|--|--|
| 1. By fall 2007, develop an installation / replacement schedule for teachers and admins without phone, voice-mail, and/ or e-mail. Provide training as needed.   | CIMS, <i>GradeBook II</i> , and <i>Parent Viewer</i> .                     |
| 2. By June 2008, design and distribute a standardized district <i>Student at Risk</i> notification template letter to schools.   | District IT work order management system and equipment inventory database. |
| 3. By June 2012, ensure all district schools have the hardware, infrastructure, and training needed to implement the Parent Viewer component of CIMS.  |  |
| 4. By June 2012, all district schools will be providing access to Parent Viewer and all district parents will have received information and/ or training about how to access Parent Viewer student data.   |  |
| 5. Continue to fund and maintain, all professionally designed and locally updated websites where district and school news, announcement, staff contact information, teacher class information, events, etc. are communicated with students and parents.  |  |
| 6. By June 2008, design and distribute a standardized district <i>Student at Risk</i> notification template letter to schools.   |  |
| 7. Annually provide Word and Desktop publishing training to teachers and classified staff to learn to publish paper documents that get attention.  |  |
| <b>Monitoring</b>  |  |
| District curriculum, data, and technology administrators and school site administrators track the development and implementation of all activities and accomplishments monthly and report progress at our monthly district/site admin meetings. Modifications to our district activities will be made as needed in order to insure that we meet or exceed this measurable objective. |  |
| <b>Timeline:</b> The timeline for the aforementioned actions are included in the Action Steps listed above.  |  |
| <b>Person(s) responsible:</b> District admins, the District Instructional Technology Manager, the District Curriculum Director, the District Technology Director, school site admins.  |  |

## **PROFESSIONAL DEVELOPMENT**

Innovation using technology to build new learning environments all of these stages exist in San Jose Unified, but the goal must be to help teachers move as quickly as possible to the innovation stage where technology is used most effectively. "Teachers' integration of the use of technology into the curricula is a major determinant of technology's contribution to student learning, once access to computers is provided (U.S. Department of Education, 1999, p.68)."

Training helps teachers transform lifeless equipment into useful tools. Creating high tech educational tools without training teachers to use them would be as useless as creating a new generation of planes, without training pilots to fly them.

We must train the nation's teachers-and the principals and administrators who lead them-or investments in high tech educational resources will be wasted.

Teachers are the key to effective use of web-based tools and applications, but first they must become skilled at using them.

It is the teacher, after all, who guides instruction and shapes the instructional context in which the Internet and other technologies are used. It is a teacher's skill at this, more than any other factor that determines the degree to which students learn from their Internet experiences. Teachers must be comfortable with technology, able to apply it appropriately, and conversant with new technological tools, resources, and approaches. If all the pieces are put into place, teachers should find that they are empowered to advance their own professional skills through these tools as well.

To make this integration happen, San Jose Unified Schools must continue with an aggressive, structured, ongoing professional development program. Strong professional development is the key to ensuring success. Far too often, Instructional Technology departments find themselves without the necessary resources and tools to offer professional development in effective ways. Budgets for training and development are sorely lacking and often the first thing sacrificed when difficult choices must be made. Individual staffs are often too busy to learn necessary skills—ironically, they are "too busy sawing wood to stop and sharpen the saw." The most common tools for learning tend to be trial-and-error or learn-by-doing. These approaches work well for some individuals in some instances, but prove too slow or ineffective in others. In too many cases, attempts are made to solve problems without the benefit of the most appropriate tools because individuals simply do not have the latest skills to apply.

Basic technology training alone is not sufficient. A recent survey by the National Education Association (NEA) found that most teachers have some facility using computers. Ninety-four percent of NEA members, and 99 percent of those under 35, are able to surf the Web,<sup>3</sup> however, familiarity does not equal proficiency. Most do not know how to apply these skills in classroom instruction.

Common sense holds that technology training for teachers will no longer be an issue if we can wait long enough for a new generation of younger teachers, raised on technology, to enter the profession. However, this is one common sense belief that simply does not hold up to close examination.

Another recent survey<sup>4</sup> found that young teachers' self-assessment of their ability to teach with technology was no different from that of their older colleagues. While younger teachers may have basic technology skills (e.g., the ability to use word-processing software, spreadsheets, presentation software, and Internet browsers)-they realize that they, like their older colleagues, do not know how to apply these skills to teaching.

The ability to use technology for non-instructional purposes does not necessarily translate into either the will or the capability to use technology to support student learning. Although they are not technophobes, these new teachers lack a clear conception of effective classroom uses of technology in their subject area.<sup>5</sup>

Professional development is the critical ingredient for effective use of technology in the classroom. Seventy percent of educators polled regarding technology in instruction put professional development at the top of their list of technology challenges.<sup>6</sup> They said what is needed is both the initial training for those just beginning to use technology and continuing education to support the growth of innovators. Three consecutive years of surveys in higher education showed the same thing: institutions ranked their greatest technological challenge as "assisting faculty to integrate information technology into instruction."<sup>7</sup>

Professional development is often called "training," but the term implies much more than just building basic technology skills. It means developing a vision built on the understanding that technology is a tool that can offer solutions to longstanding teaching and learning problems. It is more than knowing how to automate past practices. It is the growing understanding that comes with confidence to "think with technology" in order to approach old problems in new ways.

Change is necessary on two fronts: in the preparatory (pre-service) education of teacher candidates, and in the continuing (in-service) education of those already in the education profession. Both groups need assistance and support in using the best tools technology offers to meet teaching goals and challenges.

The training teachers do receive is usually too little, too basic, and too generic to help them develop real facility in teaching with technology. Ninety-six percent reported that the most common training they received was on basic computer skills.<sup>11</sup> Another national survey of public school teachers found that while most (78 percent) received some technology-related professional development in the 1998-99 school year. The training was basic, brief, and lasting only 1 to 5 hours for 39 percent of teachers, and just 6 to 10 hours for another 19 percent of those trained.<sup>12</sup>

Teachers need more than a quick course in basic computer operations. They need guidance in using the best tools in the best ways to support the best kinds of instruction. And they need something more. They need time.

When asked in a National Center for Education Statistics (NCES) survey to name the greatest barrier to their use of computers and the Internet in the classroom, most teachers (82 percent) cited lack of "release time" (time outside classroom) to "learn, practice, or plan ways to use computers or the Internet." This factor outweighed their concern about too few computers (78 percent) or lack of time in the schedule for students to use computers in class (80 percent).<sup>13</sup>

What would it take to change this picture? What kinds of resources would be necessary for the Instructional Technology department to foster an appropriate culture of learning for San Jose Unified School District's staff?

As we started developing the San Jose Unified School District technology, we engaged in a series of conversations about the need for increased professional development. We initiated a discourse within the organization and with the leadership of the institution; we spoke at length with anyone who would listen about our case for improved professional development, citing the need for better service, better troubleshooting skills, quicker response, and improved solutions. We talked about the skills we needed to develop, that would greatly enhance our skills in teaching students. (We firmly believed that creating an organization where people could learn and grow would encourage them use technology to increase student achievement.) We explained openly what support people would need for professional development. When we looked at business models of professional development we found they do not operate the way we do. Indeed, they operate in a world where training is tailored, focused, and just-in-time. In the education world, it is more often one-size-fits-all, generic, and just-in-case.

The overwhelming majority (90 percent) of all corporate and government training occurs on paid time.<sup>14</sup> In public schools, teachers report just over a third (39 percent) of their professional development occurs on paid time.<sup>15</sup> Professionals in other fields expect to be trained regularly. Motorola, long the standard for industry, provides every employee with at least 40 hours of training each year.<sup>16</sup>

Equally significant, professionals in other fields are provided with follow-up support needed for that training to take root—including immediate access to the hardware and software on which they are trained, Internet connections, and easy access to support personnel and follow-up skill building.

Most teachers are not rewarded or reimbursed for the time they spend in training. Just as some teachers spend their own money for classroom supplies, some teachers pay for their own preparation. Many take classes on their own time and pay their own tuition or fees. For example, OnlineLearning.net, an online continuing education provider, offered over 1,000 courses in the past year. Over 6,000 teachers enrolled in these courses. Eighty-five percent paid the \$450 tuition fee on their own.<sup>18</sup>

Technology training rarely translates directly into higher pay for teachers. In fact, a growing concern among schools is the lure of higher salaries offered in the private sector to teachers and administrators who do exhibit strong technical proficiencies or a desire to develop these.

In sum, the message to teachers is a mixed one, we expect you to teach with technology, but we will not help you do so.

Another study measuring technology support for district technology coordinators in 27 states found that it took from 14 hours to more than 7 days to fix a technology problem in a school or classroom. The average response time was more than two days.<sup>20</sup> While this would be unthinkable in most businesses, imagine what it means to a teacher who has developed a lesson around the Internet, only to discover that the whole class is disrupted for an unknown period of time. It is simply intolerable.

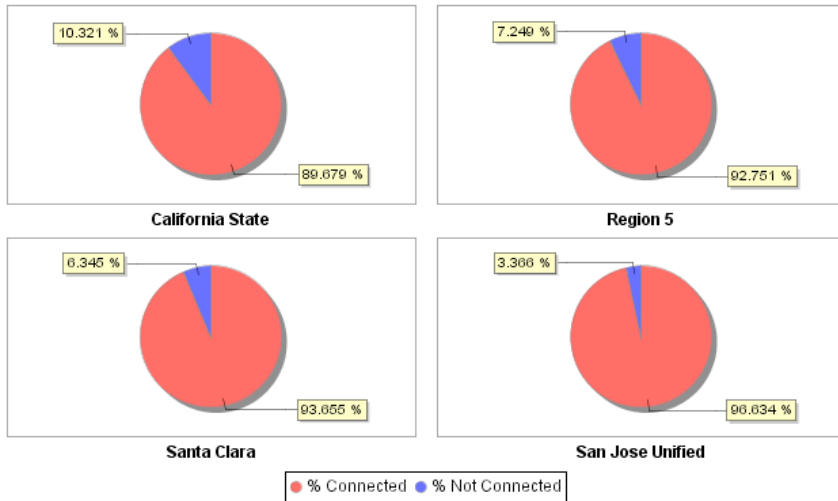
Fewer than 20 percent of all schools have a full-time technology coordinator. In most cases, technology coordinators are charged with training teachers and helping them integrate technology in their classes. In reality, they spend most of their time on technical support. On a weekly basis, full-time technology coordinators spend only 3 to 4 minutes per teacher assisting with technology integration. Part-time technology coordinators perform this kind of assistance only 1 to 2 minutes per week.<sup>21</sup>

SJUSD has made a conscious commitment to increase the priority given to training and development. As a first step, we put more of our financial resources into the budget for an instructional technology department. This department will be enhanced by adding additional resource teachers, clerical and technology staff. The department will also be supervised by a certificated manager. We have set an expectation that individuals we must support the enormous investment that San Jose Unified School District has made in both hardware and software.

We believe that the case can easily be made for a comprehensive approach to professional development that can help an Instructional Technology staff operate at its best. While there is no single right way to approach such a venture, the attention given to both individuals and the staff as a whole can pay ongoing dividends to the entire organization as it becomes better able to face the array of challenges that the future will bring. Clearly there are benefits to improving individual technical skills. But more importantly, an organization can become a more cohesive unit by developing skills and competencies for effectively teaching students and increasing student achievement.

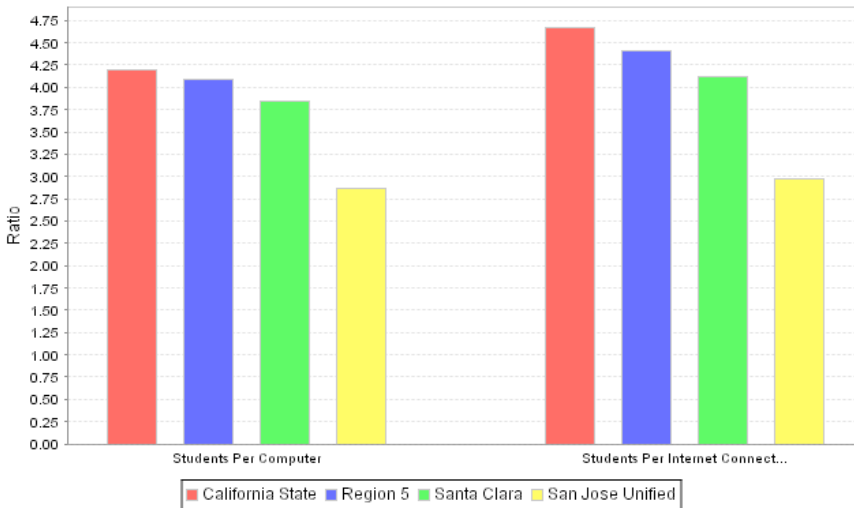
We have setup a network of connectivity to each site (see the chart, Classrooms Connected to the Internet). As you can see from the chart below San Jose Unified School District has almost 100% connectivity to the Internet.

### Classrooms Connected to the Internet



We have 1,539 teachers, all who have laptops. Computer training rooms at each site (see the chart, Student/Computer Ratios), 4 secondary laptop schools, and over 10,000 computers. Our computer to student ratio is better than the averages for California, region, and county.

### Student/Computer Ratios



Therefore, with this much of an investment a strong and effective Instructional Technology department and technology integration into the classroom professional development is a necessity.

At present, we have one resource teacher, one share secretary, and one share technology specialist. In this plan, we are recommending a complete restructuring of Instructional Technology to best meet the needs of our teachers and students. Below is our restructuring model for a greatly improve Instructional Technology department. With adequate staffing for Instructional Technology support for our teachers to integrate technology into the curriculum will be greatly enhanced.

|  |   |   |   |  |  |
|--|---|---|---|--|--|
| <b>Duties:</b> <ul style="list-style-type: none"> <li>• Manage Instructional Technology Budgets</li> <li>• Manage Instructional Technology Staff</li> <li>• Manage Instructional Technology Professional Development</li> <li>• Work with various department involved with Instructional Technology</li> <li>• Assist and lead grant application and writing for instructional technology</li> </ul>   |   | <b>MANAGER</b><br>Cost:   |   | <b>Duties:</b> <ul style="list-style-type: none"> <li>• Coordinate the writing of the TUP plan</li> <li>• Maintain and plan Instructional Technology Department</li> <li>• Manage TSG group and staff development</li> <li>• Work very closely with Technology Services on all matters concerning Instructional Tech</li> </ul>  |  |
| <b>Instructional Technology Resource teacher Professional Development</b><br>Cost:   | <b>Instructional Technology Resource teacher Elementary</b><br>Cost:  | <b>Instructional Technology Resource teacher Elementary</b><br>Cost:  | <b>Instructional Technology Secretary</b><br>Cost:  | <b>Instructional Technology Specialist</b><br>Cost:  |  |
| <b>Duties:</b> <ul style="list-style-type: none"> <li>• Design, Develop and Coordinate Instructional Technology Professional Development</li> <li>• Provide Instructional Technology Professional Development classes</li> <li>• Work closely with the Krause Center of Innovation</li> <li>• Teacher on Record for Foothill College for SJUSD Instructional Technology Classes</li> <li>• Provide staff development in technology opportunities for TSG and TSC members</li> <li>• Work closely with the County Office of Education and coordinate Instructional Technology opportunities</li> <li>• Work with Technology Services supporting Measure F, Digital Lockers, GradeBook 2, etc.</li> <li>• Administrator and support for:               <ul style="list-style-type: none"> <li>- United Streaming</li> <li>- netTrekker</li> <li>- CyberHigh</li> <li>- RenPlace</li> </ul> </li> </ul> | <b>Duties:</b> <ul style="list-style-type: none"> <li>• Work closely elementary schools to provide staff development in Instructional Technology in District support Apps and applications that are needed at the school</li> <li>• Model integrating technology into the curriculum at school sites.</li> <li>• Provide Instructional Technology Professional Development classes</li> <li>• Provide support for the site Tech Support Coordinator</li> <li>• Work closely with the elementary principals to tailor the Instructional Technology Prof Dev t for their staff</li> <li>• Provide support for               <ul style="list-style-type: none"> <li>- RenPlace</li> <li>- iWorks and iLife</li> <li>- Kid Pix</li> <li>- Type To Learn</li> <li>- Kidspiration</li> <li>- Reader Rabbit</li> <li>- Accelerated Grammar &amp; Spelling</li> </ul> </li> <li>• Administrator and Support for:               <ul style="list-style-type: none"> <li>- United Streaming</li> <li>- netTrekker</li> <li>- RenPlace</li> </ul> </li> </ul> | <b>Duties:</b> <ul style="list-style-type: none"> <li>• Work closely elementary schools to provide staff development in Instructional Technology in District support Apps and applications that are needed at the school</li> <li>• Model integrating technology into the curriculum at school sites.</li> <li>• Provide Instructional Technology Professional Development classes</li> <li>• Provide support for the site Tech Support Coordinator</li> <li>• Work closely with the elementary principals to tailor the Instructional Technology Prof Dev t for their staff</li> <li>• Provide support for               <ul style="list-style-type: none"> <li>- RenPlace</li> <li>- iWorks and iLife</li> <li>- Kid Pix</li> <li>- Type To Learn</li> <li>- Kidspiration</li> <li>- Reader Rabbit</li> <li>- Accelerated Grammar &amp; Spelling</li> </ul> </li> <li>• Administrator and Support for:               <ul style="list-style-type: none"> <li>- United Streaming</li> <li>- netTrekker</li> <li>- RenPlace</li> </ul> </li> </ul> | <b>Duties:</b> <ul style="list-style-type: none"> <li>• Performs secretarial duties including material of confidential nature, consisting of letters, reports, legal forms and actions, briefs, contracts, specifications, bulletins, memoranda, minutes of meetings and record material; prepares special reports and relieves a District administrator of a variety of administrative details. A variety of difficult clerical work is performed along with assigned secretarial duties. Assigned clerical duties require the exercise of considerable judgment and discretion. Incumbents must have a wide knowledge of the current operations, procedures rules, and precedents of the District and department, and must be able to interpret and apply this information in their work with the general public and with administrators and employees; may maintain department budget. Wide latitude is permitted in the performance of assignments, with incumbents frequently made responsible for the style, format, final appearance, and accuracy of completed work, and the entering of data through the use of computer terminals.</li> </ul> | <b>Duties:</b> <ul style="list-style-type: none"> <li>• Expression/Engine Coordinator/Support</li> <li>• Web and Information Design of Tech Resources and Information web site</li> <li>• Web design and support for schools, Historic Hoover Theater</li> <li>• Parents' Guide - Secondary and Elementary</li> <li>• Marketing/Graphic Design for Federal Magnet Schools</li> <li>• CTAP/Edtech Profile and CA Tech Surveys - training, support and coordination for school &amp; district</li> <li>• Gather data from surveys for District Tech Plan, Federal Magnet and grants</li> <li>• Nettrekker: support/training</li> <li>• Student Tech Corp District coordinator</li> <li>• Photos, Posters, Flyers, Brochures, CD covers, training videos for various departments</li> <li>• UnitedStreaming Admin District</li> <li>• Technology Rep for SCCOE</li> </ul> |  |

The recommended implementation approach for integrating or inserting technology must focus on comprehensive planning to assist all San Jose Unified School District educators will fully integrate into their practice appropriate educational and rigorous and effective digital content to promote mastery of the State Academic Content Standards by all students. Critical factors in our restructuring includes establishing a vision for the plan, utilizing existing and emerging resources, basing technology decisions on curriculum and instructional needs, focusing on student needs, and providing for local staff development and follow-up assistance. The best approach for implementing technology comes from the National Education Technology Plan. This plan has seven major steps and recommendation to follow.

## 1. Strengthen Leadership

For public education to benefit from the rapidly evolving development of information and communication technology, leaders at every level – school, district and state – must not only supervise, but also provide informed, creative and ultimately transformative leadership for systemic change.

Recommendations for states, districts and individual schools include:

- Invest in leadership development programs to develop a new generation of tech-savvy leaders at every level.
- Retool administrator education programs to provide training in technology decision-making and organizational change.
- Develop partnerships between schools, higher education and the community.
- Encourage creative technology partnerships with the business community.
- Empower students' participation in the planning process.

One person cannot take on all of the professional development responsibilities for an entire school. By developing teams of leaders to assist the Instructional Technology Resource Teacher, the effects of the professional development program will increase dramatically. Once the teams are established, they must be trained not only in technology integration, but also in professional development. These teams can become powerful agents for change. There are several teams that should be developed which include, but are not limited to, the Technology and Proficiencies Integration Team (TPIT), Vanguard Team, and coaching teams.

The Technology and Proficiencies Integration Team (TPIT) should consist of the Instructional Technology Resource Teacher, the Technology Support Coordinator, and classroom teachers. This team receives professional development from the Teaching, Learning, and Technology Specialists and the Manager of Instructional Technology. Training focuses on improving student learning by integrating technology into the curriculum and on effective professional development techniques. The team, in turn, should train building administrators and the Vanguard team(s).

The Vanguard Teams consist of building leaders who are interested in using technology for student learning. This team receives professional development from the TPIT team focusing on integrating technology into the curriculum to improve student learning. The Vanguard Team, in turn, becomes the technology leaders in the building to train others and lead coaching teams.

After Vanguard Team members achieve the appropriation level on the Evolution of Thought and Practice, (see Objective 2) they are ready to be educational technology leaders in their building and form coaching teams with other teachers in their schools. Coaching teams work together to integrate technology in their classrooms and develop new methods of teaching with technology. Schools may implement their coaching projects in different ways; however, all should hold to these key concepts:

- Focus on how technology is used by students and teachers as tools for project-based learning.
- Deliver staff development on site through teacher practitioners.
- Situate learning for the coached teachers in the classrooms of the coaches.
- Keep the expert teachers (coaches) in their classrooms.
- Provide time for teacher reflection.
- Emphasize peer-coaching relationships among those engaged in the program.

## **2. Consider Innovative Budgeting**

Needed technology often can be funded successfully through innovative restructuring and reallocation of existing budgets to realize efficiencies and cost savings. The new focus begins with the educational objective and evaluates funding requests – for technology or other programs – in terms of how they support student learning. Today, every program in *No Child Left Behind* is an opportunity for technology funding – but the focus is on how the funding will help attain specific educational goals.

Funding and budgetary recommendations for states, schools and districts include:

- Determine the total costs for technology as a percentage of total spending.
- Consider a systemic restructuring of budgets to realize efficiencies, cost savings and reallocation. This can include reallocations in expenditures on textbooks, instructional supplies, space and computer labs.
- Consider leasing with 3-5 year refresh cycles.
- Create a technology innovation fund to carry funds over yearly budget cycles.

### **3. Improve Teacher Training**

Teachers have more resources available through technology than ever before, but some have not received sufficient training in the effective use of technology to enhance learning. Teachers need access to research, examples and innovations as well as staff development to learn best practices. The U.S. Department of Education is currently funding research studies to evaluate the effective use of technology for teaching and learning. The National Science Foundation also provides major support for educational research.

Recommendations for states, districts and individual schools include:

- Improve the preparation of new teachers in the use of technology.
- Ensure that every teacher has the opportunity to take online learning courses.
- Improve the quality and consistency of teacher education through measurement, accountability and increased technology resources.
- Ensure that every teacher knows how to use data to personalize instruction. This is marked by the ability to interpret data to understand student progress and challenges, drive daily decisions and design instructional interventions to customize instruction for every student's unique needs.

Professional development should occur within the regular school day with as little impact on the classroom as possible. The CEO Forum (1999, p.13) states, "While teachers should always share the responsibility for their own professional development, primarily relying on teacher personal time will never enable a culture of effective technology use." San Jose Unified must rethink how to accomplish quality professional development without solely relying on substitutes to cover classes. Many strategies exist for conducting professional development during the school day without using substitutes:

- Devote faculty meeting time to professional development. Instead of disseminating information at the meeting, use email to disseminate information to the staff and devote the time to professional development.
- Engage students in community volunteer projects with the support of parents, community volunteers, and some teachers. This program can free up some school staff for professional development.
- Develop master schedules so teams of teachers within a learning community have common time for professional development, planning, and learning.
- Provide online professional development opportunities.
- Use curriculum pay for professional development.
- San Jose Unified should develop partnerships with universities to enhance technology integration into the educational program of pre-service teachers

Technology professional development must also be integrated with other professional development programs in order to minimize time and maximize the benefits of professional development efforts. Technology professional development should focus not only on how to use a piece of software or hardware, but also on how to teach with technology. When teachers are developing new instructional methods in curricular areas, technology should be integrated into this training. If professional development programs are integrated, then the total amount of time spent on professional development can be decreased.

Additionally, if professional development allows teachers to develop lessons and activities they can use in their classroom, the feeling that the training takes away from planning for instruction will be reduced. Peer coaching is an ideal way to accomplish this integration of time because it allows teachers to work through ideas and problems with each other, facilitates reflection, and provides support for teachers as they change.

Online opportunities can provide flexible, anytime, any place professional development. Staff members can access online course content at a time and place most comfortable to them. Online education also allows for “just in time” professional development allowing staff to access the content they need when they need it.

Professional development efforts must be supported with the tools that enable teachers to practice what they have learned. After training, teachers must have constant access to technology, so they have time to develop and revise lessons. If the technology access is not convenient or is intermittent, then teachers are not likely to develop lessons to integrate in a timely manner.

The district will provide teachers with computers to support differentiated professional development. In order to be provided a computer for their use, a teacher must advance through three levels: Navigator, Integrator, and Leader. The Navigator level will focus on learning computer fundamentals, software application, and beginning integration with content standards. The Integrator level will focus on regular integration of a variety of technology that transforms the learning environment. Finally, the Leader level will focus on leadership with the school and district, which includes training other teachers on the best practices of technology use. Each level will consist of a minimum of forty hours of class time in addition to time to reflect, practice, and apply the principles learned at each level. Teachers will be allowed to advance through a level without being required to complete all training hours if they can demonstrate proficiency of the skills and principles required at that level. The computer provided the teacher for their use, will remain the property of the District.

#### **4. Support e-Learning and Virtual Schools**

In the past five years there has been significant growth in organized online instruction (e-learning) and “virtual” schools, making it possible for students at all levels to receive high

quality supplemental or full courses of instruction personalized to their needs. Traditional schools are turning to these services to expand opportunities and choices for students and professional development for teachers.

Recommendations include:

- Provide every student access to elearning.
- Enable every teacher to participate in e-learning training.
- Encourage the use of e-learning options to meet *No Child Left Behind* requirements for highly qualified teachers, supplemental services and parental choice.
- Explore creative ways to fund e-learning opportunities.
- Develop quality measures and accreditation standards for elearning that mirror those required for course credit.

## **5. Provide new teachers with skills in technology integration to advance student learning**

As new teachers are learning how to teach and develop lessons, they should be learning how to integrate technology into practice. Many new teachers have basic technology skills; however, they may not have experience integrating technology into their curriculum. Training for new teachers should focus on integrating technology and managing a technology rich classroom. Technology should be an integral part of San Jose Unified 's teacher induction programs.

Experienced teachers who are new to the district should also go through a technology induction program in order to bring them up to date on the district's technology program, services, and training.

## **6. Move Toward Digital Content**

In order for technology to become a part of the school culture, all members of the school must use technology to improve productivity. According to the U.S. Department of Education (1996, Online), "technology can be used as an administrative and management tool that enables principals and superintendents to save money, streamline operations, and monitor student progress." Appropriate professional development opportunities must be offered for all staff members of the San Jose Unified School District. District and building level administrators must be provided three levels, or tiers, of professional development. These tiers of training will ensure that administrators have the knowledge and skills necessary to improve productivity, communicate efficiently, and provide the leadership necessary to positively influence student learning.

- Tier 1 – Fundamentals –Administrators need professional development in using technological tools to increase productivity and to analyze student achievement. Training at this level will focus on learning skills needed to use various pieces of hardware and software.
- Tier 2 – Integration – Administrators need professional development on how teaching and learning changes with the increased use of technology in the

classroom. They need to understand how teachers can use technology to teach to standards and assess student learning.

- ❑ Tier 3 – Leadership/Administrative leadership is critical for the successful integration of technology. Although administrators do not need to be involved in the day-to-day activities of the technology program, they do need to make and support informed decisions. Administrators need to be the leader of leaders within the district and school.

Classified staff provides assistance to teachers and administrators in order to support student learning. They need to be trained on the tools that will help them be productive.

## **7. Integrate Data Systems**

Integrated, interoperable data systems are the key to better allocation of resources, greater management efficiency, and online and technology-based assessments of student performance that empower educators to transform teaching and personalize instruction.

Recommendations include:

- Establish a plan to integrate data systems so that administrators and educators have the information they need to increase efficiency and improve student learning.
- Use data from both administrative and instructional systems to understand relationships between decisions, allocation of resources and student achievement.
- Ensure interoperability. For example, consider School Interoperability Framework (SIF) Compliance Certification as a requirement in all RFPs and purchasing decisions.
- Use assessment results to inform and differentiate instruction for every child.

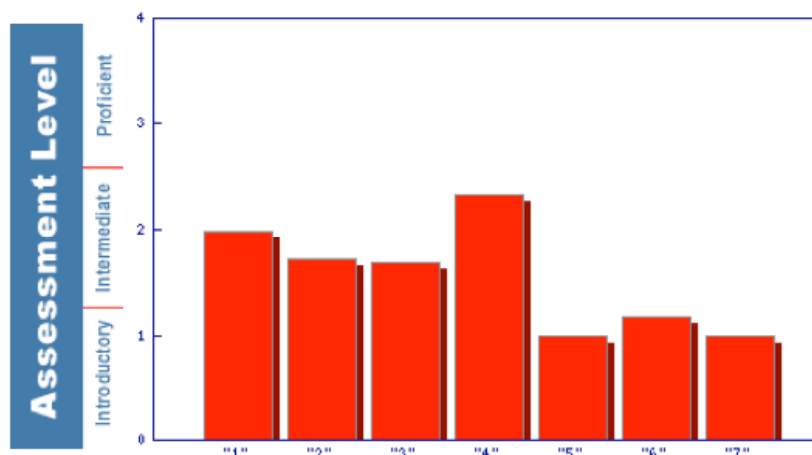
The graph below show that San Jose Unified School District students are somewhere in the average area for technology use it surely differs from the ratio of computers to students that were show in the above graphs. There does not seem to be the increase in technology use that one would assume with the increased number of computers. This can be directly related to the lack of professional development. Looking above at the National Education Technology Plan and its recommendations it seems clear that we need to change the way we have been doing things and implement the recommended changes. Too often, we get in a rut, and all we can see as the horizon is the edge of the rut. Change can be difficult. However, to do the same thing year after year expecting positive results and then not getting those results is one definition we know all too well.

| Location         | Graphically Presenting Materials | Solving Problems and/or Analyzing Data | Corresponding with others via E-Mail and/or Internet | Demonstrations or Simulations | Creating Reports or Projects | Research, using the Internet or CD-ROMs | Accessing Content-Specific Software or Web-based Resources | Word Processing |
|------------------|----------------------------------|--|--|-------------------------------|------------------------------|---|--|-----------------|
| California State | 3.99                             | 3.44                                   | 3.72   | 3.66                          | 2.74                         | 2.03                                    | 2.65   | 2.78            |
| Region 5         | 3.81                             | 3.32                                   | 3.58   | 3.55                          | 2.57                         | 2.09                                    | 2.48   | 2.63            |
| Santa Clara      | 3.86                             | 3.35                                   | 3.69   | 3.63                          | 2.65                         | 2.2                                     | 2.55   | 2.73            |
| San Jose Unified | 3.84                             | 3.6                                    | 3.74   | 3.58                          | 2.51                         | 1.77                                    | 2.35   | 2.6             |

It must be emphasized that school and district plans can only be implemented if teachers are developing and implementing classroom plans or projects that directly support the objectives of the school, district technology plans and curricular standards.

### District Teachers' Survey Data

EdTechProfile survey data of district teachers as of December 2006 indicates that most teachers are at similar intermediate levels as administrators with general computing, Internet, e-mail, and word processing and at the introductory level in presentation, spreadsheet, and database skills. Teachers need professional development opportunities in basic Personal Technology proficiencies.



- 1 General computer knowledge and skills (Includes 517 in calculation)
- 2 Internet skills (Includes 514 in calculation)
- 3 Email skills (Includes 512 in calculation)
- 4 Word processing skills (Includes 510 in calculation)
- 5 Presentation software skills (Includes 508 in calculation)
- 6 Spreadsheet software skills (Includes 508 in calculation)
- 7 Database software skills (Includes 510 in calculation)

In addition, the following district technology training preferences came from 2006 EdTechProfile survey data for the district which will be factored into our professional development plans.

| Teacher needs and preferences regarding the type or level of technology training at their school. | Basic computer/technology skills | Integrating technology into the curriculum | Neither |
|---|----------------------------------|--|---------|
| I need opportunities to participate in educational technology staff development focused on:       | 26%                              | 74%  | 0%      |

Although we will continue to offer both Basic Personal Proficiency and Professional proficiency technology integration training, we will offer more curriculum integration opportunities to meet the need.

| Teacher needs and preferences regarding technology training format at their school. | One-on-one informal technology training. | Small group technology training. | Online web-based technology training. |
|---|--|----------------------------------|---------------------------------------|
| The training format I prefer is:  | 21%                                      | 62%                              | 16%                                   |

We will offer small group technology training supported by online web-based resources and provide one on one technology coach site-based support, meeting all three identified needs.

| Teacher needs and preferences regarding technology training availability at their school. | During the school day. | After school. | In the evening. | On the weekend. | During the summer/of f track. |
|---|------------------------|---------------|-----------------|-----------------|-------------------------------|
| I prefer technology training to be offered:   | 32%                    | 34t%          | 6%              | 6%              | 22%                           |

We will offer technology training at a variety of times, with most offerings after school. Some professional development will occur during the school day with subs and during summer workshops and conferences.

**Professional Development Goals, Benchmarks, Timelines, Monitoring, and Evaluation.**

Our professional development action plans are based on a thorough needs analysis and include clear, specific, realistic goals, and measurable objectives that will provide our teachers and administrators with sustained, ongoing professional development necessary to implement the Curriculum Component of our Education Technology Plan.

Our three main Education Technology professional development goals over the next five years are:

- PD Goal 1:** District site administrators and teachers will become proficient with the same general technology skills, technology integration skills, and information literacy skills required of their students as well as proficient with work specific productivity tools.
- PD Goal 2:** District site administrators and teachers will become proficient in the use of technology to improve student achievement data collection, analysis, reporting, and decision-making.

- ❑ **PD Goal 3:** District site administrators and teachers will become proficient in the use of technology to improve two-way communication between home and school.

The accomplishment of these goals will be met through the following:

Our Education Technology Professional development will encompass a three-tiered professional development approach based on teachers' individual technology training needs.

1. Annually as needed, we will offer Personal proficiency training on NETs skills including general computer knowledge and skills; Internet skills; Email skills; Word processing skills; Presentation software skills; and Spreadsheet /Database software skills.
2. Annually as needed, we will offer Professional proficiency training on NETs skills integration including information literacy, curriculum-based software, adopted materials software resources, online resources such as SETs, and job specific productivity and assessment tools.
3. Annually as needed, we will offer Technology Leadership / Coach proficiency training: Training interested teachers as site-based coaches offering support to teachers as they work toward proficiency in tiers one and two.

Our coordinated professional development plan is based on the analysis of our teachers' and administrators' technology skills and needs as well as our district's curricular goals. The district will offer a variety of training options such as the CTAP Online ([www.ctaponline.org](http://www.ctaponline.org)) learning portal, face-to-face training & collaboration time, and one-on-one coaching. We will maximize the use of technology and site resources to support the district's goals and objectives for curriculum, instruction, intervention, and assessment, including but not limited to the following:

- Site-based technology coaches and CTAP Online mentors available to each district site.
- District as well as site based annual face-to-face technology skill professional development opportunities.
- Anytime, anywhere online district technology professional development opportunities using CTAP Online Personal and Professional Proficiency technology classes and supported by site based technology coaches.
- District content and grade-band specific technology integration face-to-face professional development supported with district professional development and resources online using CTAP Online's *CourseBuilder* tool.
- CTAP Online technology integration training.
- Broad-based pre/post completions of the EdTechProfile survey and professional development data analysis to track improvements and training needs.
- Annual professional development offerings / priorities based on student, teacher, and administrator EdTechProfile survey data and district curricular goals.
- Student assessment and intervention, student information system, web publishing, e-mail, and voice-mail training opportunities for all stakeholders as needed to support student achievement and improve home / school communications and interventions.
- Identification, training, and use of low and no cost Internet, video-conferencing and face-to-face learning opportunities and resources. National, State and local online research-based strategies and resources will be leveraged and integrated during faculty

meetings, collaboration time, and professional development such as: the U.S. Department of Education's web site *What Works Clearinghouse* (<http://www.w-w-c.org/>). We will regularly examine and use relevant data from the *What Works Clearinghouse* (WWC), which was established in 2002 by the U.S. Department of Education's Institute of Education Sciences to provide educators, policymakers, researchers, and the public with a central and trusted source of scientific evidence of what works in education. We will also rely on the County Office of Education, CTAP Region 2, and CTAP Online resources, and the Statewide Education Technology Services (SETS) which includes: California Learning Resource Network (CLRN) which identifies CDE approved supplemental electronic learning resources that both meet local instructional needs and embody the implementation of California curriculum frameworks and standards. And the Technology Information Center for Administrative Leadership (TICAL) which helps administrators find technology resources to assist in the day-to-day needs of their jobs; and the Technical Support for Education Technology in Schools (TechSETS) which provides technical professionals in California schools improved access to training, support and other resources.

### District Professional Development Plan July 1, 2007 – June 30, 2012 (sections 4b-4d)

|  |
|--|
| <b>PD Goal 1 - District Professional Development Goal</b>  |
| <p><b>Goal 1:</b> District Site Administrators and Teachers will become proficient with the same general technology skills, technology integration skills, and information literacy skills required of students as well as proficient with work specific productivity tools.</p> <p><b>Target Group:</b> Certificated teachers and administrators</p> <p><b>Supports Curriculum Driven Technology Goals and Objectives 1, 2, 3 &amp; 4 in Component 3 of our Ed Tech Plan</b></p>  |
| <b>Specific Measurable Objectives by June 30, 2012</b>   |
| <p><b>Objective: 1a:</b> By June 2012, <b>100%</b> site administrators, who participate in district sponsored educational technology professional development, will become proficient with general technology knowledge and skills, integration skills, information literacy, and administration productivity tools aligned to the <u>NETs</u> for administrators.</p> <p><b>Annual Benchmarks</b></p> <p><b>Year 1:</b> 50% by June 2008.                      <b>Year 3:</b> 75% by June 2010.<br/> <b>Year 2:</b> 65% by June 2009.                      <b>Year 4:</b> 90% by June 2011.<br/> <b>Year 5:</b> 100% by June 2012.</p> <p><b>Objective: 1b:</b> By June 2012, <b>100%</b> k-12 teachers, who participate in district sponsored educational technology professional development, will become proficient with general technology knowledge and skills, classroom productivity tools, and information literacy skills aligned to the <u>NETs</u> for teachers and <u>NETs</u> for students. All district ELD, Special Education and GATE teachers will become proficient in technology skills and assistive tools for their subgroup populations.</p> <p><b>Annual Benchmarks</b></p> <p><b>Year 1:</b> 50% by June 2008.                      <b>Year 3:</b> 75% by June 2010.<br/> <b>Year 2:</b> 65% by June 2009.                      <b>Year 4:</b> 90% by June 2011.<br/> <b>Year 5:</b> 100% by June 2012.</p> |

**Objective: 1c:** By June 2012, **100%** k-12 ELA and Math teachers, who participate in district sponsored educational technology professional development focused on CLRN and/ or SBE approved curriculum based technology resources will become proficient with technology integration.

**Annual Benchmarks**

**Year 1:** 50% by June 2008.                      **Year 3:** 75% by June 2010.  
**Year 2:** 65% by June 2009.                      **Year 4:** 90% by June 2011.  
**Year 5:** 100% by June 2012.

**Year 5: minimum of 100%** in the 2011-12 school year.

**Objective: 1d:** By June 2012, the district will provide a trained technology mentor / coach to all district schools.

**Annual Benchmarks**

**Year 1:** 50% by June 2008.                      **Year 3:** 75% by June 2010.  
**Year 2:** 65% by June 2009.                      **Year 4:** 90% by June 2011.  
**Year 5:** 100% by June 2012.

**PD Goal 1: Objective: 1a, b, c, d Evaluation Instrument(s) & Data**

**Instrument:** EdTechProfile pre and post EdTechProfile completed for all district sponsored Education Technology professional development programs

**Data:** Administrators' and teachers' self assessed technology and integration skills

**Instrument:** District and site-based training agendas and records

**Data:** Professional development participation correlated with proficiency in EdTechProfile survey

**Data reviewers**

District curriculum, data, and technology administrators and school admins will analyze benchmark data annually in late August / September and make any necessary modifications in order to meet our objectives.

**PD Goal 1: Objective: 1a, b, c, d - Implementation Action Steps**

**Use of Technology**

|   |   |
|---|---|
| 13. Annually, require administrator and teacher completion of pre and post EdTechProfile survey by all who participate in district-sponsored technology training programs.  | Apple iLife and iWorks, Microsoft Office Suite, FirstClass e-mail, Internet.                    |
| 14. Annually, in June, analyze EdTechProfile administrator and teacher technology and integration skill data to plan for professional development offerings during the year.  | Peripherals such as LCD projectors, digital cameras, video cameras, and printers.               |
| 15. Annually, provide EdTechProfile workshops to teachers, administrators, and site EdTechProfile admins.   |   |
| 16. Annually in the fall, schedule and promote district sponsored technology workshops for administrators and for teachers during the school year aligned to the content standards, to the NETs, assistive technology, and to identified EdTechProfile professional development needs including information literacy skills.  | CLRN approved curriculum-based software   |
| 17. Annually in the fall, schedule and promote district sponsored technology integration and CLRN approved curriculum-based software and resource workshops for Math and ELA teachers by grade bands (K-2, 3-5, 6-8, 9-12) during the school year aligned to the content standards, to the NETs, and to identified EdTechProfile professional development needs.                    | Online resources including netTrekker, United Streaming, Criterion, CyberHigh, Vantage Learning |
| 18. Annually, the district will train site-based technology integration mentors and EdTechProfile online mentors to support district technology participants at the site level.   | EdTechProfile   |
| 19. Annually, provide systematic professional development and collaboration time for site administration and teachers to analyze student achievement data, align standards-based instruction, learn and share best practices in instruction and intervention, including the use of technology and develop quarterly assessments horizontally and vertically through grade levels in |   |

|  |  |
|--|--|
| the district.  |  |
| <b>Monitoring</b>  |  |
| District curriculum, data, and technology administrators and school site administrators track the development and implementation of all activities and accomplishments monthly and report progress at our monthly district/ site admin meetings. Modifications to our district activities will be made as needed in order to insure that we meet or exceed this measurable objective.  |  |
| <b>Timeline:</b> The timeline for the aforementioned actions are included in the Action Steps listed above.  |  |
| <b>Person(s) responsible:</b> District admins, the District Instructional Technology Manager, the District Curriculum Director, the District Testing and Assessment Director, the District Technology Director, school site admins, and site media specialists/mentors are responsible for the planning, development, implementation, and evaluation of all the aforementioned activities. Site administrators and teachers are responsible for completing all necessary professional development, ensuring student instruction is based on standards-aligned objectives, and research based programs, practices and arrangements. |  |

|   |                                  |
|---|----------------------------------|
| <b>PD Goal 2 - District Professional Development Goal</b>   |                                  |
| District site administrators and teachers will become proficient in the use of technology to improve student achievement data collection, analysis, reporting, and decision-making.   |                                  |
| <b>Target Group:</b> Certificated teachers and administrators   |                                  |
| <b>Supports Curriculum Driven Technology Goals and Objectives 1, 2, 3, 5, &amp; 6 in Component 3 of our Ed Tech Plan</b>  |                                  |
| <b>Specific Measurable Objectives by June 30, 2012</b>  |                                  |
| <b>Objective 2a:</b> By June 2012, 100% of teaches will use technology to analyze assessment data make data-driven decisions to meet individual student academic needs and target student intervention needs.<br>In addition, by June 2012, 100% of district administrators and teachers, who attend professional development, will be proficient with the implementation and integration of a student assessment and data management system such as <i>Edusoft</i> . |                                  |
| <b>Annual Benchmarks</b>  |                                  |
| <b>Year 1:</b> 50% by June 2008.  | <b>Year 3:</b> 75% by June 2010. |
| <b>Year 2:</b> 65% by June 2009.  | <b>Year 4:</b> 90% by June 2011. |
| <b>Year 5:</b> 100% by June 2012..  |                                  |
| <b>Objective: 2b:</b> By June 2012, 100% of district administrators and teachers, who attend professional development, will be proficient with the complete <i>SASI</i> student information suite: <i>CIMS</i> , <i>GradeBook II</i> , and <i>Parent Connect</i> offering parents password protected, online access to their student’s attendance, assignments, grades, and progress reports.   |                                  |
| <b>Annual Benchmarks</b>  |                                  |
| <b>Year 1:</b> 50% by June 2008.  | <b>Year 3:</b> 75% by June 2010. |
| <b>Year 2:</b> 65% by June 2009.  | <b>Year 4:</b> 90% by June 2011. |
| <b>Year 5:</b> 100% by June 2012.   |                                  |
| <b>Evaluation Instrument(s) &amp; Data</b>  |                                  |
| <b>Instrument:</b> Annual CTAP-squared EdTech:  |                                  |
| <b>Data:</b> teacher’s self assessed technology and integration skills  |                                  |
| <b>Instrument:</b> District sponsored training records, usage records and site-based mentor support records   |                                  |
| <b>Data:</b> % of teachers trained and proficient.  |                                  |
| <b>Data reviewers</b>   |                                  |
| District curriculum, data, and technology administrators and school admins will analyze benchmark data annually in late August / September and make any necessary modifications in order to meet our objectives.  |                                  |

| PD Goal 2: Objective: 2a,b Implementation Action Steps   | Use of Technology   |
|--|---|
| 1. Annually, require administrator and teacher completion pre and post EdTechProfile survey by all who participate in district-sponsored technology training programs.   | CIMS, <i>GradeBook II</i> , TetraData <i>EASE-e</i> , and <i>Parent Connect</i> .   |
| 2. Annually, in June, analyze EdTechProfile administrator and teacher survey results on data driven instructional decision making and student data reporting systems to plan for professional development offerings.   | Integrated student assessment such as <i>Edusoft</i> , <i>RenPlace</i>  |
| 3. Annually by September, plan professional development opportunities for the year focused on standards-aligned classroom assessments and data-driven decisions that meet individual student academic needs and target student intervention needs. Promote opportunities to teachers through all available communication conduits.   | Online resources including netTrekker, United Streaming, Criterion, CyberHigh, Vantage Learning<br><br>EdTechProfile, TICAL |
| 4. Annually in the fall, schedule and promote district sponsored technology workshops for administrators and for teachers during the school year on all CIMS components.   |   |
| 5. Annually in the fall, schedule and promote district sponsored technology workshops for administrators and for teachers during the school year on the district's web-based student reporting system.   |   |
| 6. Annually in the fall, schedule and promote district sponsored technology workshops for administrators and for teachers during the school year on an integrated student assessment platform/system such as <i>Edusoft</i> .  |   |
| 7. Annually, provide systematic professional development and collaboration time for site administration and teachers to analyze student achievement data, align standards-based instruction, learn and share best practices in instruction and intervention, including the use of technology and develop quarterly assessments horizontally and vertically through grade levels in the district.   |   |
| <b>Monitoring</b>  |   |
| District curriculum, data, and technology administrators and school site administrators track the development and implementation of all activities and accomplishments monthly and report progress at our monthly district/ site admin meetings. Modifications to our district activities will be made as needed in order to insure that we meet or exceed this measurable objective.  |   |
| <b>Timeline:</b> The timeline for the aforementioned actions are included in the Action Steps listed above.  |   |
| <b>Person(s) responsible:</b> District admins, the District Instructional Technology Manager, the District Curriculum Director, the District Testing and Assessment Director, the District Technology Director, school site admins, and site media specialists/mentors are responsible for the planning, development, implementation, and evaluation of all the aforementioned activities. Site administrators and teachers are responsible for completing all necessary professional development, ensuring student instruction is based on standards-aligned objectives, and research based programs, practices and arrangements. |   |

### PD Goal 3 - District Professional Development Goal

District administrators and teachers will become proficient in the use of technology to improve two-way communication between home and school.

**Target Group:** Certificated teachers and administrators

**Supports Curriculum Driven Technology Goals and Objectives 1,2,3,5, & 6 in Component 3 of our Ed Tech Plan**

#### Specific Measurable Objectives by June 30, 2012

**Objective: 3a** By June 2012, 100% k-12 teachers, who attend professional development, will post students' attendance, assignments and grades through a web-based system such as GradeBook II Parent Viewer and all parents that want access will be given a password and access instructions/training...or other such mechanism such as *Expression Engine* website.

**Annual Benchmarks**

**Year 1:** 50% by June 2008.                      **Year 3:** 75% by June 2010.

**Year 2:** 65% by June 2009.                      **Year 4:** 90% by June 2011.

**Year 5:** 100% by June 2012.

**Objective: 3b** By June 2012, 100% site administrators and teachers, who attend professional development, will be proficient with the district's *Diverse Network Associates Freedom* web publishing software which allows teachers to publish class web pages on their school web site and administrators to easily update and edit communications on their school websites.

**Annual Benchmarks**

**Year 1:** 50% by June 2008.                      **Year 3:** 75% by June 2010.

**Year 2:** 65% by June 2009.                      **Year 4:** 90% by June 2011.

**Year 5:** 100% by June 2012.

**Objective: 3c** By June 2012, 100% k-12 teachers and administrators, who attend professional development, will be proficient with the district's new Outlook e-mail service.

**Annual Benchmarks**

**Year 1:** 50% by June 2008.                      **Year 3:** 75% by June 2010.

**Year 2:** 65% by June 2009.                      **Year 4:** 90% by June 2011.

**Year 5:** 100% by June 2012.

### PD Goal 3: Objective: 3a, b, c Evaluation Instrument(s) & Data

**Instruments:** District records of the number of teachers trained to use *GradeBook II* to feed data into *Parent Connect*

**Data:** % of teachers trained; % of parents requesting passwords and instructions; % of parents using *Parent Connect*.

**Instrument:** District and site based equipment and Outlook e-mail account records

**Data:** % of teachers with access

**Instrument:** Communication artifacts from School and classroom websites.

**Data:** evidence of efforts to improve two-way communication.

**Data reviewers**

District curriculum, data, and technology administrators and school admins will analyze benchmark data annually in late August / September and make any necessary modifications in order to meet our objectives.

| PD Goal 3: Objective: 3a, b, c Implementation Action Steps   | Use of Technology   |
|--|---|
| 1. Annually, require administrator and teacher completion of pre and post EdTechProfile survey by all who participate in district-sponsored technology training programs.  | CIMS, GradeBook II, TetraData EASE-e, and Parent Connect, or replacement applications           |
| 2. Annually, in June, analyze EdTechProfile administrator and teacher student information/data analyses results to plan for professional development offerings during the next school year.  | Integrated student assessment such as Edusoft, RenPlace   |
| 3. Annually in the fall, schedule and promote district sponsored technology workshops for administrators and for teachers on all CIMS or replacement components during the school year.  | .   |
| 4. Annually in the fall, schedule and promote district sponsored technology workshops for administrators and for teachers during the school year on the district's web-based student reporting system and <i>Students at Risk</i> procedures.  | Online resources including netTrekker, United Streaming, Criterion, CyberHigh, Vantage Learning |
| 5. By fall 2007, plan district rollout of new service to replace existing CIMS service.  | EdTechProfile, TICAL  |
| 6. By spring 2008, new service, replacement for CIMS, server in place and client software district wide.   |   |
| 7. By fall 2007, schedule and promote district sponsored new service replacement for CIMS workshops for administrators and for teachers during the 2009-10 school year with the objective of getting 30% trained by the end of year. Continue training annually.   |   |
| 8. Annually in the fall, continue to schedule and promote district sponsored new service, replacement for CIMS workshops for administrators and for teachers during the school year.   |   |
| <b>Monitoring</b>  |   |
| District curriculum, data, and technology administrators and school site administrators track the development and implementation of all activities and accomplishments monthly and report progress at our monthly district/ site admin meetings. Modifications to our district activities will be made as needed in order to insure that we meet or exceed this measurable objective.  |   |
| The timeline for the aforementioned actions are included in the Implementation Action Steps listed above.  |   |
| <b>Person(s) responsible:</b> District admins, the District Instructional Technology Manager, the District Curriculum Director, the District Testing and Assessment Director, the District Technology Director, school site admins, and site media specialists/mentors are responsible for the planning, development, implementation, and evaluation of all the aforementioned activities. Site administrators and teachers are responsible for completing all necessary professional development, ensuring student instruction is based on standards-aligned objectives, and research based programs, practices and arrangements. |   |

## INFRASTRUCTURE, HARDWARE, SOFTWARE, AND TECHNICAL SUPPORT

**5a & 5b. Summary of current district technology hardware, electronic learning resources, networking and telecommunication infrastructure, physical plant modifications, and technical support and anticipated needs to support our tech plan objectives.**

### Current District Hardware

Existing hardware and electronic resources at each of our sites is included in *Component 3a: Current Technology Access* in our tech plan. This data comes from both our CBEDS data and our annual California School Technology Surveys.

The CBED computer to student ratio by grade band is summarized in the chart below and includes all computers regardless of age. However, data from the 2005-06 California School Tech Survey shows the average SJUSD student computer ratio for computers four years old and newer is 2.3:1. (See data on following page)

| District Technology by School Type 2005 - 06   |        |
|--|--------|
| District<br>Students per Computer: 2.5/1   |        |
| Elementary   | 14,566 |
| Middle   | 7,284  |
| High   | 8,319  |
| Continuation   | 122    |
| Alternative  | 324    |
| <b>Source:</b> California Department of Education, Educational Demographics Office (CBEDS), SJUSD Inventories In addition to computers available for use by students, those used by staff for instructional activities are also included when counting computers at the various schools. This count is then divided by student enrollment to arrive at a students-per-computer figure. |        |

The total number of Internet connected multi-media computers in the district (from 2006 California Tech Survey) is summarized in the chart below.

| Elementary Schools | Junior High Schools | High Schools | K-12 Ind. Study & Spec. Ed. | District Total |
|--------------------|---------------------|--------------|-----------------------------|----------------|
| 5,664              | 3,494               | 4,111        | 120                         | 13,389         |

| <b>District Equipment Replacement Chart</b> |   |  |
|---|---|--|
| <b>School Name</b>                          | <b>2006-07 Enrollment (Unofficial CBED)</b> | <b># of current Instructional Multimedia computers / thin clients 4 years or newer from 2006 CA. Tech Survey</b> |
| Allen @ Steinbeck Elem                      | 750   | 401  |
| Almaden Elem                                | 362   | 158  |
| Bachrodt Elem                               | 455   | 205  |
| Booksin Elem                                | 677   | 244  |
| Canoas Elem                                 | 402   | 193  |
| Carson Elem                                 | 405   | 101  |
| Darling, Anne Elem                          | 551   | 280  |
| Empire Gardens Elem                         | 449   | 164  |
| Galarza Elem                                | 485   | 202  |
| Gardner Elem                                | 464   | 215  |
| Grant Elem                                  | 541   | 286  |
| Graystone Elem                              | 801   | 208  |
| Hacienda Elem                               | 578   | 218  |
| Hammer @ Galarza Elem                       | 258   | 47   |
| Los Alamitos Elem                           | 651   | 256  |
| Lowell Elem                                 | 445   | 192  |
| Mann, Horace Elem                           | 527   | 211  |
| Olinder Elem                                | 493   | 178  |
| Reed Elem                                   | 448   | 204  |
| River Glen Elem                             | 530   | 146  |
| Schallenberger Elem                         | 520   | 213  |
| Simonds Elem                                | 627   | 199  |
| Terrell Elem                                | 508   | 188  |
| Trace Elem                                  | 781   | 244  |
| Washington Elem                             | 628   | 326  |
| Williams Elem                               | 660   | 220  |
| Willow Glen Elem                            | 570   | 165  |
| Burnett MS                                  | 884   | 771  |
| Castillero MS                               | 1231  | 337  |
| Harte, Bret MS                              | 1212  | 287  |
| Hoover MS                                   | 1161  | 379  |
| Muir MS                                     | 1166  | 1104   |
| River Glen MS                               | 530   | 146  |
| Willow Glen MS                              | 1100  | 470  |
| Broadway HS                                 | 221   | 122  |
| Gunderson HS                                | 1016  | 1341   |
| Leland HS                                   | 1761  | 616  |
| Lincoln HS                                  | 1741  | 401  |
| Pioneer HS                                  | 1508  | 486  |
| San Jose HS                                 | 935   | 755  |
| Willow HS                                   | 1358  | 390  |
| Gunderson Plus HS                           | 40  | 3  |

San Jose Unified has a four-year replacement plan for both student and faculty computers. This program is also supplemented by additional funds from various grants.

|  |               |               |  |
|--|---------------|---------------|--|
| Leland Plus HS   | 40            | 9             |  |
| Lincoln Plus HS  | 40            | 9             |  |
| Pioneer Plus HS  | 40            | 19            |  |
| San Jose Plus HS                                       | 40            | 25            |  |
| Willow Glen Plus HS                                    | 41            | 24            |  |
| Career Academy HS                                      | 15            | 19            |  |
| Middle College   | 68            | 12            |  |
| <b>Total = 2.3:1<br/>student to computer<br/>ratio</b> | <b>34,270</b> | <b>13,389</b> |  |

**District Hardware Needs during the Next Five Years**

We will replace old computers and add to the numbers at each site to maintain our student to computer ratios through new purchases that meet or exceed the CDE minimum recommended standards for new desktops, laptops. We will continue our to computer ratios through replacement of computers that are in service for a minimum of 4 years.

**Current District Software**

**Elementary School Software Used:**

Accelerated Reader, Accelerated Mathematics, Reading Counts, Rosetta Stone, Microsoft Office Suite, Internet resources, netTrekker, iMovie, iWorks, CIMS, Edusoft, GradeBook II, and CLRN approved curriculum based software.

**Middle School Software Used:**

Accelerated Reader, Accelerated Mathematics, Larsson’s Mathematics, Criterion Learning, Rosetta Stone, Microsoft Office Suite, Internet resources, iMovie, iWorks, Macromedia, Dreamweaver, CIMS, GradeBook II, and CLRN approved curriculum based software.

**High School Software Used:**

Accelerated Reader, Accelerated Mathematics, Larsons Mathematics, Cognitive Tutor, Vantage Writing, Rosetta Stone, Microsoft Office Suite, Internet resources, iMovie, iWorks, Macromedia, Dreamweaver, CAD software, CIMS, GradeBook II, and CLRN approved curriculum based software, career software.

**District Software Needs during the Next Five Years**

**Library Management Software**

The district recognizes the importance in education of a solid Library Media automation system that interfaces with our students, parents, teachers, Administrators and library staff in a common environment.

The district needs to move to a robust centralized browser-based Library Management solution. A system that is 100% browser-based should minimize the hardware and support required at the district and schools. Further, the browser-based system will allow those with appropriate permissions access to the solution from any computer within the district or outside the district if needed. A centralized solution will facilitate the sharing of resources within the district reducing future costs.

This system should reduce administrative functions for our library staff allowing them to spend more time with the students and teachers

The system should be able to interface with CIMS and future SIS systems at least on a nightly basis and be SIF compliant.

### **In Addition**

- Additional district standardized and CLRN approved curriculum and intervention software and online services for English/Language Arts and Math for all K-12 grade levels.
- Additional K-8 SBE adopted textbook publisher companion technology resources, particularly for English/Language Arts and Math.
- Ongoing subscriptions to online research resources such as netTrekker and EduSoft
- CLRN approved assistive software as identified by Special Education teachers by the district
- Microsoft Office
- Additional upgrades to existing software versions as needed

### **Current District Infrastructure, Site Networks, and Connectivity**

- Total Number of district schools = **49**
- Total Number of district schools connected to the Internet by a permanent (non-dial-up) connection = **49**

Total Number of district schools connected to the Internet by:

- Full T-1: **47**
- Fractional T-1: **None**
- ISDN: **1**
- DSL: **None**
- Microwave: **None**
- Wireless (not microwave): **1**

Total number of schools in the district that are NOT connected to the District's LAN: 0, all schools are connected.

Average # of drops per classroom: **6 with 2 active**

What percentage of schools is served by the following Internet service provider?

- District office: 100%
- What percentage of classrooms in the district does not have a phone service in the classroom? **0%**
- What percentage of classrooms in the district does not have voicemail service? **90%**

### **District Infrastructure Needs During the Next Five Years**

Insert what you need to meet your objectives in component sections 3 and 4. Such as:

- Increase # of drops per classroom? **NO**
- Increase wireless capabilities? **Yes**

- Additional classroom phone lines and voice-mail to improve home to school communications? Additional upgrades to phone systems, network, switches and routers and implement Parent Link.

**Current District Tech Support**

Technical support at school sites ranges includes our district technical support staff to lead technology teachers, teacher volunteers, students, principals, librarians, media specialists, and Instructional Aides.

District Support includes a Director of Technology Services, a Manager of Technology Services, and a combination of seven full-time District Technology Support Coordinators (Help Desk), Two Network Technicians, and two Phone Technicians. The technicians are available to sites five days a week.

The full-time district Computer Technicians’ duties are:

- Administrative Computers, Software, Infrastructure, LAN, Network phone equipment, software
- Elementary School Computers, Software, Infrastructure, LAN, Network phone equipment, software Secondary School Computers, Software, Infrastructure, LAN, Network phone equipment, software
- District office departments

We also have a full time Computer Operator who supports the financial system and serves as the Information Services Help Desk, and a full-time Central Attendance Clerk who answers questions about the CIMS/MUNUS software.

| Type Of District Support Provided                      | Individuals Responsible  |
|--|--|
| Ongoing equipment maintenance, repair, and replacement | District Help Desk, None at site level, repairs are a contracted service. Replacement is determined by Technology Services.                              |
| Technical Support provided during school hours         | District Help Desk, Manager of Instructional Technology, Director of Technology Services, Technology Resources Teachers, Technology Support Coordinators |
| Technology Integration Support                         | Manager of Instructional Technology, Director of Technology Services, Technology Resources Teachers, Technology Support Coordinators                     |

**District Tech Support Needs over the Next Five Years**

We will need to be supporting infrastructure upgrades will include high-speed WAN connections using wireless technologies, high-speed fiber connections or other technologies that may provide the higher bandwidth service. We also need to support the upgrading of network equipment including routers, firewall, switches, security appliances, wireless access points and servers to provide increased bandwidth and greater security. Future movement to VOIP for telephone services will also need to be supported. SJUSD’s support structure will continue to be reviewed and upgraded to meet the increasing needs of our technology.

The district will offer WAN/LAN troubleshooting and Network standards training for site staff. The district will also hire additional technicians as needed and as funding is available. To support teachers participating in the district's education technology professional development opportunities, the district will train and offer stipends to site-based technology integration mentors (Technology Support Coordinators and Technology Resource Teachers).

**5. C & D Benchmarks, timelines, and monitoring process for new hardware, infrastructure, and software acquisitions.**

|  |
|--|
| <b>Goal 1 - District Goal for Hardware and Software</b>  |
| <p><b>Goal 1:</b> All k-12 students will have access to up-to-date computers and appropriate software to support achievement of the academic standards in the classroom, district curricular goals, and ultimately for lifelong learning and success in our Digital society.</p>   |
| <b>Specific Measurable Objective by June 30, 2012</b>  |
| <p><b>Objective: 1a</b> By June 30, 2012 our district average student to computer* ratio will be 2.5 to 1 or better. (*based on CDE defined up to date multimedia computer - four years old or newer).</p> <p><b>Annual Benchmarks and Timeline:</b><br/> <b>Year 1:</b> 2.5 students to 1 computer by June 2008.      <b>Year 2:</b> 2.5students to 1 computer by June 2009<br/> <b>Year 3:</b> 2.5 students to 1 computer by June 2010.      <b>Year 4:</b> 2.5students to 1 computer by June 2011.<br/> <b>Year 5:</b> 2.5 students to 1 computer by June 2012</p> <p><b>Objective: 1b</b> By June 30, 2012 100% k-12 core curriculum classroom ( E/LA, Math, History/Social Science, Science) will have access to district approved CLRN and/or SBE approved curriculum based learning and intervention software and/or internet subscriptions.</p> <p><b>Annual Benchmarks and Timeline:</b><br/> <b>Year 1:</b> 60% of classrooms by June 2008.      <b>Year 2:</b> 75% of classrooms by June 2009<br/> <b>Year 3:</b> 85% of classrooms by June 2010.      <b>Year 4:</b> 95% of classrooms by June 2011.<br/> <b>Year 5:</b> 100% of classrooms by June 2012</p> |
| <b>Monitoring and Evaluation Instrument(s) &amp; Data</b>  |
| <p><b>Instrument:</b> Annual CBEDS:<br/> <b>Data:</b> average student to computer ratio by school and district wide</p> <p><b>Instrument:</b> Annual California Online Tech Survey:<br/> <b>Data:</b> average student to computer ratio by school.</p> <p><b>Instrument:</b> Annual district technology software survey<br/> <b>Data:</b> % of classrooms with access to approved curriculum based software</p> <p><b>Monitoring and Evaluation Process:</b><br/> The District Technology Director, school site administrators, and site technology coordinators will track the development and implementation of all appropriate access activities, inventories and accomplishments monthly and report progress at our monthly district/ site admin meetings. Modifications to our district activities will be made as needed in order to insure that we meet or exceed this measurable objective. District Technology Director, school site admins., and school site tech coordinators will analyze end of school year results annually in June.</p>   |



**5. C & D Benchmarks, timelines, and monitoring process for new hardware, infrastructure, and software acquisitions.**

|   |
|---|
| <b>Goal 3 - District Goal for Technical Support</b>   |
| <p><b>Goal 3:</b> All k-12 school sites in district will have access to timely district technical support so teachers and students have access to technology needed to support standards in the classroom, district curricular goals, and ultimately for lifelong learning and success in our Digital society. <i>(Aligns to curriculum goal #4 in component 3)</i></p>   |
| <b>Specific Measurable Objective by June 30, 2012</b>   |
| <p><b>Objective: 3a</b> By June 2012, the district will have an standardized Information Technology Services (ITS) work order process and tracking system in place.</p> <p><b>Annual Benchmarks and Timeline:</b><br/> <b>Year 1:</b> 100% by June 2008.                      <b>Year 2:</b> 100% by June 2009<br/> <b>Year 3:</b> 100% by June 2010.                      <b>Year 4:</b> 100% by June 2011.<br/> <b>Year 5:</b> 100% by June 2012</p> <p><b>Objective: 3b</b> By June 2012, the district will have ITS computer, software, and network security standards in place for district supported technology.(ie. Virus protection, DeepFreeze software, web content filtering software, Spam Blocking)</p> <p><b>Annual Benchmarks and Timeline:</b><br/> <b>Year 1:</b> 100% by June 2008.                      <b>Year 2:</b> 100% by June 2009<br/> <b>Year 3:</b> 100% by June 2010.                      <b>Year 4:</b> 100% by June 2011.<br/> <b>Year 5:</b> 100% by June 2012</p> |
| <b>Monitoring and Evaluation Instrument(s) &amp; Data</b>   |
| <p><b>Instrument:</b> District ITS Policies and Procedures handbook<br/> <b>Data:</b> Standardized work order process and security standards for computers and networks.</p> <p><b>Monitoring and Evaluation Process:</b><br/> The District Technology Director, school site administrators, and site technology coordinators will track the development and implementation of all appropriate access activities, inventories and accomplishments monthly and report progress at our monthly district/ site admin meetings. Modifications to our district activities will be made as needed in order to insure that we meet or exceed this measurable objective. District Technology Director, school site admins., and school site tech coordinators will analyze end of school year results annually in June.</p>   |

## **EDUCATION TECHNOLOGY FUNDING & BUDGET**

Economic conditions in California and the nation may continue to impact k-12 education budgets and grants through the duration of our 5-year tech plan. Therefore, our established and potential funding sources to implement our Ed. Technology Plan may be impacted as well. The Manager of Instructional Technology has the primary responsibility for securing future funding opportunities. The Manager of Instructional Technology identifies possible future funding sources from: IT networking venues, the CDE's grant notification list serv, CTAP Region 5, web site resources and private grant solicitation. Our Manager of Instructional Technology and our Director of Technology Services also will work with the curriculum department to integrate technology in existing curricular-based professional development.

### **Budget Assumptions:**

- District-paid and site-paid tech support will increase above current 2006/07 levels.
- DAS/E-rate programs will continue throughout the duration of the Ed tech plan.
- EETT Formula grant funds continue at approximately the same level annually.
- EETT Competitive grants continue to be available to grades 4-8.
- There will not be any state or district budget freezes for the duration of our Tech Plan. .
- School site budgets and Title 1 funds will fund some of the site-specific hardware, software, and tech support outlined in the plan.

**List of established and potential funding sources and cost savings, present and future**

**6A. Established Funding Sources**

| Funding Sources to Implement District Ed. Technology Plan | Pays For  | Nature of Source |          |           | Amt.* Year 1 | Amt.* Year 2 | Amt.* Year 3 | Amt.* Year 4 | Amt.* Year 5 |
|---|---|------------------|----------|-----------|--------------|--------------|--------------|--------------|--------------|
|   |   | On-going         | One Time | Potential |              |              |              |              |              |
| District General Fund                                     | Salaries, bandwidth, Licenses, tech infrastructure                    | X                |          | 250 M     | 250 M        | 250 M        | 250 M        | 250 M        | 250 M        |
| District Technology Budget                                | Licenses, tech infrastructure, hardware, and Professional Development | X                |          | 1 M       | 1 M          | 1 M          | 1 M          | 1 M          | 1 M          |
| California TeleConnect (DAS)                              | Cal Teleconnect Fund 50% abated into acct                             | X                |          | 100 K     | 100 K        | 100 K        | 100 K        | 100 K        | 100 K        |
| E-Rate  | Discount Only   | X                |          | 500 K     | 500 K        | 500 K        | 500 K        | 500 K        | 500 K        |
| Title 1 site budgets                                      | Various including hardware & ELR, salaries                            | X                |          | 7.3 M     | 7.3 M        | 7.3 M        | 7.3 M        | 7.3 M        | 7.3 M        |
| Title II D – EETT Formula                                 | In-service, service fees, hardware                                    | X                |          | 35 K      | 35 K         | TBA          | TBA          | TBA          | TBA          |
| Title II D – EETT Competitive?                            | In-service, service fees, hardware                                    | X                |          | 963 K     | 646 K        | 317 K        | TBA          |              |              |
| QZAB  | Licenses, tech infrastructure, hardware, and Professional Development | X                |          | 7.9 M     | 2.3 M        | 1.2 M        | 1.2 M        | 1.2 M        | 900 K        |
| K-12 Voucher Program                                      | State Grant   |                  | X        | 2.2 M     | 2.2 M        |              |              | ?            |              |
| Magnet Schools of America                                 | Federal Grant   | X                |          | 7.2 M     | 2.4 M        | 2.4 M        | 2.4 M        | NA           | NA           |
| Other Technology Grants                                   | Fed., State, & Private grants   |                  |          | 1 M       | 1 M          | 1 M          | 1 M          | 1 M          | 1 M          |
| Other Prof. Dev Grants                                    | Fed., State, & Private grants   | X                |          | 600 K     | 600 K        | 600 K        | 600 K        | 600 K        | 600 K        |
| <b>Annual Totals</b>                                      |   |                  |          |           | <b>268 M</b> | <b>264 M</b> | <b>264 M</b> | <b>261 M</b> | <b>261 M</b> |

We will continue our endeavors to secure new monies through grants, local industry as well as investigate other sources of funding. Currently we are exploring ways to leverage our funds with partnerships with local technology industries.

**6B. Estimate of Tech Plan Implementation Costs for District’s Five Year Plan.**

| Category  | Description Item/category Cost                           | Estimated cost Year One | Estimated cost Year Two | Estimated cost Year Three | Estimated cost Year Four | Estimated cost Year Five | Total cost estimate |
|---|--|-------------------------|-------------------------|---------------------------|--------------------------|--------------------------|---------------------|
| 1000-1999 Certificated Salaries                 | Substitutes and stipends for staff development           | \$185,000               | \$185,000               | \$185,000                 | \$185,000                | \$185,000                | <b>\$925,000</b>    |
| 2000-2999 Classified Salaries                   | Tech Support   | \$1,600,000             | \$1,600,000             | \$1,600,000               | \$1,600,000              | \$1,600,000              | <b>\$8,000,000</b>  |
| Employee Benefits                               | Benefits for certificated and classified                 | \$446,000               | \$446,000               | \$446,000                 | \$446,000                | \$446,000                | <b>\$2,230,000</b>  |
| 4000-4999 Books and Supplies                    | <b>Misc. Infrastructure: 5 year plan</b>                 |                         |                         |                           |                          |                          |                     |
|   | 2000 Computers (total)                                   | \$2,000,000             | \$2,000,000             | \$2,000,000               | \$2,000,000              | \$2,000,000              | <b>\$10,000,000</b> |
|   | 200 Printers (total)                                     | \$60,000                | \$60,000                | \$60,000                  | \$60,000                 | \$60,000                 | <b>\$300,000</b>    |
|   | 50 LCD Projectors (total)                                | \$32,000                | \$32,000                | \$32,000                  | \$32,000                 | \$32,000                 | <b>\$160,000</b>    |
|   | ELRs (Electronic Learning Resources) and InfoTrak Online | \$200,000               | \$200,000               | \$200,000                 | \$200,000                | \$200,000                | <b>\$1,000,000</b>  |
|   | ELARs – (Electronic Learning Assessment Resources)       | \$200,000               | \$200,000               | \$200,000                 | \$200,000                | \$200,000                | <b>\$1,000,000</b>  |
| 5000 -5999 Services, operating expenses, travel | Staff Development Training                               | \$455,000               | \$500,000               | \$550,000                 | \$580,000                | \$590,000                | <b>\$2,675,000</b>  |
| 6000-6999                                       | Capitol Outlay   | \$400,000               | \$400,000               | \$400,000                 | \$400,000                | \$400,000                | <b>\$2,000,000</b>  |
| <b>TOTALS</b>                                   |  | <b>\$5,578,000</b>      | <b>\$5,623,000</b>      | <b>\$5,673,000</b>        | <b>\$5,703,000</b>       | <b>\$5,713,000</b>       | <b>\$28,290,000</b> |

**6c. Level of Ongoing District Technical Support**

The district has five FTE computer technicians and seven Technology Support Coordinators offering tech support to schools, one FTE for every 1200 computers in the district. In addition to the District Technical Support information in Component 5 (a, b, c, d) of our tech plan, the district will train and offer stipends to site-based technology integration support mentors (peer coaches) to assist teachers participating in the district’s education technology professional development opportunities.

**6d. District’s Replacement Policy for Obsolete Equipment**

The district replacement policy for obsolete equipment is every four years. Our district computer replacement budget is 10% per year of our technology budget. Some of our school sites have their own technology budgets. Principals work with the District and School Site Councils to review tech inventories at the school and replace as needed.

## **6e. District's Budget and Funding Monitoring Process**

Our district is committed to a dependable and sustainable technology plan that ensures funding for reliable infrastructure, hardware, technical support, professional development, and software for all district sites.

The district Manager of Instructional Technology has the primary responsibility and access to appropriate budgets to meet goals and objectives specified in this plan. District budget and funding monitoring is the responsibility of the SJUSD Director of Information Technology who takes budget recommendations and revision requests to Cabinet-level meetings and the School Board as needed. Routine district budget analyses and funding opportunities are tracked to ensure optimal leveraging of funds. Site technology budgets are the domain of site principals and school site councils.

We will actively pursue any funding opportunities that become available. We have a standing technology committee that will guide each opportunity to ensure success in obtaining these funds.

District technology support and site-based technology staff provide the district Manager of Instructional Technology and Director of Technology Services ongoing data on technology replacement, upgrade, maintenance, and technical support needs including the annual California School Survey data provided by all sites in the district.

This data will then be used to restructure our support process if needed. San Jose Unified School District has three committees that oversee our support structure.

- Our technology support group consists of representatives at each school. This group is the main conduit between the schools and the District office. The individuals maintain and support teachers and staff with the technology at the school.
- A second committee is our teachers association technology committee whose purpose is to keep ongoing communication between the District and the teachers about the impact of technology in the classroom,
- Last is the District Technology in the Curriculum Committee that reviews both curriculum software and support issues.

## **MONITORING & EVALUATION OF TECHNOLOGY PLAN**

San Jose Unified School District has made a substantial investment in educational technology and must ensure that all technology is used to effectively enhance student achievement and add value to the educational experience. However, evaluating the impact of technology on student achievement is not a simple matter. Many factors impact student achievement. As with the use of all devices, materials and curriculum, instructional effectiveness depends on how they are used. The diversity of technology further complicates assessment. As a result, schools are caught in the struggle of trying to isolate the innovation in order to show its effect on student achievement and learning.

Examining the impact of technology on student achievement and learning should not be limited to just test scores, but also to the value the technology brings to the educational experience. Research shows technology encourages a positive attitude toward learning and motivation and decreases student attendance problems. These factors must also be examined when evaluating the effectiveness of technology in enhancing student achievement and learning.

While the pressure continues to develop answers about how technologies may contribute to student learning, there has been increasing recognition that technology is a crucial player in a more complex process of change that cannot be accomplished by technological fixes alone. As a result, researchers are increasingly asking questions about how technology is integrated into educational settings; how new electronic resources were interpreted and adapted by their users; how best to match technological capacities with students' learning needs; and how technological change can interact with and support changes in many other parts of the educational process. (Honey, McMillian Culp, and Carrigg, 1999, p.3).

The district must provide guidelines and assistance on educationally valid evaluation procedures.

### **Conduct technology evaluations to compare current school and district technology use with best practice research directed toward student achievement.**

Technology evaluations, conducted first in pilot sites, then moving to all sites, will use current research about best practice as a standard for comparison of educational technology use.

### **Provide training and tools for staff to effectively assess and evaluate technology use at the site level.**

Site staff will be provided the tools and the professional development needed to make assessment a part of technology implementation.

### **Capitalize on evaluations conducted by other educational organizations, and actively participate in local, regional, state and national technology organizations and projects.**

Research and evaluations of the effectiveness of technology on student achievement already exist. San Jose Unified School District should not waste time and money reinventing valid, reliable research findings. "Research can play an important role in providing educational

practitioners with concrete suggestions on why and how to use technology with their students" (Norris, Smolka, & Soloway, 1999, p. 9).

In addition, participating in existing technology organizations and projects allows San Jose Unified School District to leverage our resources and expertise.

Implementing this vision for technology requires time. A phased implementation is necessary to ensure success. The chart indicates the approximate time line for implementing the goals of the technology plan. Because this is a continuation of the previous technology plan, many goals are already in place and ongoing.

| Job Title(s) of Responsible Individual(s)  | Responsibilities  | Monthly FTE Time Estimate | Time Line   |
|--|---|---------------------------|---|
| District Instructional Technology Manager  | Provide overall Tech Plan management and coordination   | 0.2                       | Monthly meetings with staffs from other departments |
| District Assistant Superintendents   | Manage, coordinate, and assess curriculum-based staff development   | 0.1                       | Monthly meetings with staffs                        |
| District Instructional Technology Manager, Technology Data Coordinator                                     | Assess, plan, implement, monitor, and evaluate technology integration staff development aligned to curriculum. Provide support to site-based technology coaches.            | 0.5                       | Monthly meetings with staffs                        |
| District Instructional Technology Manager / District Information Services Supervisor                       | Standardize, develop, manage, monitor, and revise as necessary network, hardware, infrastructure, software, and technical support specifications, policies, and procedures. | 0.1                       | Meeting two times a year.                           |
| District Assistant Superintendents, District Instructional Technology Manager                              | Coordinate ongoing partner involvement  | 0.1                       | Monthly meetings                                    |
| District Instructional Technology Manager, Technology Data Coordinator, District Assistant Superintendents | Collect and analyze data regarding K-12 students' computer skills and students' academic achievement.   | 0.1                       | Monthly meetings with staffs                        |
| Technology Data Coordinator  | Collect staff development data on technology proficiencies.   | 0.6                       | Twice a year  |
| Technology Data Coordinator, Instructional Technology Assistant  | Collect data regarding staff development focused on teaching students computer and information literacy skills  | 0.3                       | Monthly   |
| District Instructional Technology Manager, Technology Data Coordinator, District Assistant Superintendents | Collect data regarding staff development focused on integration of technology into the curriculum to improve academic achievement   | .3                        | Monthly meetings with staffs                        |
| District Instructional Technology Manager, Technology Data Coordinator                                     | Use collected data to monitor and evaluate progress toward benchmarks and the timeline and to plan and make modifications.  | .3                        | Monthly meetings with staffs                        |
| Instructional Technology Assistant   | Collect annual California School Technology Survey data and assist with pre and post I-assessment completion.   | .2                        | Yearly  |

## **SJUSD Evaluation Tool**

The intent of this tool is to provide an effective, yet relatively simple tool that will help district leaders (a) reflect on activities to date vis à vis effective practices in project management and technology integration, (b) think about what needs to be done in order to meet project goals, and (c) consider strategies for maximizing project impact. The instrument should also provide an effective means for collecting and reporting comparable information across the projects.

The tool contains several principles of good practice (labeled A, B, C, etc.) and indicators of three levels of success, as described in the following scale:

- 1. Minimum:** The project is going forward as described in the proposal.
- 2. Moderate:** Project objectives are being met. Where appropriate, project strategies and activities impact additional areas of the instructional program, e.g., other schools, curricular areas, grade levels.
- 3. Strong:** Project strategies and activities are institutionalized throughout the school system's ongoing instructional program.

### Instructions:

As you go through the form, read the three indicators for each principle and determine which one best describes where your project is as of the end of the project year. **Circle the number corresponding to that indicator.** In the optional "Comments" block, add any information that you think other educators will need in order to understand the status of your project. Another option is to use the empty tables at the end of each section to add principles and indicators that help you evaluate your project.

### Some Assurances:

One of the major purposes of this type of evaluation is to show progress and impact over time. For projects designed to take five years for full implementation, it would be unusual for the evaluation to show many 3s (strong performance) during the first year. Projects designed for one year should reach some level of institutionalization or sustainability by the end of that one-year period. In rare instances, there might be a principle that does not apply to a particular project; such cases should be explained in the Comments box.

This data will be collected each year by our District Data Team. Analysis and summation of this data will be presented to the Assistant Superintendent and to the Technology in the Curriculum Committee. Based on this information our Technology in the Curriculum Committee will meet with the Assistant Superintendent to decide on what strategies and adjustments need to be made.

## Principles and Indicators of Success for All Projects

### There is evidence that:

A. The project attains the goals and meets the objectives outlined in the proposal.

| 1   | 2   | 3                              |
|---|---|--------------------------------|
| Project activities address the objectives outlined in the proposal. | Major project activities are completed, and most objectives are met as described in the proposal. | The project has met its goals. |
| Comments:   |   |                                |

B. The project supports the implementation of the school system instructional technology plan.

| 1   | 2   | 3  |
|---|---|--|
| Project activities support and positively impact the school system's instructional technology plan. | As a result of the project, specific objectives of the existing instructional technology plan have been accomplished. | The project has moved the state of technology integration forward throughout the school system and has led to the identification of new directions and goals for the instructional technology program. |
| Comments:   |   |  |

C. Businesses and community partners are actively involved in the project.

| 1   | 2   | 3   |
|---|---|---|
| The project is beginning to implement strategies for involving businesses and the community in the project. | Project partners from businesses and the community are actively involved in planning and implementing the project. Old partnerships are strengthened and new ones are formed. | The school system builds on the partnerships and collaborative relations to formulate new educational technology initiatives. |
| Comments:   |   |   |

D. The project reduces disparities in access to and utilization of technology.

| 1  | 2  | 3  |
|--|--|--|
| Disparities have been identified and a plan is in place to overcome the barriers that created the disparities. | Technology implementation helps reduce disparities and overcome barriers to teaching and learning. | Systems are in place to anticipate and react to disparities as they arise. |
| Comments:  |  |  |

E. Information about the project is disseminated to other educational entities, such as schools, school districts, universities, and professional associations.

| 1   | 2  | 3  |
|---|--|--|
| Information about the project is distributed throughout the school system and across the <b>community</b> . | Products have been developed (e.g., documentation of the model, training materials, student materials) and are being disseminated. | As a result of dissemination activities, other educational entities are contacting the grantee for products, information, or advice. |
| Comments:   |  |  |

F. The project is being implemented in a manner that enhances the likelihood that programmatic activities are sustained after federal funding ends.

| 1   | 2   | 3  |
|---|---|--|
| School system leaders and project partners recognize the importance of sustaining project activities over time. | School system leaders and project partners have developed plans for sustaining the project's activities after federal funding ends. | School system leaders and project partners have implemented plans to sustain the project after federal funding ends. |
| Comments:   |   |  |

G. The project is well managed.

| 1   | 2  | 3  |
|---|--|--|
| The proposal identifies project leader(s) and has outlined an organizational structure and project management strategies. | Project management procedures are shared with project participants and are in operation. | Project activities are on time, on target, and within budget. Project participants are satisfied with management strategies. |
| Comments:   |  |  |

H. Stakeholders (those who are affected by the project) are actively involved in planning and implementing technology integration.

| 1  | 2  | 3  |
|--|--|--|
| Stakeholders have input into planning project activities, as stated in the proposal. | The school system implements specific strategies for ensuring the input and participation of stakeholders in technology integration. | The school system institutionalizes a system for maximizing stakeholder involvement in the planning and implementation of technology into teaching and learning. |
| Comments:  |  |  |

I. Educators have the training and technical assistance necessary for the successful completion of project objectives.

| 1   | 2   | 3  |
|---|---|--|
| A plan is in place for systematic training and technical assistance to meet project objectives. | Training and technical assistance strategies are developed and implemented. | Project participants received training and technical assistance on site and on demand. |
| Comments:   |   |  |

J. As a result of the project, educators are using technology for instruction.

| 1   | 2  | 3   |
|---|--|---|
| Project participants are integrating the project's technology applications into their ongoing instructional programs. | Instructional technology applications associated with the project have been adopted by teachers in other curricular areas or grade levels than those anticipated originally. | Instructional technology applications associated with the project are being adopted system-wide in appropriate academic areas and grade levels. |
| Comments:   |  |   |

K. As a result of the project, students are using technology as a tool for learning.

| 1  | 2  | 3   |
|--|--|---|
| The project's target students regularly use technology for the applications described in the proposal. | The scope of technology use by students has expanded beyond the original scope of the project to include other curricular areas or grade levels. | All students, including those with special learning needs and those who are at risk of academic failure, use technology as a tool for learning. |
| Comments:  |  |   |

L. As a result of increased technology use, students demonstrate improvement in class work, assessment, attitudes, and/or behavior.

| 1   | 2   | 3   |
|---|---|---|
| The project has developed strategies to document the impact of technology on student performance, attitudes, and/or behavior. | As a result of project activities, the target students have demonstrated increased motivation in schoolwork, higher performance ratings, and/or new workforce skills. | The school system has evidence that project activities, strategies, or products have had a positive impact on the performance, attitudes, and behavior of students beyond those originally served by the project. |
| Comments:   |   |   |

M. Additional principles and indicators: \_\_\_\_\_  
 \_\_\_\_\_

### Principles and Indicators of Success for Instructional Priority Models

Model designed to integrate technology into the teaching and learning process in a way that supports the school system’s implementation of the San Jose Unified School District Board of Education’s educational plan.

**There is evidence that:**

A. A replicable model for integrating technology into teaching and learning is developed and implemented.

| 1  | 2  | 3   |
|--|--|---|
| An informal technology integration model is developed but has not been documented or pilot tested. | A technology integration model is documented and tested. The model is implemented with the population described in the proposal. | A replicable technology integration model is an integral part of the school system’s on-going technology program. |
| Comments:  |  |   |

B. Technology is integrated into curricular areas outlined by the San Jose Unified School District Technology Use Plan.

| 1  | 2   | 3   |
|--|---|---|
| Project participants are knowledgeable about the state curriculum area identified in the proposal and have initiated strategies for integrating technology into that area. | Project participants have developed strategies, materials, and resources for integrating technology into the designated curricular area and are planning to expand to other areas, sites, and grade levels. | Strategies for integrating technology into additional curricular areas identified by San Jose Unified School District are being implemented. The school system is planning to expand the strategies to address other curricular areas and grade levels, as appropriate. |
| Comments:  |   |   |

C. Project participants use lesson plans, instructional units, and other resources that support the integration of technology into the curricular areas designated by San Jose Unified School District.

| 1   | 2  | 3   |
|---|--|---|
| Project participants have developed or adopted lesson plans, instructional units, and other resources that incorporate technology into the curricular area and grade level(s) designated in the proposal. | Most teachers of the subjects and grades identified in the proposal frequently use technology as tools for learning, as evidenced by lesson plans, instructional units, and other resources. | Teachers in additional curricular areas have adopted and are using technology as tools for learning as evidenced by lesson plans, instructional units, and other resources. |
| Comments:   |  |   |

D. Teachers learn and employ innovative teaching strategies that use technology as a tool for learning.

| 1  | 2   | 3  |
|--|---|--|
| Project planners identify teaching strategies that help teachers become the “guide on the side” rather than the “sage on the stage.” Teachers participate in training on the strategies. | Teachers experiment with and adopt student-focused teaching strategies in their classes, e.g., constructivist learning, collaborative work groups, and student research projects. | As a result of the project, teachers fluidly employ a variety of effective teaching strategies, according to the needs of the students and the nature of the subject matter. |
| Comments:  |   |  |

E. Administrators provide opportunities for teachers to learn and experiment with technology applications.

| 1  | 2  | 3  |
|--|--|--|
| Principals and central office staff begin to implement ways to encourage and support the use of technology by project participants, e.g., arranging time, providing resources, and allowing freedom for experimentation. | Principals and central office staff implement strategies that encourage and support teacher’s use of technology, e.g., time for learning and access to state of the art equipment. | Mechanisms are in place system wide to support the use of technology by all educators. Access to technology resources, training, and technical support is equitable. |
| Comments:  |  |  |

## Principles and Indicators of Success for Instructional Priority Models

Technology staff development training model for teachers designed to implement the technology competencies outlined in the San Jose Unified Technology Standards.

### There is evidence that:

A. A replicable model for teacher training is developed and implemented.

| 1  | 2  | 3  |
|--|--|--|
| An informal professional development model is developed but has not been documented or pilot tested. | A professional development model is documented and tested. The model is implemented with the teacher population described in the proposal. | A replicable professional development model is an integral part of the school system's on-going technology program as well as the system wide professional development program for all teachers. |
| Comments:  |  |  |

B. Professional development activities meet the identified needs of teachers.

| 1  | 2  | 3  |
|--|--|--|
| The school system conducts a formal needs assessment of the teachers involved in the project and designs professional development activities based on the results. | Each year, the school system conducts formal needs assessments of all teachers (e.g., survey, focus groups) and collects other needs data throughout the year (e.g. workshop evaluations). | Each school in the system institutionalizes annual formal and informal needs assessments and uses the results to update the professional development component of the school improvement plan. |
| Comments:  |  |  |

C. Professional development activities are offered at times and places that enhance participation by teachers.

| 1   | 2  | 3   |
|---|--|---|
| The school system offers professional development activities for project participants at a variety of times and places, e.g., after school, on weekends, and during the summer. | The school system tries and evaluates innovative ways of enhancing participation in professional development activities while acknowledging the demands on teachers' time. | The school system has evidence of teacher satisfaction with the technology-training program, such as increased participation by all teachers. |
| Comments:   |  |   |

D. Professional development activities are on-going and just-in-time.

| 1  | 2   | 3   |
|--|---|---|
| Workshops on technology applications and instructional strategies are offered throughout the year. The requisite technology is in place for teachers to apply new skills and strategies (i.e., teachers don't receive training before they have access to the technology). | Project participants engage in professional growth activities that are timed to coincide with classroom activities and instructional units. | All teachers in the system have access to professional development activities that are timed to coincide with classroom activities and instructional units. |
| Comments:  |   |   |

E. Teachers learn and apply the North Carolina Technology Competencies.

| 1   | 2  | 3  |
|---|--|--|
| Project participants are beginning to apply the Technology Competencies in their teaching and in professional activities. | Project participants and their peers have developed skills identified in the SJUSD technology competencies and are demonstrating them in their teaching. | Teachers throughout the system have developed skills identified in the Technology Competencies and are demonstrating them in their teaching. |
| Comments:   |  |  |

F. Additional principles and indicators: \_\_\_\_\_  
\_\_\_\_\_

| 1         | 2 | 3 |
|-----------|---|---|
|           |   |   |
| Comments: |   |   |

## Principles and Indicators of Success for Instructional Priority Models

Performance based assessment model that measures the impact that technology makes on student achievement.

### There is evidence that:

A. A replicable performance based assessment model is developed.

| 1   | 2  | 3   |
|---|--|---|
| An informal model is developed but has not been documented or pilot tested. | A performance based assessment model is documented and tested. The model is implemented with the population described in the proposal. | A replicable performance based assessment model is an integral part of the school system's on-going technology program. |
| Comments:   |  |   |

B. The assessment model is multi-dimensional.

| 1  | 2   | 3  |
|--|---|--|
| Project planning and initial activities are based on input from several groups and sources of information. | The assessment model contains a variety of sources of information and perspectives on the impact of technology, i.e., goes beyond scores on standardized achievement tests. | The assessment model is an interwoven collection of several strategies, each of which addresses a different target audience, issue, or expected outcome to measure the impact of technology. |
| Comments:  |   |  |

C. Refinements to the assessment model are based on information from the piloting activities.

| 1   | 2   | 3   |
|---|---|---|
| A process has been developed for refining the assessment model based on project findings. | Effectiveness and efficacy data have been gathered and used to refine the assessment model or its components. | A system is in place for periodic revision of the assessment model, based on findings from existing activities. |
| Comments:   |   |   |

D. The model establishes a process for documenting at least one of the four expected benefits identified in the San Jose Unified School District Technology Plan.

- Student learning/achievement
- Student workforce readiness
- Teacher productivity
- Cost-effectiveness

| 1  | 2   | 3   |
|--|---|---|
| The project identifies which of the expected benefits of the San Jose Unified School District Technology Plan will be addressed by the assessment model. | Project activities include data gathering and analysis to determine the impact of technology implementation on at least one of the California Technology Standards areas. | As part of the assessment model, a process exists to document the benefits of implementing technology to at least one of the California Technology Standards. |
| Comments: (Indicate which of the expected benefits the project addresses.)   |   |   |

E. Documentation of project activities includes references to research and the professional literature supporting the impact of technology on the teaching/learning process.

| 1   | 2  | 3  |
|---|--|--|
| The project includes plans to use research or current literature to develop or revise activities in developing the model. | Findings from similar projects and published research have been reviewed and incorporated into the assessment model. | Documentation of the assessment model describes activities that incorporate existing research findings as well as states parallels to or extends findings published in current literature. |
| Comments:   |  |  |

F. Additional principles and indicators: \_\_\_\_\_  
 \_\_\_\_\_

| 1         | 2 | 3 |
|-----------|---|---|
|           |   |   |
| Comments: |   |   |

## ADULT LITERACY AND TECHNOLOGY

### **Criteria 8: Effective Collaborative Strategies with Adult Literacy Providers to Maximize the Use of Technology**

Adult Literacy is provided in the district through the San Jose Unified School District Office of Parent Education and Involvement. During the Fall of 2007, the manager will meet with adult literacy providers at our district High School to share information about our technology plan, to learn how the Adult School Program is currently incorporating technology into its classes, and to discover how we may collaborate to better provide services to our students, our parents and the district community. Our district will try to develop a collaborative partnership plan with the Office of Parent Education and Involvement to maximize the use of technology.

Our parents from the targeted schools are notified, informed, and invited to the events at the school sites or the District Office. The Office of Parent Education works very closely with the schools' administration and district personnel to communicate with parents.

Principal at each school does have a system for communication with the parents such as:

- Web site
- Phone Messages
- Newsletter
- Coffee with the Principal
- Parent meetings

The Office of Parent Education has its own system to collaborate, support and reach all parents such as:

- District Web site
- Fliers are mailed to the schools and to the homes of the students
- Notices are placed at the District Office
- There is an information Table for the fliers to be public to all
- Phone calls are made from the Office of Parent Education to the individual homes of the parents at the targeted schools to invite them to classes, workshops and events.
- Phone calls are made to the individual homes of the parents of the targeted schools to remind of the classes, workshops or events which they have registered.
- At any event held at the District Office, presentation is made to the parents about the different programs available to them.
- Parents are given a certificate or completion for the workshops are classes, which they attend
- Day Care is made available to the parents that attend classes, workshops and events

Workshops are held continually throughout the school year and during the summer vacation. Examples of some of our workshops for parents are:

- Parents can access the Internet information on appropriate web sites for students
- The Internet and how it can enhance learning and support academics
- Word Processing, Spread sheet, Graphics, Internet, beginning and Intermediate Classes

- ❑ Rosetta Stone English language development, practice and instruction, beginning, intermediate and advanced
- ❑ On line education for parents through the Internet, Primary and Secondary classes through: Instituto Nacional de la Educación de los Adultos
- ❑ College Nights for Parents for Targeted Schools at School Sites
- ❑ Workshops for parents on how parents can help their children with their reading and mathematic assignments at home. The workshops addressed the importance of using technology as a tool and a motivator for research, enrichment and practice to enhance reading and mathematics and careers exploration.
- ❑ Ayudemos a Nuestros Hijos en Lectura y Matemáticas
- ❑ Workshops for the parents on positive discipline, promoting family wellness and involvement in school. The workshops addressed the importance of technology in the home and school. The importance of technology for parents in the home and in the work place to be better informed and to stay connected and involved in their children's education.
- ❑ The workshops addressed the importance of technology and its use to enhance academic success.

The partnership of the District with the parents and community support is enormous. The greater San Jose Bay Area is rich with resources and needs. The diversity of the resources is as great as the diversity of the needs of the students, parents and families of San Jose Unified School District.

These resources are used to enrich the education of our families, such as support in the area of mental and physical health, translation, scholarships and vocational opportunities. Companies in the San Jose area support education with grants and scholarships. The partnerships between the educators, the home and the community prove itself repeatedly to be the key to support student learning and success.

## RESEARCH-BASED METHODS AND STRATEGIES

### Criteria 9: Effective, Research-Based Methods and Strategies

#### 9a Description of how education technology strategies and proven methods for student learning, teaching, and technology management are based on relevant research and effective practices

Our technology plan lists clear goals and strategies for integrating technology into the curriculum to improve student learning in the specific areas of English/ Language Arts and Math. The learning objectives are based on the California State Academic Content Standards. The following relevant research was examined and integrated into our plan. The research we selected emphasizes best practices for technology integration in the curriculum, Total Cost of Ownership, and important factors that contribute to successful staff development.

San Jose Unified School District's philosophy is that the use of technology should be integrated into the curriculum at all levels in order to improve student achievement. Technology should not be a separate content taught for its own sake. Technology improves student performances when the application directly supports the curriculum objectives being assessed. Alignment of project or lesson content with state content standards is an important first step in infusing technology into the curricula. A survey of 465 teachers in California resulted in 92% affirming that the starting point in infusing technology into the curriculum is having information about the specific content of a program or use of an application that aligns with state-adopted curriculum standards. A number of respondents indicated that an online resource that profiles electronic learning resources with the specific skills and knowledge in areas that align with the content standards would facilitate the selection of programs enabling the integration of technology with the curriculum (Cradler & Beuthel, 2001)

In an ACOT study student engagement remained highest when technology use was integrated into the larger curricular framework, rather than being an "add-on" to an already full curriculum (Sandholz et al, 1997). Research suggests that when technology is integrated into the larger instructional framework, students will gain both technical expertise and content knowledge (Silverstain et al, 2000) Moreover, using technology within the curricular framework can enhance important skills valued in the workplace, such as locating and accessing information, organizing and displaying data, and creating persuasive arguments (Sandholtz et al, 1997; "Critical Issue," 1999)

While our district does offer some basic technology courses, technology integration will not be taught in isolation. Staff development has, and will continue to emphasize the use of technology as a powerful teaching and learning tool that engages students while addressing content standards within the curricular, instructional framework and adopted curriculum.

*The Learning Return On Our Educational Technology Investment: A Review of Findings from Research*, WestED (Ringstaff and Kelley, June 2002) is an extensive report that examines many studies related to educational technology and school reform. Several key factors are identified a crucial elements for successfully using technology:

- Technology is best used as one component in a broad-based reform effort
- Teachers must be adequately trained to use technology

- Teachers may need to change their beliefs about teaching and learning
- Technological resources must be sufficient and accessible
- Effective technology use requires long-term planning and support
- Technology should be integrated into the instructional framework

These key elements are addressed in several places in our Technology Plan. They are best found in the areas aligning technology with curricular and professional development goals emphasizing technology-enhanced, standards-based curricular lessons and units.

Our revised Education Technology Plan 2007-2011 includes all the research-based best practices integrated in:

**The *EETT Technology Plan*** research-based requirements for formula and competitive grant applications for Title II, Part D in *No Child Left Behind*.

<http://www.ed.gov/policy/elsec/leg/esea02/pg35.html#sec2414>

***Education Technology Planning: A Guide for School Districts.***

California's research-based guidelines for district-level educational technology planning.

<http://www.cde.ca.gov/ls/et/rd/edtechguide.asp>

***COSN, Total Cost of Ownership (TCO)***

TCO Tool offers schools a formalized process for assessing the costs of managing their technology investments. Costs for wireless communications, voice/data integration and elearning.

[http://classroomtco.cosn.org/gartner\\_intro.html](http://classroomtco.cosn.org/gartner_intro.html)

In our district technology plan, professional development is a primary focus and CTAP Online ([www.ctaponline.org](http://www.ctaponline.org)) is at the heart of our technology skill and integration professional development program. In September of 2002, the California Department of Education released the document: **Learning...Teaching...Leading...Report of the Professional Development Task Force** (<http://www.cde.ca.gov/re/pn/fd/documents/learnteachlead.pdf>) which contained 10 recommendations for developing a comprehensive, aligned, and integrated statewide system of professional development that will sustain the continued growth of a highly-qualified teacher and administrator workforce. Among the recommendations, CTAP Online web-based professional development portal was specifically identified as the primary example of a, "... **Web-based support system for teachers and administrators that is available at all times and includes standards-based curriculum resources, professional development resources, and facilitated online training.**" (pp 37-38, *Learning...Teaching...Leading.*)

In addition CTAP Online matches up against the design elements for high quality professional development as outlined in the *Designs for Learning*. *Designs for Learning* was developed by the California Professional Development Reform Initiative, which was sponsored by the California Department of Education with support from the California Professional Development Consortia, the Center for the Future of Teaching and Learning, the California Staff Development Council, and the New Teacher Center. <http://www.cde.ca.gov/pd/ps/te/designs4lrng.asp>

Becker, J.H., and Riel, M.M. (2000). Teacher professional engagement and constructivist compatible computer use, Center for Research on Information Technology and Organizations.

Retrieved February 23, 2007, online.

[http://www.crito.uci.edu/tlc/findings/report\\_7/startpage.html](http://www.crito.uci.edu/tlc/findings/report_7/startpage.html)

This report describes a number of aspects of the professional engagement of American teachers. It also examines relationships between professional engagement and teaching practice, including instruction involving computer use. We defined professional engagement as a teacher taking effort to affect the teaching that occurs in classrooms other than his or her own. We measured professional engagement by (1) the frequency that a teacher had informal substantive communications with other teachers at their school, (2) the frequency and breadth of professional interactions with teachers at *other* schools, and (3) the breadth of involvement in specific peer leadership activities-mentoring, workshop and conference presentations, and teaching courses and writing in publications for educators.

Our Education Technology Plan is consistent with the Becker research in the following ways: (1) Teachers collaborate with various staff to produce and practice technology integrated technology activities. (2) Teachers are provided with the opportunity to attend sessions every semester both online and face-to-face that cover basic-to-advance use of technology; and (3) Our key (technology proficient) teachers are involved in leadership activities such as coaching, facilitating, and modeling the effective use of instructional technology.

Marzano, R, Pickering, D., and Pollock, J. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*.

This book summarizes the research supporting a variety of instructional strategies with proven successes in improving student achievement. The research-based strategies include 1) identifying similarities and differences; 2) summarizing and note-taking; 3) reinforcing effort and providing recognition; 4) homework and practice; 5) nonlinguistic representations; 6) cooperative learning; 7) setting objectives and providing feedback; 8) generating and testing hypotheses; and 9) cues, questions, and advance organizers.

A variety of instructional strategies and technologies will be used to assist teachers and students in acquiring Information and technology literacy skills and all content areas. As described in the research, the used of nonlinguistic representations such as graphic organizers are effective tools for supporting understanding of key concepts, and graphic representations are highly effective tools for supporting new concepts and vocabulary. Simulation software allows students to generate and test hypotheses quickly and efficiently. Using presentation software to organize information, coupled with using a printed copy of the presentation to assist in note-taking skills, helps students to better identify key concepts and summarize critical information. Consistent with the research, our curricular and staff development goals include the use of Inspiration and other mind-mapping tools, the use of simulation software and probe-ware, and PowerPoint handouts to guide students in note-taking.

Current research will be incorporated as appropriate to ensure that the education technology program in our district is consistent with current scientifically based research regarding

technology, teaching, and learning. Software evaluation and selection in the area of literacy will be consistent with research from the Early Reading First initiative, which has identified five components essential to a child's learning to read: phonemic awareness, phonics, vocabulary, fluency, and comprehension. All software selected will be CLRN and/ or SBE approved and evaluated for its ability to support the five key literacy components, and will follow the “assess, align, instruct, and evaluate” model to target instructional activities based on students’ needs.

### **9b. Description of thorough and thoughtful examination of externally or locally developed education technology models and strategies**

#### **Factors that Contribute to Improved Educational Outcomes**

Margaret Honey of EDC in “New Approaches to Assessing Students’ Technology-Based Work” in Great Expectations: Leveraging America’ s Investment in Educational Technology, 2002 “After more than two decades of research on the benefits of educational technology, evidence that demonstrates the positive effects technology can have on student achievement is mounting. Specifically studies have shown that:

- ❑ Large-scale statewide technology implementations have correlated use of technology with increases in students’ performance on standardized tests.
- ❑ Software supporting the acquisition of early literacy skills - including phonemic awareness, vocabulary development, reading comprehension and spelling - can support student-learning gains.
- ❑ Mathematics software, particularly programs that promote experimentation and problem solving, enable students to embrace key mathematical concepts that are otherwise difficult to grasp.
- ❑ Scientific simulations, microcomputer-based laboratories and scientific visualization tools have all been shown to result in students’ increased understanding of core science concepts.

“We have also learned that if technologies are to be used to support real gains in educational outcomes, then five factors must be in place and working in concert.

1. There must be leadership around technology use that is anchored in solid educational objectives. Simply placing technologies in schools does little good. Effective technology use is always targeted at specific educational objectives; whether for literacy or science learning, focus is the key to success.
2. There must be sustained and intensive professional development that takes place in the service of the core vision, not simply around technology for its own sake;

moreover, this development must be a process that is embedded in the culture of schools.

3. There must be adequate technology resources in the schools, including hardware and technical support to keep things running smoothly.
4. There must be recognition that real change and lasting results take time.
5. Finally, evaluations must be conducted that enable school leaders and teachers both to determine whether they are realizing their goals and to help them adjust their practice to better meet those goals.”

See [http://www2.edc.org/CCT/publications\\_report\\_summary.asp?numPubId=49](http://www2.edc.org/CCT/publications_report_summary.asp?numPubId=49)

### **The Most Current Empirical Research**

John Schacter in *The Impact of Education Technology on Student Achievement: What the Most Current Research Has to Say* (1999) “These studies show that in over 700 empirical research studies, in the study of the entire state of West Virginia, in a national sample of fourth- and eighth-grade students, and in an analysis of newer educational technologies that students with access to (a) computer assisted instruction, or (b) integrated learning systems technology, or (c) simulations and software that teaches higher order thinking, or (d) collaborative networked technologies, or (e) design and programming technologies, show positive gains in achievement on researcher constructed tests, standardized tests, and national tests. There is, however, evidence in some of these studies that learning technology is less effective or ineffective when the learning objectives are unclear and the focus of the technology use is diffuse.”

See <http://web.mff.org/publications/publications.taf?page=161>

### **Improving and Changing Classroom Practice with Multimedia Learning Technologies**

Changing the Face of Education in Missouri in *New Horizons*, 2002 “Currently there are 585 eMINTS (enhancing Missouri’s Instructional Networked Teaching Strategies) classrooms in grades 3-12 in rural, suburban and urban settings throughout Missouri. Over 15,000 children and teachers report to eMINTS classrooms every morning. When they reach those classrooms, they find a rich array of multimedia learning technologies, including:

- Teacher laptop

- Interactive whiteboard and projector
- Teacher workstation computer
- Digital camera and scanner
- Printers
- One Internet-connected computer for every two students
- Software limited to Microsoft Office and Inspiration”

“However, what these teachers and students DO with the technology is the big story. The instructional model promoted and supported by eMINTS is inquiry-based, collaborative and multi-disciplinary in nature. Teachers must often learn to teach in very different ways from those they learned and have practiced over the years. “

“The analysis of MAP (Missouri Assessment Program) scores for students in eMINTS classrooms in the spring of 2001 showed that, on average, students in eMINTS classes scored higher in every subject area than other students. The analysis compared 1,836 students enrolled in eMINTS classes with 4,217 students not enrolled in eMINTS classes in the same grades and schools. In every subject area, students enrolled in third and fourth grade eMINTS classes scored higher than students not enrolled in eMINTS classes. In addition, the average eMINTS student scored higher than the statewide student average in every subject area. “

See <http://www.emints.org/evaluation/reports>

### **Improving Student Writing with Computers**

Michael Russell, Professor at the Center for the Study of Testing, Evaluation, and Educational Policy at Boston College, “We just finished a meta-analysis of the effects of computers and student writing. This study focused on research performed since 1991 and found a positive effect of about .4 standard deviations on the quality of student writing and .5 standard deviations on the quantity of student writing. ...This effect tended to be larger for middle and high school students than for elementary students.”

See <http://www.intasc.org>

## **The Value of particular Technologies Targeted at Specific Educational Objectives**

Robert Tinker, President of the Concord Consortium, "It is as silly to ask for "a study.. of education technology" as it would be to study whether cars are useful. There are many situations in which educational technology is inappropriate or badly implemented. Similarly, there are many situations where the value of technology is so obvious that no study is needed. In addition, there have been wealth of rigorous studies, not just anecdotes that show the value of particular technologies in particular contexts. There have been many reviews of these studies, such as the 1999 research review by John Schacter, available at <http://web.mff.org/publications/publications.taf?page=161> and the Fall, 2000 issue of the "Future of Children" from the Packard Foundation at [http://www.futureofchildren.org/pubs-info2825/pubs-info.htm?doc\\_id=69787](http://www.futureofchildren.org/pubs-info2825/pubs-info.htm?doc_id=69787)

### **9c. Description of development and utilization of innovative strategies for using technology to deliver rigorous academic courses and curricula, including distance-learning technologies**

The San Jose Unified School District is examining ways to deliver curriculum and professional development using new, innovative, technology-based tools. Our technology plan integrates the development of innovative strategies for using technology including the use of standards-based report cards, easy to use school and teacher Web Publishing software, free or low cost Internet resources for students, teachers, and administrators and piloting wireless laptop and thin client programs at our middle schools.

Our district is committed to increasing course offerings through the use of technology. The district is investigating online AP courses for high school students. The district is also investigating video conferencing capabilities at school sites in order to enhance instruction through collaborative learning projects, to deliver courses from different sites, to allow for students and teachers to collaborate with peers and experts.

We will continue to work with CTAP Region 5 and our County Office of Education to explore use of the High Speed Network to deliver rigorous academic curricula online to our middle and high school students.

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## APPENDIX C – CRITERIA FOR EETT FUNDED 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 the EETT Technology Plan Requirement (Appendix D).
- If the technology plan is revised, insert the Education Technology Plan Benchmark Review Form (Appendix I) in 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 five years. (For new plan, can include technology plan development in the first year).</b> | Page 4                | The technology plan describes the districts use of education technology for the next five years. (For new plan, description of technology plan development in the first year is acceptable). Specific start and end dates are recorded (7/1/07 to 6/30/12). | Plan duration is 2007-12.  |
| <b>2. STAKEHOLDERS CRITERION</b><br>Corresponding EETT Requirement(s): 7 and 11 (Appendix D).  | Page 7                | <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>                        | Page 8                | 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><br>Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, and 12 (Appendix D).  | <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.  | Page 11                      | 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.   | Page 21                      | 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.   | Page 28 - 51                 | 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.             | Page 52                      | The plan delineates clear, specific, and realistic goals and target groups for using technology to support the district's curriculum goals and academic content standards to improve learning. The implementation plan clearly supports accomplishing the goals. | The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.  |
| e. List of clear goals and a specific implementation plan detailing how and when students will acquire technology and information literacy skills needed to succeed in the classroom and the workplace. | Page 55                      | For the focus areas, the plan delineates clear, specific and realistic goals for using technology to help students acquire technology and information literacy skills. The implementation plan clearly supports accomplishing the goals.                         | The plan suggests how technology will be used, but is not specific enough to determine what action needs to be taken to accomplish the goals.   |

|    |  |  |   |   |
|----|--|--|---|---|
| f. | List of clear goals and a specific implementation plan for programs and methods of utilizing technology that ensure appropriate access to all students.  | Page 57  | For the focus areas, the plan delineates clear, specific and realistic goals for using technology to support the progress of all students. The implementation plan clearly supports accomplishing the goals.            | The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.    |
| g. | List of clear goals and a specific implementation plan to utilize technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs. | Page 59  | The plan delineates clear, specific and realistic goals for using technology to support the district's student record-keeping and assessment efforts. The implementation plan clearly supports accomplishing the goals. | The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.    |
| h. | List of clear goals and a specific implementation plan to utilize technology to make teachers and administrators more accessible to parents.   | Page 61  | The plan delineates clear, specific and realistic goals for using technology to facilitate improved two-way communication between home and school. The implementation plan clearly supports accomplishing the goals.    | The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.    |
| i. | List of benchmarks and a timeline for implementing planned strategies and activities.  | Page 52 for Goal 1 and continue through page 62 for Goal 6)  | 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.                                    | Pages 52 for Goal 1 and continue through page 62 for Goal 6) | 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><br>Corresponding EETT Requirement(s): 5 and 12 (Appendix D).   | <b>Page in District Plan</b> | <b>Example of Adequately Addressed</b>   | <b>Example of Not Adequately Addressed</b>  |
|--|------------------------------|--|---|
| <b>a.</b> Summary of the teachers' and administrators' current technology skills and needs for professional development.   | Page 74                      | 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, relates only to a limited segment of the district's teachers and administrators in the focus areas, or does not relate to the focus areas, i.e., only the fourth grade teachers when grades four to eight are the focus grade levels. |
| <b>b.</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.  | Page 75                      | The plan delineates clear, specific and realistic goals for providing teachers and administrators with sustained, ongoing professional development necessary to implement the Curriculum Component of the plan. The implementation plan clearly supports accomplishing the goals.                    | The plan speaks only generally of professional development and is not specific enough to ensure that teachers and administrators will have the necessary training to implement the Curriculum Component.  |
| <b>c.</b> List of benchmarks and a timeline for implementing planned strategies and activities.  | Page 77                      | The benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what steps will be taken, by whom, and when.  | The benchmarks and timeline are either absent or so vague that it would be difficult to determine what steps will be taken, by whom, and when.  |
| <b>d.</b> 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. | Page 78                      | 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>5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA</b><br>Corresponding EETT Requirement(s): 6 and 12 (Appendix D).   | <b>Page in District Plan</b> | <b>Example of Adequately Addressed</b>  | <b>Example of Not Adequately Addressed</b>  |
|---|------------------------------|---|---|
| <b>a.</b> 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. | Page 83                      | The plan clearly summarizes the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support proposed to support the implementation of the district’s Curriculum and Professional Development Components. The plan also includes the list of items to be acquired, which may be included as an appendix. | The plan includes a description or list of hardware, infrastructure and other technology necessary to implement the plan, but there doesn’t seem to be any real relationship between the activities in the Curriculum and Professional Development Components and the listed equipment. Future technical support needs have not been addressed or do not relate to the needs of the Curriculum and Professional Development Components. |
| <b>b.</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.   | Page 83                      | The plan clearly summarizes the existing technology hardware, electronic learning resources, networking and telecommunication infrastructure, and technical support to support the implementation of the Curriculum and Professional Development Components. The current level of technical support is clearly explained.   | The inventory of equipment is so general that it is difficult to determine what must be acquired to implement the Curriculum and Professional Development Components. The summary of current technical support is missing or lacks sufficient detail.   |
| <b>c.</b> List of clear benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components.   | Page 88                      | The benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what needs to be acquired or repurposed, by whom, and when.  | The benchmarks and timeline are either absent or so vague that it would be difficult to determine what needs to be acquired or repurposed, by whom, and when.   |
| <b>d.</b> Description of the process that will be used to monitor whether the goals and benchmarks are being reached within the specified time frame.   | Page 88                      | 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.   |

| 6. <b>FUNDING AND BUDGET COMPONENT CRITERIA</b><br>Corresponding EETT Requirement(s): 7 & 13, (Appendix D)    | <b>Page in District Plan</b> | <b>Example of Adequately Addressed</b>  | <b>Example of Not Adequately Addressed</b>   |
|---|------------------------------|---|--|
| a. List of established and potential funding sources and cost savings, present and future.                    | Page 92                      | The plan clearly describes resources* that are available or could be obtained to implement the plan. The process for identifying future funding sources is described.   | Resources to implement the plan are not identified or are so general as to be useless.   |
| b. <b>Estimate annual implementation costs</b> for the term of the plan                                       | Page 93                      | 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.                           | Page 93                      | 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.                                   | Page 93                      | 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, update funding, and budget decisions.           | Page 94                      | 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><br>Corresponding EETT Requirement(s): 11 (Appendix D).  | <b>Page in District Plan</b> | <b>Example of Adequately Addressed</b>  | <b>Example of Not Adequately Addressed</b>   |
|--|------------------------------|---|--|
| <b>a.</b> 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. | Page 95                      | 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>b.</b> Schedule for evaluating the effect of plan implementation.   | Page 96                      | 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.                         |
| <b>c.</b> Description of how the information obtained through the monitoring and evaluation will be used.  | Page 97                      | 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><br>Corresponding EETT Requirement(s): 11 (Appendix D). | <b>Page in District Plan</b> | <b>Example of Adequately Addressed</b>  | <b>Example of Not Adequately Addressed</b>   |
|---|------------------------------|---|--|
| <b>a.</b> If the district has identified adult literacy providers, there is a description of how the program will be developed in collaboration with those providers.         | Page 107                     | 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 or potential future outreach efforts. | 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><br>Corresponding EETT Requirement(s): 4 and 9 (Appendix D).  | <b>Page in District Plan</b> | <b>Example of Adequately Addressed</b>   | <b>Not Adequately Addressed</b>  |
|--|------------------------------|--|--|
| <b>a.</b> Description of how education technology strategies and proven methods for student learning, teaching, and technology management are based on relevant research and effective practices.  | Page 112                     | 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. |
| <b>b.</b> Description of thorough and thoughtful examination of externally or locally developed education technology models and strategies.  | Page 113                     | The plan describes references to research literature that supports why or how the model improves student achievement.  | No research is cited.  |
| <b>c.</b> 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). | Page 114                     | 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. | There is no plan to utilize technology to extend or supplement the district’s curriculum offerings                     |