

Technology Plan



Lucerne Elementary

July 1, 2010 - June 30, 2015

02/01/2010 (revised 03/19/2010)

Superintendent / Principal

Mike Brown

Lucerne School Board

President- Kay Hancock

Clerk- Bruce Higgins

Member- Mark Sadler

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Background and Demographic Profile

Lucerne Elementary school is located in Lake County. Lake County's population is expected to grow to 79,676 by the year 2020. The population is largely low income and has a high unemployment rate. Lucerne Elementary has approximately 70% of its' students in the free and reduced lunch program. Lake County also has a significant senior population distributed throughout the county. The principal industry in the county is agriculture.

The need to provide a large number of low income students with the preparation, education and career training to improve their opportunities is immediate. This need will certainly increase in the future as the population grows and as new industries consider relocating into our county.

Over the next five years Lucerne Elementary School will continue to ensure students and staff have access to technology to enhance student learning and prepare them for the demands of an increasingly technologically demanding workforce. The district will continue to purchase and improve hardware and software, upgrade existing networks, increase staff development, and work to improve technology resources with the County Office of Education.

1. Plan Duration

July 1, 2010 - June 30, 2015

2. Stakeholders

Stakeholders		
Name	Position	CDS
Kay Hancock	School Board Chairperson	Lake Lucerne Elementary Lucerne Elementary
Bruce Higgins	School Board Clerk	Lake Lucerne Elementary Lucerne Elementary
Mark Sadler	School Board Member	Lake Lucerne Elementary Lucerne Elementary
Mike Brown	District Administrator	Lake Lucerne Elementary
Ron Hale	Classroom Teacher	Lake Lucerne Elementary Lucerne Elementary
Angela Austin	Technology Support Staff	Lake Lucerne Elementary Lucerne Elementary
Lisa Cockerton	Business Manager	Lake Lucerne Elementary Lucerne Elementary

The stakeholders of this plan represent individuals within the school district who are technology leaders. All committee members play a critical role in development and execution of the plan. Each member is instrumental in making this plan a reality, by contributing their expertise, support, training, or participation. Members of the committee met together several times to develop ideas for the best possible methods for infusing technology into the curriculum. Writing was done in consultation with subgroups consisting of teachers, staff, administrators, and California Technology Assistance Program.

3. Curriculum

3a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours.

Lucerne Elementary School District currently has a state of the art computer lab. Each computer meets the minimum requirements for multimedia desktop computers set forth by the California Technology Grant Program. Each computer is networked through a server, and is connected to the Internet. The computer lab and classroom computers are available to teachers and students before and during school. The computer lab is available to community groups, such as, the Lucerne Senior Center and the local community colleges after school and on the weekends on a sign-up basis.

Each classroom (including Special Education) has at least two multimedia computers (with at least one printer) that are connected to the Internet, a video player, DVD player, TV with cable access, and a radio with a cassette and CD playing capability.

The school GATE/Leadership program has a computer located in the GATE/Leadership teacher's classroom. This computer is used during, and after school, for GATE/Leadership activities and for publishing the school yearbook.

Each classroom has a telephone with intercom, and outside line capabilities.

The upper grade classes (5-8 grade) have access to a mobile lab using lap tops. This mobile lab is kept in a 7/8 grade class.

The school now several wireless hubs that allow internet access anywhere in the school. Every teacher has their own lap top they use for supplementing lessons, and a projector and ELMO to use with the lap tops.

3b. Description of the district's current use of hardware and software to support teaching and learning.

Each teacher has equal access to the computer lab. Teachers sign up for a time slot at the beginning of the year. Additionally, there are "open" time slots available each week where teachers can come in with their students and use the lab in addition to their regular slot. Each teacher makes available the classroom computers for student learning through use of the Internet and curricular software. In addition the 7th and 8th grade classrooms have access to a mobile laptop cart for internet research and curriculum instruction work. Each teacher uses the classroom VCR/DVD and TV to supplement lessons when appropriate. The teachers use the

internet on their laptops, projectors, and ELMO machines within the classrooms to further enhance the curriculum.

Teachers in the primary grades (K-4) use the computers for Language Arts/Reading, typing skills, and internet research.

The upper grade teachers (grades 5-8) use the computers for research, science, math, and social studies, and integrating Language Arts into the other academic subjects.

Examples of software used in the computer lab: Microsoft Office, Microsoft Excel, Microsoft PowerPoint, Knowledge Adventure Math Blaster for ages 5-7 and 7-9, and Jumpstart Typing.

Examples of software used in the classrooms: Microsoft Office, Microsoft Excel, Microsoft PowerPoint, and Accelerated Reader.

Teachers use the three digital cameras, and digital video cameras for classroom and school activities.

3c. Summary of the district's curricular goals that are supported by this tech plan.

Lucerne School District uses technology to enhance student learning and meet not only state technology standards, but state standards in other curriculum areas as well, as addressed in the LEAP/SPSA. Classrooms, the computer lab, and the school library are equipped with the technology necessary to assure student achievement. These needs are addressed annually by students and faculty.

As per our LEAP/SPSA Plan the district feels that while technology cannot replace a skilled teacher or tutor, the effective use of well designed technology based supports can provide additional resources for students, especially those potentially at risk for reading failure. These philosophies hold true for math, as well as, all other curricular subjects.

- 3d. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve teaching and learning by supporting the district curricular goals.

The following technology goals and implementation plans have been identified and developed to support the districts curricular goals and to enhance student achievement of the academic content standards. The major focus of these goals is to use technology and information literacy to support the teaching and learning of standards based curriculum for all students, including students with special needs and students who are not yet meeting grade level standards. We intend to measure increases in teacher classroom practices to measure an increase in technology use during the learning process.

Goal 3d.1: Students will use technology and electronic resources that support all students achieving high standards in standards based content areas and assist in closing the achievement gap of less successful students.

Objective 3d.1.1: By June 2015, 100% of teachers will increase student use of technology and electronic resources to enhance their achievement of academic content standards by increasing their use of technology to at least once per day.

Benchmarks:

- Year 1: At least 20% of teachers will increase students' use of technology and electronic resources to enhance their achievement of academic content standards by increasing their access to technology to at least once per day
- Year 2: At least 40% of teachers will increase students' use of technology and electronic resources to enhance their achievement of academic content standards by increasing their access to technology to at least once per day
- Year 3: At least 60% of teachers will increase students' use of technology and electronic resources to enhance their achievement of academic content standards by increasing their access to technology to at least once per day
- Year 4: At least 80% of teachers will increase student use of technology and electronic resources to enhance their achievement of academic content standards by increasing their access to technology to at least once per day.
- Year 5: By June 2015, 100% of teachers will increase student use of technology and electronic resources to enhance their achievement of academic content standards by increasing their access to technology to at least once per day.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
All students will use technology and electronic resources in support of achieving academic content standards.	All 5 years	Classroom Teachers, Curriculum Coaches	Admin and Coach observations, Teacher Lesson Plans, Student EdTech Profile	Student EdTech Profile
All students will use the electronic resources that accompany the state adopted core subject textbooks.	All 5 years	Classroom Teachers, Curriculum Coaches	Admin. and Coach observation, Lesson Plans, EdTech Student Profile	Student EdTech Profile
Review and select standards based electronic resources and tools that support the academic content standards.	All 5 years	Classroom Teachers, Curriculum Coaches, Tech Specialists, Site Principals	Web Site Resources, Admin. and Coach observations, District budget,	
Refine intervention models that utilize technology in the classroom.	All 5 years	Classroom Teachers, Curriculum Coaches, Tech Specialists	Collaborative Meeting Minutes	
Adopt and utilize electronic resource databases and web site catalogs and link them to school web sites.	All 5 years	Classroom Teachers, Curriculum Coaches, Web Site Coordinators, Site Principals	Web Site, Collaborative Meeting Minutes	
Develop online resources for teachers of best practices/strategies for using technology and information literacy to enhance the learning of the content standards, including using the electronic resources that accompany the core subject textbooks.	All 5 years	Curriculum Coaches, Tech Specialists, Web Site Coordinators	District Web Site	

The following resources will be added to each site's webpage: Links to resources that support all grades content standards in Language Arts, Math, Social Science, and Science. Best practices and strategies for using technology and electronic resources, including for the electronic resources that accompany the core subject textbooks.	All 5 years	Curriculum Coaches, Tech Specialists, Web Site Coordinators	District Web Site	
Populate & update websites and academic resources	All 5 years	Curriculum Coaches, Web Site Coordinators	District Web Site	
Develop projects and sample lessons at each grade level that integrates technology & information literacy to enhance the learning of the content standards. Lessons will include using the electronic resources that accompany the core subject textbooks as well as other resources. Lessons will be developed to be used in a lab settings, and to be used with limited computers in the classroom as well.	All 5 years	Classroom Teachers, Curriculum Coaches, Site Principals, Tech Specialists	Collaborative Meeting minutes	

Goal 3d.2: All teachers will use technology to improve classroom instructional strategies to support students in meeting targeted academic performance levels as set in the LEAP/SPSA.

Objective 3d.2.1: By June 2015, 100% of teachers will use technology to improve classroom instructional strategies to support students in meeting targeted academic performance levels as set in the LEAP/SPSA plan.

Benchmarks:

- Year 1: 20% of all teachers will use technology to improve classroom instructional strategies to support students in meeting targeted academic performance levels as set in the LEAP.
- Year 2: 40% of all teachers will use technology to improve classroom instructional strategies to support students in meeting targeted academic performance levels as set in the LEAP.
- Year 3: 60% of all teachers will use technology to improve classroom instructional strategies to support students in meeting targeted academic performance levels as set in the LEAP.
- Year 4: 80% of all teachers will use technology to improve classroom instructional strategies to support students in meeting targeted academic performance levels as set in the LEAP.
- Year 5: By June 2015, 100% of teachers will use technology to improve classroom instructional strategies to support students in meeting targeted academic performance levels as set in the LEAP.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Teachers will collaborate on the use of technology to improve the delivery of instruction and to support all students.	All 5 years	Site Principal, Classroom Teachers, Curriculum Coaches, Tech Specialists	Collaboration meeting minutes, admin/coach observations, teacher lesson plans	Ed Tech Profile, sections 9 and 16.
Resources for teachers of best practices, tools, lessons and strategies for using technology to improve the delivery of instruction and to support all students will be developed/implemented	All 5 years	Principals, Classroom Teachers, Curriculum Coaches, LCOE/CTAP	Collaboration meeting minutes, admin/coach observations, teacher lesson plans	
All teachers will increasingly use data to make instructional decisions.	All 5 years	Principals, Classroom Teachers, Curriculum Coaches	Coaches notes	EdTech Profile

All teachers will increasingly use project based learning in social studies and science as an instructional strategy.	All 5 years	Principals, Classroom Teachers, Curriculum Coaches	Admin/Coach observations	EdTech Profile
All teachers will increasingly use technology to assist them with differentiated instruction in order to enhance the full spectrum of talents and abilities of students.	All 5 years	Principals, Classroom Teachers, Curriculum Coaches	Accelerated Reader, Reading Intervention Programs	EdTech Profile
All teachers will use technology to improve the delivery of instruction and to support all students in meeting academic content standards and district goals.	All 5 years	Principals, Classroom Teachers, Curriculum Coaches	Admin/Coach observation, Teacher lesson plans	EdTech Profile, sections 9 and 16
Teachers will collaborate on the use of technology to improve the delivery of instruction and to support all students.	All 5 years	Principals, Classroom Teachers, Curriculum Coaches	Collaboration meeting minutes	
Develop resources for teachers of best practices, tools, lessons and strategies for using technology to improve the delivery of instruction and to support all students.	All 5 years	Principals, Classroom Teachers, Curriculum Coaches, LCOE/CTAP	Collaboration meeting minutes, admin/coach observations, teacher lesson plans	
Evaluate and modify best practices, lessons, and strategies yearly, based on student achievement and teacher feedback.	All 5 years	Principals, Classroom Teachers, Curriculum Coaches	Collaborative meeting minutes	
Teachers will use assessment tools and/or electronic resources that accompany the core subject textbooks when available.	All 5 years	Principals, Classroom Teachers, Curriculum Coaches	Data Director Assessment Record	Data Director

Post the following resources on the district webpage: Best practices, tools, lessons, and strategies for using technology to improve the delivery of instruction and to support all students.	All 5 years	Principals, Classroom Teachers, Curriculum Coaches, Web Site Coordinators	District Web Site	
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3e. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire the technology skills and information literacy skills needed to succeed in the classroom and the workplace.

Goal 3e.1: Students in grades K-8 will learn and demonstrate competency in district and grade level technology standards.

Grade Level Benchmarks, K-8:

Grades K-3 will begin introduction to computers and keyboarding. Use established educational websites, teacher generated lessons, and software to address content standards, such as: understanding printed material, asking questions for clarification, using table of contents, and organization of an essay. Each year students and staff will become increasingly sophisticated in their knowledge of computers and how to use them to enhance curriculum and learning.

Year one- 80% of students in grades K-3 will be competent in the use of computers and keyboarding.

Year two- 85% of students in grades K-3 will be competent in the use of computers and keyboarding.

Year three- 90% of students in grades K-3 will be competent in the use of computers and keyboarding.

Year four- 95% of students in grades K-3 will be competent in the use of computers and keyboarding.

Year five- 100% of students in grades K-3 will be competent in the use of computers and keyboarding.

Grades 4-5 will be introduced to the usage of locating information through the use of CDRoms and the Internet begin to organize data into reports, and be able to competently write an essay using Word. Each year students and staff will become increasingly sophisticated in their knowledge of computers and how to use them to enhance curriculum and learning.

Year one- 80% of students in grades 4-5 will be competent in the use of computers, keyboarding and able to organize data to write an essay using Word.

Year two- 85% of students in grades 4-5 will be competent in the use of computers, keyboarding and able to organize data to write an essay using Word.

Year three- 90% of students in grades 4-5 will be competent in the use of computers, keyboarding and able to organize data to write an essay using Word.

Year four- 95% of students in grades 4-5 will be competent in the use of computers, keyboarding and able to organize data to write an essay using Word.

Year five- 100% of students in grades 4-5 will be competent in the use of computers, keyboarding and able to organize data to write an essay using Word.

Grades 6-8 will be able to write a report (in any curriculum area), and make a presentation using Power Point that incorporates Word and Excel when appropriate. Use of research tools will be taught and used in greater detail. Each year students and staff will become increasingly sophisticated in their knowledge of computers and how to use them to enhance curriculum and learning.

Year one- 80% of students in grades 6-8 will be competent in the use of computers, keyboarding, internet research and able to organize data to write an essay using Word. Students will be able to make a presentation using Power Point that incorporates Word and Excel.

Year two- 85% of students in grades 6-8 will be competent in the use of computers, keyboarding, internet research and able to organize data to write an essay using Word. Students will be able to make a presentation using Power Point that incorporates Word and Excel.

Year three- 90% of students in grades 6-8 will be competent in the use of computers, keyboarding, internet research and able to organize data to write an essay using Word. Students will be able to make a presentation using Power Point that incorporates Word and Excel.

Year four- 95% of students in grades 6-8 will be competent in the use of computers, keyboarding, internet research and able to organize data to write an essay using Word. Students will be able to make a presentation using Power Point that incorporates Word and Excel.

Year five- 100% of students in grades 6-8 will be competent in the use of computers, keyboarding, internet research and able to organize data to write an essay using Word. Students will be able to make a presentation using Power Point that incorporates Word and Excel.

- A questionnaire/survey will be given to students in the 4-8 grades to see if there is anything they feel they need to learn in addition to what is being taught.
- Accelerated Reader will be taught and used in the computer lab, library, and classrooms.
- Students will be shown how to access the school district website for information and curriculum support for those students that have access to the Internet at home. Students will also be shown how to e-mail their teachers using the district e-mail system.
- The district will purchase curriculum/standards based software which will be grade level specific for use in the classroom and Computer Lab.

3f. List of goals and an implementation plan that describe how the district will address the appropriate and ethical use of information technology in the classroom so that students can distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use

3f. **Ethical use:** A program will be implemented at the school site that will have students watching videos, engaging in activities, and having group discussions around the topics of the ethical use of technology including copyright laws and fair use. Online resources such as the Cyber Safety lesson plans on the CTAP website will be used and updated as necessary so that we are consistently delivering current material to our students.

The Board of Trustees intends that technological resources provided by the district be used in a responsible and proper manner in support of the instructional program and for the advancement of student learning.

The administrators and teachers shall notify students and parents/guardians about authorized uses of district computers, user obligations and responsibilities, as well as consequences for unauthorized use and/or unlawful activities.

LCOE ensures that all district computers with Internet access have a technology protection measure that blocks or filters Internet access to visual depictions that are obscene, child pornography, or harmful to minors, and that the operation of such measures is enforced.

As a part of the registration/enrollment process, the Lucerne Elementary school district registration packet contains an Acceptable Use Agreement, which details terms and conditions that all students must follow. These terms and conditions define all unacceptable and inappropriate use of the Internet, and impose consequences for doing so. The agreement is signed by both student and parents. These forms are kept at the school site. This practice will remain in place for the life of this Educational Technology Plan.

Teachers and staff shall review the Acceptable Use Agreement annually to be aware of users' obligations and responsibilities. Staff shall supervise students while they are using on-line services and may ask teachers and aides to assist in this supervision.

Benchmarks-

Year One- 80% of students in grades K-8 will be aware of the Ethical Use of Technology, Copyright Laws, and Fair Use.

Year Two-85% of students in grades K-8 will be aware of the Ethical Use of Technology, Copyright Laws, and Fair Use.

Year Three-90% of students in grades K-8 will be aware of the Ethical Use of Technology, Copyright Laws, and Fair Use.

Year Four-95% of students in grades K-8 will be aware of the Ethical Use of Technology, Copyright Laws, and Fair Use.

Year Five-100% of students in grades K-8 will be aware of the Ethical Use of Technology, Copyright Laws, and Fair Use.

Goal 3f.1: A program of awareness around the topics of Ethical Use of Technology, Copyright Laws, and Fair Use will be implemented in grades K-8 in the computer labs. By June 30, 2015, 100% of students will be aware of the Ethical Use of Technology, Copyright Laws, and Fair Use.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Video and Lesson Plans on the ethical use of technology. CyberSafety lesson plans from the CTAP website and other resources will be implemented.	2010-2011	Mike Brown, Ron Hale, Angela Austin	Students responses to presentations. Monitoring and evaluation will be observed by computer lab teacher.	Evaluation will be consistent and assessed by quizzes and discussion.
Video and Lesson Plans on the ethical use of technology. CyberSafety lesson plans from the CTAP website and other resources will be implemented.	2011-2012	Mike Brown, Ron Hale, Angela Austin	Students responses to presentations. Monitoring and evaluation will be observed by computer lab teacher.	Evaluation will be consistent and assessed by quizzes and discussion.
Video and Lesson Plans on the ethical use of technology. CyberSafety lesson plans from the CTAP website and other resources will be implemented.	2012-2013	Mike Brown, Ron Hale, Angela Austin	Students responses to presentations. Monitoring and evaluation will be observed by computer lab teacher.	Evaluation will be consistent and assessed by quizzes and discussion.
Video and Lesson Plans on the ethical use of technology. CyberSafety lesson plans from the CTAP website and other resources will be implemented.	2013-2014	Mike Brown, Ron Hale, Angela Austin	Students responses to presentations. Monitoring and evaluation will be observed by computer lab teacher.	Evaluation will be consistent and assessed by quizzes and discussion.
Video and Lesson Plans on the ethical use of technology. CyberSafety lesson plans from the CTAP website and other resources will be implemented.	2014-2015	Mike Brown, Ron Hale, Angela Austin	Students responses to presentations. Monitoring and evaluation will be observed by computer lab teacher.	Evaluation will be consistent and assessed by quizzes and discussion.

3g. List of goals and an implementation plan that describe how the district will address Internet safety, including how to protect online privacy and avoid online predators. (AB 307)

A program will be implemented at the school site that will have students watching videos, engaging in activities, and having group discussions around the topics of Cyber Safety and online privacy. Online resources such as from the CTAP website will be used and updated as necessary so that we are consistently delivering current material to our students.

Benchmarks-

Year One- 80% of students in grades K-8 will be aware of the Ethical Use of Technology, Cyber Safety, Cyber Bullying, and Copyright laws.

Year Two- 85% of students in grades K-8 will be aware of the Ethical Use of Technology, Cyber Safety, Cyber Bullying, and Copyright laws.

Year Three- 90% of students in grades K-8 will be aware of the Ethical Use of Technology, Cyber Safety, Cyber Bullying, and Copyright laws.

Year Four- 95% of students in grades K-8 will be aware of the Ethical Use of Technology, Cyber Safety, Cyber Bullying, and Copyright laws.

Year Five- 100% of students in grades K-8 will be aware of the Ethical Use of Technology, Cyber Safety, Cyber Bullying, and Copyright laws.

Goal 3g.1: Cyber Safety / Bullying / Copyright and fair use program will be implemented each year for grades K-8. By June 30, 2015, 100% of our students will be knowledgeable in the use of internet safety, online privacy, and avoiding online predators.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Video and lesson plans on Cyber Safety, Bullying, copyright and fair use implementation will be taught in the computer lab.	2010-2011	Mike Brown, Ron Hale, Angela Austin	Monitoring and evaluation will be observed by classroom teacher.	Evaluation will be consistent and assessed by quizzes and discussion.
Video and lesson plans on Cyber Safety, Bullying, copyright and fair use implementation will be taught in the computer lab	2011-2012	Mike Brown, Ron Hale, Angela Austin	Monitoring and evaluation will be observed by the classroom teacher.	Evaluation will be consistent and assessed by quizzes and discussion.
Video and lesson plans on Cyber Safety, Bullying, copyright and fair use implementation will be taught in the computer lab.	2012-2013	Mike Brown, Ron Hale, Angela Austin	Monitoring and evaluation will be observed by the classroom teacher	Evaluation will be consistent and assessed by quizzes and discussion.

Video and lesson plans on Cyber Safety, Bullying, copyright and fair use implementation will be taught in the computer lab.	2013-2014	Mike Brown, Ron Hale, Angela Austin	Monitoring and evaluation will be observed by classroom teacher.	Evaluation will be consistent and assessed by quizzes and discussion.
Video and lesson plans on Cyber Safety, Bullying, copyright and fair use implementation will be taught in the computer lab.	2014-2015	Mike Brown, Ron Hale, Angela Austin	Monitoring and evaluation will be observed by classroom teacher	Evaluation will be consistent and assessed by quizzes and discussion.

3h. Description of the district policy or practices that ensure equitable technology access for all students.

3H. Appropriate Access Goal: All students, including special education and GATE/Leadership, will have access to technology and age appropriate instructional media that will support the content standards. Students will go the computer lab at least once per week, for at least one hour. The classroom teacher will determine classroom access.

Year 1:

All students, including special needs students and GATE/Leadership, currently have access to technology in their classroom, special education classrooms, and the computer lab. The district will ensure this continues. The RSP (special education) programs have a much higher student to computer ratio due to more computers available for student use in the rooms, and smaller class sizes.

The district will continue to look into purchasing new curriculum support software for the computer lab.

Technology coordinator and the technology committee will research websites and other technology sources and disseminate this information to staff to use with students.

The FAST (families and schools together) program will be used to initiate the use of technology with families in the community.

Students will assist staff in keeping the district website current.

Year 2:

Explore the possibility of having the computer lab opened before and after school hours for student use.

Continue to expand the use, and role, of the server in the computer lab.

Students will assist staff in keeping the district website current.

Years 3-5:

Have upper grade students assigned to classrooms and the computer lab as technology mentors and assistants for the primary grades.

Students will assist staff in keeping the district website current.

- 3i. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.

Each teacher in the district currently has a grading program on a classroom computer. In the upper grades teachers send home progress reports, generated by the grading programs, on a weekly basis. Grades are posted in classrooms with student ID numbers.

Goal 1: Teachers will discuss, and work to implement, the development of technology based student portfolios.

Goal 2: Begin implementation of technology based student portfolios. When a student leaves the district a CD can be made of their portfolio and given to them. Implementation is Year 2-5 of this plan.

Goal 3: A committee will be formed to look into the possibility of switching from the current report cards to a computerized standards-based report card. Implementation is Year 4-5 of this plan.

Goal 4: Continually update assessment information in the Data Director system in collaboration with LCOE, in alignment with SAIT, allowing ELA and Mathematics benchmarks and standardized testing information to be securely accessed from the web to be used by teachers to inform instruction.

Benchmark- Grades 4-8:

- Grades 4-8 using Grade book and weekly progress reports in year one will be 25%.
- Grades 4-8 using Grade book and weekly progress reports in year two will be 50%.
- Grades 4-8 using Grade book and weekly progress reports in year three will be 75%.
- Grades 4-8 using Grade book and weekly progress reports in year four will be 80%.
- Grades 4-8 using Grade book and weekly progress reports in year five will be 100%.

Objective: By the end of June 2015, 100% of teachers will use Data Director to inform instruction.

Benchmark:

- Year 1: 25% of teachers will use Data Director to inform instruction.
- Year 2: 50% of teachers will use Data Director to inform instruction.
- Year 3: 75% of teachers will use Data director to inform instruction.

- Year 4: 80% of teachers will use Data director to inform instruction.
- Year 5: 100% of teachers will use Data Director to inform instruction.

3j. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to improve two-way communication between home and school.

Goal 3j: Teachers and administrators will utilize District provided email accounts and website to utilize technology to make themselves more accessible to parents and community members.

Objective: By June 2015, 100% of teachers and administrators will be accessible to parents and community members through district email and the school website.

Benchmarks:

Year 1: 75% of teachers and administrators will be accessible to parents and community members through email and the school website.

Year 2: 80% of teachers and administrators will be accessible to parents and community members through email and the school website.

Year 3: 90% of teachers and administrators will be accessible to parents and community members through email and the school website.

Year 4: 95% of teachers and administrators will be accessible to parents and community members through email and the school website.

Year 5: 100% of teachers and administrators will be accessible to parents and community members through email and the school website.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Train all staff on how to access and use their District email accounts.	At the beginning of each school year; 2010-2015	Tech Coordinator, Principal.	Use sign-in sheets and copies of school documents sent through email.	
Train all staff on how to provide information to be used on the District website and made available to parents.	At the beginning of each school year: 2010-2015	Tech Coordinator and Web Site Coordinator.	Update website information through district email.	

- 3k. Describe the process that will be used to monitor the Curricular Component (Section 3d-3j) goals, objectives, benchmarks and planned implementation activities including roles and responsibilities.

During the course of this 5 year plan the principal/superintendent will be the primary person responsible for monitoring the technology curricular goals, and will be directed by the school board as to how to meet those goals. He will be assisted in this by staff. He will use teacher observations of technology use, teacher feed-back during evaluations and staff meetings, and the results of formal and informal surveys. Teachers will be sent to technology conferences and report back to the principal, other staff, and the school board on new hardware (such as digital white boards) and software the district may plan to purchase and use. Part of staff meetings will be set aside to discuss implementation and use of new hardware and software. The principal will plan needed professional development for the staff as a whole, and for individual teachers as needed. CTAP teacher surveys, evaluation and observations will be used as a tool to determine this need.

4. Professional Development

- 4a. Summary of teachers' and administrators' current technology skills and needs for professional development.

All district teachers are able to interact with others using e-mail and are familiar with a variety of collaborative tools. Most teachers are comfortable using electronic research tools and are able to assess the authenticity and reliability. Most teachers are using computer applications to maintain records, communicate, and create technology enhanced lesson aligned with content standards. Many teachers design and use lessons which address students' needs to develop information literacy and problems solving skills as tools for lifelong learning.

In January 2010 the staff and administrator of Lucerne Elementary School completed the on-line Ed Tech Profile survey at the CTAP website. Following are the results of that survey.

www.lucerne.k12.ca.us/techplan/pdf-801097188.pdf

- 4b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities based on your district needs assessment data (4a) and the Curriculum Component objectives (sections 3d through 3j) of the plan.

Professional development is the key to technology actually being used to enhance and support the district curricular goals and student achievement of the academic content standards. Administrators, teachers, and support staff must be assessed annually to determine the professional development needs of the district. Lucerne Elementary School District will rely on the EdTech Profile and feedback from the teachers to measure technology knowledge and skills. Results will be used along with the district curricular goals and the goals from the curriculum component of this technology plan to design and implement technology training for all staff. The focus will be using technology to enhance teaching and learning in a standards based curriculum.

Goal 4b.1: Teachers will participate in email training to utilize technology to make themselves more accessible to district announcements, and to be more accessible to parents and community members.

Objective 4b.1.1: By June 2015, 100% of teachers will utilize their district email account on a regular basis.

Benchmarks:

Year 1: 60% of teachers will utilize their district email account on a regular basis.

Year 2: 70% of teachers will utilize their district email account on a regular basis.

Year 3: 80% of teachers will utilize their district email account on a regular basis.

Year 4: 90% of teachers will utilize their district email account on a regular basis.

Year 5: 100% of teachers will utilize their district email account on a regular basis.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Training on how to utilize the district email system.	Annually	Principal, Tech coordinator	Sign-in logs, emails sent out by Principal and Tech coordinator.	

Goal 4b.2: Teachers will be trained to teach students about software piracy, plagiarism, internet safety, and copyright laws.

Objective 4b.2.1: By June 2015, 100% of teachers will be trained to teach students about software piracy, plagiarism, internet safety, and copyright laws.

Benchmarks:

Year 1: 60% of teachers will be trained to teach students about software piracy, plagiarism, internet safety, and copyright laws.

Year 2: 70% of teachers will be trained to teach students about software piracy, plagiarism, internet safety, and copyright laws.

Year 3: 80% of teachers will be trained to teach students about software piracy, plagiarism, internet safety, and copyright laws.

Year 4: 90% of teachers will be trained to teach students about software piracy, plagiarism, internet safety, and copyright laws.

Year 5: 100% of teachers will be trained to teach students about software piracy, plagiarism, internet safety, and copyright laws.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Teachers will be trained to teach students about software piracy, plagiarism, internet safety, and copyright laws.	Annually	Principal, Tech Coordinator.	Sign in Sheets, Monthly lesson plans on what activities were introduced to students.	

Goal 4b.3: Teachers will participate in in-services that show teachers how to manage and align technology resources with course content.

Objective 4b.3.1: By June 2015, 100% of teachers will attend quarterly in services on technology resources.

Benchmarks:

Year 1: 60% of teachers will attend quarterly in services on how to manage and align technology resources with course content.

Year 2: 70% of teachers will attend quarterly in services on how to manage and align technology resources with course content.

Year 3: 80% of teachers will attend quarterly in services on how to manage and align technology resources with course content.

Year 4: 90% of teachers will attend quarterly in services on how to manage and align technology resources with course content.

Year 5: 100% of teachers will attend quarterly in services on how to manage and align technology resources with course content.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Teachers will attend quarterly in services on how to manage and align technology resources with course content.	Quarterly	Principal	Sign in Sheets, EdTech Profile, admin. observations	Ed Tech Profile

Goal 4b.4: Teachers will be trained in the use of all technology equipment available to them, e.g. White boards, document cameras, laptops, projectors, etc. to increase the access of technology for students.

Objective 4b.4.1: By June 2015, all teachers will attend in services on technology equipment as it is introduced to classrooms.

Benchmarks:

Year 1: 60% of all teachers will attend in services on technology equipment as it is introduced to classrooms.

Year 2: 70% of all teachers will attend in services on technology equipment as it is introduced to classrooms.

Year 3: 80% of all teachers will attend in services on technology equipment as it is introduced to classrooms.

Year 4: 90% of all teachers will attend in services on technology equipment as it is introduced to classrooms.

Year 5: 100% of all teachers will attend in services on technology equipment as it is introduced to classrooms.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
All teachers will attend in services on technology equipment as it is introduced to classrooms.	Annually	Principal, Tech coordinator.	Sign-in sheets	

4c. Describe the process that will be used to monitor the Professional Development (Section 4b) goals, objectives, benchmarks, and planned activities including roles and responsibilities.

Benchmark/Activity	Responsible Party	Completion Date
Staff will take the on-line survey at the CTAP website. The technology committee will review the results of the survey and begin planning training based on staff needs.	Administration	1/10 - Ongoing
Staff will receive an in-service class during a staff meeting detailing how to find and use the Released Test Questions and Standards Blueprints from the cde.ca.gov website.	Administration	Ongoing
The technology coordinator will work with all staff members in their area(s) of need based on the CTAP online survey assessment.	Technology Committee	1/10 - ongoing
Technology coordinator will continue to work with staff members that have limited background with PCs.	Technology Committee	Ongoing
Technology coordinator will work with the administration and the technology committee to acquire appropriate software to support curriculum and standards.	Technology Committee	Ongoing
Provide in-service(s) on how to use district e-mail.	Technology Coordinator	Ongoing
The administration and technology committee will have outside sources provide staff development as needed.	Administration/ Technology committee	Ongoing
In-service for the use of the Accelerated Reader program and keyboarding software.	Technology Committee/ Software Rep.	Ongoing
Using CTAP1, assess district staff competencies.	Administration/Technology Committee	Annually
Staff will be in-serviced as the district purchases new technology.	Technology Committee	Ongoing
Staff will be encouraged to attend technology workshops and provide information/in-services to other staff.	Administration/Technology Coordinator	Ongoing

5. Infrastructure, Hardware, Technical Support, and Software

5a. Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that will be used to support the Curriculum and Professional Development Components of the plan.

Existing Hardware:

Total number of computers currently available for use: 107 computers (all are PCs-all MACs have been replaced).

Number in each classroom: K-5 classrooms 25, 6-8 classrooms 10

Number in the two Special Education Classrooms: K-5 class 7, 6-8 class 5

Number in the computer lab: 30

Number used by GATE: 2

- Servers: 1 in the computer lab
- One mobile lab consisting of 30 lap-tops which are kept in a 7/8 class and used by grades 5-8.
- All teachers have their own lap top, a projector and ELMO to present lessons.

Existing Internet Access: All classrooms are hard-wired for internet access, as is the computer lab. There are four wireless hubs placed strategically throughout the school to allow wi fi access. One of the hubs is located with the mobile lap-top cart to provide wireless connectivity for the 30 laptops.

Existing Electronic Learning Resources: We have replaced the Mac software with PC software as appropriate, and with what is current. Software is available, and is used, by teachers from the state adopted curriculums. United Streaming and Study Island are web-based resources used throughout the school by all teachers. Accelerated Reading is located in the library and in different classrooms throughout the school. Upper grades teach, and use, different programs from Microsoft Works.

Existing Technical Support: Current support is provided by the site administrator, one technology mentor, a teacher who was a former technology mentor, and by the staff being willing to help each other as needed (and expertise allows). For any issues that are above the capabilities of those listed above the district has a contract with the ARM group that will assist as needed.

5b. 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.

Hardware Needed:

1. Continue to purchase PCs to replace old, outdated, and broken PC's that are in the classrooms and computer lab.
2. Have a consultant (like the ARM group) diagnose our computer lab as to see whether we are using the networking in the computer lab and server as effectively and efficiently as possible.
3. Look into wiring more of the computer lab for Internet use and electrical. All outlets are currently being used.
4. As the need arises an outside source would be available to maintain and update the hardware. This person would also be available to provide staff development when necessary. The technology coordinator deals with many of the normal hardware problems that arise. Many problems are outside of the technology coordinator's range of expertise and cannot be solved by the person in that position. For this reason we would need to occasionally contract outside technical support (ex. The ARM Group)
5. Replace outdated software with current versions.
6. Network the computer lab for technology lessons from the teacher station.
7. Fund school site licenses for newly purchased software so that it can be used in the classrooms and the computer lab.
8. The firewall currently in place in the office does not allow for use of a grading program that teachers can communicate from the classroom computers to the office.
9. Purchase audio/visual equipment (projectors, projector screens, digital whiteboards, ELMO's, laptops) for student instruction in the classroom, library, and computer lab.
10. New quizzes needed for the Accelerated Reader program which is used in all classrooms and the library to support the language arts program.

Electronic Learning Resources Needed:

1. United Streaming, and Study Island subscription; other electronic resources that supplement and enrich the curriculum are purchased as needed.
2. Current software versions compatible with newer versions of Windows to support the math and language arts curriculum.

Networking and Telecommunications Infrastructure Needed: Expand bandwidth beyond previous infrastructure. Improve wireless access to allow full coverage for the campus using professional grade wireless access points.

Physical Plant Modifications Needed: Build on current infrastructure for technology growth by creating and improving a better facility to maintain and improve current and previous projects to the network operation.

Technical Support Needed: Technical support through LCOE and The ARM Group will be implemented as needed to accommodate infrastructure, staff and student development.

5c. List of clear annual benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components as identified in Section 5b.

5c. Annual Benchmarks and Timeline for obtaining resources

Year 1 Benchmark: Purchase new computers to replace outdated or broken equipment. Replace outdated software with current versions that are compatible with new computers. Wire the computer lab with extra outlets and internet drops. Fund site licenses of software titles and internet subscriptions. Purchase Accelerated reader quizzes for the library and classrooms.		
Recommended Actions/Activities	Timeline	Person(s) Responsible
Consult a professional on the wiring of the computer lab.	2010-2011	Superintendent, Business Manager
Purchase new computers to replace obsolete and broken computers.	2010-2011	Technology Coordinator, Superintendent, Business Manager
Purchase site licenses and internet subscriptions.	2010-2011	Technology Coordinator, Superintendent, Business Manager
Purchase new Accelerated Reader Quizzes.	2010-2011	Technology Coordinator, Superintendent, Business Manager
Purchase newer versions of software	2010-2011	Technology Coordinator, Superintendent, Business Manager

<p>Year 2 Benchmark: Purchase new computers to replace outdated or broken equipment. Replace outdated software with current versions that are compatible with new computers. Fund site licenses of software titles and internet subscriptions. Purchase Accelerated reader quizzes for the library and classrooms. Purchase audio-visual equipment for classroom instruction (whiteboards, projectors, ELMO's, laptops) as needed.</p>		
Recommended Actions/Activities	Timeline	Person(s) Responsible
continue to replace outdated and broken computers	2011-2012	Technology Coordinator, Superintendent, Business manager
replace outdated software with newer versions	2011-2012	Technology Coordinator, Superintendent, Business manager
Fund site licenses of software titles and internet subscriptions.	2011-2012	Technology Coordinator, Superintendent, Business Manager
Purchase Accelerated reader quizzes for the library and classrooms	2011-2012	Technology Coordinator, Superintendent, Business manager
Purchase audio-visual equipment for classroom instruction (whiteboards, projectors, ELMO's, laptops) as needed.	2011-2012	Technology Coordinator, Superintendent, Business Manager

<p>Year 3 Benchmark: Purchase new computers to replace outdated or broken equipment. Replace outdated software with current versions that are compatible with new computers. Fund site licenses of software titles and internet subscriptions. Purchase Accelerated reader quizzes for the library and classrooms. Purchase audio-visual equipment for classroom instruction (whiteboards, projectors, ELMO's, laptops) as needed.</p>		
Recommended Actions/Activities	Timeline	Person(s) Responsible
continue to replace outdated and broken computers	2012-2013	Technology Coordinator, Superintendent, Business Manager
replace outdated software with newer versions	2012-2013	Technology Coordinator, Superintendent, Business Manager
Fund site licenses of software titles and internet subscriptions	2012-2013	Technology Coordinator, Superintendent, Business Manager
Purchase Accelerated reader quizzes for the library and classrooms	2012-2013	Technology Coordinator, Superintendent, Business Manager
Purchase audio-visual equipment for classroom instruction (whiteboards, projectors, ELMO's, laptops) as needed.	2012-2013	Technology Coordinator, Superintendent, Business Manager

<p>Year 4 Benchmark: Purchase new computers to replace outdated or broken equipment. Replace outdated software with current versions that are compatible with new computers. Fund site licenses of software titles and internet subscriptions. Purchase Accelerated reader quizzes for the library and classrooms. Purchase audio-visual equipment for classroom instruction (whiteboards, projectors, ELMO's, laptops) as needed.</p>		
Recommended Actions/Activities	Timeline	Person(s) Responsible
continue to replace outdated and broken computers	2013-2014	Technology Coordinator, Superintendent, Business Manager

replace outdated software with newer versions	2013-2014	Technology Coordinator, Superintendent, Business Manager
Fund site licenses of software titles and internet subscriptions.	2013-2014	Technology Coordinator, Superintendent, Business Manager
Purchase Accelerated reader quizzes for the library and classrooms	2013-2014	Technology Coordinator, Superintendent, Business Manager
Purchase audio-visual equipment for classroom instruction (whiteboards, projectors, ELMO's, laptops) as needed.	2013-2014	Technology Coordinator, Superintendent, Business Manager

Year 5 Benchmark: Purchase new computers to replace outdated or broken equipment. Replace outdated software with current versions that are compatible with new computers. Fund site licenses of software titles and internet subscriptions. Purchase Accelerated reader quizzes for the library and classrooms. Purchase audio-visual equipment for classroom instruction (whiteboards, projectors, ELMO's, laptops) as needed.		
Recommended Actions/Activities	Timeline	Person(s) Responsible
continue to replace outdated and broken computers	2014-2015	Technology Coordinator, Superintendent, Business Manager
replace outdated software with newer versions	2014-2015	Technology Coordinator, Superintendent, Business Manager
Fund site licenses of software titles and internet subscriptions.	2014-2015	Technology Coordinator, Superintendent, Business Manager
Purchase Accelerated reader quizzes for the library and classrooms	2014-2015	Technology Coordinator, Superintendent, Business Manager
Purchase audio-visual equipment for classroom instruction (whiteboards, projectors, ELMO's, laptops) as needed	2014-2015	Technology Coordinator, Superintendent, Business Manager

5d. Describe the process that will be used to monitor Section 5b and the annual benchmarks and timeline of activities including roles and responsibilities.

As equipment breaks down teachers notify the technology coordinator who tries to repair the equipment first. If the technology coordinator is unable to repair the equipment they notify the administration and it is then determined whether to notify a repairman, send the equipment to a repair shop, or dispose of the equipment.

The technology coordinator is responsible for updating and expressing the infrastructure needs to the administration. As funds become available the superintendent will discuss funding and implementation with the technology coordinator, who will coordinate repair or implementation.

The superintendent reports to the School Site Council and School Board any infrastructure and/or repair needs.

6. Funding and Budget

6a. List of established and potential funding sources.

Established Funding Sources:

The goal of this Technology Plan is to guide our District as it continues to develop instructional strategies that utilize technology in effectively enhancing teaching and learning. Since it has been written as a guide, this Plan will be modified as needed, dependent on receipt of projected funding from Categorical and other programs, grants, and other funding sources. Based on the funding actually received, the priorities of this Plan may be modified by the Board of Trustees, with consideration of input from the Superintendent, Site Principal, School Site Council and District Technology Coordinator.

Potential Funding Sources	Estimated Amount
Microsoft Vouchers	\$15,000
Economic Impact Aid/ State Compensatory Education	\$50,019
GATE	\$9,686
Professional Development Block Grant	\$13,750
School and Library Improvement Program Block Grant	\$25,645
Title II: Teacher and Principal Training and Recruiting	\$21,429
Title II: Enhancing Education Through Technology	\$396
Title VI: Rural Education Achievement	\$16,536

6b. Estimate annual implementation costs for the term of the plan.

Item Description	Year 1	Year 2	Year 3	Year 4	Year 5	Funding Source Including E-Rate
4000-4999 Materials and Supplies						
Purchase of CD's and Printer ink for computer lab	\$300	\$300	\$300	\$300	\$300	
5000-5999 Other Services and Operating Expenses						
Software Purchases-web based	\$2,500	\$1,800	\$1,000	\$2,500	\$1,000	Microsoft K12 Vouchers
Hiring outside consultants(contract support services)	\$4,000	\$4,000	\$4,000	\$4,500	\$4,500	
Recycling obsolete computers	\$100	\$100	\$200	\$200	\$250	
6000-6999 Equipment						
Upgrade printers in classrooms	\$100	\$200	\$200	\$300	\$300	REAP - EIA
Upgrade/update of current LAN system	\$1,000	\$1,500	\$2,000	\$3,000	\$3,000	E-RATE
Upgrade WAN connection to LCOE	\$6,000	\$0	\$0	\$0	\$0	E-RATE
Upgrade office server and support system	\$6,000	\$0	\$0	\$0	\$0	Microsoft k12 vouchers
Totals:	\$20,000	\$7,900	\$7,700	\$10,800	\$9,350	

6c. Describe the district's replacement policy for obsolete equipment.

The District policy for disposal of obsolete equipment is:

The district will “de-inventory” computers as they become obsolete. The computers will be sold inexpensively at school functions like Back to school Night.

Obsolete computers will be donated to the high school for parts.

Obsolete computers will be sent to the recycling center for between \$50.00-\$100.00 per computer.

We will also use, as often as possible, the State of California Recycling Program.

6d. Describe the process that will be used to monitor Ed Tech funding, implementation costs and new funding opportunities and to adjust budgets as necessary.

Feedback loop: The technology coordinator will be the focal point for the feedback loop. All problems/needs will come through the teachers to the technology coordinator. The technology coordinator will address all of the problems/needs whenever possible. If a problem persists the technology coordinator will contact the administration to contract an outside source for resolution of the problem. The technology coordinator will contact the wing teachers to update them on the expected resolution of the problem.

Budgets: The administration will meet with the technology coordinator and/or the technology committee to discuss funding and budget decisions. The technology committee, technology coordinator, and administration will make decisions as to how and when funded items will be spent.

7. Monitoring and Evaluation

7a. Describe the process for evaluating the plan's overall progress and impact on teaching and learning.

The latest CTAP staff survey was taken by the staff and used to address the various needs outlined in this technology plan. The evaluation of technology's impact on student learning, attainment of district curricular goals, and classroom and school management will be done at least three times a year by the administration. All of the monitoring processes described in much greater detail earlier in this plan (see sections 3-6) will be refocused and reorganized biannually. All monitoring processes will be used to address the needs of staff, students, parents, and administration. All processes will be used to insure that technology is being used to enhance curriculum and standards, and that technology becomes a part of every students' knowledge base for their future.

7b. Schedule for evaluating the effect of plan implementation.

Monitoring and evaluation of the technology plan implementation will be reviewed on an annual basis as well as during the school year at regular monthly scheduled staff meetings. The technology coordinator will be responsible for gathering data from staff and disseminating this information to the administration, and vice versa. The information will be used to evaluate and plan for professional development, and any further hardware or software needs. The technology committee will use data to encourage staff to use their strengths to incorporate technology into the core curriculum.

7c. Describe the process and frequency of communicating evaluation results to tech plan stakeholders.

Monitoring and evaluation will be an on going process. Information will be gathered from staff at staff meetings, and through surveys like CTAP. The information will be used to evaluate and plan for professional development. The administration will use data to encourage staff to use their strengths to incorporate technology into the core curriculum. At least three times a year staff will be surveyed by the administration as to their needs. This will be conveyed to the school board by the administration.

8. Collaborative Strategies with Adult Literacy Providers

Lucerne Elementary School District works directly with the Lake County Office of Education to provide Adult Literacy. The following narrative explains the District and County collaboration for adult literacy.

Lake County Adult Literacy Providers:

We believe that technology can expand adult student access to educational materials, help in the delivery of innovative instruction, and make staff-development materials readily available to instructors and volunteers. Lucerne Elementary School has provided the school computer lab for the local Senior center and the local community college. Lucerne school has implemented the program F.A.S.T(families and schools together). Furthermore, technology can offer individuals who cannot attend formal classes the educational opportunities that they might not otherwise have.

School districts within Lake County, offer adult literacy instruction. These programs provide instruction at the Adult Basic Instruction level (grades 3-8 equivalency), and Adult Secondary Instruction level (grades 9-12 equivalency). The Adult Secondary Instruction focuses on GED preparation classes and High School Diploma programs.

The Lake County Office of Education (LCOE) ROP program, also provides a comprehensive schedule of career preparation classes which are offered throughout the county. LCOE also facilitates student access and program planning for district adult literacy programs.

Needs within Lake County:

The year-2008 population of Lake County was 64,866 and is projected to grow to 79,676 by the year 2020. The population is largely low income and has an unemployment rate which ranks 40th in the state. Unemployment in Lake County is 18.5%, as of December, 2009. Lake County also has a significant senior population distributed throughout the county. The principal industry in the county is agriculture.

All of these demographics indicate a high need for Adult Literacy in every form within our county. The need to provide a large number of adults with the preparation, education and career training to improve their opportunities is immediate. This need will certainly increase in the future as the population grows and as new industries consider relocating into our county.

Collaboration Efforts – Now and in the Future:

The Lake County Office of Education technology committee plans to meet with adult literacy providers to share information about our technology plan, to review how they currently incorporate technology into their classes, and to discover how we may collaborate to better provide services to our students, our parents and the general community. Possible assistance may include increased co-location of classes to increase student accessibility, sharing of ideas on how to integrate technology into curriculum, collaboratively pursuing adult literacy funding sources, and offering technology professional development courses to adult literacy staff and volunteers.

The Lake County Office of Education is currently participating in the following coalition and collaborative effort. Our focus will continue to be to support, encourage and expand these efforts:

Lake County Literacy Coalition

The Lake County Literacy Coalition is a cooperative effort centered in our county Libraries. It is staffed by volunteers (with paid coordinators), and provides tutorial assistance for reading development. The Lake County Office of Education cooperates with this program by (a) facilitating access for participants in the program, (b) providing program planning assistance, and (c) co-locating services within our facilities.

9. Effective, Researched-Based Methods and Strategies

9a. Summarize the relevant research and describe how it supports the plan's curricular and professional development goals.

The curricular goals in the Lucerne Elementary School District Technology Plan include: 1) using technology to remediate, reinforce, and extend student learning; 2) provide computer assisted instruction (CAI) to increase student achievement in reading and math; 3) integrating technology use into the curriculum to improve reading, writing, and math skills; 4) integrating technology into the curriculum to improve information gathering and presentation skills; 5) using technology to support the academic progress of all students in special programs. Each of these goals are supported and validated by research.

Research Examples Relating to Curriculum Integration

1. Integration Within the Curriculum Framework

“And in the 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.”

Sandholtz, J.H., Ringstaff, C. & Dwyer, D.C. (1997). Teaching with Technology: Creating student-centered classrooms. New York: Teachers College Press.

2. Information Literacy Skills

“Moreover, using technology within the curriculum framework can enhance important skills that will be valued in the workplace, such as locating and accessing information, organizing and displaying data, and creating persuasive arguments.”

Critical issues: Using technology to improve student achievement. (1999). Retrieved

March 12, 2001, from North Central Regional Educational Laboratory Web site: <http://www.ncrel.org/sdrs/areas/issues/methods/technlgy/te800.htm>

3. Collecting, Organizing, and Analyzing Information

“These technologies provided an excellent platform—a conceptual environment—where children could collect information in multiple formats and then organize, play, visualize, link, and

eventually construct new ideas about relationships among facts and events. The same technology could then be used powerfully by students to communicate their ideas to others, to argue and critique their beliefs, to persuade and teach others, to add greater levels of understanding to their own growing knowledge (p.5-6).”

Dwyer, D. (1992), ACOT: History, findings, Cupertino, CA: Apple Computer Inc.

4. Mathematics Skills

“Mathematics courses that emphasize small-group processes, analyses of real-world situations, the use of computational tools, and incorporate adaptive tutoring software into curriculum can result in improved mathematics skills as measured by standardized assessments. These types of courses also result in improved problem-solving skills and enhanced ability to translate between equivalent representations of algebraic content”

Koedinger, K., Anderson, L.K., Hadley, W. & Mark, M. (1997). Intelligent Tutoring Goes to School in the Big city. Pitsburg, PA: Human-computer Interaction Institute, CarnegieMellonUniversity.

5. Basic Academic Skills

“Integrated learning programs should be considered as a supplement for the systematic development of basic academic skills but should not replace project-based activities that are designed to teach students the relevance and application of the basic skills as they are mastered”

Mann, D., Shakeshaft, C., Becker, J.C. & Kottkamp, R. (1998).

West VirginiaStory: Achievement gains from a statewide comprehensive instructional technology program. Santa Monica, CA: Milken Exchange on Educational Technology.

6. Integrated Learning Systems (ILS) / Computer-Assisted Instruction (CAI)

“The computer-integrated instructional program, (Project Child) found that elementary students in project classrooms from kindergarten through fifth grade consistently had higher test scores and better discipline than their counterparts”

Butzin, S.M. (2000, June). Project Child: a decade of success for young children [Feature]. Technology Horizons in Education Journal, 27(11). Retrieved from <http://www.thejournal.com/magazine/vault/A2882.cfm>

A meta-analysis of 500 computer-based instruction studies concluded that computer-assisted instruction and drill and practice software can significantly improve students’ scores on standardized achievement tests.

Kulik, J.A. & Kulik C.-L. C. (1987a) Computer-based instruction: What 200 evaluations say. Paper presented at the Annual Convention of the association for Educational communications and Technology,Atlanta,GA.(ERIC Document Reproduction Service No. ED 285 521)

7. Drill and Practice Software

As a result of these meta-analyses, many conclude that computer-assisted instruction and drill-and-practice software can significantly improve students' scores on standardized achievement tests (Kulik, 1994; Sivin- Kachala & Bialo, 2000), in all major subject areas, preschool through higher education (Coley, 1997).

Sivin-Kachala, J., & Bialo, E. (2000). 2000 research report on the effectiveness of technology in schools (7 th ed.),Washington,DC: Software and Information Industry Association

8. Learning Styles and Special Needs

“Technology can provide the means for students with special needs to communicate via email and use the Internet for research, and can also help teachers accommodate students' varying learning styles”

Silverstein, G., Frechtling, J. & Miyoaka, A. (2000). Evaluation of the use of technology inIllinoispublic schools: Final report (prepared for Research Division,IllinoisStateBoard of Education),Rockville,MD: Westat

“Gifted students can work at their own pace and explore subjects in more depth than the basic curriculum. Technology can also analyze and provide immediate feedback on performance, and can suggest modifications in instruction where necessary to improve student achievement.”

CEO Forum on Education and Technology. (2001). Education technology must be included in comprehensive educational legislation.Washington,DC: Author

9. Interdisciplinary, Project-Based Learning

In another longitudinal study, researchers investigated the impact of project-based learning using multimedia. Data from teachers' self-reports, as well as classroom observation data, suggest that project teachers were less likely to lecture than non-project colleagues, and instead took on the role of facilitator or coach. In project classrooms, students spent a greater amount of time than non-project peers in active, small-group collaborative activities or small-group discussions. In short, project classrooms were much more student centered than non-project classrooms, and were “organized around the collaborative construction of complex products.”

Penuel, B., Golan, S., Means, B. & Korbak, C. (2000).Silicon ValleyChallenge 2000: Year 4 report.Menlo Park,CA: SRI International

10. Technology Integration and Student Achievement

In an eight-year longitudinal study of SAT-1 performance at New Hampshire's Brewster Academy (Bain & Ross, 1999), students participating in the technology-integrated school reform efforts (School Design Model) demonstrated average increases of 94 points in combined SAT 1 performance over students who participated in the traditional school experience.

Bain, A. & Ross, K. (1999). School reengineering and SAT-1 performance: A case study. International Journal of Education Reform, 9(2), 148-153

Staff Development

Staff members at Lucerne Elementary School receive on-going training that is appropriate for their skill level. At least one staff development day each year is devoted to staff development. Additionally, the District mentor trains and works with all staff members as needed. Feedback from grade levels ensures each training is tailored to individual, as well as, group needs.

Research Examples relating to Technology Professional Development

1. Improving Student Achievement

“Results of over 300 studies of technology use, authors concluded that teacher training was the most significant factor influencing the effective use of educational technology to improve student achievement. Specifically, the report states that students of teachers with more than ten hours of training significantly outperformed students of teachers with five or fewer training hours”

Sivin-Kachala, J. & Bialo, E. (2000). 2000 research report on the effectiveness of technology in schools (7 th ed.). Washington, DC: Software and Information Industry Association

“Students whose teachers received professional development on computers showed gains in math scores of up to 13 weeks above grade level.”

Wenglinsky, H. (1998). Does it compute? The relationship between educational technology and student achievement in mathematics (Educational Testing Service Policy Information Report). Retrieved March 12, 2001, from <ftp://ftp.dts.org/pub/res/technology.pdf>

“The greatest gains in student achievement occurred when teachers were trained in the use of technology.”

Schacter, J. (1999). The impact of education technology on student achievement: what the most current research has to say. Retrieved from the Milken Family Foundation Web site: <http://www.mff.org/pubs/ME161.pdf>

“Helping teachers to learn to integrate technology into curriculum is a critical factor in the successful implementation of technology in schools.”

Sivin-Kachala, J. & Bialo, E. (2000). 2000 research report on the effectiveness of technology in schools (7 th ed.). Washington, DC: Software and Information Industry Association

“When teachers are learning to integrate technology into their classrooms, the most important staff-development features include opportunities to explore, reflect, collaborate with peers, work on authentic learning tasks, and engage in hands-on, active learning.”

Schacter, J. (1999). The impact of education technology on student achievement: what the most current research has to say. Retrieved from the Milken Family Foundation Web site: <http://www.mff.org/pubs/ME161.pdf>

“Mentors who can help teachers adapt technology applications to their classroom needs are important to the success of innovative uses of technology.”

Zhao, Y., Pugh, K., Sheldon, S. & Byers, J.L. (2002). Conditions for classroom technology innovations. Teachers College Record, 104(3), 482-515.

Collaborative learning and practice:

“Considerable time for collaborative learning and practice is required for teachers to gain confidence in using technology .”

Coley, R.J., Cradler, J. & Engle, P.K. (1997). Computers and classrooms: The status of technology in U.S. schools (Policy Information Report). Princeton, NJ: Educational Testing Service.

Professional associations:

“Participation in professional associations and sharing with colleagues within and beyond one’s school contribute to increased confidence and motivation for using technology and correspond with increased use of learner-centered instructional strategies.”

Becker, H.J. & Riel, M. (2000). Teacher professional engagement and constructivist compatible computer use (Report No. 7) [Online]. Irvine: University of California, Irvine, Center for Research on Information Technology and Organizations. Available: http://www.crito.uci.edu/tlc/findings/reprot_7/TEXT.html .

Long-term professional development:

“Teachers need long-term professional development to adapt and infuse curricula with technology.”

(Wetzel, 2001a, 2001b: wetzel, Zambo, Buss, & Padgett, 2001),.

“Teachers need ready access to technology while they plan, along with flexible scheduling for team teaching and for learning to use technology during the school day.”

(Honey & McMillan, 1996).

Effective Training Models

Although Lucerne Elementary School is located in a rural area, and the opportunities to examine other technology models and strategies is limited, every effort is made to visit to outside sources whenever possible. The District mentor attends at least two conferences/classes each year. The administration and school board are fully supportive in exploring upgrading our technology, and allow staff to explore new, innovative strategies. The district also works closely with a technology support provider, the ARM group, to assist in updating our technology whenever possible.

Pre-service elementary teachers learn technology integration strategies by working with and observing practicing teachers and students while they use technology. For their practice teaching assignments, pre-service teachers should be placed with teachers who are exemplary users of technology.

Abbott, J.A. & Faris, S.E. (2000). Integrating technology into pre-service literacy instruction: A survey of elementary education students' attitudes toward computers. Journal of Research on Computing in Education, 33(2), 149-161

“Education faculty should integrate technology applications into pre-service teacher assignments and field activities so that new teachers have opportunities to acquire technical skills and practice instructional strategies.”

COEForum (1999). Professional development: A link to better learning [Online]. Washington, DC: Author. Available: <http://www.ceoforum.org/reports.cfm?RID=2>

“Staff development must be individualized to the needs of the teacher. Teachers must decide on what the topic should be and when the staff development or training should occur. Time for teachers to plan, learn about, and implement technology applications is essential. Educators need an understanding of ways to integrate technology into education reform initiatives. Involvement of teachers in planning statewide, schools, and classroom uses of technology is critical.”

Cradler, J. & Cradler, R. (1995). Prior studies for technology insertion.

San Francisco, CA: Far West Laboratory.

“There is a continuing need for the school site presence of a technology coordinator who can serve as a mentor or “translator” of technology applications and instructional integration for teachers. Appropriate technology resource personnel are not only for the early stages of a technology initiative or technology plan.”

Stradler, N. (1994). The role of school-based technology coordinators as change agents in elementary school programs: A follow-up study. Presented at AERA, New Orleans, LA, April 5, 1994

“66% of teachers who received more than 32 hours of technology related training felt well to very well prepared to use technology in their classrooms (NCES, 2000a). The percentage who felt well to very well prepared to use technology dropped to 34% for those who received from 9 to 32 hours and to 24% for those who received less than 9 hours of technology-related professional development.”

National Center for Educational Statistics. (2000a). Teachers' tools for the 21st century: a report on teachers' use of technology [Online]. Washington, DC: Author. Available: <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2000102>

9b. Describe the district's plans to use technology to extend or supplement the district's curriculum with rigorous academic courses and curricula, including distance-learning technologies.

Technology is integrated through most of the curriculum at Lucerne Elementary School. With the recent purchase of Standards-based curricula the students have unprecedented access to the richness of technology. With internet-linked multimedia computers in every room students can use CD-ROMs and the World Wide Web to supplement the core curriculum. The teachers can supplement lessons, and give remediation to any student in the school. The curriculum includes videos to supplement lessons and reinforce core concepts in every classroom.

In the school computer lab students have access to a variety of on-line resources. Teachers use the technology in the lab to deliver lessons via PowerPoint presentations and computer-linked projectors. Students use Microsoft Excel and PowerPoint to research topics in every curriculum area.

The staff, administration, school site council, and the school board of Lucerne Elementary School developed these innovative strategies. Through wing meetings and staff meetings ideas, needs, timelines, etc; were prioritized and implemented.

**Appendix J - Technology Plan Contact Information
(Required)**

Education Technology Plan Review System (ETPRS)
Contact Information

County & District Code: 17 - 64048

School Code (Direct-funded charters only): _____

LEA Name: Lucerne Elementary

*Salutation: Mr.

*First Name: Mike

*Last Name: Brown

*Job Title: Principal/Superintendent

*Address: PO Box 1083

*City: Lucerne

*Zip Code: 95458-1083

*Telephone: 707-274-5578 Ext: 11

Fax: 707-274-9865

*E-mail: mbrown@lucerne.k12.ca.us

Please provide backup contact information.

1st Backup Name: Angela Austin

E-mail: aaustin@lucerne.k12.ca.us

2nd Backup Name: Ron Hale

E-mail: rhale@lucerne.k12.ca.us

* Required information in the ETPRS

Reporting

Date of Report: 02/01/2010 09:50:13 AM PST

Data as of: 02/01/2010 08:34:34 AM PST

Technology Assessment Profile: Proficiency Analysis Report Report for Lucerne Elementary

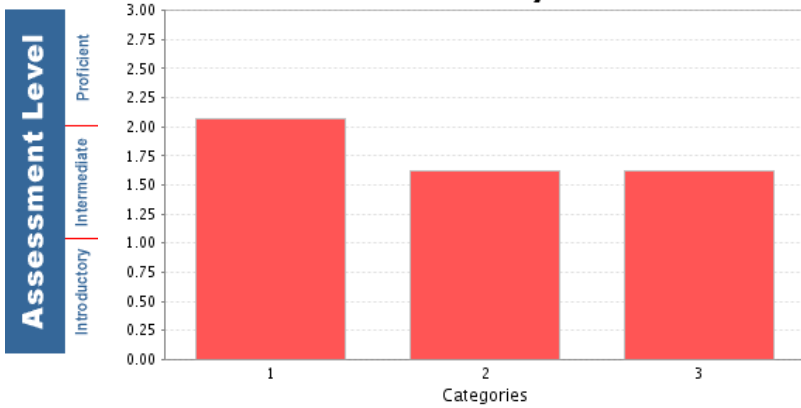
Assessment: Technology Assessment Profile

All users

School type: Public

Lucerne Elementary has 17 credentialed teachers, this chart represents the assessment summary for 15 teachers or 88%. It is important to note that this includes both fully completed and partially completed assessments.

Main Summary Chart



- 1 Computer Knowledge and Skills (Includes 15 in calculation)
- 2 CCTC Program Standard 9: Using Technology in the Classroom (Includes 13 in calculation)
- 3 CCTC Program Standard 16: Using Technology to Support Student Learning (Includes 13 in calculation)

Reporting

Date of Report: 02/01/2010 09:50:13 AM PST

Data as of: 02/01/2010 08:34:34 AM PST

Technology Assessment Profile: Proficiency Analysis Report Report for Lucerne Elementary

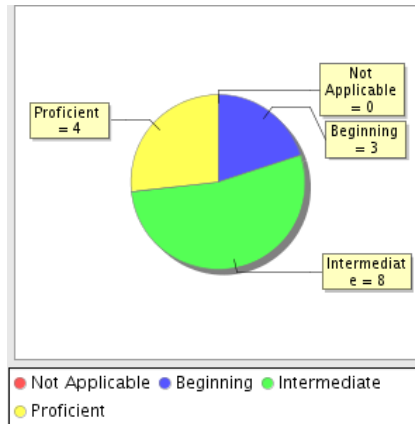
Assessment: Technology Assessment Profile

All users

School type: Public

Category: Computer Knowledge and Skills

Computer Knowledge and Skills



Percentage	Number	
0%	0	Not Applicable
20%	3	Beginning
53%	8	Intermediate
27%	4	Proficient
100%	15	Total Responses

Reporting

Date of Report: 02/01/2010 09:50:13 AM PST

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Technology Assessment Profile: Proficiency Analysis Report Report for Lucerne Elementary

Assessment: Technology Assessment Profile

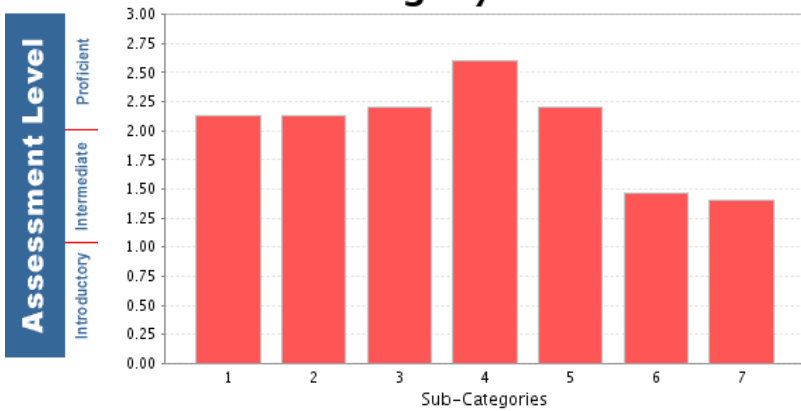
All users

School type: Public

Category: Computer Knowledge and Skills

Lucerne Elementary has 17 credentialed teachers, this chart represents the assessment summary for 15 teachers or 88%. It is important to note that this includes both fully completed and partially completed assessments.

Category Chart



- 1 General computer knowledge and skills (Includes 15 in calculation)
- 2 Internet skills (Includes 15 in calculation)
- 3 Email skills (Includes 15 in calculation)
- 4 Word processing skills (Includes 15 in calculation)
- 5 Presentation software skills (Includes 15 in calculation)
- 6 Spreadsheet software skills (Includes 15 in calculation)
- 7 Database software skills (Includes 15 in calculation)

Reporting

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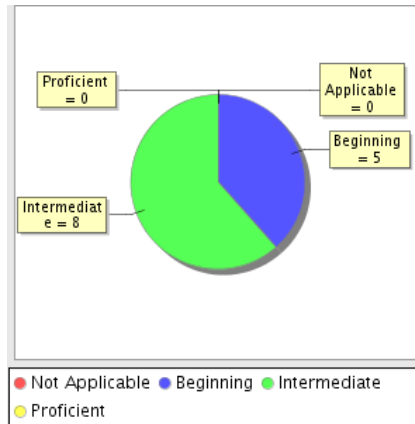
Assessment: Technology Assessment Profile

All users

School type: Public

Category: CCTC Program Standard 9: Using Technology in the Classroom

CCTC Program Standard 9: Using Technology in the Classroom



Percentage	Number	
0%	0	Not Applicable
38%	5	Beginning
62%	8	Intermediate
0%	0	Proficient
100%	13	Total Responses

Reporting

Date of Report: 02/01/2010 09:50:14 AM PST

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Technology Assessment Profile: Proficiency Analysis Report Report for Lucerne Elementary

Assessment: Technology Assessment Profile

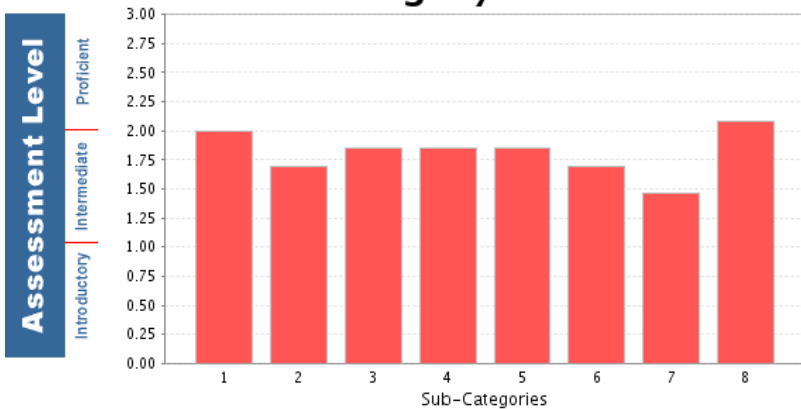
All users

School type: Public

Category: CCTC Program Standard 9: Using Technology in the Classroom

Lucerne Elementary has 17 credentialed teachers, this chart represents the assessment summary for 13 teachers or 76%. It is important to note that this includes both fully completed and partially completed assessments.

Category Chart



Standard 9a (Includes 13 in calculation)

- 1 Each candidate considers the content to be taught and selects appropriate technological resources to support, manage, and enhance student learning in relation to prior experiences and level of academic accomplishment.

Standard 9b (Includes 13 in calculation)

- 2 Each candidate analyzes best practices and research findings on the use of technology and designs lessons accordingly.

Standard 9d (Includes 13 in calculation)

- 3 Each candidate uses computer applications to manage records and to communicate through printed media.

Standard 9e (Includes 13 in calculation)

- 4 Each candidate interacts with others using e-mail and is familiar with a variety of computer-based collaborative.

Standard 9f (Includes 13 in calculation)

- 5 Each candidate examines a variety of current educational technologies and uses established selection criteria to evaluate materials, for example, multimedia, Internet resources, telecommunications, computer-assisted instruction, and productivity and presentation tools. (See California State guidelines and evaluations.)

Standard 9g (Includes 13 in calculation)

- 6 Each candidate chooses software for its relevance, effectiveness, alignment with content standards, and value added to student learning.

Standard 9h (Includes 13 in calculation)

- 7 Each candidate demonstrates competence in the use of electronic research tools and the ability to assess the authenticity, reliability, and bias of the data gathered.

Standard 9i (Includes 13 in calculation)

- 8 Each candidate demonstrates knowledge of copyright issues and of privacy, security, safety issues and Acceptable Use Policies.

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Technology Assessment Profile: Proficiency Analysis Report Report for Lucerne Elementary

Assessment: Technology Assessment Profile

All users

School type: Public

Category: CCTC Program Standard 9: Using Technology in the Classroom

CCTC Program

Standard 9:

Using

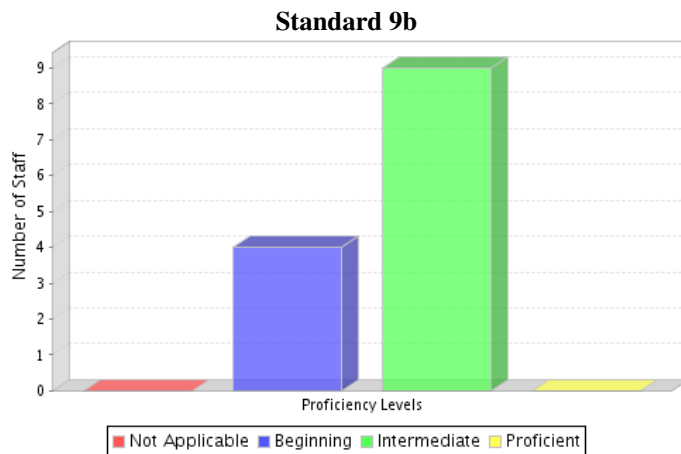
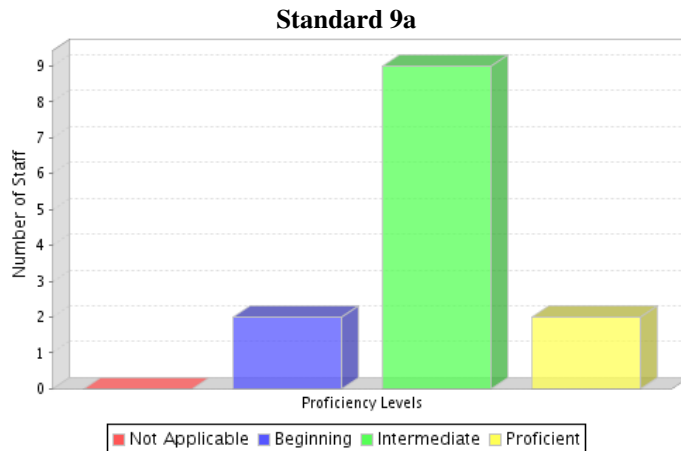
Technology in

the Classroom

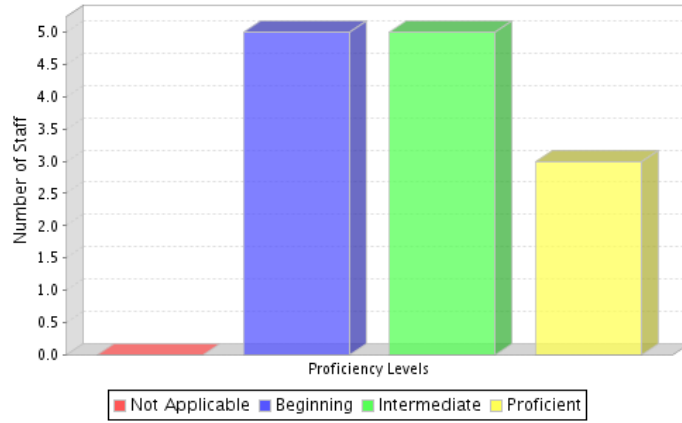
Proficiency Level

	Standard 9a		Standard 9b		Standard 9d		Standard 9e		Standard 9f		Standard 9g		Standard 9h	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Not Applicable	0	0%	0	0%	0	0%	1	8%	0	0%	0	0%	1	8%
Beginning	2	15%	4	31%	5	38%	4	31%	3	23%	5	38%	6	46%
Intermediate	9	69%	9	69%	5	38%	4	31%	9	69%	7	54%	5	38%
Proficient	2	15%	0	0%	3	23%	4	31%	1	8%	1	8%	1	8%
Total Responses	13	100%	13	100%	13	100%	13	100%	13	100%	13	100%	13	100%

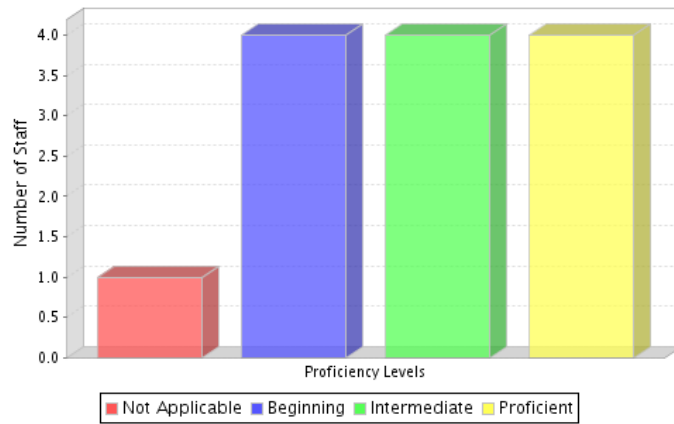
Number of teachers by proficiency level



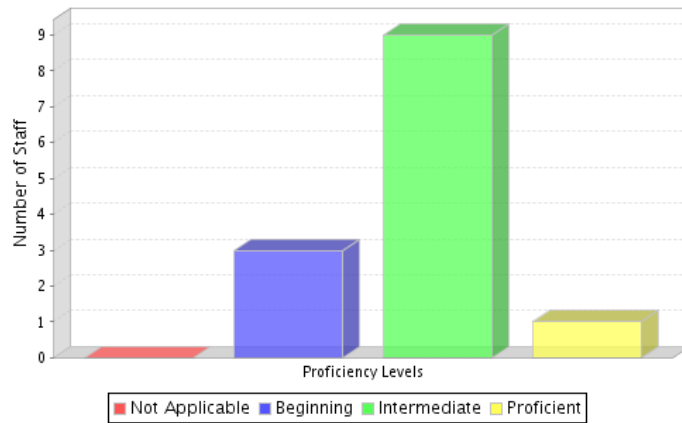
Standard 9d



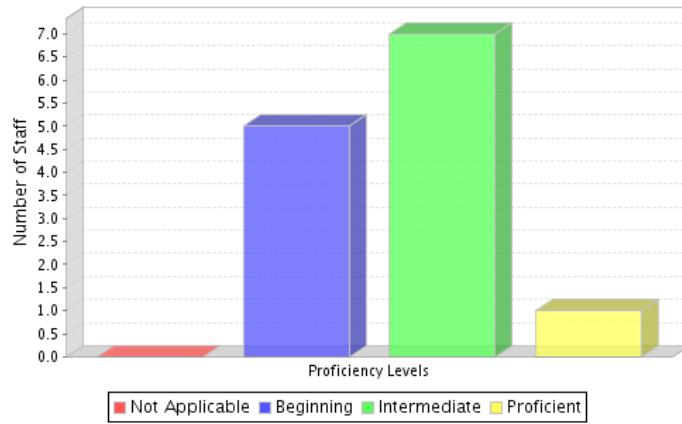
Standard 9e



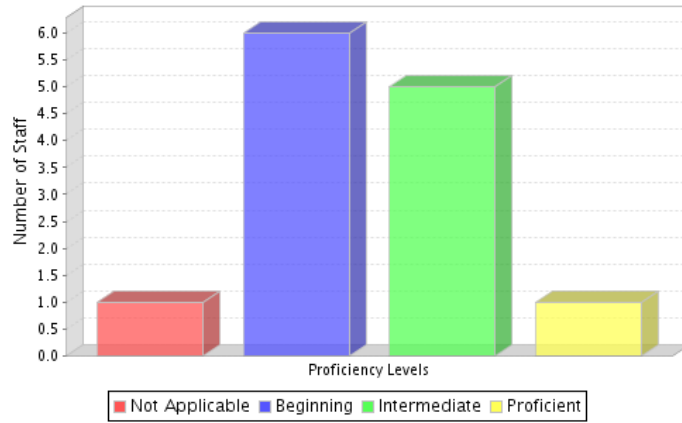
Standard 9f



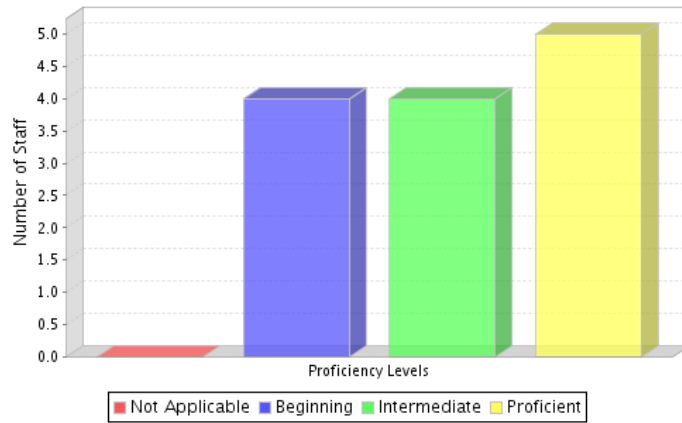
Standard 9g



Standard 9h



Standard 9i



Reporting

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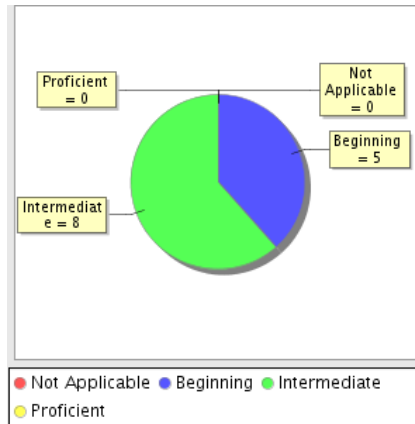
Assessment: Technology Assessment Profile

All users

School type: Public

Category: CCTC Program Standard 16: Using Technology to Support Student Learning

CCTC Program Standard 16: Using Technology to Support Student Learning



Percentage	Number	
0%	0	Not Applicable
38%	5	Beginning
62%	8	Intermediate
0%	0	Proficient
100%	13	Total Responses

Reporting

Date of Report: 02/01/2010 09:50:14 AM PST

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Assessment: Technology Assessment Profile

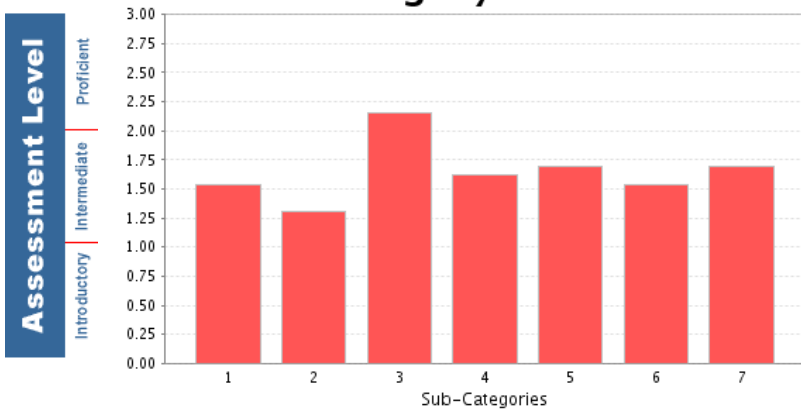
All users

School type: Public

Category: CCTC Program Standard 16: Using Technology to Support Student Learning

Lucerne Elementary has 17 credentialed teachers, this chart represents the assessment summary for 13 teachers or 76%. It is important to note that this includes both fully completed and partially completed assessments.

Category Chart



- Standard 16a (Includes 13 in calculation)
1 Each participating teacher communicates through a variety of electronic media.
- Standard 16b (Includes 13 in calculation)
2 Each participating teacher interacts and communicates with other professionals through a variety of methods, including the use of computer-based collaborative tools to support technology enhanced curriculum.
- Standard 16c (Includes 13 in calculation)
3 Each participating teacher uses technological resources available inside the classroom or in library media centers, computer labs, local and county facilities, and other locations to create technology enhanced lessons aligned with the adopted curriculum.
- Standard 16d (Includes 13 in calculation)
4 Each participating teacher designs, adapts, and uses lessons which address the students' needs to develop information literacy and problem solving skills as tools for lifelong learning.
- Standard 16e (Includes 13 in calculation)
5 Each participating teacher uses technology in lessons to increase students' ability to plan, locate, evaluate, select, and use information to solve problems and draw conclusions. He/she creates or makes use of learning environments that promote effective use of technology aligned with the curriculum inside the classroom, in library media centers or in computer labs.
- Standard 16f (Includes 13 in calculation)
6 Each participating teacher uses computer applications to manipulate and analyze data as a tool for assessing student learning and for providing feedback to students and their parents.
- Standard 16g (Includes 13 in calculation)
7 Each participating teacher demonstrates competence in evaluating the authenticity, reliability and bias of the data gathered, determines outcomes, and evaluates the success or effectiveness of the process used. He/she frequently monitors and reflects upon the results of using technology in instruction and adapts lessons accordingly.

Reporting

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Technology Assessment Profile: Proficiency Analysis Report Report for Lucerne Elementary

Assessment: Technology Assessment Profile

All users

School type: Public

Category: CCTC Program Standard 16: Using Technology to Support Student Learning

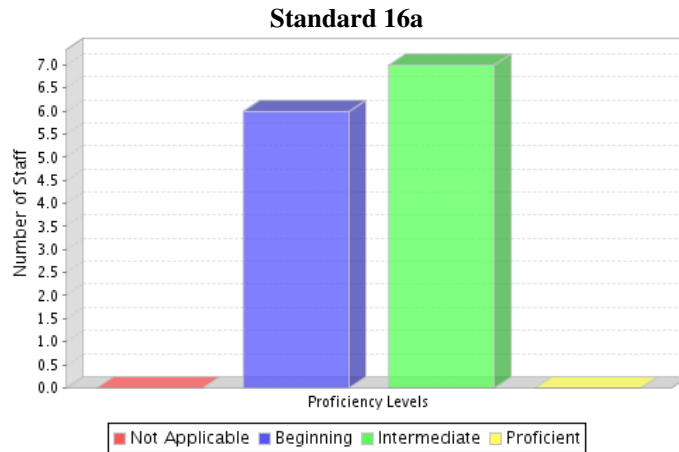
CCTC Program

Standard 16:

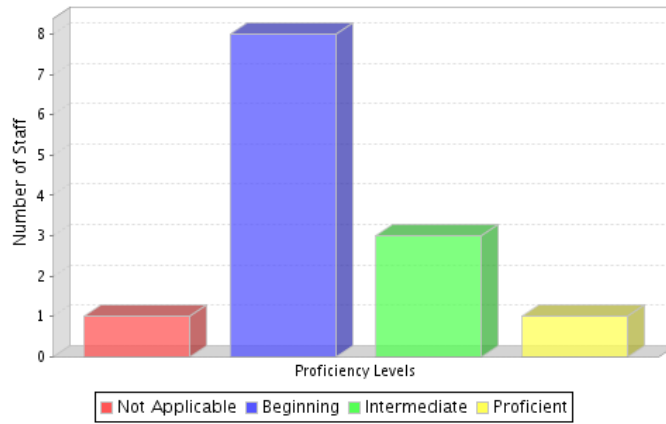
**Using
Technology to
Support Student
Learning**

	Standard 16a		Standard 16b		Standard 16c		Standard 16d		Standard 16e		Standard 16f		Standard 16g	
Proficiency Level	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Not Applicable	0	0%	1	8%	0	0%	0	0%	0	0%	2	15%	0	0%
Beginning	6	46%	8	62%	1	8%	8	62%	4	31%	5	38%	4	31%
Intermediate	7	54%	3	23%	9	69%	2	15%	9	69%	3	23%	9	69%
Proficient	0	0%	1	8%	3	23%	3	23%	0	0%	3	23%	0	0%
Total Responses	13	100%	13	100%	13	100%	13	100%	13	100%	13	100%	13	100%

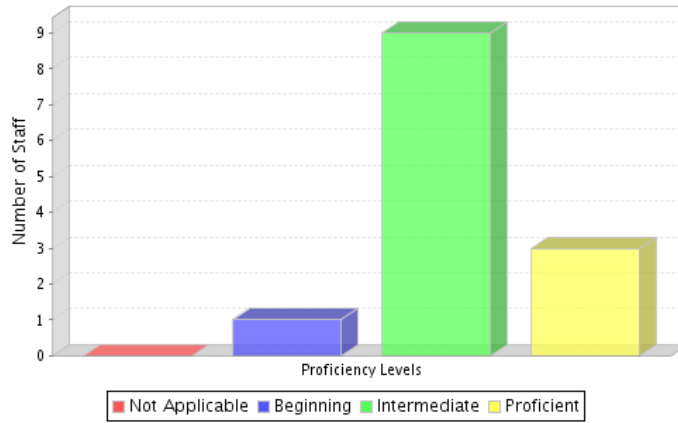
Number of teachers by proficiency level



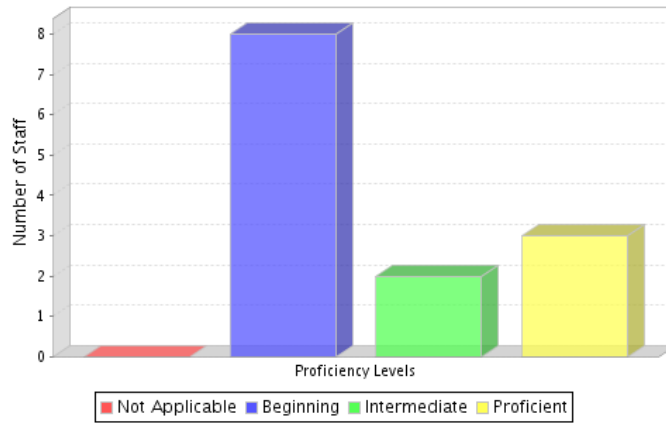
Standard 16b



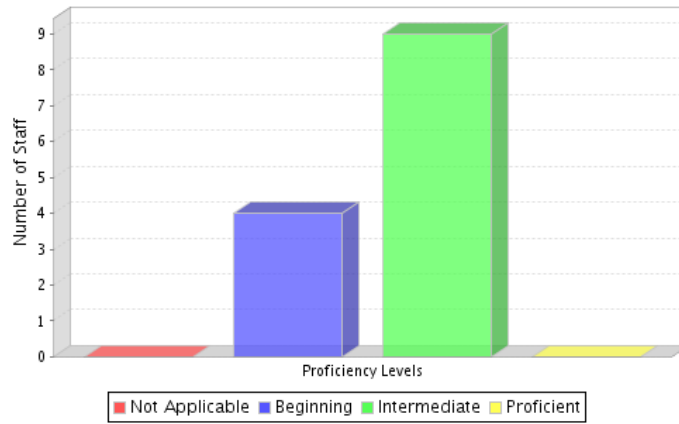
Standard 16c



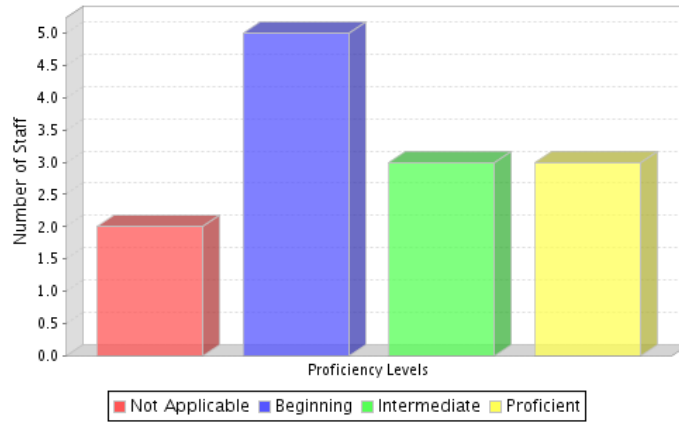
Standard 16d



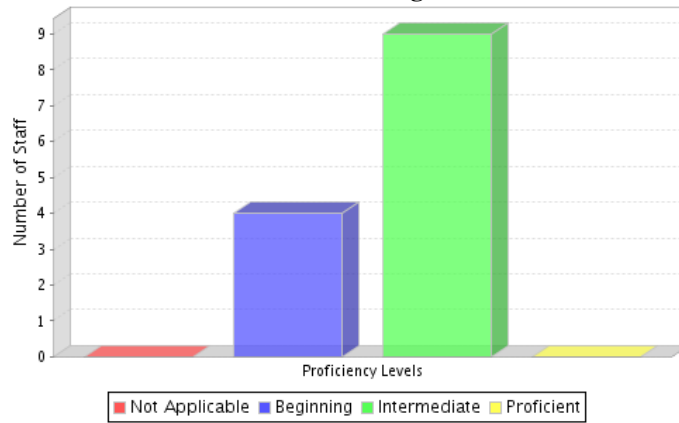
Standard 16e



Standard 16f



Standard 16g



Reporting

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Data as of: 02/01/2010 08:34:34 AM PST

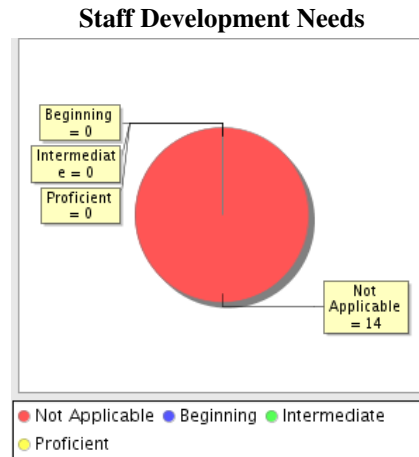
Technology Assessment Profile: Proficiency Analysis Report Report for Lucerne Elementary

Assessment: Technology Assessment Profile

All users

School type: Public

Category: Staff Development Needs



Percentage	Number	
100%	14	Not Applicable
0%	0	Beginning
0%	0	Intermediate
0%	0	Proficient
100%	14	Total Responses