

1 **Project Summary**

2 **EETT Round 3, Maywood Middle School, CUESD, and EAST Initiative**

3 The Corning Union Elementary School District (CUESD) will provide a comprehensive program
4 for our teachers and students that align with current district efforts. The program will provide the
5 following: 1.) Intensive, ongoing, research-based professional development of teachers for integrating
6 technology into the curricula and instruction, enabling students to meet or exceed the state academic
7 content standards. 2.) Increased access to technology. 3.) Improved communication/collaboration among
8 home, school and community. 4.) Methods of collecting data for accountability and evaluation, and a
9 plan for continuous improvement have been included in each component of the program.

10 Environmental and Spatial Technology (EAST) has been implemented in over 200 schools nationwide. A
11 longitudinal study has recently been commissioned by the U.S. Department of Education to determine
12 why the program has been so successful in maximizing student achievement. The EAST classroom is a
13 performance-based learning environment utilizing advanced technological applications in an
14 interdisciplinary environment. The CUESD selected the EAST model because of a proven history of
15 success as well as the program’s ability to positively impact school culture and support existing school
16 reform efforts. In addition to promoting academic and intellectual growth of students, real world problem
17 solving, incorporating 21st century skills, are also stressed. As part of the comprehensive program, EAST
18 will be the model used in the Maywood Middle School in the CUESD. Approximately 125 students and 2
19 teachers will participate in the program in the first year, expanding to 150 students and 3 teachers in the
20 second year. The curricular focus will be in the areas of language arts: writing, research, analysis and
21 communications. Target group selection and curricular focus was based on: Performance Improvement
22 goals, EduSoft test data, and a survey of teacher’s interest and enthusiasm for the project. The CUESD
23 will direct the project and will be the fiscal agent, and there are no private schools in our area.

24 EAST Competencies have been aligned to both the California Academic Content Standards and
25 the 21st Century Skills. Implementing EAST in the CUESD will not only allow students to excel in the
26 California Content Standards, but also allow our site to implement essential competencies and skills that
27 students need to be successful in the 21st century (Partnership for 21st Century Skills (2003)). Student
28 success is measured by the degree of demonstrated growth and by progress made toward the development
29 of skills the state’s standardized tests indicate so many students are lacking, such as creative and critical
30 thinking skills. These skills have been identified in the Secretary's Commission on Achieving Necessary
31 Skills report (SCANS, 1991) and the Partnership for 21st Century Skills (2003) as necessary for students’
32 future success.

1
2 **PROJECT NARRATIVE**

3 **Corning Union Elementary School District**
4 **EETT Competitive Grant Application, Round 3**
5

6 **A. Program for Students**
7

8 Target Group: Students in the 6th, 7th and 8th grades at the Maywood Middle School, CUESD, will be
9 targeted for this program implementation. The school serves 690 students. 72% come from economically
10 disadvantaged families and are entitled to free breakfast and lunch. The school is a performance
11 improvement needed school. Our ratio of computers 4 years old or less to students is 52:1. The Corning
12 Union Elementary School District EAST Initiative program will recruit a diverse group of students that
13 reflects the demographics of the school. During the first year, the program will serve students in the 6th,
14 7th, and 8th grades and it is expected that there will be 125 students enrolled in the EAST Program at the
15 Maywood Middle School in Year 1. During Year 2, this program will expand to serve 150 students in the
16 6th, 7th and 8th grades. The program will be offered as an elective class during the regular school day.
17 EAST Initiative is a program for all students, but can have a particularly significant impact on groups of
18 students that traditionally have been left behind such as females and minorities (Andrews and Wilkins,
19 2001).
20

	<u>Grade Level</u>	<u>Curriculum Focus</u>	<u># of Students</u>	<u># of Teachers trained</u>
Year 1	6 th	Eng/LA	25	1
	7 th	Eng/LA	50	1
	8 th	Eng/LA	50	
Year 2	6 th	Eng/LA	50	1
	7 th	Eng/LA	50	
	8 th	Eng/LA	50	

21
22
23 **How the students' learning needs will be met:** All students in the targeted classroom will have a
24 strong focus on the English Language Arts Content Standards. Research has shown that authentic writing
25 with computers is an effective way of learning language mechanics. When combined with the use of
26 telecommunications, such as a cooperative development project, improvements show up on multiple
27 measures and standardized tests (Riel, M., 1990). As students work using a variety of tools to develop
28 their community service projects, other specific content areas will be addressed. For example, when

1 students in an EAST classroom in Sacramento began analyzing patterns and plotting arson fires to assist
2 the local fire department, they addressed several standards in Mathematics as they set up the formulas to
3 plot the Global Positioning Systems (GPS) coordinates on an interactive map. Students in an EAST class
4 in La Crescenta are working with the local Environmental Protection Agency office and marine biologists
5 to collect, test, and analyze soil samples in the Los Angeles Harbor to determine the concentration of
6 heavy metals. Using the scientific method to develop their findings, the students raised community
7 awareness of the potential dangers of these toxins and devised strategies for preventing future
8 contaminations. The culmination and presentation of these projects align with many of the English
9 Language Arts Content Standards. Student-learning opportunities extended beyond the EAST classroom
10 as they gathered information and did research. The benefits extended not only to the students, but also the
11 school and community at large.

12 Technology provides powerful tools for organizing and analyzing information and modeling
13 concepts and underlying structures. Students who have the opportunity to use these tools gain a deeper
14 understanding of complex topics and concepts and are more likely to recall information later in life and
15 use it to solve problems in non-school situations (NCREL, 2000).

16 Students will be monitored throughout the year on their progress in meeting competencies in the
17 EAST program, which have been aligned to the California Content Standards. Progress will also be
18 measured by formal classroom observations by the Maywood Principal, as well as by outside evaluators.

19 In the targeted classroom, students mentor one another and develop personal accountability and a
20 true appreciation of diversity, while acquiring ownership of the learning process as a whole. The targeted
21 classroom will promote the creation of a dynamic environment in which students with all degrees of
22 skills, experience, and aptitudes work together (Secretary's Commission on Achieving Necessary Skills,
23 1991; Partnership for 21st Century Skills (2003)). Students are more likely to succeed when they are fully
24 engaged and learn to take responsibility for their own learning (Sandholtz, J.H., Ringstaff, C., Dwyer,
25 D.C. 1997).

26 The EAST model includes a multifaceted, interdisciplinary, service-learning curriculum integrated
27 with advanced technical applications. During the course of the year, targeted students will receive training
28 on the following technology applications: architecture, animation and visualization, computer-aided
29 drafting (CAD), database development, 3D design engineering, global positioning systems (GPS),
30 geographical information systems (GIS), computer networking, systems administration, computer
31 programming, desktop publishing, digital filmmaking, and web development. As emerging technologies
32 become available, they will be integrated into this curriculum.

33 The focus of this program is to allow students to excel as learners in an integrated setting that
34 fosters such diverse skills as teambuilding, responsibility, accountability, and personal initiative

1 (Secretary's Commission on Achieving Necessary Skills, 1991; Partnership for 21st Century Skills
2 (2003)). While students concentrate on projects that foster academic growth, their teacher focuses on
3 developing students' intellectual capacities through the application of traditional curricular objectives
4 aligned to the California Academic Content Standards and appropriate adopted materials. Success is
5 measured by the degree of growth the students have demonstrated in mastering and applying basic skills
6 and concepts, as well as EAST Competencies, as listed below.

7

8 **How the technology will help support the students meeting California Academic Content**

9 **Standards:** The EAST Initiative has been recognized nationally as an innovative, relevant and successful
10 approach to education. The competencies of this comprehensive program have been aligned with the
11 California Academic Content Standards. Students in this program experience an individualized,
12 supportive learning environment in which they collaborate on relevant service-learning projects utilizing
13 high-end software and hardware. Research tells us that seamless integration of word processing and
14 hypermedia-authoring tools with telecommunications through the Internet facilitates and supports meeting
15 the English language arts standards on many levels. Students apply knowledge of media, current social
16 literary conventions, and information literacy skills to create and share non-print texts with teachers,
17 peers, and authentic audiences. A recurring theme throughout the literature about these and other
18 electronic technologies is a call for electronic literacy skills. Electronic literacy refers to literacy activities
19 (e.g., in reading, writing, spelling) that happen to be delivered, supported, accessed, or assessed through
20 computers or other electronic means rather than on paper. It is different from computer literacy, which
21 refers to computer usage competencies (Topping, Bircham, & Shaw, 1997). The Maywood School uses
22 the Holt Literature and Language Arts textbook series, the High Point program, the Step Up to Writing
23 program, and the EduSoft test modules which are all aligned to the California Content Standards, in
24 addition to Accelerated Reader, Accelerated Math, and the full Microsoft Office Suite in all classrooms
25 and labs.

26 Professional development provided by EAST develops teachers who can create and maintain a
27 learning environment in which the students work on creating projects utilizing high-end software and
28 hardware, to solve real world problems that produce measurable results. The students are given strategies
29 that help move them from a traditional teacher-centered classroom, to a more collaborative team approach
30 to solving relevant problems with technology. The EAST competencies are aligned with the California
31 Academic Content Standards and are listed below:

- 32 • Conduct-focused research

33 Grade Six, Writing Strategies, *Research and Technology*, 1.5, Grade Seven, Writing Strategies, *Research and*
34 *Technology* 1.4, Grade Seven, Writing Strategies, *Research and Technology* 1.6, Grade Seven, Reading

1 Comprehension, *Structural Features of Informational Materials* 2.2, Grade Eight, Writing Strategies,
2 *Research and Technology* 1.4, Grade Eight, Writing Applications, *Using Writing Strategies* 2.6(c)

- 3 • Evaluate resources to determine their validity, relevance and appropriateness

4 Grade Six, Speaking Applications, *Deliver Presentations on Problems and Solutions*, 2.5 (a), (b), Grade Six,
5 Writing Strategies, *Research and Technology*, 1.5, Grade Six, Writing Strategies, *Research and Technology*,
6 1.4, Grade Seven, Writing Strategies, *Research and Technology* 1.4, Grade Seven, Writing Strategies,
7 *Research and Technology* 1.6, Grade Eight, Writing Strategies, *Research and Technology* 1.5, Grade Eight,
8 Reading Comprehension, *Comprehension and Analysis of Grade-Level-Appropriate Text* 2.3, Grade Eight,
9 Writing Applications, *Using Writing Strategies* 2.3 (d)

- 10 • Develop solutions to community or school-level problems using emerging technologies
11 within the context of service-learning projects

12 Grade Six, Speaking Applications, *Deliver Presentations on Problems and Solutions*, 2.5, Grade Eight,
13 Reading Comprehension, *Comprehension and Analysis of Grade-Level-Appropriate Text* 2.6, Grade Eight,
14 Writing Strategies, *Research and Technology* 1.5,

- 15 • Ethically apply resources and problem-solving strategies to real-world problems

16 Grade Eight, Reading Comprehension, *Comprehension and Analysis of Grade-Level-Appropriate Text* 2.6,
17 Grade Eight, Writing Strategies, *Research and Technology* 1.5, STaR Indicator: 1, 11,15, SCANS,
18 Foundation Skills, *Thinking Skills*

- 19 • Collaborate as a productive member of a team

20 STaR Indicator: 1, 10

- 21 • Take responsibility for self-directed learning

22 STaR Indicator: 1, SCANS, Foundation Skills, *Thinking Skills*

- 23 • Effectively use multiple modes to communicate with a variety of audiences

24 Grade Six, Listening and Speaking Strategies, *Organization and Delivery of Oral Communications*, 1.4,
25 Grade Six, Listening and Speaking Strategies, *Organization and Delivery of Oral Communications*, 1.6,
26 Grade Six, Listening and Speaking Strategies, *Organization and Delivery of Oral Communications*, 1.7,
27 Grade Six, Speaking Applications, *Deliver Informative Presentations*, 2.2 (b), Grade Six, Speaking
28 Applications, *Deliver Presentations on Problems and Solutions*, 2.5, Grade Six, Writing Strategies, *Research*
29 *and Technology*, 1.4, Grade Six, Writing Strategies, *Research and Technology*, 1.5, Grade Six, Written and
30 Oral English Language Conventions, *Grammar*, 1.2, *Punctuation*, 1.3, *Capitalization*, 1.4, *Spelling*, 1.5,
31 Grade Seven, Listening and Speaking Strategies, *Organization and Delivery of Oral Communication* 1.4,
32 Grade Seven, Writing Strategies, *Research and Technology* 1.4, Grade Seven, Writing Strategies, *Research*
33 *and Technology* 1.6, Grade Seven, Writing Applications, *Write Persuasive Compositions* 2.4 (a), Grade
34 Seven, Writing Applications, *Write Persuasive Compositions* 2.4 (b), Grade Seven, Writing Strategies,
35 *Evaluation and Revision* 1.7, Grade Eight, Speaking Applications, *Deliver and Research Presentations* 2.3
36 (d), Grade Eight, Listening and Speaking Strategies, *Organization and Delivery of Oral Communication* 1.6,
37
38
39

1 Grade Eight, Writing Applications, *Using Writing Strategies* 2.3 (d), Grade Eight, Written and Oral English
2 Language Conventions, *Punctuation and Capitalization* 1.5, *Spelling* 1.6, STaR Indicator: 1

- 3 • Demonstrate confidence in their own abilities to meet the challenges of the 21st century
4 STaR Indicator: 1, 2, 5, 6, 10, and 15

5
6 **How the model will assist students in meeting the performance goal:** The comprehensive
7 program addresses the performance goals, benchmarks and common data elements evaluated as outlined
8 in Form 4. The following description includes the strategies to be utilized.

9 **Performance Goal 1:** *All students in the target group will increase their use of technology as a*
10 *tool to support meeting or exceeding the state academic content standards as adopted by the State Board*
11 *of Education.* The Maywood School uses keyboarding tests, and requires many assignments to be
12 produced using Microsoft software and these are utilized to monitor technology skill advancement in the
13 program. At the start of the program, 100% of the students in the target group complete a CUESD
14 “Student Technology Use and Skills Survey” and any CTAP2 student surveys. This baseline data will
15 allow us to monitor the students’ technology skills growth in combination with portfolios to monitor the
16 work in specific content areas. Students in the targeted classroom will complete service-learning projects
17 with a strong Language Arts focus. Many projects will go in-depth into specific content areas in addition
18 to addressing Language Arts. Instruction in research proficiencies and information literacy skills are built
19 into the curriculum. Students will gain competency in reading, writing, speaking and listening skills, all of
20 which are inherent in the completion of the learning activities as outlined in the plan. Effective
21 communication of ideas in a variety of models is essential for success both in higher education and in the
22 workplace.

23 As listed in Form 5, several strategies are in place to assure that students involved in the program
24 will increase their use of technology as a tool to support meeting or exceeding state academic content
25 standards adopted by the State Board of Education. These include the following:

- 26 • Examination of quarterly on-line student assessments
- 27 • Quarterly portfolio/learning progress presentation delivered by each student
- 28 • Analysis of site observation forms

29
30 **Administrative support in the Corning Union Elementary School District:** The grant
31 implementation and EETT Coordination Team will include: Bobbie Abold, Maywood Principal; Louise
32 Grajczyk, Language Arts and Technology Skills Development Teacher; Renae Conley, 6th Grade Teacher;
33 Frank Passantino, CUESD Technology Manager; Michael Garofalo, part-time Technology and Media Services
34 Supervisor; Jeanie Stout, Technology Instructional Support Assistant; and one member from the community.

1 One administrator from the CUESD will attend the required information and training sessions. They will
2 support the training required for the staff and students throughout the program by allocating funds and adjusting
3 schedules as needed. They will make sure all technology equipment is installed in a timely manner, and is
4 supported throughout the year. Local administration will also ensure the targeted classroom has Internet
5 connectivity, and all targeted students and teachers will have e-mail accounts. The student program will be
6 managed and supported by the EETT Coordination Team. This team will monitor and assess student progress
7 toward program goals. They will meet 4 times a year to review progress and make recommendations and
8 adjustments as necessary to ensure program success.

9 The following research-based recommendations have been considered and align with the tenets of
10 the EAST Initiative:

- 11 • **Incorporating technology as a normal part of the learning environment** – Technology will
12 be part of the daily routine, just as pen and paper are a part of the traditional learning
13 environment. Three of the classes, led by Mrs. Grajczyk, are now held every day in the 35
14 computer equipped classroom; and the second teacher, Renae Conley, teaches in the classroom
15 immediately adjacent to the computer equipped classroom.
- 16 • **Using standards-aligned electronic learning resources that support the adopted**
17 **curriculum appropriate to support student achievement** – Students and teachers have a
18 wide range of electronic learning resources provided through the national support
19 infrastructure, e.g., the Center for Advanced Spatial Technologies (CAST) Geospatial Virtual
20 Camp, the EAST technical resources web page, the EAST forums, listservs, ESRI’s Virtual
21 Campus, Discover United-Streaming, Maywood School website, and many others.
- 22 • **Utilizing electronic technologies to access and exchange information** – The students will
23 collaborate with other EAST schools, business and university partners. EAST staff members
24 are linked via a web-based communication forum and teacher listserv. Students are also linked
25 with data clearinghouses through the Internet.
- 26 • **Utilizing technology tools to assist students with productivity, research, problem-solving**
27 **and decision-making activities related to learning** – Students will use a variety of resources
28 such as the Internet and advanced software applications to research and produce solutions to
29 community problems in order to make informed decisions.
- 30 • **Allowing students to choose and use technology tools to help obtain information, analyze,**
31 **synthesize, and assimilate the information, and then present it in an acceptable manner** –
32 Students will learn to use technology tools that assist them in creating data (for example GPS),
33 not merely consuming it. This information can then be pulled into other technologies for

1 analysis and synthesis, as with GIS. The students can then use other technologies to present
2 their findings to community members.

- 3 • **Using technology to engage in activities that would be difficult, if not impossible, to**
4 **replicate without technology-** Students in this comprehensive program will be using high-end
5 technology to meet academic standards as they solve real world problems. Numerous local
6 issues offer opportunities for research and collaboration.

7
8 **Evaluation and Monitoring of Program for Students:** Each targeted classroom and the
9 targeted students will be systematically and continuously evaluated as part of the comprehensive CUESD
10 evaluation model. This data will be used to drive a continuous cycle of improvement and program
11 modification. This will include, but not be limited to the Student Technology Use and Skills Survey, the
12 EAST Classroom Observation Tool, EduSoft information, and portfolio assessment.

13 14 **B. Professional Development**

15
16 **How the comprehensive and ongoing professional development will be offered:** Because group
17 work dramatically changes the teacher's role, professional development is vital to the implementation of
18 cooperative learning (Cohen, 1994). Therefore, implementation of this model provides professional
19 development for teachers and administrators to support teachers' roles as facilitators of learning. Initial
20 training will be offered in three phases, and will focus on teachers' participation in teams that model the
21 approach to be used in the classroom. Phases I-III will be delivered in the "Just in Time" approach, as
22 teachers are ready to move to the next level. There is continued support after the trainings through virtual
23 communities hosted on the EAST web site. Each school identifies a primary teacher and back-up teacher
24 for training. As the teachers work together with EAST staff to prepare to facilitate the program in their
25 local school, they also discuss ways of integrating the California Academic Content Standards to increase
26 student achievement of the adopted curriculum and solving pedagogical issues associated with
27 cooperative team learning. As part of their training, teachers assess their own teaching styles and develop
28 plans for implementation. Schools are also encouraged to make peer visits to other schools involved in
29 this program in their area. Such visits will allow students with strength in a particular area of expertise to
30 share with a partner school and vice-versa.

31
32 **How increasing teacher use of technology as a tool will support student achievement of the**
33 **academic content standards and the adopted curriculum:** Effective staff development must be high
34 quality, comprehensive and ongoing (NEIRTEC, 2002; NCES, 2002). This comprehensive program uses

1 educational research as a foundation for professional development. Teachers will receive professional
2 development that emphasizes how to support student achievement of the California Content Standards.
3 The description below details how professional development will be centered on student achievement of
4 the academic content standards and adopted curriculum:

5 **Phase I** (teachers, 35 hours): Teachers in this five-day summer institute will be given hands-on
6 instruction in classroom and systems management using the same equipment and systems they will use in
7 their own programs before their school's targeted classroom begins operation. Workshop participants
8 meet experienced teachers and students who have used this model, and gain insight into the creation of
9 successful programs. They will be taught how to stay focused on the intellectual development of their
10 students (given individual learning styles), how to properly evaluate student progress, and how to set high
11 expectations to support student academic achievement. Teachers will be given preliminary instruction in
12 how to use data (i.e., student self assessments) to individualize assistance. This professional development
13 will also help teachers develop techniques to link all student projects to the California Academic Content
14 Standards and adopted materials as appropriate. Because the key to success relies heavily on the
15 educational philosophy of the individual teacher, beginning teachers of EAST are exposed to strategies
16 that help move students from the traditional student-centered, teacher-directed educational environment to
17 a collaborative work environment that promotes student success (Secretary's Commission on Achieving
18 Necessary Skills, 1991). Upon completion of this phase of professional development, participants present
19 their implementation plan for review by EAST staff, thus ensuring a positive beginning for their school's
20 program.

21 **Phase II** (teachers, 14 hours): This two-day workshop is held after the school year is in session. The
22 training includes discussion sessions that help teachers sharpen their understanding of their role as they
23 begin to guide students in developing school and community service projects. The workshop provides
24 opportunities for teachers to increase their knowledge of the application options available in the program,
25 and to share their successes and difficulties. Teachers in Phase II work in groups to learn how to address
26 issues of diversity and how to assess and measure student growth through observation and evaluation.
27 Additional subjects include problem solving strategies and reinforcement of Phase I professional
28 development. More detailed presentations are given to support the teachers in the areas of equity in the
29 targeted class and to promote integrating technology within the curriculum.

30 **Phase III** (teachers, 14 hours): This two-day workshop re-visits some of the topics covered previously
31 and provides in-depth training on the following targeted areas: 1.) utilizing data to inform decisions and
32 make program adjustments as needed; 2.) collaboration with partnerships to promote student learning,
33 such as higher education, private and public sectors; and, 3.) sharing methods for dissemination of
34 promising practices, including techniques for showcasing of exemplary projects. Mentor teachers from

1 successful EAST sites, representatives from partnerships, and civic leaders often attend this session.
2 Experienced presenters with specific knowledge of the topic areas will lead the workshop for this Phase
3 training.
4

5 **Teachers participating in the professional development:** Two in the target group, as well as a back-
6 up teacher will be trained in the extensive professional development model described previously plus
7 training during the annual conference and the three-day summer institute. This model consists of up to
8 161 hours of training in the first year. Attendance will be monitored by sign-in sheets at each scheduled
9 training. There will also be 42 hours of training in the second and third years (with additional optional
10 opportunities encouraged) for the two selected teachers. Our plan is to have 2 credentialed teachers, 1
11 backup teacher, and 1 classified technology support staff member trained at Maywood School.
12

13 **Professional Development for staff and students (56 hours):**
14

15 **Technical Professional Development** (teachers): An initial systems administration class is included as
16 part of the implementation. This two-day class will take place approximately thirty days after installation
17 of the equipment. Teachers will learn a successful method of systems administration geared to the
18 classroom environment.

- 19 • **Specific Technology Training** (teachers): Teachers will be provided with basic overview of high-end
20 software applications. The knowledge gained from this training will be utilized to meet the technology
21 strand for teachers as well as to assist students with real world applications.
- 22 • **Specific Technology Training** (students): Workshops for students are offered throughout the year to
23 establish basic technical knowledge. Upon completion of the training, students return to their respective
24 schools to teach and facilitate other students' work using similar advanced applications.

25 Additional professional development opportunities include multimedia tutorials that are classroom
26 resources for students and teachers, and teacher "shadowing" opportunities for hands-on training in
27 practical applications. The annual EAST Partnership Conference will include professional
28 development sessions in technical and pedagogical areas for both students and teachers. One of the
29 major components of this conference is the showcasing and dissemination of projects that reflect best
30 practices. There will be a three-day teacher in-service in the summer. It will be open to teachers who
31 have completed at least one year in an EAST classroom and it provides a forum for teachers to address
32 common needs.
33

1 **Performance Goal 2.1: All teachers in the target group participating in professional**
2 **development on education technology will be qualified to use technology as a tool for teaching and**
3 **learning:** Teachers are trained in classroom management technologies and are introduced to training
4 designed to educate them on the function and capabilities of advanced technological applications and how
5 these technologies support student achievement. These applications become part of the “daily routine” in
6 the classroom. Teachers are supported by on-call technicians, listservs, and forums.

7
8 **Performance Goal 2.2: All teachers in the target group participating in professional**
9 **development on education technology will increase their use of technology as a tool to support**
10 **academic achievement:** Teachers in the target group will use technology as the central communication
11 point in achieving program goals, reporting on progress and learning, and troubleshooting problems.
12 Teachers will be using technology to assess, track and monitor student performance on a continuous basis.
13 Teachers using the EAST model are connected to other teachers (as well as students and university and
14 business partners) through a central web-based communication hub that includes web-based user forums
15 and e-mail for communication. Teachers will also use technology to communicate project goals, monthly
16 student progress, and results.

17
18 **Administrative Support in the CUESD:** The EETT Coordination Team will monitor and assess the
19 implementation of the grant to ensure that the teacher performance goals and benchmarks are met. The
20 team will facilitate infrastructure and acquisition issues and work with school faculty members and staff
21 development committee to determine goals, funding and accountability issues, including data gathering
22 and analysis. At quarterly meetings, this team will meet to gather and analyze data represented in student
23 work and to implement assessment strategies. This process of engaging teachers along with administrative
24 staff, technology department members, and parent/community volunteers and partners will provide the
25 consistency and support for continued efforts in improving the use of technology beyond the life of the
26 grant. The Maywood Principal will support the program and encourage teachers to participate in all
27 aspects of the grant, including evaluation, professional development, and collection of data.
28 Administrators will be accountable for ensuring that all program goals are met.

29 **Collaboration and partnerships that support professional development:** The Maywood Middle
30 School will be collaborating with both the local and national EAST programs. As part of this program, the
31 Institutes of Higher Education and CAST will be involved in the professional development of teachers
32 and students.

33

1 **Evaluation and Monitoring of Professional Development:** The Maywood Principal will evaluate and
2 monitor professional development using such criteria as attendance at ETTT workshops and training
3 sessions, CTAP coursework, fulfillment of ETTT grant objectives, classroom observations, and a review
4 of portfolios.

5
6 **C. Expanded Access to Electronic Learning Resources, Including Infrastructure, Equipment,
7 and Technical Support**

8
9 **Current status of technology access:** As a result of previous CUESD commitments and ongoing
10 implementation, each school site has a fully operational Ethernet local area network operating that
11 supports data transmission rates of 10Mb/s, 100 Mb/s, and 1 Gb/s (1000 Mb/s). Each school site has
12 received a Local Area Network with access to all related network devices such as switches, routers,
13 servers, Category 5 and Fiber Optic cabling and is connected to the district's wide area network. Each
14 school's local area network configuration consists of connecting every classroom by Category 5 data
15 cabling to the building's Intermediate Distribution Frame (IDF). Each IDF provides an individual port on
16 a high capacity network switch to each Category 5 data drop. Each IDF location is connected to the site's
17 Main Distribution Frame (MDF) which provides connectivity to the district's wide area network via T-1.
18 While some of the IDF to MDF backbones are still 10Mb/s or 100 Mb/s Category 5 copper, we are in the
19 process of upgrading these to 1 Gb/s fiber optic backbones. The target bandwidth on each school site's
20 local area network to classrooms has been 10/100 Mb/s to the desktop. The district's wide area network
21 consists of a full T-1s from each site router to the core router located at the District Office. The district's
22 core router is connected to the California K-12 High Speed Network node at Red Bluff High School via
23 a 45 Mb/s DS3 providing access to the Internet and other resources.

24 The CUESD has used an approved District Technology Plan, 2002-2005. We have completed,
25 obtained CUESD School Board approval, and submitted on 3/10/05 to our CTAP2 Coordinator, Nancy
26 Silva, our new CUESD District Technology Plan 2005-2010.

27 Currently, each classroom at the Maywood School has a minimum of one Internet-connected,
28 multimedia computer, 40% have two computers, and 25% have three to eight computers. The student to
29 computer ratio for Maywood School is 15:1 for all computers; however, the ratio of computers 4 years
30 old or less to students is 52:1. The Maywood School has a new Novell server that allows students and
31 teachers to access their files from any computer in the school building.

32 Teachers are using computers with varying degrees of proficiency as cited by the CTAP²
33 iAssessment proficiency test. Many teachers are using the computers for their own as well as student
34 word processing, desktop publishing, educational software, and Internet research needs. Students are

1 typing reports and other writing assignments. We have three computer labs (33, 17, and 10 computers),
2 with LCD projectors, running Microsoft Office applications and connected to the Internet; and, a
3 computer library lab running Windows programs for keyboarding and word processing.

4 An EAST classroom will be initiated at Maywood School, Room 13, 35 computers, and the EAST
5 classroom will be available to students for three periods for an activity period Technology elective course,
6 and to other teachers who will to bring classes in for special projects, for the teachers to use as a
7 professional development center for their training needs, and for Family Technology Nights. This new lab
8 will feature portable laptop computers. In addition, the second classroom will have six new desktop
9 computers in their classroom for break-out work by students and for elective EETT student work projects,
10 and this classroom is less that 40 feet from the EAST classroom. Much of their initial work will focus on
11 analysis of instructional methods and student learning through video work, and we currently use United-
12 Streaming. With this information, they will refine their lessons and include technology as a component for
13 increasing student access and achievement. The EAST classroom can be used before and after school for
14 various programs. The classroom will become a place where students, particularly the targeted students
15 who are academically at-risk, can have access to technology for the purpose of learning.

16 In the EAST model, students provide some technical support for the classroom. They will be
17 mentored by our technology support staff person at Maywood and CUESD technology support staff as
18 part of their assigned duties; and, by the EAST technical support team, listservs and the on-line forums.

19 The data from all components of the EETT program will be utilized by the CUESD Technology
20 Committee to inform future program development and mid-course changes to our master CUESD
21 Technology Plan. All our current technology policies, procedures, plans, lessons, Internet guides and
22 class assignment portals, school information, and examples of student work products are now readily
23 available online at: <http://www.cuesd.tehama.k12.ca.us/maywood/index.htm>

24 **Current and proposed status of technology resources to support the comprehensive**
25 **program:** In the targeted EETT lab classroom, Room 13, there will be 1 file server, and 35 multimedia
26 laptop computers; and, in second classroom there will be a minimum of 6 multimedia desktop
27 computers. All of these devices have access to the Internet and will give students and teachers the ability
28 to e-mail and use a variety of tools for data-driven decision-making. All of these are designed to run
29 advanced software applications. Several of the advanced software applications come with campus
30 licenses and some with home licensing for students.

31
32 **Current and proposed technology to support Data-Driven Decision-Making:** Before any
33 students begin work on a real world project, research and data must be obtained and analyzed to
34 determine need, scope and feasibility of project. This data will drive the direction of the project. Teachers

1 will use EduSoft data, student technology surveys, EETT coordination team analysis, and student team
2 recommendations to inform decisions when making any needed program adjustments.

3 Target Students' learning will go beyond the classroom when the students begin to apply the
4 technology skills that they acquire in the class into their core classes. The core classes will reap the
5 rewards of access to advanced applications and technology provided through the EAST classroom. Home
6 licensing allows students to reinforce in-school learning, and can address the needs of students who would
7 not have the means to acquire experience in these applications any other way thus helping to address the
8 "digital divide".

9 **Technical support that will enhance the comprehensive program:** Researchers investigating the
10 impact of technology on student learning have found that a major barrier to technology use is the lack of
11 technical support. Even teachers who regularly use computers will stop if the equipment is unreliable. The
12 effective use of technology requires timely, on-site technical support (Ringstaff & Kelley,
13 2002; NEIRTEC, 2002; NCES, 2002). Throughout the year, the EAST technical support staff provides
14 service to their programs. When a problem arises in the classroom that cannot be resolved using local
15 resources, students (not the teacher) contact the support staff. Technicians will then guide the student
16 through a troubleshooting process designed to develop the skills to resolve present (and future) technical
17 issues. Should an issue arise that cannot be resolved through phone or web support, technicians are
18 available to travel to the local site to provide support.

19 From the beginning, students are actively involved in the learning process so that they can
20 immediately begin to take ownership of the classroom. Students are trained in the installation, support and
21 on-going maintenance of the classroom equipment. Each member of the technical support staff is trained
22 to regard each support issue at a local site as a learning opportunity for the students. This model of
23 technical support has proven very successful in the EAST Initiative across the nation.

24
25 **Performance Goal 3: All students and teachers in the target group will have expanded**
26 **access to up-to-date technology tools and electronic learning resources:** The target classroom will be
27 assisted in the ordering and installation of the advanced technologies. This will provide students and
28 teachers with the best tools for collection, research, and analysis of data to identify projects to be
29 developed by students. All students in the EETT Room 13 lab and second classroom will have a multi-
30 media Internet ready computer to use.

31
32 **Evaluation and Monitoring of Expanded Access:** The CUESD Technology Plan (2005-2010) requires
33 annual monitoring and reporting of progress made towards purchasing new computers, upgrading

1 computers, expanding school websites, expanding access to resources, and improving the technology
2 skills of teachers and students.

3

4 **D. Communication and Collaboration Among Home, School, and Community**

5

6 **Utilization of technology to establish and improve communication and collaboration among**
7 **home, school and community:** The proven model that will be implemented by the CUESD Maywood
8 School will greatly enhance the ability of students to interact with the outside world in a positive way.
9 Because of the diversity and the complexity of the software applications available in the classroom,
10 students are encouraged to look beyond the classroom for inspiration for projects. The school and
11 community will provide project opportunities and become the proving ground for the real-world learning.
12 The school and community will tangibly benefit from the efforts of the students in the form of the
13 community service projects. Outside of the product of the project, the skills that develop from a project
14 group trying to accomplish real goals for someone other than themselves will greatly enhance the
15 collaboration and communication in the school and community. In working together with school faculty
16 and community members, the students will gain a better understanding of the needs of these people and
17 the organizations that they represent. In turn, community members, faculty and parents, get to see the
18 students as caring, productive and positive. The CUESD Maywood School would develop the Computer
19 Technology and Student Webmaster Club, expand the existing 5 school websites, provide student and
20 staff presentations in the EETT lab during all open houses and conference nights, and seek opportunities
21 with the area adult school and community college for evening computer classes in the EETT lab. The
22 targeted students will also be part of nationwide web-based support forums that will allow students to
23 share information and collaborate with others in ways that simply are not possible without technology.

24

25 **Support of students' learning needs through the use of technology for communication and**
26 **collaboration among home, school, and community:** The learning needs of students in this program
27 will be greatly enhanced through the integration of technology into the learning environment. Students are
28 encouraged to seek information into how the technologies can help them further their project goals. They
29 will collaborate with other users of the technology (in their schools and communities) in a very natural
30 way. For example, students collaborate with other users into how the technology can be applied to project
31 goals. This leads to a better appreciation for how the technology integrates into practical settings.

32

33 **Use of technology for communication among home, school, and community to enhance the**
34 **targeted program:** Students will use technology as the central communication point in achieving project

1 goals, reporting on progress and learning, and troubleshooting problems. Students will be connected to all
2 other EAST students as well as teachers and university/business partners through a central web-based
3 communication hub that includes web-based user forums and e-mail for communication. Students will use
4 the technology to communicate project goals, progress, and results. This will take the form of electronic
5 and/or web-based presentations that align with several California Content Standards.

6
7 **Collaboration and partnerships with other entities that help support the comprehensive**
8 **program:** A large part of this model will be the support provided by the national EAST Initiative. This
9 will be through professional development, web-based and phone support, and alliances and partnerships
10 with other non-profit and for-profit entities. Existing EAST partnerships leverage the purchase of industry
11 standard software packages to schools at a great discount. By implementing this comprehensive program,
12 the CUESD Maywood School will become part of a nationwide network of teachers, students,
13 administrators, university and business partners, along with a national support staff. Access to this
14 network allows students to build relationships that allow them to grow as learners while strengthening
15 their own skills and abilities by utilizing the strengths of others. In this community, it is acknowledged
16 that everyone has value and contributes resources to the partnership.

17 Students will be linked with peers, faculty, community members, and business/university partners
18 who provide their expertise to develop their own skills and abilities. From the students' point of view, this
19 program does not resemble traditional school activities. Rather, it resembles the real world "work"
20 environment: students are expected to produce real, tangible results of high quality that have a positive
21 impact on their community. Students will have the opportunity to identify as well as solve real life
22 problems (21st Century Skills, 2003).

23
24 **Dissemination of promising practices:** As mentioned above, we will have numerous student and
25 staff presentations at existing open house school events and student led conference meetings. Our
26 extensive websites will be expanded to include many examples of student work, student projects, and
27 teacher produced documents - all available to our entire K-8 schools and local community. Our Computer
28 Technology Club will present two events during the year. We will offer GATE classes in the EETT lab.
29 Qualified students will be allowed to borrow laptop computers for weekend use.

30
31 **Performance Goal 4: Communication and collaboration among home, school, and community**
32 **utilizing technology will be established or improved to support students' learning needs** – Teachers
33 will be trained on ways to improve communication with parents and community members as a primary
34 focus of their program and a strategy to reinforce student-learning while meeting student learning needs.

1 They will be given relevant tools to accomplish their communication needs, and training in how to use
2 those tools to further their communication goals. In this model, communication is collaborative and
3 focused on enhancing student learning.

4 The EAST Initiative will also offer an infrastructure that has access to web-based support and
5 communication in the form of web forums and list serves that are provided for administrators, teachers,
6 and students. EAST also provides on-site assessment for all of its schools through a team dedicated to on-
7 site evaluation.

8
9 **Administrative commitment for student/teacher access to methods of electronic communication**

10 **to ensure program success:** The CUESD Maywood School will partner with the EAST Initiative to
11 provide access to web-based tools and electronic mail for the purposes of communication with other
12 participating EAST schools, the EAST support infrastructure, and the participating university/business
13 partners.

14 The following research-based recommendations align with the tenets of the comprehensive program
15 for the CUESD Maywood School:

- 16 • **Facilitating e-mail accounts/web access for teachers and students promotes**
17 **communication and sharing of information** – The CUESD Maywood School will ensure
18 that all participating students and teachers have access to both the Internet and to e-mail.
- 19 • **Developing school/community partnerships will support learning opportunities for**
20 **students** – The CUESD Maywood School will leverage university and business partners
21 that support the efforts of this comprehensive program, as well as cultivate new
22 partnerships with allied local business, civic, and academic parties.
- 23 • **Using school web postings and e-mail can enhance communication with parents**
24 **regarding student attendance as well as performance on individual assignments** –
25 Parents and community members already have information about all CUESD school
26 activities using the school and district websites. All program participants already have
27 access to a complex web-based portal. These resources will be expanded by a student
28 webmaster development sub-program.
- 29 • **Sponsoring parent/community events can promote involvement in education and**
30 **increase awareness of how students utilize technology for learning:** Teachers will be
31 trained in methods of promoting awareness of their local programs. As community projects
32 come to fruition, students will participate in presentations and demonstrations of learning
33 and accomplishments at local meetings and events.

1
2
3 **Evaluation and Monitoring of Communication and Collaboration Among Home, School, and**
4 **Community:**
5

6 **E. Evaluation:** Comprehensive assessment reports, including comparison of progress over time and
7 comparison of each student's progress to other EAST students nationwide over time are disseminated
8 to each teacher. These results are used to track progress as well as to provide information needed to
9 incorporate program revision, if necessary. In addition, an evaluation team from EAST Initiative, that
10 may include a representative from CDE, will conduct a minimum of one site visitation to each school
11 with an EAST program. The evaluation team will evaluate programs against quality indicators that
12 include the academic content standards and provide schools with program implementation feedback.
13 As per grant requirements, findings will be reported in semi-annual reports. These reports will include
14 detailed quantitative and qualitative data, charts and interpretations clarifying the implementations and
15 impact of the project, descriptions of samplings, instruments and processes, and other information
16 necessary for understanding and evaluating the findings. All reports will meet the state and federal
17 reporting requirements of the EETT component of No Child Left Behind

18 The student program will be managed and supported by the CUESD EETT Coordination Team consisting
19 of site principal, 2 EAST teachers, 1 classified Technology Support person, the K-8 Technology Manager, the
20 Technology and Media Services Supervisor, and parent/community volunteers. This group of professionals
21 will monitor and assess the implementation of the grant to ensure continuous improvement and that the student
22 performance goals and benchmarks are met. The team will facilitate infrastructure and acquisition issues and
23 work with school faculty members and staff development committee to determine goals, funding and
24 accountability issues, including data gathering and analysis. At quarterly meetings, this team will meet to gather
25 and analyze data represented in student work and to develop assessment schemes. This process of engaging
26 teachers along with administrative staff, technology department members, and parent/community volunteers
27 and partners will support continued efforts in improving the use of technology beyond the life of the grant.
28

29 **In summary, here is how the evaluation plan will address each of the required performance**
30 **goals.**

31 **Performance Goal 1:** Students will increase their use of technology as a tool to increase learning.
32 We will use the EduSoft data to correlate performance on standardized tests with EAST participation, and
33 use the EAST Classroom Observation Tool, pre and post Student Technology Use Survey, Quarterly
34 portfolio/learning progress presentation delivered by each student for evaluation purposes.

1 **Performance Goal 2.1:** All participating teachers will be able to use technology as a tool. We will use
2 the Pre and Post analysis of the CTAP² Technology Proficiency Assessment for evaluating the progress of
3 teachers. All teachers in the project will use Grade Quick, EduSoft, SASI, email and other systems as a
4 tool for management, communication, assessment and evaluation.

5 **Performance Goal 2.2:** All participating teachers will be able to infuse technology into their lessons to
6 improve student learning. We will use the EAST Classroom Observation Tool, Pre and Post analysis of
7 the CTAP² Technology Proficiency Assessment, Interviews with teachers, and documented classroom
8 observations for evaluations.

9 **Performance Goal 3:** Students and Teachers will have expanded access to up-to-date technology.
10 Analysis of data from the California School Technology Survey, classroom observation, and in-house
11 technology surveys will be used during evaluation.

12 **Performance Goal 4:** We will increase communication and collaboration among home, school and
13 community. Evaluation will be based on attendance sign-in sheets, and interviews and surveys with a
14 random group of participating teachers, students, parents and partners.

15
16 **Process for Making Program Adjustments:** Teachers and students are connected with EAST mentors
17 through on-line communication. These mentors have a proven record of success within the EAST
18 Initiative. Tools have been developed to help manage projects and assess success of student growth by
19 teachers as well as evaluators. Periodic visits by district team and the EAST staff will provide valuable
20 information to CUESD Maywood School, CUESD, and the California Department of Education. This
21 information will be used to make adjustments towards obtaining project goals and benchmarks, as defined
22 in Form 4.

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