

Hart Ransom District Technology Plan

July 1, 2008 – June 30, 2011

District Description

Hart-Ransom Union School District is a small school district consisting of two schools, a tradition K-8 with an ADA of 725 and a home based charter school with an ADA of 275. It is located in a rural setting, just west of the Modesto, California city limits, and stretching north to the unincorporated community of Salida. 26% of students qualify for free-reduced lunch and English Language Learners average 15% of the total student population.

Hart-Ransom School district has a long, distinguished record of high student achievement, including strong standardized testing and Academic Performance Index scores. The district offers a rigorous, standards-based curriculum at all grade levels. Average Class Size in Kindergarten through 3rd grades is 20 and 29 in grades 4 – 8. Reading support is provided by a Miller-Unruh Reading specialist A and a district counselor is available to students at all grade levels. Character education is emphasized at all grade levels. A "state of the art" computer lab and technology coordinator offers on-going computer-based instruction and technological support to staff. A vibrant Parent/Teacher Club anchors a strong and supportive community presence in the District. The District also hosts Stanislaus County Office of Education-operated Deaf and Hard of Hearing Special Day Class serves students in grades 1 - 8.

2a. Stakeholder Description

An inclusive team of teachers, administrators, community members, and government representatives created the Hart Ransom district technology plan. The following individuals participated in the planning and writing of this document:

- Sara Martin, *Technology Coordinator and Instructor*
- Jerrianna Boer, *Site Principal*
- Marianne Bauman, *Library Media Center Specialist*
- Cathy Thomasson, *District Office Manager*
- Suzanne Howell, *Principal's Secretary and parent of 8th grade student*
- Cheryl Finnegan, *parent of 4th, 5th and 8th grade students*
- Sarah Bullock, *Site Technology Mentor and 6th grade teacher*
- Teri Shaw, *2nd Grade Teacher*
- Ron Ball, *School Maintenance Supervisor*
- Brian Bridges, *CTAP Region 6 Staff*
- Mark Chaffey, *Top Networks: Network Design and Support, Engineer, and Consultant*

School Board

- Greg Austin- President
- Robin Hennings- Vice President
- Mr. Rich Fultz- Clerk
- Mr. Randy Heinrich- Trustee
- Mr. Scott Vincent- Trustee

Administration

Superintendent: Dr. Ream Lochry

Principal: Jerrianna Boer

Director: Sherry Smith

3. Curriculum

3a. Description of teachers' and students' current access to technology tools

Students and teachers at Hart-Ransom School currently have high access to technology. Each classroom has between two and six high-speed internet-connected computers and a classroom printer. 85% of classroom computers are 2 years old or less. The school has a computer lab with 36 computers and a library media center with 15 computers, all of which are less than 1 years old.

We have a LAN and all teachers, administrator and students in grades four through eight have their own folders on the server where they save and access their work. The district runs four servers. Each server administrates the following areas: student and teacher data, printers, district office and web/email.

Teachers have their own workstations in their classrooms and have access to the following software: MicroGrade grade book software that includes the WebGrade utility (via yearly subscription) to upload students' grades to a secure and dedicated website for parents and students to check grades, Renaissance Learning software to manage their Accelerated Reader and Star Reader information on their classes, Microsoft Office suite, Photoshop Elements, DVD player and virus control software. Teachers have access to TeacherWeb accounts for classroom website creation and uploading, although not all teachers take advantage of this service.

The computer lab is equipped with an LCD projector and there are portable LCD projectors in all of our 6 – 8 grade classrooms. In addition, 1 LCD projectors is available for each grade level in grades 1 – 4 to share. We also have a flat bed scanner, 15 digital cameras, and 10 network printers: black and white and color lasers available. Classrooms have access to network printers through the LAN.

Students in grades one through three receive computer instruction during their library-media center periods. The site media center specialist delivers their instruction during this time. These primary students also use classroom computers and receive instruction there as well.

Students in grades four through six are scheduled for two 40-minute computer lab periods each week. Instruction is provided by the school's full time Technology Coordinator/Instructor. Information gathering and technology skills are taught through standard based integrated projects.

Both the computer lab and library (Library Media Center) are open during regular school hours. Students and teachers can also use the Center before school and during breaks.

Hart-Ransom also offers an after school intervention program (Eagles' Nest) funded by 21st Century Grant-After school Education and Safety. Students are referred to the program via teacher recommendation. The school uses a computer based program called AutoSkills to reinforce reading and math skills. Students attend classes for 30 minutes everyday after school.

The district/school will continue expanding Accelerated Reading Program for grades 2-8. The district/school will continue expanding AutoSkills for Reading and Math and purchase a skills based computer reading intervention program for student below grade level in reading. Study Island will be available to all students in grades 4 – 8 in 2008-09 and then evaluated for further use in future years.

3b. Description of the district’s current use of technology to support teaching and learning

Students are the heaviest users of technology. Technology curriculum focuses on the use of Microsoft Office, including FrontPage in grades 4-8. Students learn necessary skills in sequential patterns that build on their prior knowledge. Skills learned are then applied to integrated projects that are enhanced by the use of technology. Examples include: sixth grade PowerPoint presentations that demonstrate students’ knowledge of ancient civilizations, comparing and contrasting ancient times with modern and considering contributions ancient civilizations have made to our modern world today. Eighth graders develop web pages that chronicle the routes of Lewis and Clark. Second graders make Kid-Pix slide shows that present the seasons. Artistic expression is accomplished through the use of Adobe Photoshop Elements. Photoshop is also used for many integrated projects with the core curriculum. The site Technology Coordinator has been recognized internationally thorough her work with Adobe Photoshop Elements and Premier Elements and has been named one of 90 Education Leaders for Adobe. Evidence of student technology skills and abilities can be observed on the walls of the computer lab, in classrooms, on school bulletin boards and inside students’ network folders (their electronic portfolios).

Implementation of Accelerated Reader and Star Reader began in 2003-2004 in grades 4-8. The Accelerated Reader program is a curriculum-based assessment tool that provides a summary and analysis of results to enable teachers to monitor both the quantity and quality of reading practice engaged in by their students. Students administer comprehension tests voluntarily themselves, and the system is intended specifically to have strong formative effects on subsequent learning. Star Reader is the assessment component of the program. Students take a computerized test to determine their reader level. In 2006-07 the district began using Renaissance Place, a product that delivers Star Reader and Accelerated Reader via an online delivery service. Also in 2006-07 the district piloted another online product from Renaissance Place called English in the Flash. This program was used to help some of our English Language Learners acquire English skills.

The District utilizes AutoSkills for Math and Reading to implement during the after-school remediation program. The reading component of this program is an individualized literacy intervention solution that helps struggling students master reading skills quickly and the math component helps struggling students achieve computational fluency.

Other software and online fee-based programs have been utilized in recent years. Get a Clue, an online vocabulary development program for grades 7 and 8 has been used for the past 4 years. In 2006-07, 6th graders piloted the use of Study Island, a standards-based program designed to help student master the standards specific to their grade in our state. Also in 2006-07 a select group of 7th grade math students piloted Accelerated Math, a program that provides essential personalized instruction, practice, and feedback in the core math curriculum.

Most teachers are becoming skilled users of technology and are integrating it into their curriculum. In 2000-2001 the school participated in the Intel Teach to the Future program and 21 teachers completed the 40-hour training class. This program is a world wide initiative designed to provide teachers with the skills to effectively integrate the way students and teacher use technology to enhance learning through research, communication, and productivity strategies and tools. Hands-on learning and the creation of curricular units and evaluation tools, which address state and national academic and technology standards, are emphasized. As teachers are exposed to more quality staff development and become more proficient in their own use of technology, increased integration with the curriculum will naturally occur.

All teachers in grades 5-8 utilize a computerized grade book program called “MicroGrade” and upload students grades to a secure website. These same teachers take attendance each day on their computer, utilizing the Sasi system.

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

Performance Goal 1: *All students will reach high standards, at a minimum, attaining proficiency or better in reading and mathematics, by 2013-2014.*

District Performance Goals (*from Single School District Plan - Single Plan for Student Achievement*):

1. The yearly API growth target will be met or exceeded by all sub-groups on the CST in the areas of English Language Arts and Mathematics.
2. Students scoring at Basic, Below Basic or Far Below Basic on the yearly CST tests will move one level toward proficient on their next CST.

To ensure progress toward goals, differentiated instruction in language arts occurs through regularly scheduled Universal Access time. Strategies for differentiation include vocabulary development, interactive reading strategies, all student participation strategies, and enrichment activities. Technology is utilized during Universal Access time to further mastery of standards through the use of motivational, remedial and enrichment programs such as Accelerated Reader, AutoSkills, Get a Clue and Study Island, as well as programs geared specifically to English Learners such as Rosetta Stone and English in a Flash.

Standards-based benchmarks are administered every six to eight weeks to monitored student progress toward goals. Classroom and support teachers meet as collegial teams on a regular

basis to analyze local assessment data and plan research based lessons to provide equitable and effective instruction to all students.

To ensure progress toward goals in the area of mathematics, differentiation is done within the classroom setting. In the 2008-2011 school years Accelerated Math will be an integral support component for the upper grades.

STAR results released August 2007 showed a 10 point increase in the school's API, which extended beyond the growth target of 3. All significant subgroups achieved their growth targets. In ELA 53% of all students scored proficient or advanced an increase of 4% of students from 2006. In Math 46% of all students scored at proficient or advanced. In both English Language Arts and Math all subgroups attained the AMO goals.

Additionally, the "Jump Start" summer school program and the "Eagle's Nest" after school program contribute student achievement and progress toward district performance goals. The summer school program provides a review and remediation session for students for the month just prior to the onset of school. Pre and post tests indicate achievement and growth as a result of this program. During the 2007 Jump Start program, all grade levels showed positive growth based on these assessments. The Eagle's Nest program is offered to students in need of academic support, as indicated by standardized test scores and teacher recommendation.

Increased access to technology:

The district/school will provide Staff development and professional collaboration aligned with standards-based instructional materials. Professional training will be provided through the Stanislaus County Office of Education courses sponsored by the local CTAP organization. Staff development will also be provided onsite administered by the school's technology coordinator.

Monitoring program effectiveness

Targeting services and programs to lowest performing student groups

Hart-Ransom school aligns its technology curriculum goals with the current International Standards for Technology and Education (ISTE). These K-12 standards, activities and evaluation tools are based upon six ISTE strands: (1) Basic Operations; (2) Social, ethical, and human issues; (3) Technology productivity tools; (4) Technology communications tools; (5) Technology research tools; and (6) Technology problem solving and decision-making.

Our goal is for technology to be used on a regular basis in the core content areas in both the lab and classroom settings. Technology use can augment and enhance all curricular goals including remediation of basic skills, development of written and oral skills and enhancement of higher order thinking skills.

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.

Hart-Ransom has chosen to delineate district goals by grade level: K-3, 4-6 and 7-8. The following goals, objectives, and benchmarks reflect the desired learning outcomes of students at their respective levels. Goals for using technology to improve teaching will be further addressed in The “Professional Development” section of this document.

Grade Level: K-3

Focus- Writing and Information Literacy

Goal 1 of 4: Students will develop curricular writing skills through the use of technology.		
Objective 1 of 1: By the end of Grade 3, students will use the computer to write clear and coherent sentences using proper spelling, punctuation and keyboarding techniques.		
End of year 1: All students in Grades 1 – 3 will type brief descriptive sentences to communicate ideas.		
End of year 2: All students in Grade 1 will continue year one activity. All students in Grades 2-3 will type expanded sentences in a logical order using supporting details to describe a main idea.		
End of year 3: All students in Grade 1 will continue year one activity. All students in Grades 2-3 will continue year two activities. Students in Grade 3 will type expanded sentences in paragraph form.		
Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Rubrics: Student work samples	End of each trimester	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Goal 2 of 4: Students will develop skills with different writing genres through the use of technology.

Objective 1 of 1: By the end of Grade 3, students will create a simple document (report, poetry, narrative, autobiography, journal, letter, etc.) using word processing, desktop publishing or multimedia software.

End of year 1: All students in Grades 1 – 3 will develop an awareness of the variety of electronic resources available and will complete a document with at least one paragraph of word processing and one at least one picture or graphic.

End of year 2: All students in Grade 1 will continue year one activity.
All students in Grades 2-3 will develop an awareness of the variety of electronic resources available to research a topic and write a short narrative, letter or simple report.

End of year 3: All students in Grade 1 will continue year one activity.
All students in Grades 2 will continue year two activity.
All students in Grade 3 will write in one of the above genres using at least one type of electronic media (word processing, desk-top publishing or multimedia)

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Rubrics: Student work samples	End of each trimester	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Goal 3 of 4: Students will deepen their basic reading and math skills through participation in Accelerated Reader, Star Reader and Accelerated Math.

Objective 1 of 1: All students in grades 2 and 3 will participate in Accelerated Reader. Star Reader will be the assessment and placement tool used in conjunction with Accelerated Reader.

End of year 1: All students in Grades 3 will use the Accelerated Reader and the Star Reader programs. All students in grades 2 will start Accelerated Reader no later than the beginning of the second trimester. Targeted first graders may also enter the program at that time.

End of year 2: Students in Grades 1- 3 will continue year one’s activities. Third grade students targeted for remediation may begin Accelerated Math.

End of year 3: Students in Grades 1- 3 will continue year one and two activity.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Star Reading Test: Reading Level. Accelerated Math Assessment Test	End of each Trimester	The technology committee will collect data, analyze the results, compare growth rates in reading and math levels and make recommendations for program modification.

Goal 4 of 4: : Students will deepen their basic reading and math skills through participation in AutoSkills Programs.

Objective 1 of 1: By the end of Grade 3, all students targeted for remediation will participate in the AutoSkills program for Reading and Math.

End of year 1: Students in Grade 3 who need remediation in Reading will be identified and will begin using AutoSkills for Reading.

End of year 2: Students in Grade 3 will continue with year one activity for reading. Also, Grade 3 students identified, as needing remediation in math will begin using AutoSkills for Math.

End of year 3: All students in Grade 3 will continue year two activities. Students in Grades 2 who need remediation will begin using the AutoSkills Reading program.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Assessments embedded in software program	End of Each Trimester	The technology committee, along with the teacher who oversees the after school AutoSkills program, will analyze data generated from embedded software and re-assign or exit students from program if indicated

Grade Level: 4-6

Focus- Writing and Information Literacy

*Writing genres and writing purposes include: Narrative, simple reports, autobiographies, poetry, journals, letters, self-expression, comparison, note-taking, research, reflection, summaries, response to literature, expository, persuasive and problem/solution.

Goal 1 of 4: Students will develop curricular writing skills through the use of technology.		
Objective 1 of 1: By the end of Grade 6, students will use proper word processing skills to write clear and coherent paragraphs that develop a central idea and maintain a topic focus.		
End of year 1: All students in Grades 4-6 will use standard word processing practices (e.g. font style and size, saving a document, using an outline or other organizational technique.) using Microsoft Word to create at least one writing project that are based on grade level writing standards and genres.		
End of year 2: All students in Grade 4 will continue year one activity. All students in Grades 5-6 will use standard word processing practices (e.g. saving locally and on network drives, using spell check, copy and paste, thesaurus) to write using the writing process (prewriting, drafting, revising, editing, post writing) to demonstrate a command of standard English with Microsoft Word. Writing projects will be based on grade level standards and genres.		
End of year 3: All students in Grade 4 will continue year one activity. All students in Grades 5 will continue year two activities. All students in Grade 6 will use standard word processing practices (e.g. tabbing, saving, using spell check and the thesaurus, copy and paste, etc.) to write clear and coherent paragraphs that develop a central idea and maintain a topic focus using Microsoft Word. Writing projects will continue to be based on grade level standards and genres.		
Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Rubrics: Student Work Samples Tests and Quizzes: Administered and graded by the Computer Literacy Teacher.	End of Each Trimester	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Goal 2 of 4: Students will develop skills with different writing genres through the use of technology.

Objective 1 of 1: By the end of Grade 6, students will use the writing process to create a document such as a narrative, autobiography poem, reflection or research paper using online resources, and CD-ROM or computer encyclopedias.

End of year 1: All students in Grades 4-6 will write in one the above genres using at least one type of electronic media (e.g. word processing, desktop publishing or multi-media software) integrating at least one graphic.

End of year 2: All students in Grade 4 will continue year one activity.
All students in Grades 5-6 will word process in one of the above genres using the electronic media (as above) with the addition of the integration of a self-drawn graphic using drawing tools or drawing software.

End of year 3: All students in Grade 4 will continue year one activity.
All students in Grade 5 will continue year two activities.
All students in Grade 6 will create a document (in one of the above genres) or a research project and present the information in a web-page format.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Rubrics: Student Work Samples Tests and Quizzes: Administered and graded by the Computer Literacy Teacher.	End of Each Trimester	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Goal 3 of 4: Students will deepen their basic reading and math skills through participation in Accelerated Reader, Star Reader and Accelerated Math.

Objective 1 of 1: All students in grades 4-6 will participate in Accelerated Reader. Star Reader will be the assessment and placement tool used in conjunction with Accelerated Reader.

End of year 1: All students in Grades 4-6 will use the Accelerated Reader and the Star Reader programs.

End of year 2: All students in Grade 4-6 continue year one activity. All students in Grades 4-6 will begin using Accelerated Math.

End of year 3: All students in Grade 4-6 continue year one and year two activity.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Star Reading Test: Reading Level. Accelerated Math Assessment Test	End of Each Trimester	The School Leadership Team will compare growth rates in reading and math levels

Goal 4 of 4: Students will deepen their basic reading and math skills through participation in AutoSkills Programs.

Objective 1 of 1: All students in grades 4-6 who are targeted for remediation will participate in the AutoSkills program for Reading and Math.

End of year 1: Students in Grades 4-6 who need remediation in Reading will be identified and will begin using AutoSkills for Reading.

End of year 2: Students in Grade 4-6 will continue with year one activity for reading. Also. Grade 4-6 students identified as needing remediation in math will begin using AutoSkills for Math.

End of year 3: All students in Grade 4-6 will continue year two activity.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
CST Scores, assessments embedded in software program	End of Year	The School Leadership Team as well as grade level collegiality teams will analyze data generated from embedded software and re-assign or exit students from program if indicated

Grade Level: 7-8

Focus – Writing/Language Arts, Math Problem Solving, and Science/Social Science

Information Literacy (Information Literacy is defined as the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand.)

Goal 1 of 5: Students will write and communicate on a variety of standards based topics using appropriate technology tools.		
Objective 1 of 1: Students will create standards-based projects that use a variety of electronic media and utilize internet resources. Projects will be created during their Computer Literacy classes taught by the school Computer Literacy Teacher.		
End of year 1: All students in Grades 7-8 will research (using on-line and other electronic resources) and create at least one project in both Science and Social Science. Proficiency in Microsoft PowerPoint and Adobe Premier Elements (multimedia presentation) and Microsoft FrontPage or Adobe Dreamweaver (web-page editor) will be demonstrated. Students will analyze the research and include correctly formatted citations when appropriate.		
End of year 2: All students in Grade 7-8 will continue the above objective. Adding to the project will be graphics designed by students using Adobe Photoshop Elements and digital camera images.		
End of year 3: All students in Grade 7 will continue year two activities. All students in Grade 8 will create a final project using the technology they find most appropriate for their project (e.g. multi-media, web-page, video, desk-top publishing, computer graphic design, web-quest)		
Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Rubrics: Student work samples Quizzes and Tests: Administered and graded by Computer Literacy Teacher	At conclusion of projects	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Goal 2 of 5: Students will use technology tools and applications to pose and solve mathematical problems, discover properties, develop reasoning ability, and to describe and analyze data.

Objective 1 of 1: Use technologies to collect, organize, analyze, and present mathematical data

End of year 1: All students in Grades 7-8 use spreadsheet software to collect, analyze, and present mathematical data using charts and graphs.

End of year 2: All students in Grade 7-8 will continue the above objective. Adding to the project will be use of formulas to manipulate mathematical data.

End of year 3: All students in Grade 7 will continue year two activities. All students in Grades 8 will create a final project using Microsoft Excel that will involve analysis, charting, and working with large worksheets.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Rubrics: Student work samples Tests and Quizzes: Administered and graded by the Computer Literacy Teacher.	At conclusion of projects	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Goal 3 of 5: Students will deepen their basic reading and math skills through participation in Accelerated Reader, Star Reader and Accelerated Math.

Objective 1 of 1: All students in grades 7-8 will participate in Accelerated Reader. Star Reader will be the assessment and placement tool used in conjunction with Accelerated Reader.

End of year 1: All students in Grades 7-8 will use the Accelerated Reader and the Star Reader programs. Targeted 7-8 grades will utilize Accelerated Math.

End of year 2: All students in Grade 7-8 continue year one activity.

End of year 3: All students in Grade 7-8 continue year one activity

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Star Reading Test: Reading Level. Accelerated Math Assessment Test	End of Each Trimester	Compare growth rates in reading and math levels. The technology committee will collect data, analyze the results, and make recommendations for program modification.

Goal 4 of 5: Students will deepen their basic reading and math skills through participation in AutoSkills Programs.

Objective 1 of 1: All students in grades 7-8 who are targeted for remediation will participate in the AutoSkills program for Reading and Math.

End of year 1: Students in Grades 7-8 who need remediation in Reading will be identified and will begin using AutoSkills for Reading.

End of year 2: Students in Grade 7-8 will continue with year one activity for reading. Also, Grade 7-8 students identified as needing remediation in math will begin using AutoSkills for Math.

End of year 3: All students in Grade 7-8 will continue year two activity.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
CST Scores, assessments embedded in software program	End of Year	The grade level collegiality teams will analyze data generated from embedded software and re-assign or exit students from program if indicated

Goal 5 of 5: Participation in Get a Clue Vocabulary Development Program

Objective 1 of 1: All students in grades 7-8 will participate in the web delivered vocabulary development program called “Get a Clue”.

End of year 1: Students in grades 7-8 will use “Get a Clue”. Students will take the online assessment test to access their vocabulary level and will work through activities designed for their individual vocabulary levels and needs.

End of year 2: Students in Grade 7-8 will continue with year one activity for Get a Clue with re-assessments completed each year.

End of year 3: All students in Grade 7-8 will continue year two activity.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
CST Scores	End of Year	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Data to be collected

Data for the evaluation process in this section will come from a variety of sources. For grades 4 – 8 the most obvious source will be each student’s electronic portfolio on the school server. All student work that utilizes technology can be found in these portfolios. For grades K – 3 a representative sample of student work generated on the computer will be collected for review.

Program Analysis and Modification Process/Data Collection Interval

Student data will be collected annually and reported back to the school through the site’s existing review process. In addition, the school Technology Committee will annually review student work and make any recommendations for modifications to the school Curriculum committee.

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.

The following goals and objectives reflect the technology skills students will acquire by grade levels. These goals are based on the National Educational Technology standards for Students, developed by the International Society for Technology in Education (ISTE). Students receive instruction in technology skills in the Library Media Center by the Library Media Specialist (Grades K-3) and the Technology Coordinator/Instructor (Grade 4-8). Classroom teachers will also be responsible for teaching and reinforcing skills.

Grade Level: K-2

Goal 1 of 4: Students will use a variety of media and technology resources for directed and independent learning activities.

Objective 1 of 1: The student will use applications such as KidPix, Storybook Weaver and/or Microsoft Word to develop a simple story.

End of year 1: The student will learn the basic operations of the software programs and will develop a simple story.

End of year 2: Same as year 1

End of year 3: Same as for year 1 and 2

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Rubric: Student work samples	End of Year	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Goal 2 of 4: Students will use input devices (e.g., mouse, keyboard) and output devices (e.g., monitor, printer) to successfully operate a computer.

Objective 1 of 1: Using proper keyboarding skills, the student will identify the parts of the keyboard (home row keys, number pad, punctuation keys)

End of year 1: Students will be introduced to the keyboard through appropriate early keyboard learning software such as Read, Write and Type.

End of year 2: Students will demonstrate the use of proper keyboard use by writing a simple sentence or story.

End of year 3: Students will demonstrate proper use of home row keys when keyboarding.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Teacher observation Assessments embedded in the software program	End of Year	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Goal 3 of 4: Students will use developmentally appropriate multimedia resources (e.g., interactive books, educational software, elementary multimedia encyclopedias) to support learning..

Objective 1 of 1: Students will use English Language software such as the Learning Planet, Reader Rabbit and Interactive books.

End of year 1: Students will be introduced to English Language learning software, including, Learning Planet, Reader Rabbit and Interactive books

End of year 2: same as year one

End of year 3: Same as year one and two

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Teacher observation	End of Year	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Goal 4 of 4: Students will practice positive social and ethical behaviors when using technology

Objective 1 of 1: Insure that all students understand responsible and safe use of technology and information.

End of year 1: Students will receive instruction regarding positive social and ethical behaviors when using technology. Grade level appropriate curriculum will be utilized from online sources such as www.netssmartz.com.

End of year 2: Students will receive instruction as above

End of year 3: Same as year one and two

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Teacher observation Written assessments included in the curriculum	End of Year	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Grade Level: 3-5

Goal 1 of 4: All students will use keyboards and other common input and output devices efficiently and effectively.

Objective 1 of 1: Demonstrate keyboarding proficiency by typing at least 15 words per minute.

End of year 1: Students will be introduced to keyboarding via Mavis Beacon typing program. Keyboarding practice will occur during computer literacy classes for grades 4 and 5 and in the library for grade 3.

End of year 2: Students will demonstrate keyboarding speeds of at least 10 words per minute

End of year 3: Students will demonstrate keyboarding speeds of at least 15 words per minute

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Assessment embedded in Mavis Beacon Keyboarding program	End of Year	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Goal 2 of 4: All students will discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use.

Objective 1 of 1: Insure that all students understand responsible and safe use of technology and information.

End of year 1: Students will receive instruction regarding positive social and ethical behaviors when using technology. Grade level appropriate curriculum will be utilized from online sources such as www.netssmartz.org.

End of year 2: Students will receive instruction as above

End of year 3: Same as year one and two

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Teacher observation Written assessments included in the curriculum	End of Year	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Goal 3 of 4: All students will use general-purpose productivity tools and peripherals to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum.

Objective 1 of 2: Students will become proficient in the use of Microsoft Word as taught by the Technology Coordinator/Instructor and the Library Media Specialist.

End of year 1: Beginning in grade 3, students will be introduced to the basics of word processing including alignment, font size and styles and spacing.

End of year 2: 4th grade students will continue building upon their word skills by adding and formatting digital pictures and basic drawing tools. Projects will include digital pictures.

End of year 3: 5th grade students will learn advanced Word skills including forms and mail merge.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Rubrics: Student Work Samples Tests and Quizzes: Administered and graded by the Computer Literacy Teacher.	When projects are completed	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Goal 4 of 4: All students will use technology tools (e.g., multimedia authoring, presentation, Web tools, digital cameras, scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom.

Objective 1 of 2: The student will create a multi-media presentation using Microsoft PowerPoint based on a class research project. Students will receive instruction during their Computer Literacy Class.

End of year 1: The student will learn to perform Internet searches to gather information for a class report. Each student will receive instruction on the basics of PowerPoint from the Computer Literacy Teacher and will present their class report with PowerPoint.

End of year 2: The student will learn to perform advanced searches on on-line databases, periodicals, and text-based materials to gather, validate, and cite references for a class report. Each student will create and present a PowerPoint presentation that includes collated data in graph and/or chart form.

End of year 3: Continuation of year two with the student developing a PowerPoint presentation based upon a project using resources from a written research paper with information gathered from a variety of sources, including electronic and traditional published (typically found in the library).

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Rubrics: Student Work Samples Quizzes and tests administered and graded by Computer Literacy Teacher.	When projects are completed	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Objective 2 of 2: The student will use the Internet as a research tool as taught by the Technology Coordinator/Instructor and the Library Media Specialist

End of year 1: Using materials available in the Media Center, the student will use various reference materials (e.g. dictionary, thesaurus, card catalog, encyclopedia, and internet based resources) to aid in the writing and information gathering process.

End of year 2: The student will understand and use various text features (e.g. format, graphics, sequence, diagrams, illustrations and charts) to make information accessible and usable.

End of year 3: The student will use the Internet as a research tool to locate and validate information and will begin to evaluate web sites.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Rubrics: Student Work Samples Quizzes and tests administered and graded by Computer Literacy Teacher.	When projects are completed	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Grade Level: 6-8

Goal 1 of 3: All students will exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.		
Objective 1 of 2: Students will understand responsible and safe use of technology and information.		
End of year 1: Students will receive instruction regarding positive social and ethical behaviors when using technology. Grade level appropriate curriculum will be utilized from online sources such as www.netssmartz.org .		
End of year 2: Students will receive instruction as above		
End of year 3: Same as year one and two		
Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Teacher observation	End of Year	The technology committee will collect data, analyze the results, and make recommendations for program modification.
Objective 2 of 2: Students will understand the concepts of fair use and copyright issues in regards to computer and Internet use.		
End of year 1: Students will receive instruction regarding the concepts of fair use and copyright.		
End of year 2: Students will receive instruction as above		
End of year 3: Same as year one and two		
Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Rubrics or other assessments including test on concepts: student work samples Blog or other wiki-posts in response to teacher prompts on subject	End of Year	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Goal 2 of 3: All students will select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems.

Objective 1 of 1: Student will learn, during their weekly Computer Literacy Classes, to use the various application groups (word processing, desk-top publishing, multi-media presentations, web-pages, spreadsheet and data bases, or graphic design) to determine the application best suited to the assigned task.

End of year 1: Locate information from an author by using a variety of consumer, workplace, and public documents available on the Internet. Evaluate the accuracy of the information, and analyze objectivity and point of view of the author. Use a word processor to record findings and create a Works Cited document.

End of year 2: Create a project using the appropriate technology of choice (e.g. word processor, encyclopedia, Internet, spreadsheet, digital or video camera, scanner, etc) to:

1. Define a thesis.
2. Record important ideas, concepts, and direct quotations from significant information sources and paraphrase and summarize two differing perspectives on the topic.
3. Use a variety of primary and secondary sources and distinguish the nature and values of each source.
4. Organize and display information in a variety of appropriate ways such as charts, maps, data bases and graphs.

Students will demonstrate proficiency in:

- Microsoft Word: working with files and text, formatting paragraphs, styles, graphics, spelling and grammar, macros, lists and tables.
- Internet: search strategies using Internet databases, evaluation of websites for validity, style sheets for citing resources, Internet and web jargon
- Microsoft Excel: modifying worksheets, formatting cells, formulas and functions, sorting and filling, graphics and charts.
- Adobe Photoshop Elements-Digital Photography: taking pictures, downloading and editing.
- Scanning: basic scanning process including saving, selecting proper size and resolution, cropping.
- Adobe Premier Elements -Video Editing: video process including planning, storyboarding, taking video, capturing to computer, editing, exporting and uploading to the web.

End of year 3: Author a web page using appropriate technology that covers all four curricular goals listed in year 2, above.

Students will demonstrate proficiency in:

- Adobe Dreamweaver Web page Editor: Basic concepts of web design, define, create, format a Web Page, organize files and folders, create templates, insert images and tables, create hyperlinks, email links and anchors, create and enhance framesets.
- Adobe Photoshop Elements: create banners, buttons and other design elements for web pages, resize photos, save to web page folder.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Rubrics: Student work samples Quizzes and tests administered and graded by Computer	End of each project	The Computer Literacy teacher, in conjunction with technology committee, will

Literacy Teacher.		collect data, analyze the results, and make recommendations for program modification.
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Goal 3 of 3: Students will research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.

Objective 1 of 1: Conduct an informational review, evaluation and analysis of materials obtained from the Internet.

End of year 1: All students in Grades 7-8 participate in an evaluation of three sources on a single topic. Sources will be reviewed using a generic criteria for evaluation including at least these five areas:

- Authority of author or creator
- Comparability with related sources
- Stability of information
- Appropriateness of format
- Software/hardware/multimedia requirements

End of year 2: All students in Grade 7-8 will continue the above objective with the inclusion of recognizing multiple points-of-view on a given topic.

End of year 3: All students in Grade 7 will continue year two activities. All students in Grades 8 will create their own web page that illustrates their point of view on a given potentially controversial subject such as uniforms in schools.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Rubrics, traditional quizzes and tests: Student work samples	End of Year	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Data to be collected

Student work will be evaluated at the end of each project using rubric style assessments developed by the Technology Coordinator. Results of each student’s projects will be saved in individual electronic portfolios.

Schedule for Program Analysis and Modification Process/Data Collection Interval

At the end of the year, student data will be collected from a sampling of student portfolios in each grade level. Samplings will include low, medium and high achieving students. Data collected from this group will be shared with school administrators, the school leadership team and the school site council. In addition, the school Technology Committee will annually review student work and make any recommendations for modifications to the school Curriculum committee.

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; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism (AB 307)

Grades 2-3:

Goal: Students will learn about information literacy, copyright, and the appropriate and ethical use of information technology.

Objective: Participate in class discussions on how to use information found on the Internet in appropriate and ethical ways.

End of year 1: Students in grades 2-3 will recognize that information found on the Internet may or may not be factual. Students in grades 2-3 will understand that they may not copy and paste information found on the Internet and use it as their own work. Students will understand that our laws state that most software and music must be purchased and not shared. Students will create a simple bibliography with website information cited.

End of year 2: same as year one

End of year 3: same as year one

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Teacher and student surveys Rubrics: Evaluation of bibliography	Trimester	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Grades 4-6

Goal: Students will learn about information literacy, copyright, and the appropriate and ethical use of information technology.

Objective: Participate in class discussions and activities on how to use information found on the Internet in appropriate and ethical ways.

End of year 1: Students in grades 4-6 will recognize and practice responsible social and ethical behaviors when using technology, and understand the consequences of inappropriate use including:

- Internet access
- Copyrighted materials
- Web-based resources

Students will receive instruction on methods to evaluate websites for authenticity and validity. Curriculum materials and videos used will be from Hall Davidson’s website <http://www.halldavidson.net/>.

End of year 2: same as year one

End of year 3: same as year one

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Teacher and student surveys EdTechProfile student surveys Quizzes and tests embedded in the Hall Davidson curriculum administered and graded by Computer Literacy Teacher.	Trimester	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Grades 7-8

Goal: Students will learn about information literacy, copyright, and the appropriate and ethical use of information technology.

Objectives: Participate in class discussions and activities on how to use information found on the Internet in appropriate and ethical ways.

End of year 1: Students in grades 7-8 will continue to deepen their ability to recognize and practice responsible social and ethical behaviors when using technology, and understand the consequences of inappropriate use including:

- Internet access
- Copyrighted materials
- On-line library resources
- Personal security and safety issues with emphasis on social networking sites, blogs and wiki type applications
- Appropriate Internet etiquette

Reinforce school rules and regulations regarding Internet use as stipulated in our Internet Use Policy. Curriculum materials and videos used will be from Hall Davidson’s website <http://www.halldavidson.net/>

End of year 2: same as year one with safety emphasis on current and emerging technologies

End of year 3: same as year one with safety emphasis on current and emerging technologies

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Teacher and student surveys EdTechProfile student surveys Quizzes and tests embedded in the Hall Davidson curriculum administered and graded by Computer Literacy Teacher.	Trimester	The technology committee will collect data, analyze the results, and make recommendations for program modification.

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.

Grades 1-3

Goal: Students will learn about Internet safety.		
Objective: Participate in class discussions and activities on how to use computers and the Internet in safe ways.		
End of year 1: Grades 1-3: Introduction to the abstract concept of an Internet community and the responsibilities and the dangers they may encounter. Grades 2-3: Introduce vocabulary and concept of Internet predators and strategies to prevent contact with them. Review school rules and regulations regarding Internet use as stipulated in our Internet Use Policy. Utilize curriculum and videos available at www.netsmartz.org .		
End of year 2: Grade 1: Introduce responsible Internet surfing using a restricted number of search engines including Yahoo!igans, Little Explorers and bonus.com. Grades 2 -3: Continue reinforcing Internet safety. Address new technologies that may have emerged that pose potential risk to children. Utilize curriculum and videos available at www.netsmartz.com		
End of year 3: same as year two		
Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Teacher and student surveys. Quizzes and tests including those embedded in the netzsmartz curriculum administered and graded by the classroom teachers.	Trimester	The technology committee will collect data, analyze the results, and make recommendations for program modification.

Grades 4-8

Goal: Students will learn about Internet safety		
Objective: Participate in class discussions and activities on how to use computers and the Internet in safe ways. To enhance students’ ability to recognize dangers on the Internet.		
End of year 1: Introduce vocabulary and concept of Internet predators and strategies to prevent contact with them. Review school rules and regulations regarding Internet use as stipulated in our Internet Use Policy. Students will watch videos available on www.netsmartz.com and complete activities embedded in that curriculum. Emphasis will be on recognizing dangers on the Internet, the importance of not sharing personal information and passwords on the Internet, recognizing that once something is posted it can never be taken back and reporting victimization to a trusted adult.		
End of year 2: same as year one		
End of year 3: same as year one and two with modifications to address emerging technologies		
Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Teacher and student surveys. Quizzes and tests including those embedded in the netsmartz curriculum administered by Computer Literacy Teacher.	Trimester	The technology committee will collect data, analyze the results, and make recommendations for program modification.

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

The Hart-Ransom School District is committed to providing and ensuring that all students in grades 4 – 8 have equal access to technology. Those students currently have high access to technology, through the Library Media Center and through classrooms computers. Each student in grades 4 – 8 has their own dedicated folder on the school network for saving class work. Also, 8th grade students are given an email account connected to our school web server for communication with teachers and others. Students participate in school blogs and private secure chatrooms (tappedin.org) giving those opportunities to participate in emerging technologies.

Resource and English Language Learning students have their own computer lab in the resource center. Students can access their class work and receive supplemental assistance as well as work on software to improve skills such as AutoSkills and Rozetta Stone.

Students who need remediation use computers in the after school program to deepen basic skills using AutoSkills for Reading and Math.

Goal: All students, including special populations (Special Education and those with other IEPs, English Learners) will have access to technology in the classrooms and Library Media Center

Objective: Provide wide access to technology in all instructional areas

End of year 1:

- All instructional areas will have at least one Internet connected computer available for student and teacher use.
- The Library Media Center will be open before school and during break for student use.

End of year 2:

- Classrooms in grades 6-8 will have at least 4 Internet connected computers installed.
- The possibility of utilizing mobile laptops for classroom use will be explored.

End of year 3:

- Budget permitting, classrooms in grades 3-5 will have at least 2 Internet connected computers installed.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Data will be collected from the annual Statewide Technology Survey.	Yearly	The District Technology Coordinator, who is also responsible for completing this survey, will provide the data collected to the School Site Council for review. This review will take place at the end of the school year.

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

Hart-Ransom Union Elementary School utilizes SASIxp to administrate student information. Demographics, attendance, grades, schedules, health information, emergency contact information, and parent/guardian information are entered into SASI's database.

Discipline Tracker is used by the Student Services Assistant to keep track of behavior referrals, suspensions and expulsion. This computer program tracks discipline referrals according to grade, gender and ethnicity.

Legislation enacted through Education Codes 52050, 52051, 52052, Senate Bill 1X (1999) and the No Child Left Behind Act, all require that schools be accountable for the academic growth and high achievement of every student. In order to comply with the stringent accountability requirements outlined in these pieces of legislation, the school joined the Santa Clara County Office of Education Consortium for the Santa Clara School-Plan which offers advanced technology to facilitate meeting the legal requirements of the legislation.

The web-based technology offered through School City/School Plan has the ability to disaggregate data for all State tests, all local assessment data such as our District Writing tests, and student grades. The program will enable the administration to use the information to develop the Local Education Agency Plan (LEAP0 and the school accountability report card because the program interacts with live data (online).

In November 2004, the Hart-Ransom Union Elementary School District purchased the Academy of Reading and Academy of Math programs (AutoSkills). These programs are a computer-based tutorial program, which assesses students' progress in the area of reading and math. The programs are used as an intervention tutorial during the school day and during the after school program.

The district/school plans to use the school website to facilitate involvement of staff, parent, and community (including notification procedures, parent outreach, and interpretation of student assessment result to parents). In addition, parent meetings and print materials will be utilized.

Goal: Administrators and staff will have effective tools to manage, assess and analyze data.		
Objective 1 of 2: Staff will utilize a data assessment program in order to effectively plan for instruction.		
End of year 1: School City/School Plan and SASI will be aligned and training will be provided in order to utilize School City/School Plan by site administration and office staff. The data will be recorded.		
End of year 2: Staff and administration will effectively use the data disaggregated and generated by School City/School Plan to plan for instruction.		
End of year 3: Staff and administration will continue to utilize program to determine instructional goals and evaluate effectiveness of program and instruction.		
Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
School City/School Plan, SAT 9 Scores, District Assessments, demographic information, program information	May 2007-full utilization of information generated by program	The school principal, along with the School Leadership Team, will analyze the results generated by these programs and recommend modifications, if necessary.
Objective 2 of 2: Staff will utilize electronic grade books for student record-keeping. (All families will also receive written progress reports mid semester and written report cards at the end of each trimester.)		
End of Year 1: Utilize MicroGrade for all teachers in Grades 4-8. All teachers in Grade 6-8 will post student grades on the Internet through WebGrade (secure and password protected area)		
End of Year 2: Utilize MicroGrade for all teachers in Grades 4-8. Provide training for use of grading software. All teachers in Grade 6-8 will post student grades on the Internet through WebGrade		
End of Year 3: All teachers in grades 4-8 will use MicroGrade and WebGrade.		
Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Survey staff, parents and administrators for programs effectiveness and ease of use	After first trimester of use.	As per Administrator, staff, School Leadership Team and Technology Coordinator

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: Increase and improve home to school communication		
Objective 1 of 1: Utilize Web-Based Home-School Connection Site		
End of year 1: District web site to include pages that communicate all basic information concerning the school, including office/classroom-to-home communication, teacher email addresses, parent club information, extra-curricular/club information, District Office communication, student grades (via WebGrade) and post exemplary student projects.		
End of year 2: Continue to revise web site to include class web sites for grades 4 – 8. Train teachers to develop class web pages.		
End of year 3: Continue to enhance District Web Page to optimize communication between home and school, as well as showcase student projects.		
Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Survey parents and staff	Each October.	Technology Coordinator and Administrator will review data collected from survey and make recommendations for modifications, if necessary.

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.

The curricular component of this plan will be analyzed in depth at the end of each year by the technology committee. The committee will look at student work, teacher and parent surveys and test scores to determine if goals were met and what, if any, modifications should be made. The committee will make recommendations to the School Leadership Team for the next school year. The School Leadership Team will take the recommendations and make the final decision for any modifications to this plan.

4. Professional Development

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

The California State Technology Proficiencies for Teachers and Administrators is used as a guideline for developing levels of staff proficiency. Most of Hart-Ransom teachers and administrators completed a Technology Skills on-line self-assessment survey provided by the CDE called the EdTechProfile. Results of this survey are below. Results of the EdTechProfile proficiency assessment show that teachers and administrators have the highest training needs in Internet skills, presentation software and database software.

In regards to CCTC Standard 9: Using Technology in the Classroom, EdTechProfile results indicate that teachers have the greatest need for training in these areas: selecting appropriate technological resources to support, manage, and enhance student learning in relation to prior experiences and level of academic accomplishment; analyzing best practices and research findings on the use of technology and designing lessons according; choosing software for its relevance, effectiveness, alignment with content standards, and value added to student learning; and demonstrating knowledge of copyright issues and of privacy, security, safety issues and Acceptable Use Policies.

In regards to CCTC standard 16: Using Technology to Support Student Learning, EdTechProfile results indicate that teacher have the greatest need for training in these areas: Communicating through a variety of electronic media; interacting and communicating with other professional through a variety of methods, including the use of computer-based collaborative tools to support technology-enhanced curriculum.

Although not specified by the survey, Information Literacy, defined as the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand, encompasses important and invaluable skills for teachers and will be addressed in training at every level.

General Computer Knowledge and Skills

Computer Knowledge and Skills	General computer knowledge and skills		Internet skills		Email skills		Word processing skills		Presentation software skills		Spreadsheet software skills		Database software skills	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Not Applicable	0	0%	2	5%	0	0%	1	3%	9	23%	5	13%	12	31%
Beginning	2	5%	14	36%	7	18%	3	8%	16	41%	19	49%	17	44%
Intermediate	27	69%	14	36%	17	44%	15	38%	8	21%	9	23%	7	18%
Proficient	10	26%	9	23%	15	38%	20	51%	6	15%	6	15%	3	8%
Total Responses	39	100%	39	100%	39	100%	39	100%	39	100%	39	100%	39	100%

CTC Standard 9

CCTC Program Standard 9: Using Technology in the Classroom	Standard 9a		Standard 9b		Standard 9d		Standard 9e		Standard 9f		Standard 9g		Standard 9h		Standard 9i	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Not Applicable	3	10%	9	30%	2	7%	0	0%	8	27%	8	27%	12	40%	7	23%
Beginning	18	60%	16	53%	13	43%	14	47%	18	60%	18	60%	13	43%	17	57%
Intermediate	7	23%	4	13%	11	37%	6	20%	3	10%	3	10%	4	13%	4	13%
Proficient	2	7%	1	3%	4	13%	10	33%	1	3%	1	3%	1	3%	2	7%
Total Responses	30	100%	30	100%	30	100%	30	100%	30	100%	30	100%	30	100%	30	100%

CTC Standard 16

CCTC Program Standard 16: Using Technology to Support Student Learning	Standard 16a		Standard 16b		Standard 16c		Standard 16d		Standard 16e		Standard 16f		Standard 16g	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Not Applicable	4	13%	9	30%	0	0%	10	33%	11	37%	16	53%	15	50%
Beginning	18	60%	19	63%	14	47%	11	37%	13	43%	9	30%	11	37%
Intermediate	7	23%	1	3%	14	47%	6	20%	5	17%	2	7%	4	13%
Proficient	1	3%	1	3%	2	7%	3	10%	1	3%	3	10%	0	0%
Total Responses	30	100%	30	100%	30	100%	30	100%	30	100%	30	100%	30	100%

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

Goal: Hart-Ransom Staff will improve their technology proficiency by at least one level as reported via the EdTechProfile survey.

Objective 1 of 2: The teachers and staff of Hart-Ransom School will be provided various training opportunities to learn how to use technology to effectively communicate and collaborate with administration, colleagues, students and parents.

End of year 1: All credentialed and clerical certificated staff will have working network connections in their computer workstation, which will enable them to connect via e-mail to our Local Area Network (LAN) and dedicated email server.

End of year 2: All staff that have network access from their work station will be trained to use e-mail and Team Folders on the school server to share classroom activities and lessons.

End of year 3: All staff will be trained to use the school website to communicate with students, parents and the community.

Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
<ul style="list-style-type: none"> • Annual Evaluation by site principal • Training Evaluations • Site Actions Plans 	Yearly	The school principal and Technology Committee members will review training records and assess the effectiveness of the program.

<ul style="list-style-type: none"> • EdTech Profile Site Data 		<p>Recommendations for possible modifications to improve the effectiveness of the training will be made.</p>
<p>Objective 2 of 2: Hart-Ransom staff will be provided with a “Training Continuum” of classes to improve their basic computer skills. Classes will be presented in various ways including on site, at the County Office of Education, on-line and through other available venues. (note: all Adobe classes are taught by the Computer Literacy Teacher during Computer Literacy classes. Staff are not required to master the Adobe products but those who are interested in learning the programs are offered after school classes several times throughout the school year by the Computer Literacy Teacher)</p>		
<p>End of year 1: Continue offering training at each level:</p> <p>Beginning:</p> <ul style="list-style-type: none"> • Introduction to computers and technology • Windows 2000 operating system fundamentals • Introduction to Microsoft Word • Introduction to e-mail services • Introduction to remediation software appropriate to teacher’s grade levels including, AutoSkills, Study Island and Get a Clue. <p>Intermediate:</p> <ul style="list-style-type: none"> • Introduction to the Internet and our District Acceptable Use Policy • Information Literacy Training • Using Microsoft Word for developing tables and columns • Introduction to Excel spreadsheets • Learning the basics of digital cameras and scanners • Introduction to Microsoft PowerPoint • Using the classroom grade book – MicroGrade • Using Sasi-xp and Legends student information and management software • Using TeacherWeb to create and update personal class web pages. • Using AutoSkill, Study Island, Get a clue and new newly adopted remediation software to access, analyze and improve student learning. <p>Advanced:</p> <ul style="list-style-type: none"> • Using Microsoft Word to merge lists and text • Introduction to Access database operation • Using Excel for analyzing data and developing charts and graphs • Understanding how to Internet can be used to develop collaborative learning • Using Library/Media resources to identify and search, the Internet, electronic and CD-ROM, and text based materials for research projects. <p>Professional</p> <ul style="list-style-type: none"> • Integrating technology with the classroom curriculum. • Selections of appropriate technological resources to support, manage, and enhance student learning in relation to prior experiences and level of academic accomplishment. • Becoming familiar with basic principles of operation of computer hardware and software, 		

<p>and implements basic troubleshooting techniques of computer systems and related peripheral devices before accessing the appropriate avenue of technical support</p> <ul style="list-style-type: none"> • Creating classroom projects and presentation using advanced PowerPoint features. • Advanced uses of multimedia technologies: scanners, digitizing video, and editing sound files. • Evaluating the use of technology in the classroom for its relevance, effectiveness, alignment with content standards, and value added to student learning. • Exploring new emerging technologies such as podcasting, blogging, wikis and other web 2.0 environments. • Knowledge of copyright issues and of privacy, security, safety issue and Acceptable Use Policies. 		
<p>End of year 2: Continue to provide training at each level-see continuum above.</p>		
<p>End of year 3: Continue to provide training at each level-see continuum above.</p>		
Evaluation Instrument(s): Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
<ul style="list-style-type: none"> • Annual Evaluation by site principal • Training Evaluations • Site Actions Plans • EdTech Profile Site Data 	<p>Yearly</p>	<p>The school principal and Technology Committee members will review training records and assess the effectiveness of the program. Recommendations for possible modifications to improve the effectiveness of the training will be made.</p>

4c. Description of the process that will be used to monitor whether the professional development goals are being met and whether the planned professional development activities are being implemented.

The professional development component of this plan will be analyzed in depth at the end of each year by the technology committee. The committee will look at teacher and principal surveys to determine if goals were met and what, if any, modifications should be made. The committee will make recommendations to the School Leadership Team for the next school year. The School Leadership Team will take the recommendations and make the final decision for any modifications to this plan.

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 could be used to support the Curriculum and Professional Development Components of the plan.

Hardware

- Hart-Ransom School's network supports 110 computer systems in its classrooms, library media center and administrative offices. All of the current systems in use are 5 years old or younger. They have CD-ROMS and are networked.
- **Servers:**
Hart-Ransom has a DNS Domain Name Server based on Microsoft Technology located at the Stanislaus County Office of Education. This server provides access to the Internet.

Hart-Ransom has 4 file servers based on Microsoft Technology that provide:

- A basis for our local area network (LAN)
 - School office attendance and grade reporting
 - The host server with client-server application
 - File and print services for District Office and School Office
 - Capability for reloading programs for classroom usage, thus avoiding possible Internet delays.
 - File and print services
Email and hosted web page
- The **computer lab** contains the following equipment:
 - 36 networked, Internet-connected systems with headphones and CD-ROMs
 - Flatbed scanner
 - Black and white laser printer on a shared network with the entire school
 - 2 Color laser printers on a shared network with the entire school
 - Telephone with outside access
 - High-Intensity LCD Projector
 - Projection screen
 - Large green screen and stand, and lighting for video studio.

The staff, students and the community use the **Library** for large group presentations and discussions. This room contains the following equipment and accessories:

- A video and computer projection system for large group viewing
- A large projection screen
- Controllable lighting
- 12 high speed computers with capabilities for accessing the school's file server and the Internet

Additional Peripherals

The school has the following equipment, either in individual classrooms or available for checkout as needed:

- 9 digital cameras
- 12 LCD projectors in individual classrooms or shared by one grade level
- 37 printers, 3 of which are connected to the network and shared by a designated area.
- 1 class set of student responders
- 31 VCR units
- 20 portable DVD players
- 1 video camera
- 30 TV monitors

Software

- Installed software including Microsoft Office 2000 and 2003, FrontPage 2000, Photoshop Elements, Premier Elements, Studio 8 (includes Dreamweaver and Flash) and Mavis Beacon (keyboarding)
- Software in the Library includes AutoSkills Academies of Reading and Math
- Software in primary classrooms includes Read, Write and Type, Storybook Weaver, Kid Pix and various Reader Rabbit versions.

Networking

- Network wiring is already in place to accommodate additional computers. The school upgraded to fiber optic (either 100BT or 1000 BT) at the end of 2003. All hubs were also replaced with 100 BT switches.
- **School wiring**
All our classrooms, the administration offices, the transportation department, the Library, Special Education, and ESL rooms are connected to the Internet via our network. All wiring complies with CAT 5 UTP wiring standards. (*See network diagram*)
- Each individual **classroom** in all grades (K-8) has at least 1 Internet-connected computer. Most rooms have at least 3 up-to-date and networked computers. Each classroom computer has the Office 2000 or 2003 suite installed and other software is available to teachers that is appropriate to their grade level and meets curricular goals.

Technical Support

1. On site Technology Coordinator/Instructor provides basic network administration and handles basic repairs and software support. Coordinator also administrates all repair jobs and keeps records on every computer and server.
2. Part-time computer technician is contracted on an as-needed basis.
3. Part-time network engineer is contracted on an as-needed basis.

Currently, technical support is available on an as-needed basis on site usually within 1 to 5 days. When further repairs are needed that can't be addressed on-site, computers are taken to a local repair shop for the repairs. These repairs usually take more than 48 hours. Hart-Ransom School District will continue to budget for and provide technical support that reaches towards the goal of repair within 48 hours.

The ongoing integration of technology into Hart-Ransom School will require that the District continue to support the position of Technology Coordinator/Instructor. This person will continue to provide instruction in technology skills to students in grades 4 – 8, administrate all district

technology issues, develop and up-grade technology-related curriculum and provide appropriate staff development in technology. In addition to the Technology Coordinator/Instructor, the District will continue to support the position of Library Media Specialist. This person will provide Library Management and beginning technology skills instruction to students in grades 1 – 3.

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.

The very nature of changing technology forces us to constantly upgrade to improve our service to our clients: students, teachers and administrator. To that end, we must constantly plan and budget to achieve the best technology configurations possible. In order to meet and exceed the goals addressed in this plan we will provide the following:

Hart Ransom Elementary School (K-6)	
Hardware	Up-to-date computers 0 – 3 years old. During the spring of 2007 the school acquired 50 new computer systems for the Computer Lab and the Library Media Center. Computers from the Lab and the Library were then moved into classroom. Currently, all the computers on campus are now 3 years old or newer. Systems will be purchased locally and will be custom-made to the specific needs of the user. The Technology Coordinator will either make all purchases or have the final approval for all technology purchases made.
Internet Access	Network equipment and wiring to support added computers in classrooms will be installed as needed as well as wireless hubs in some locations.
Electronic Learning Resources	For installation on new computers. Includes Windows xp Operating System, Office Professional 2003, Internet Explorer, Mavis Beacon, KidPix, Adobe Photoshop Elements. Selected computers will need additional licenses for AutoSkill Reading and Math software. Site licenses are available for Mavis Beacon and Accelerated and Star Reader and Accelerated Math. All other licenses will have to be purchased for each new system.
Technical Support	A technician will be available on an as-needed basis. All repairs will be made within 48 hours from the time reported whenever possible.

5c. Benchmarks and timeline for obtaining the needed hardware, infrastructure, learning resources and technical support

Objective 1 of 4: Create a video studio in the computer lab for video production projects and weekly school news show.
End of year 1: Purchase video camera, lighting, green screen and microphones.
End of year 2: Upgrade video equipment as necessary. Explore and consider available web based hosting opportunities for videos produced by students.
End of year 3: Same as year 2.
Objective 2 of 4: Maintain network, assess reliability and appropriateness, plan for future
Year 1, 2 and 3: Evaluate servers, upgrade or replace if necessary. Add servers if necessary to meet current and future needs.
Objective 3 of 4: Add approximately 30 new computer systems for classroom use
End of year 1: Upgrade computers as needed.
End of year 2: Purchase at least 15 new computer systems, upgrade existing systems that are 5 years old or older.
End of year 3: Purchase at least 15 new computer systems, upgrade any additional systems that have reached 5 years old.
Objective 4 of 6: Purchase 10 LCD projectors for classroom use
End of Year 1: Purchase 4 projectors
End of Year 2: Purchase 2 projectors
End of Year 3: Purchase 2 projectors
Objective 5 of 6: Provide Technical support within 48 hours
End of year 1: Continue to use technician on an “as needed” basis
End of year 2, 3: Continue to utilize technician as above
Objective 6 of 6: Purchase software that supports curricular goals
Year 1, 2, and 3: Purchase appropriate software licenses (minimum required plus additional to support grade level standards) for every new computer including upgrades
Description of process to monitor whether goals and benchmarks are being reached
Technology Committee to review progress at end of the year meeting and make recommendations for modifications.

6. Funding and Budget

6a. List of established and potential funding sources.

Year 1:

- Funding for upgrades and licenses by General Fund
- Staff professional development activities provided by EETT Formula grant.

Year 2:

- Funding for upgrades and licenses by General Fund.
- Staff professional development activities provided by EETT Formula grant.
- Other possible sources may include state or federal grants, private grants or other donations.

Year 3:

- Possible sources may include District Funding, state or federal grants, private grants, Parent Club and other donations.

Estimated annual budgets to implement the plan (3-5 years)

Approval of the plan and the recommended projects would commit Hart-Ransom School to pursue technology grants and allocate funding over the next three years. The following is a projected budget summary and does not include any grants that may be pursued.

6b. Estimate annual implementation costs for the term of the plan. (3-5 years)

Budget Code	Year 1	Year 2	Year 3	Justification for Expenses
1000 Certificated employees	4500.00	4500.00	4500.00	Technology Coordinator Extra Duty Pay
	1000.00	1000.00	1000.00	Subs for teacher release time to attend technology training
	3000.00	4000.00	4000.00	Professional Growth-Classes, seminars and conferences
2000 Classified employees	0	0	0	
3000 Employee Benefits	0	0	0	
4000 Materials & Supplies	1500.00	1500.00	2000.00	Purchase software and site licenses such as Microsoft Office and XP operating systems, Adobe Photoshop Elements
	2000.00	2500.00	3200.00	Purchase new software-site licenses

	1750.00	1750.00	2000.00	Supplies for repair or expansion of data lines, hubs, switches and ports
	2000.00	2500.00	2800.00	Ink and laser cartridges for networked printers
	2800.00	3000.00	3400.00	Repair parts for computers
	2000.00	200.00	500.00	Camcorder, microphones, green screen, lighting (for video studio)
	5000.00	10000.00	12000.00	Purchase or upgrade computers
	1000.00	1500.00	750.00	Purchase digital and/or video cameras
	3200.00	1600.00	1600.00	Purchase LCD Projectors
5000 Other Services & Operating Expenses	25000.00	28000.00	30000.00	Computer Tech support-on call
6000 Equipment				
Total	\$ 54,750	\$ 62,050	\$ 67,750	

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

As systems become obsolete, they will be replaced in one of the following ways:

- Upgraded if possible
- Discarded through sale, donation or recycling, as appropriate and replaced with new equipment when necessary and when budget allows

Obsolete is defined as over five years old for computer systems and monitors. Other equipment will be deemed obsolete on a case by case method.

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.

Technology Coordinator will serve on the school Budget Committee. Coordinator also operates with and is responsible for a separate technology budget. The Coordinator and the District Administrator will work closely to monitor budget on a continuous basis.

7. Monitoring and Evaluation

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

Data for the evaluation process in this section will come from a variety of sources. For grades 4 – 8 Standardized Test and District Writing scores will be reviewed along with each student’s electronic portfolio on the school server and other student work provided by classroom teachers. For grades K – 3 a representative sample of student work generated on the computer will be collected for review along with Standardized Test scores and other student work samples.

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

Departments involved with the collection, review, and dissemination of this data will be: Technology Committee, District and School Administrators, School Leadership Committee, School Site Council and any others chosen by administration. Data from the above section will be collected and reviewed at least once a year, normally at the end of the school year.

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

Evaluations will be used to improve the effectiveness of the total program. Concerns, suggestions and ideas will be submitted to the Technology Committee and The School Leadership Team. Recommendations will be made to the Board of Education. Any reportable information will be made available to parents, staff and site administration for their reactions and comments.

Two technology focus meetings will be held, one in the Fall and one in the Spring, to address and educate the community in the areas of Internet Safety as well as showcase students’ technology projects. Transitions from preschool, elementary and middle school will also be addressed. If interest is expressed, these meetings may expand to include adult computer skills hands-on classes.

8. Collaborative Strategies with Adult Literacy Providers

8a. Description of how the program will be developed in collaboration with those providers.

Twenty-four percent of the total population, the equivalent of about 75 thousand adults in Stanislaus County, has very low literacy skills. Many of these people have reading levels that are so low that they have difficulty reading and understanding most writing such as job applications, leases, or even simple written instructions. They are unable to read a map, a newspaper or help with their children’s schoolwork. Many people with limited reading skills are unable to qualify for full-time jobs. It is also not surprising that a third of the prison inmates in our area have low literacy skills. (*source: Stanislaus Literacy Center. <http://www.readingworks.net/>*)

Providing services that address adult literacy needs can help break the cycle of illiteracy from one generation to another. Services that are most effective address adult literacy needs, emerging literacy needs of children, interactive/intergeneration literacy, and parenting.

Several agencies in our community currently provide many of the services noted above. They include Families for Literacy (FFL), California’s statewide library-based literacy organization, the Read-Succeed Literacy Program, Adult Literacy Services, and ReadingWorks.

Access to technology can increase the effectiveness of adult literacy programs in two ways: 1) by increasing the access to high quality materials and 2) by providing access to instruction through computers at home or in public places for individuals who cannot attend formal classes.

Hart-Ransom school community recognizes the need to provide adult literacy opportunities to its adult population. The school is currently providing an adult class that teaches parents how to help their children become more successful in school. It is called the *Parents Assuring Student Success* or the PASS program, published by the National Education Service. The class is taught using technology such as power point presentations. One of the eight modules focuses on parents helping their children improve computer skills by teaching parents how to improve their own computer skills.

A core component of the program is parent involvement. Having all parents, regardless of their educational level, become advocates for their children's education is key and this program helps parents become more involved.

During the spring of 2011, the Hart-Ransom District technology committee will meet with adult literacy providers in our community to share information. It is hoped that we will discover how we may collaborate to better serve our students, parents and the general community. Possible assistance may include providing facilities and/or instructors, curriculum

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.

Integration of technology with Curriculum

At our school site, we have a strong “pull-out” computer program where by students are trained in technology skills in a computer lab setting. In order to facilitate the goal to fully integrate technology several steps will need to be taken.

1. Appropriate technology tools must be available to students in classrooms.
2. Collaboration must occur between the computer lab teacher and the classroom teachers.
3. Professional development must be provided to classroom teachers.

In order to achieve the goals listed above, the site has the following goals:

1. Provide a minimum of 3 Internet accessible computers in all 4 – 8 grade classes by the end of year 2011.
2. Continue to schedule of all 7th and 8th grade students so that they are in computer class at least 2 times a week throughout the entire school year.
3. **Provide scheduled professional development** as well as develop minimum computer competencies for each teacher by the end of 2007.

For students in the 4th through 8th grades, classroom teachers in collaboration with the computer lab teacher will develop activities. These projects and activities will be designed to extend the learning opportunities for students and deepen skills and understanding of subject matter. For example, when 8th grade study folksongs from the Westward Expansion period of American History, they will also be designing a CD cover for one of the targeted folksongs in computer class with the program Photoshop Elements. 7th graders will be asked to write a newspaper article in computer class using Microsoft Word that reports on an event in the literature book, *Lapita Manana* that they are reading in their Literature class. After being introduced to the concepts of weathering in their science class, 6th graders will use digital cameras to go out on campus grounds to take pictures of different types of Mechanical and Chemical Weathering. Then they will take those pictures and format them on a word document during computer class adding descriptions of the pictures and noting which type of weathering occurred as well as which agents helped the weathering take place. 5th graders will learn PowerPoint skills while creating a slideshow about the state they are reporting on in the social studies class. This is just a partial list of the many activities that will take place during the school year. Every activity and project will be aligned with the California State Standards.

The curricular activities mentioned above are based on the following research:

Many research studies have validated the effectiveness of technology integration into the core curriculum. When measuring gains in standardized tests, research has shown that students using computers have had consistently higher gains in their score than students that do not have access to computers.

The West Virginia Basic Skills study attributed 11% gains on standardized tests due to technology use. Students using computers also had better grade in high school, took more advanced placement classes, and were more likely to graduate. A Florida study (Project CHILD) found that computers contributed to higher scores for student in both low and high achieving

schools and that the student had better discipline. In both studies, the boost technology gave students was sustained over time. (Harvey Barnett, "Making Sure Technology Pays Off" *Technology Information Center for Administrative Leadership* 2001. www.portical.org/barnett_intro.html and The West Virginia Story: Achievement Gains from a Statewide Comprehensive Instructional Technology Program, 1999 (Mann, et.al.))

Integrating technology into a school campus requires many things; hardware, software, networks and wiring, network administrators, but the most important key to making all this work to the benefit of our kids is quality staff development.

Professional Development

The Hart-Ransom School District, in response to research findings that indicate the critical need for extensive professional development in technology support of core curriculum, is working to create a professional development program that is appropriate, comprehensive and attainable. Currently, Professional Development is available to teachers through access to technology classes at our County Office of Education and less formal classes provided by the District Technology Coordinator after school hours. Future plans for professional development include participation in classes available through our local CTAP office and participation in summer institutes, conferences and other classes offered in our local area.

These steps towards providing professional development in this area are supported by the following research:

- "Virtually every major study of successful technology use finds that teacher professional development is key" (Office of Technology Assessment, *Teachers and technology: Making the Connection*. Washington, DC: U.S. Government Printing Office, 1995)
- "Teachers trained in how to use technology use it more often and in ways that result in student gains. Conversely, a lack of training is a significant barrier to success" (Dale Mann & Edward Shafer, "Technology and Achievement," *The American School board Journal*. July 1997. www.asbj.com/achievement/ci/ci10.html)
- Teachers need training, assistance and support in making the transition from traditional methods of teaching (lecture, recitation, and seatwork) to technology-based instruction (supporting student collaboration, inquiry, problem solving, and interactive learning. Ringstaff & Kelly, 2002.)

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

Studies have found that students and teachers who regularly and consistently use technology in their lives and education had the following results:

1. Students routinely use higher order thinking skills far beyond what was expected, when technology is applied to research.
2. Student demonstrated enhance ability to communicate with peers.
3. Students demonstrate increased initiative, to find data and apply concepts. Students also were much more likely to complete projects on time with superior result.
4. Student and teacher us of technology, coupled with teachers having time for reflection, lead to substantial changes in teacher beliefs about teaching and learning strategies for all students, including student at risk.

Comparative analysis of student with and without access to technology completing the same authentic assessment take found that the student with access to technology consistently outscored their peers that did not have access to technology. (Harvey Barnett, "Making Sure Technology Pays Off" *Technology Information Center for Administrative Leadership* 2001. www.portical.org/barnett_intro.html)

In response to this research, Hart-Ransom School District will be exploring several innovative and creative virtual and physical training to increase technology proficiency by teachers and students including:

- Distance learning (using cable TV, video streaming and online training)
- A redesigned and expanded District web site that will provide updates as new information and services are added. Teachers and student created web pages will also be supported
- Possible contracts with larger districts to provide mobile training opportunities.

Because technology continues to play an important role in modern industrial society, integrating technology into the schools will help prepare students to succeed in a rapidly changing world. "Technology is transforming society, and schools do not have a choice as to whether they will incorporate technology but rather how well they use it to enhance learning"

*North Central Regional Educational Laboratory & Illinois State Board of Education,
1995*