

NOBLE AVENUE ELEMENTARY

Instructional Technology Use Plan

The Noble Avenue Elementary School Instructional Technology Use Plan is a three-year plan for technology, prepared by the Noble Avenue Elementary School Technology Committee in partnership with Tech Ed Services, Inc. The plan is aligned with the school's goals for student achievement.

Noble Avenue Elementary School Instructional Technology Use Plan

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1.0 MISSION and VISION STATEMENTS

Noble Avenue Elementary School Vision

Students, parents, teachers and staff at Noble Avenue Elementary will be prepared to use the most current technological tools and applications to enhance all aspects of student education and improve student achievement.

Technology Mission

Noble Avenue Elementary School provides a rich technological environment to the student, faculty, staff, and parent population for the purpose of enhancing and strengthening students' basic skills, creativity, problem-solving abilities, and school-to-work/career skills. All children will receive an education in technology built upon the California State Frameworks and the Los Angeles Unified School District Master Technology Plan and Student Learning Standards. Students, teachers, and parents will have access to the most current technological equipment and support for the use and application of technology in making a positive impact upon all facets of the educational experience. The changing population and technologies will guide the annual updating of the school plan in order to continue the advancement and accomplishment of Noble Avenue's vision and goals.

2.0 SCHOOL PROFILE DEMOGRAPHIC & SCHOOL INFORMATION

Noble Avenue Elementary School is a K-5 elementary school located in the urban community of Panorama City, within the Los Angeles Unified School District (hereafter known as "the District"). The school teaching staff of approximately 91 teachers serves 1,792 students on a year-round calendar.

Student and Teacher Demographics

Noble Avenue Elementary School's demographics represent the diversity of students and teachers:

Population	American Indian	Asian	Pacific Islander	Filipino	Hispanic	African American	White	Other
Students	0.0%	1.3%	0.1%	1.8%	94.1%	1.5%	1.3%	0.0%
Teachers	0.0%	3.3%	0.0%	5.6%	46.7%	7.8%	36.7%	0.0%

Other pertinent demographic information includes special populations counts. Approximately 83% of the students at Noble Avenue are English Language Learners, 82.3% receive free/reduced price meals, and 17.2% are part of the CalWorks program.

Measures of Academic Achievement

Prior to the 2001-02 school year, the standardized STAR test for measuring student achievement was the Stanford Achievement Test, ninth edition (SAT-9) and was administered in the spring of the school year. The percentage of students scoring at or above the 50th percentile in 2002 is listed in the following chart:

2002 STAR Results				
Percent Scoring At or Above the 50 th Percentile				
Grade	Reading	Math	Language	Spelling
2	27%	33%	26%	36%
3	17%	41%	32%	34%
4	16%	30%	28%	22%
5	18%	20%	21%	19%

API Score, Ranks and Targets		
Base Information		
2001 Base API	450	Scale of 200 to 1,000
2001-2002 Growth Target	18	5% of the difference between 800 and the school's 2001 Base API, with exceptions
2002 API Target	468	2001 Base API plus the 2001-2002 growth target
2001 Statewide Rank	1	Each rank has 10% of all schools of the same type; 1 is lowest, 10 is highest.
2001 Similar Schools Rank	5	Each rank has 10% of the 100 most similar schools; 1 is lowest, 10 is highest.
2002 Growth	526	Scale of 200 to 1,000; calculated using the same formulas as 2001 Base API
Source: California Department of Education, Policy and Evaluation Division (API Base file dated 10/17/02)		

3.0 NOBLE AVENUE ELEMENTARY SCHOOL INSTRUCTIONAL TECHNOLOGY USE PLAN

The Noble Avenue Elementary School Instructional Technology Use Plan has been developed in order to formalize and document a set of guiding principles for the next three years including:

- Development of instructional programs and teaching strategies
- Training of faculty, staff, and community members
- Acquisitions of hardware and software
- Utilization of outside resources within the arena of educational technology

Based on the information collected for this Technology Plan, the following aims were developed by the Technology Committee and were used to formulate the goals, objectives, and benchmarks for this Technology Plan:

- Maximize the potential of technology to improve student achievement
- Enrich the curriculum
- Prepare students for a changing technological society
- Empower teachers to utilize technology as an effective tool to transform teaching and learning

All students need to:

- Improve language arts and mathematics skills
- Use technology as a communication and information tool
- Develop, practice, and demonstrate critical thinking skills in all areas

All staff members need to:

- Increase their basic "hands on" operation associated with technology use
- Understand the "mechanics" of technology well enough to be adventurous, innovative, confident, and experimental
- Collaborate with one another and students in learning the technology operations
- Improve effectiveness of instruction with the assistance of technology tools

The ability to process and manipulate information has already become an important determiner of economic success for individuals as well as states and nations. In this new information age, the ability to gather and distribute information through electronic communication is vital. Noble Avenue understands that the use of technology, by itself, is not as important as the educational setting or context in which it is used. The school wants to ensure that technology is not an adjunct to the curriculum, but an integral part of it, with the most important goal being to improve student achievement.

4.0 STUDENT GOALS AND OBJECTIVES

4a. Alignment of Curricular Goals and Academic Content Standards

Technology will be aligned to the curricular goals and academic content standards for student achievement which are based on:

- California State Content Standards
- Los Angeles Unified School District Technology Master Plan
- National Educational Technology Standards for Students (N.E.T.S.)
- The Big 6™ Approach (Information Literacy Skills)
- Noble Avenue Elementary Technology Scope and Sequence

4b. Student Academic Achievement

The following section describes what Noble Avenue Elementary School students are expected to be able to do academically and describes how, through the meaningful integration of technology, student academic achievement can be improved. To maximize the potential of technology, to enrich the curriculum, and to increase student achievement, and prepare students for a changing technological society, the following goals and objectives must be achieved.

GOAL 1. ALL NOBLE AVENUE ELEMENTARY SCHOOL STUDENTS WILL IMPROVE STUDENT ACADEMIC ACHIEVEMENT.

Objectives	Benchmarks			
	2003	2004	2005	2006
1.1 By June 2004, and in succeeding years, the percentage of students meeting or exceeding grade level standards in Language arts will increase 5% per year at each grade 2-5, as measured by the Language Arts California Standards Test.		5%	5%	5%
1.2 By June 2004, and in succeeding years, the percentage of students in grades 2-5 meeting or exceeding grade level standards in Mathematics will increase 8% per year, as measured by the Mathematics California Standards Test.		8%	8%	8%
1.3 By June 2006, 95% of students will meet promotion/retention and acceleration criteria in Reading/Language Arts and Math.	Establish baseline	50%	75%	➡
1.4 By October 2003, and in all succeeding years, Noble Avenue Elementary will meet or exceed its API targets.	100%	➡		
1.5 By June 2006, 98% of students will meet attendance requirements.		95%	96%	98%
1.6 By June 2006, 95% of students will score proficient or higher on CAT-6		90%	93%	95%
1.7 By June 2005, 10% of students will be in the Noble Avenue Elementary will GATE program.		5%	10%	➡

4c. Student Computer Knowledge and Skills


In order to enable students to use technology as a tool to improve academic achievement, Noble Avenue Elementary School needs to ensure that students have the opportunity to learn computer knowledge and skills. At the middle and high school levels, students are being expected to be proficient in word processing, Internet search and retrieval, messaging skills (including email), spreadsheets, electronic publishing, and courseware. Where appropriate for age and skill level, Noble Avenue Elementary School is committed to providing students the opportunity to learn technology skills for use during their time at Noble Avenue and in preparation for advancement into higher grades where these skills will be expected. Currently, all students in grades K-5 are provided with weekly access to technology for remedial and enrichment purposes. Students use productivity software, Internet and select subject-area software as part of the academic program.

Noble Avenue Elementary School also places high priority on aligning the teaching of information literacy skills with technology use. Information literacy is defined as the ability to define, locate,

select, organize, present, and assess information in and through a variety of media technologies and contexts to meet diverse learning needs and purposes.

Technology skills are taught in the context of course curriculum as well as through a variety of activities as delineated for each grade level as defined by the school’s Technology Scope and Sequence, Appendix B.

GOAL 2. ALL STUDENTS WILL DEMONSTRATE COMPETENCY IN TECHNOLOGY AND INFORMATION LITERACY SKILLS.

Objectives	Benchmarks			
	2003	2004	2005	2006
2.1 By June 2005, 90% of all students will demonstrate grade level appropriate technology knowledge and skills, as defined by the Technology Scope and Sequence.	30%	60%	90%	
2.2 By June 2005, 95% of students will use technology to create a grade-appropriate multimedia project.		30%	60%	95%

The Scope and Sequence, contained in the appendix, addresses grade appropriate technology skills including: word processing, spreadsheets, messaging skills (including electronic mail), electronic publishing, Internet search and retrieval, and courseware. It will integrate these skills into adopted content standards as appropriate.

In order to support teachers who may not have experience using technology in lessons, Noble Avenue will promote the use of team teaching and teacher partnerships to achieve the technology project goals.

4d. Implementation Plan to Meet Curricular Goals

In order to successfully implement this plan and meet the curricular goals and objectives, Noble Avenue Elementary will need the following:

- Maintain a minimum ratio of ten students to one (10:1) Internet accessible, networked computer
- Access to presentation equipment for connection of TV monitors to an Internet accessible computer per classroom and/or a projection device per classroom
- Maintain Internet in all instructional areas connected to the Internet
- Standardized grade and subject appropriate diagnostic remedial/ reinforcement/ and enrichment software, such as Accelerated Reader, Math Steps, Star Reading, Star Math
- Thirty (30) minutes per week of computer access for grades K/1
- Sixty (60) minutes per week of computer access for grades 2/3
- Ninety (90) minutes per week of computer access for grades 4/5
- Intensive, ongoing professional development
- After school programs

4e. Appropriate and Safe Access to All

Noble Avenue Elementary School is ADA compliant and ensures equal and appropriate access to all students. If a student requires additional assistive technologies, they will be purchased to meet student needs, as outlined in the IEP. Noble Avenue Elementary considers it a priority to ensure a safe environment for all Internet and electronic messaging activities. Noble Avenue Elementary ensures that the Acceptable Use Policy covers 100% of students.

GOAL 3: NOBLE AVENUE ELEMENTARY WILL ENSURE A SAFE ENVIRONMENT FOR ON-LINE ACTIVITIES.

Objective	Benchmarks 7/2003
3.1 By July 2003, all students will be educated on the US Department of Justice’s Youth Rules for Online Safety and the Rules will posted in all areas where computers are used. (See Appendix A)	DOJ Youth Rules taught and posted

4f. Administrative Uses of Technology for Student Record Keeping and Assessment

Currently, the District is using SIS as the student information system for demographics, attendance, conduct, health records, and classroom schedule. Data is entered to the system by Noble Avenue Elementary School secretaries. Teachers can request reports such as student contact information or attendance data from the school secretaries.

Objective	Benchmarks		
	2004	2005	2006
3.2 By June 2006, 95% staff will use administrative and District SIS tools to assist their decision-making process.	75%	85%	95%

4g. Timeline

The following chart identifies steps, persons responsible and deadlines for implementation:

Action Step	Person Responsible	Completion Date
Accessible Use Policy implemented	Principal/Technology Committee	6/2003
Department of Justice’s Youth Rules for Online Safety taught to all students using technology.	Technology Committee/Teachers	6/2003
Develop rubric for grade-level multimedia projects	Teachers/Technology Committee	6/2003
Annual monitoring of CA State Content Standards Test scores in Language Arts	Principal	6/2003 Annually thereafter
Annual monitoring of CA State Content Standards Test scores in Mathematics	Principal	6/2003 Annually thereafter
Annual monitoring of promotion/retention and acceleration criteria	Principal	6/2003 Annually thereafter
Annual monitoring of progress against CAT-6	Principal	6/2003 Annually thereafter
Annual monitoring of attendance	Principal	6/2003 Annually thereafter
Annual monitoring of GATE enrollment	Principal/GATE Coordinator	6/2003 Annually thereafter

Annual monitoring of API growth targets	Principal	6/2003 Annually thereafter
Monitoring of student work described in Scope and Sequence to meet grade level standards for technology and information literacy skills	Teachers/Technology Committee	Annually from 6/2003-6/2006

4h. Monitoring Process

Individual(s) Responsible	Responsibilities
Technology Committee	<ul style="list-style-type: none"> • AUP implementation • DOJ Youth Rules for Online Safety training • Monitoring implementation of plan goals and benchmarks • Monitoring of student work to meet grade level technology and information literacy standards • Rubric for student multimedia projects
Principal	<ul style="list-style-type: none"> • Development of academic intervention plan outside school hours • Monitoring teacher websites • Monitoring AUP update and implementation • Monitoring of student achievement measures (CA State Content Standards, Promotion/Retention and Acceleration criteria)
Teachers	<ul style="list-style-type: none"> • Monitoring completion of student projects • Monitoring of weekly student access to technology

5.0 PROFESSIONAL DEVELOPMENT GOALS AND OBJECTIVES

5a. Current Skills

In order for students to master technology and be able to use it aligned with curriculum goals, all teachers need to be provided with the necessary training and support to learn and utilize technology in the classroom. Most Noble Avenue Elementary School teachers have completed the CTAP² survey, which covers general computer knowledge and skills, word processing, email, Internet search and retrieval, publishing, databases, spreadsheets, presentation software, and instructional technology. Teachers will annually complete the CTAP² survey. Noble Avenue Elementary will use the results of all surveys to identify training needs of teachers.

Teachers have completed a variety of training for Internet search and retrieval, word processing (MS Word), and desktop publishing skills. Additional training is often provided through educational publishing companies in core curricular areas, conferences and workshops.

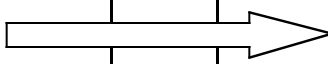

Currently Noble Avenue has two part time Technology Leaders (TL’s). These TL’s are seen as “site experts” and handle “just-in-time” training as well as delivery of in-service technology skills training.

5b. Professional Development Goals - Improving Staff Personal Proficiencies

The section that follows describes what is expected of teachers to meaningfully utilize technology in their curriculum. Professional development will be aligned to the CTAP², as well as the curricular component of this plan, and will be provided on an on-going, flexible basis. The technology training that teachers will receive will be integrated into staff development planning as appropriate in order to achieve personal proficiency and promote integration into the classroom.

Noble Avenue Elementary School recognizes the importance of providing appropriate resources necessary to help support and sustain staff. To that end, the school will make use of a variety of resources that collectively will sustain professional development.

GOAL 4. ALL NOBLE AVENUE ELEMENTARY SCHOOL TEACHERS AND ADMINISTRATORS WILL UTILIZE TECHNOLOGY FOR PERSONAL AND PROFESSIONAL PRODUCTIVITY.

Objectives	Benchmarks			
	2003	2004	2005	2006
4.1 By June 2003, 100% of staff will complete the CTAP ² survey and update annually.	100%			
4.2. By June 2003, Noble will select a cadre of teachers to be trained to serve as coaches to help supplement and sustain staff.	Select	Provide training		
4.3 By June 2004, 90% of staff (teacher and office) will have personal proficiency in basic skills/ troubleshooting, messaging skills/email, Internet search and retrieval, word processing, spreadsheet, multimedia presentations, and selected courseware.	75%	90%		

5c. Professional Development Goals - Technology Integration

Noble Avenue Elementary is committed to developing a truly integrated approach to technology where it is embedded into the standards-based curriculum and research-based professional development program wherever it can add value.

GOAL 5. NOBLE AVENUE ELEMENTARY SCHOOL TEACHERS WILL EFFECTIVELY UTILIZE TECHNOLOGY WITHIN THEIR CURRICULUM.

Objective	Benchmarks			
	6/2003	6/2004	6/2005	6/2006
5.1 By June 2006, 95% of teachers will demonstrate effective integration of technology throughout the curriculum (assessment and instruction) as evidenced by lesson plans and student work products.	25%	45%	70%	95%

Noble Avenue adopted Waterford Accelerated Reader as a standardized language arts diagnostic remedial/ reinforcement/ and enrichment software for grades K-2. In addition, the school is considering other similar applications for grades 3-5 and mathematics for adoption school-wide. Teachers at all levels must be trained in its use for effective implementation overall.

GOAL 6. NOBLE AVENUE ELEMENTARY SCHOOL TEACHERS WILL HAVE PROFICIENCY IN STANDARDIZED DIAGNOSTIC REMEDIAL/ REINFORCEMENT/ AND ENRICHMENT SOFTWARE.

Objective	Benchmarks		
	6/2004	6/2005	6/2006

<p>6.1 By June 2006, 95% of Noble Avenue teachers will be trained to integrate chosen standardized diagnostic remedial/ reinforcement/ and enrichment software (e.g. Accelerated Math and Accelerated Reader).</p>	<p>School selected literacy software</p>	<p>60%</p>	<p>95%</p>
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5d. Implementation Plan to Meet Professional Development Goals

In order to motivate staff to participate in all professional development activities, and to successfully implement this plan to meet the professional development goals, Noble Avenue Elementary will need to:

- Select technology coaches
- Select/hire technology consultants to provide directed training to staff and to supplement technology coaches
- Develop a detailed action plan for delivering applicable staff training.
- Offer varying, flexible scheduling and training model options.
- Offer stipends/compensation for trainers, assistants, and trainees.
- Pool school site resources with other schools to develop more robust, farther reaching staff development opportunities.
- Provide funds for equipment, materials, food/refreshments, and other incentives.
- Pursue opportunities to offer computer hardware incentives for teachers who achieve training goals.
- Allow for curriculum development time.
- Incorporate components of technology training into other staff development activities.
- Offer opportunities for online training through The Curriculum Resource (TCR), Classroom Connect University, or other distance learning programs.
- Provide access to Microsoft training software for individualized professional development.

The following table, which continues on the next page, outlines training targets for teacher proficiencies in using technology to improve teaching and learning. Training programs will be designed each year that correspond with professional development needs identified in the yearly CTAP² Surveys.

<p>Personal Proficiency Training</p>	<p>Description of Staff Uses of Technology</p>	<p>Description of Staff Activities to Assist Students</p>
<p>Basic Skills</p>	<p>Starts up and shuts down computer and peripherals; uses a mouse; inserts and ejects diskettes, CD-ROMs, etc.; uses software from disk, hard drive, CD-ROM; creates, name/renames folders and files; names, saves, saves as, retrieves, and revises a document; prints a document.</p>	<p>Assists students with basic computer skills.</p>
<p>Troubleshooting</p>	<p>Troubleshoots basic hardware, software, and printing problems before accessing the appropriate level of support; checks cables for proper attachment; solves simple printer problems with directly connected printer.</p>	<p>Assists students in basic computer skills, including set-up, start-up, log-on, password, and program use.</p>

Word Processing	Copies, pastes text within and between documents; uses styles to change the appearance of the document; uses borders, bullets, numbers, page breaks, headers, and footers; creates tables; understands elements of basic design (e.g. white space, page layout, etc.); incorporates digital images from external sources.	Creates enhanced word processed documents for classroom use; designs lessons that utilize word processing as part of the activity; develops student assignments that embed elements of effective design; develops newsletters, lesson plans, and classroom assignment materials.
Messaging/ Electronic mail	Uses email as a tool to interact with and provide information to students, parents, and other community members. Opens attachments.	Designs curricular lessons, which utilize email; selects and implements appropriate email tools to support teaching and learning; incorporates etiquette in classroom instruction. Communicates with students and parents.
Internet Search and Retrieval	Uses advanced search features to conduct online research; understands Boolean logic; conducts multiple search strategies to locate and validate information; uses information literacy skills and incorporates strategies within lessons. Bookmarks sites. Understands basic navigational tools.	Selects and implements Internet resources appropriately into lesson design; selects and uses effective classroom management techniques. Incorporates information literacy issues such as Internet citations, copyright, plagiarism, and site bibliographies. Uses virtual reality activities.
Multimedia Presentation	Creates and presents multimedia presentation using PowerPoint or other presentation software: incorporates sound, uses available tools imports graphics, and incorporates hypertext links. Connects, configures and troubleshoots peripheral devices for presentation including scanners and digital cameras.	Designs curricular lessons, which utilize multimedia, to enhance learning outcomes; assists students in the use of presentation software and peripherals. Uses in presentations for parent conferences.
Subject Specific Software	Learns effective use of courseware, including probes and other content specific technology. Aligns use with curriculum.	Designs curricular lessons, which integrate courseware, including probes and other content specific technology.
Spreadsheet	Creates and modifies spreadsheets: imports/exports charts and data, aligns and rotates text and numbers, creates charts, labels graphs appropriately. Maintains student records via spreadsheet and/or grade book templates.	Designs curricular lessons requiring the use of spreadsheets and charts; creates appropriate charts for content lessons.

5e. Timeline

The following chart identifies action steps, persons responsible and task completion deadlines for implementation.

Action Step	Person Responsible	Completion Date
Monitoring of CTAP ² Surveys	Principal/Technology Committee	Annually from 6/2003-6/2006
Select cadre of coaches	Staff Development Committee	6/2003

Select/hire direct training technology consultant	Technology Committee/Principal	9/2003
Create/revise staff development action plan to deliver training aligned with results of CTAP surveys	Technology Committee/Staff Development Committee	Annually from 9/2003 – 6/2006
Monitor % of teachers attaining personal proficiency	Technology Committee/ Staff Development Committee	Annually from 6/2003-6/2006
Monitoring of % of teachers integrating technology through evaluation of student work product and lesson plans	Technology Committee/ Staff Development Committee	Annually from 6/2003 to 6/2006
Monitor % of teachers who have completed training to integrate the standardized diagnostic remedial/ reinforcement/ and enrichment software	Technology Committee/ Staff Development Committee	Annually from 6/2005-6/2006

5f. Monitoring Process

Individual(s) Responsible	Responsibilities
Technology Leadership	
Technology Leaders/Technology Coaches	<ul style="list-style-type: none"> • Manage training seminars
Technology Committee/Staff Development Committee	<ul style="list-style-type: none"> • Monitor progress against objectives of this plan • Monitor training for staff • Monitoring of CTAP² surveys
Principal	<ul style="list-style-type: none"> • Monitoring of CTAP² surveys • Monitor % of teachers completing training • Monitor % of teachers integrating technology throughout curriculum via evaluation of lesson plans and student work products • Monitor % of appropriate teachers integrating diagnostic remedial/ reinforcement/ and enrichment software • Monitor staff training for data-analysis software

6.0 INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, SOFTWARE

6a (1). Computer Hardware (Existing and Need)

Currently, Noble Avenue Elementary provides access to myriad technology tools. Each classroom is equipped with approximately five computers (upper grades have as many as nine computers), which are networked to the school’s server. Each classroom is also wired providing Internet access. The school also has four mobile carts equipped with 30 laptops (2/ibooks; 2/PC)

In order to reach curriculum and professional development goals, Noble Avenue Elementary School will need to maintain its 7:1 ratio of multimedia Internet accessible computers that are no older than four years. This number will include mobile cart computers. Noble Avenue also recognizes the need for additional peripherals that would benefit students in the creation of multimedia projects.

GOAL 7. NOBLE AVENUE ELEMENTARY SCHOOL WILL MAINTAIN A 7:1 STUDENT-TO-COMPUTER RATIO

Objective	Benchmarks	
	6/2005	6/2006

<p>7.1 By June 2006, and in succeeding years, the school will monitor student growth rate and evaluate the purchase of additional computers as needed to maintain a 7:1 student-to-computer ratio.</p>		<p>Purchase needed computers to maintain 100% 7:1 ratio</p>
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6a (2). Staff Computer Needs

Teachers and administrators need computers to enable them to meet district site-level goals for technology use to improve personal and professional productivity.

GOAL 8. NOBLE AVENUE ELEMENTARY SCHOOL WILL INCREASE TEACHER ACCESS TO COMPUTERS.

Objective	Benchmarks		
	9/2003	9/2004	9/2005
<p>8.1 By September 2005, the Noble Avenue Elementary School will have two laptops for each grade level.</p>		<p>3 teacher laptops (1/grade level)</p>	<p>3 teacher laptops (1/grade level)</p>

6a (3). Peripheral Equipment

In order to use computer technology for effective teaching and learning, peripheral equipment must also be purchased. The district has set the standard that projection systems will be purchased instead of overhead projectors. It is the district’s recommendation that each school have a minimum of one projection system. In addition, the district feels that digital still and video cameras can be used for professional development (e.g., to record training sessions), for teacher use to help create their websites for parents, and for streaming video of emergency procedures. The district’s recommendation is to have at least one still and one video camera per school.

GOAL 9. NOBLE AVENUE ELEMENTARY SCHOOL WILL USE APPROPRIATE PERIPHERALS TO ENHANCE STUDENT WORK DONE UTILIZING TECHNOLOGY.

Objective	Benchmarks			
	2003	2004	2005	2006
<p>9.1 By June 2004, peripherals will be purchased including: 2 multimedia projection systems, 2 digital video and 6 digital still cameras (2 per grade level).</p>	<p>1 projection system, 1 video camera</p>	<p>1 projection system, 1 video camera, 2 still cameras</p>	<p>2 digital Still cameras</p>	<p>2 digital Still cameras</p>

6b. Electronic Learning Resource

Various instructional software programs, operating systems, and workgroup information management tools are being used. To maximize existing and future resources, Noble Avenue will be conducting an evaluation of all existing software programs including teacher input on what is being use, not used, and the application’s overall academic value. If determined appropriate, upgrades and/or additional licenses will be purchased.

In order to efficiently train and support the use of these electronic learning resources and guide the selection process towards standards-aligned purchases, Noble Avenue’s Technology Committee will establish additional software standards. Once selected, Noble Avenue Elementary will incorporate the standards as an addendum to this plan.

GOAL 10. NOBLE AVENUE ELEMENTARY WILL STANDARDIZE PURCHASING AND USE OF SOFTWARE.

Objectives	Benchmarks	
	2003	2004
10.1 By June 2004, Noble Avenue will be standardized on, and use only MS Office	Software standardized	Complete implementation
10.2 By June 2004, diagnostic remedial/ reinforcement/and enrichment software will be selected and standardized.	Software standardized	Software implemented
10.3 By June 2004 evaluate existing resources, and purchase, as necessary (software) to determine alignment with Noble Avenue technology plan	Software evaluation complete	Additional purchased identified

In order to research and select appropriate learning tools, the district plans to use the California Learning Resource Network (CLRN) and the California Technology Assistance Program (CTAP) as resources for selecting curriculum aligned technologies.

6c. Infrastructure

Currently, all classrooms are connected to the Internet. Each room has two (2) drops with eight (8) hubs. Each classroom is wired for cable television and phone lines are installed in every classroom.

All classrooms, labs, and the library/media center are connected to the Internet by a permanent T-1 connection. The network uses a fiber optic backbone and Category 5 UTP Ethernet cable to each workstation. The MDF and IDF closets are all locked and controlled by the District.

6d. Technical Support and Sustainability

All computer hardware is purchased with three-year warranties. Noble Avenue Elementary supports two part time Technology Leaders to help troubleshoot computer problems. In addition, the school recently implemented a student repair team that provides site support for basic computer problems. The district also provides support through a combination of internal support and outsourced consultants to provide technical support.

As funding allows, the school will provide 2.0 FTE equivalent technicians. One individual will handle hardware-related issues. The second individual will focus on technology integration planning and implementation.

Through professional development programs for teachers on basic troubleshooting, the adoption of an escalation process, the addition of 2.0 FTE equivalent technicians, and the student repair team Noble Avenue Elementary hopes to manage technical support so that teachers and students can utilize technology effectively within the classroom.

Obsolete Equipment Replacement Policy

Noble Avenue School has established a four (4) year computer lifespan. After the first four years of life, the Technology Coordinator will determine whether or not a unit is beyond economic repair. For example, any damage to a computer’s motherboard or serious damage to a laptop’s LCD panel

would be considered cost prohibitive to fix. Once equipment is considered obsolete, the school complies with the district’s guidelines for disposal.

GOAL 11. NOBLE AVENUE ELEMENTARY SCHOOL WILL MAINTAIN APPROPRIATE LEVELS OF TECHNICAL SUPPORT.

Objective	Benchmarks			
	6/2003	6/2004	6/2005	6/2006
<p>11.1 By June 2003, Noble Avenue will implement an escalation process for technical support. For example: LEVEL 1 = Teacher Responsibility (requires troubleshooting training) LEVEL 2 = TLT (as defined in TLT Roles and Responsibilities) LEVEL 3 = District: LEVEL 4 = Vendor</p>	Escalation process established & implemented			

6e. Technology Planning

Noble Avenue Elementary School has developed a Technology Committee consisting of administrators and teachers from all grades. The committee will be responsible for overseeing the implementation of this plan and addressing issues not specifically identified in the plan (i.e. care of computers).

GOAL 12. NOBLE AVENUE WILL KEEP TECHNOLOGY PLANNING CURRENT AND WILL UPDATE PLANNING DOCUMENTS AS NEEDED.

Objective
<p>12.1 By June 2003, and in succeeding years, Noble Avenue will update this plan and include its contents in the school wide plan.</p>

6f. Timeline

Action Step	Person Responsible	Completion Date
Peripherals (projection systems, digital and still video cameras) purchased	Principal/Technology Lead Teachers	6/2003-6/2004
Laser printers purchased	Principal/Technology Lead Teachers	6/2003-6/2006
School Wide Plans updated to include Tech Plan	Principal/Technology Committee	6/2003
Standardized on MS Office	Technology Lead Teachers	6/2003
Standardize on diagnostic remedial/ reinforcement/ and enrichment software	Technology Lead Teachers/ Technology Committee	6/2003
Escalation process determined and implemented	District/Technology Lead Teachers	6/2003

Technology Use Plan update	Technology Committee	6/2004-6/006
Teacher checkout laptops purchased	Principal	9/2004-9/2005
Student computers purchased to maintain 7:1	Principal	6/2003-6/2006

6g. Monitoring Process

Individual(s) Responsible	Responsibilities
Principal	<ul style="list-style-type: none"> • Write or update School Wide Plan to include technology plan • Purchase peripherals, printers, student computers, teacher laptops • Monitor student growth rate for 7:1 ratio
Technology Leaders	<ul style="list-style-type: none"> • Determine and implement escalation process • Input to standardization of diagnostic remedial/ reinforcement/ and enrichment software • Provide technology support/installation • Provide purchase recommendations to Technology Committee/Principal
Technology Committee	<ul style="list-style-type: none"> • Monitor plan implementation and progress against goals/objectives • Update plan annually

7.0 HOME TO SCHOOL CONNECTION

7a. Accessibility to Parents

Noble Avenue Elementary School advocates for a strong home to school connection as means of improving student academic achievement. Currently a variety of activities are facilitated to increase a parent’s involvement with the school and thus in their child’s academic progress. Noble Avenue intends to baseline the current parent involvement from which quantifiable measures will be subsequently created.

The school will also create/enhance its school website to serve as a communication vehicle with parents and the community. All teachers have district email accounts, which are used at the teacher’s discretion.

GOAL 13. THE NOBLE AVENUE WILL USE TECHNOLOGY TO MAKE TEACHERS AND ADMINISTRATORS MORE ACCESSIBLE TO PARENTS.

Objectives	Benchmarks			
	6/2003	6/2004	6/2005	6/2006
13.1 By June 2006, 60% of all teachers will have a website which minimally provides homework and curriculum information and includes a link to the teachers' email address.	5%	15%	40%	60%
13.2 By June 2003, Noble Avenue will baseline parent involvement and subsequently update the parent involvement plan to include growth benchmarks.	Survey baseline	Update plan		

8.0 MONITORING AND EVALUATION

8a. Monitoring Implementation

The coordination and effective implementation of the technology plan will be the oversight responsibility of the Noble Avenue Elementary School Technology Committee, as directed by the school's Principal.

Individual(s)	Responsibilities
Principal	<ul style="list-style-type: none"> • Monitor API targets, CA State Standards test results, normed reference test scores as measured by the NCE, and CELDT results • Monitor completion of student class technology projects • Monitor percent of certificated staff with personally proficiency in technology skills • Monitor percent of trained teachers integrating technology and information literacy skills • Monitor budgets and purchasing as funding allows to meet goals/objectives of plan
TL's	<ul style="list-style-type: none"> • Provide technical support • Provides assistance to teachers to integrate lessons for student technology projects • Post DOJ Rules in lab • Monitor hardware/peripherals to be purchased and make recommendations • Install applicable software on classroom and library
Technology Committee	<ul style="list-style-type: none"> • Monitor implementation of Instructional Technology Use Plan • Update of Instructional Technology Use Plan
Staff Development Committee	<ul style="list-style-type: none"> • Provides assistance to teachers to integrate lessons for student technology projects • Monitor implementation of Scope and Sequence; identify projects to monitor for assessment of student proficiency • Develop and implement professional development for technology integration
Teachers	<ul style="list-style-type: none"> • Develop lessons to incorporate student technology projects • Post DOJ Rules in all classrooms where computers are used • Monitor percent of students increasing proficiencies • Monitor percent of students demonstrating technology and information literacy skills

8b. Evaluating Implementation

Evaluation of the Curriculum Component

Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
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API Targets	API results showing that NHS met API targets	Annually	This information will be collected by the Principal and reviewed with the Technology Committee.
NCE score on standardized normed reference test	Measure of the number of students who have improved their normed reference test scores	Annually	This information will be collected by the Principal and reviewed with the Technology Committee.
CA State Standards Test	Percent of students increasing their scores from the Non-proficient and basic levels	Annually	This information will be collected by the Principal and reviewed with the Technology Committee.
CELDT Results	Percent of students increasing their overall proficiencies	Annually	This information will be collected by the Principal and reviewed with the Technology Committee.
Student work product	% of students demonstrating proficiency in identified skills noted in Scope and Sequence	Annually from 6/2004	Technology Coaches/Staff Development Committee to work with teachers to collect student work.
Lesson plans and classroom observation	Determine that teachers are including the DOJ Youth Rules in their curriculum and that the Rules are posted	July 2002	The Principal monitors that Rules are posted in all classrooms where technology is used.

Evaluation of the Professional Development Component

Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
CTAP ² survey results	Determine what % of teachers have personal proficiency in each area	Annually, beginning February 2003	The Principal will monitor results annually and recommend appropriate staff development programs.
Attendance sheets	Percent of teachers attending training	June 2003 and annually thereafter	The Principal will monitor results.
Teacher observation	Percent of teachers integrating technology in the classroom	Annually beginning September 2003	Principal observes teachers in the classroom and recommends appropriate staff development programs.

Evaluation of the Technology Component

Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
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Computer Inventory	Number of computers purchased to replace obsolete units	Annually	TL's assess need and makes appropriate recommendations to Tech Committee for purchases where funding is available.
Computer Inventory	Number of lab computers purchased	Annually	TL's assess need and makes appropriate recommendations to Tech Committee for purchases where funding is available.
Peripherals Inventory	<ul style="list-style-type: none"> • Number of projection systems purchased • Number of digital still and video cameras purchased 	Annually	TL's assesses need and makes appropriate recommendations to Tech Committee for purchases where funding is available.
Peripherals Inventory	Number of laser printers purchased to replace ink jets	Annually	TL's assess need and makes appropriate recommendations to Tech Committee for purchases where funding is available.
Software Inventory	Accelerated Reader/Math installed	6/2004-9/2004	TLT installs software in all units
Technology Plan Document	Annual update to School Wide Plan	Annually from 6/2003	Technology Committee meets annually to revise and update plan

9.0 ACTION PLAN

9a. Short-term Action Plan

The following table outlines action items that the Technology Committee believes can be achieved during the second half of the 2001-2002 school year and the 2002-2003 school year.

Action	Responsible	Due Date
DOJ Youth Rules posted in all computer areas	Teachers and Principal	7/2002
Monitoring percent of students increasing CELDT proficiencies	Teachers/ Principal	6/2003 Annually after
Monitoring completion of student projects	Principal	6/2003
School Website posted	Administration/TL	6/2003
Update of Instructional Technology Use Plan	Technology Committee	6/2003 Annually after
Projection systems, digital still cameras, and digital video cameras purchased	Principal/Tech Committee	9/2003-9/2005
Replacement computers purchased	Principal/Tech Committee	9/2003 Annually after
Monitor percent of certificated staff with personally proficiency in technology skills	Principal/Staff Development Committee	6/2003 Annually thereafter

Monitoring percent of trained teachers integrating technology and information literacy skills	Principal/Staff Development Committee	6/2004 Annually thereafter
Monitoring of API targets	Principal	6/2003 Annually thereafter
Monitoring of normed reference test scores as measured by the NCE.	Principal	6/2003 Annually thereafter
Monitoring of “Non-Proficient” and “Basic” levels on the California State Standards test in core curricular areas	Principal	6/2003 Annually thereafter
Monitoring percent of student’s demonstrating technology and information literacy skills	Teachers and Principal	6/2004 Annually thereafter

9b. Long-Term Action Plan

The following action items can be achieved over a period of three to five years, beginning with the 2003-2004 school year, in order to fulfill long-term goals:

- Allocate funding to purchase necessary hardware and software.
- Allocate funding for staff development training and compensation.
- Purchase hardware and software for classroom/ school technology.
- Provide intensive, ongoing professional development for all faculty and staff in the use of technology and its integration into the curriculum.
- Measure growth towards benchmark attainments.
- Continue to seek grant funds through the state, federal or private sector to purchase computers and other items for instructional purposes.
- Continue to nurture partnerships with businesses, service organizations, and the community to acquire equipment, software, and support.

10.0 BUDGET

The following chart breaks down estimated costs associated with this plan. *Please note that all of these figures are estimates and will only be spent once funding becomes available.*

10a. Funding Resources

All technology objectives are and will be obtained through current and potential funding resources at the district and school site levels. These include but are not limited to:

- Title 1
- Block Grant
- EIA/LEP
- Donations
- Parents/Community Partners
- School Improvement
- API
- II/USP

10b. Implementation Cost Estimates

The following chart breaks down estimated costs associated with any needed student or teacher hardware, infrastructure upgrades, electronic learning resources, physical plant needs, professional development and planning needs. *Please note that all of these figures are estimates and will only be spent once funding becomes available to the district and/or school sites.*

Student Computer Hardware and Peripherals	Goal	Needed	Estimated Cost/Item	Estimated Total Cost
Multimedia Internet Accessible Computers	7:1	TBD	\$1000	TBD
Multimedia projection systems	2	2	\$3000	\$6,000
Digital Video Camera	2	2	\$800	\$1,600
Digital Still Cameras	2 per grade level	3	200	\$600
School printers	1 per core per grade level	6	\$2500	\$15,000
Electronic Learning Resources				
Selected diagnostic remedial/ reinforcement/ and enrichment software				TBD
Administrative Resources				
Upgrades	As needed	As needed	TBD	TBD
Hardware Replacement Requirements				
Computer replacement	As needed	As needed	TBD	TBD
Teacher and Administrator Computer Hardware				
Teacher checkout laptops	2 per grade level	6	\$2000	\$12,000
Infrastructure Upgrades (add leasing/maint contracts, replacement)				
Server for networked applications	1	1	\$4,000	\$4,000
Library/Media Center automation	As needed	As needed		TBD
Physical Plant				
Power upgrades	As needed	As needed	TBD	TBD
Professional Development				
Troubleshooting	All teachers	All teachers		TBD
Train the Trainer workshop	All Tech Coaches	All Tech Coaches		~\$4000
Selected diagnostic remedial/ reinforcement/ and enrichment software	All teachers	All teachers		TBD
Selected data-analysis software	Teachers Administrators	Teachers Administrators		TBD
Library automation training	As needed	Library clerk		TBD
Ongoing costs				
TL support		2 FTE	TBD	TBD
Consultants		As needed		TBD
Stipends, teacher		As needed	\$22/hour	TBD
Planning				
Site technology plan as needed			TBD	TBD
Technical Support				
As needed	As needed	As needed	TBD	TBD

APPENDIX A**Department of Justice Youth Rules for Online Safety**

- I will not give out personal information such as my address, telephone number, parents' work address/telephone number, or the name and location of my school without my parents' permission.
- I will tell my parents right away if I come across any information that makes me feel uncomfortable.
- I will never agree to get together with someone I "meet" online without first checking with my parents. If my parents agree to the meeting, I will be sure that the meeting is in a public place and that I bring along my mother or father.
- I will never send my picture or anything else to a person without first checking with my parents.
- I will not respond to any messages that are mean or that in any way make me feel uncomfortable. I am not to blame if I get a message like that. If I do, I will tell my parents right away so that they can contact the online service.
- I will talk with my parents so that we can set up rules for going online. We will decide on the time of day that I can be online, the length of time I can be online, and appropriate sites for me to visit. I will not access other sites without their permission.

http://www.usdoj.gov/kidspage/getinvolved/7_2.htm

Appendix B Technology Scope and Sequence

Appendix C Research

Relevant Research

The annotated bibliography that is included in this section describes the research that was used in the development of this plan. The research was selected for its focus on strategies and methods to integrate technology in order to improve learning, teaching, and management.

Research Literature and Utilization of Strategies

The CEO Forum school technology and readiness report: Key building blocks for student achievement in the 21st century. (2001). The CEO Forum
<http://www.ceoforum.org/downloads/report4.pdf>

This report concludes that effective uses of technology to enhance student achievement are based on four elements: alignment to curricular standards and objectives, assessment that accurately and completely reflects the full range of academic and performance skills, holding schools and districts accountable for continuous evaluation and improvement strategies, and an equity of access across geographic, cultural, and socio-economic boundaries.

How the research has been and will be used: Consistent with this research, Noble Avenue Elementary will carefully analyze learning resources and lessons both for alignment with California content standards and for the ability to measure growth/achievement on those standards in a variety of ways. Through ongoing data collection and analysis, the school will continuously monitor its attainment of the goals and objectives of the 2003-2006 Technology Plan, and will report results annually to the district and community stakeholders. Throughout the plan, attention is paid to providing equitable access to all students in our community, including students in special populations.

The CEO Forum school technology and readiness report. The power of digital learning: Integrating digital content. (2000). The CEO Forum.
<http://www.ericit.org/fulltext/IR020402.pdf>

This report offers a vision for digital learning and focuses on actions that schools, teachers, students, and parents must take to integrate digital content into the curriculum to create the learning environments that develop 21st century skills. The report presents a vision for digital learning. The power of digital learning is discussed, including the need for digital learning, the power and potential of digital learning, reasons why digital content is essential to digital learning, digital learning environments, digital learning develops 21st century skills, shifting to digital learning environments, models from the business community, readjustment (expanding the scope of technology integration), the critical importance of professional development, and integrating digital content.

How the research has been and will be used: Consistent with this research, in the development of this technology plan, Noble Avenue has followed, and will continue to follow, the steps recommended in the report. In alignment with the report, the school has identified educational goals and linked technology resources to those objectives; established student outcomes and performance standards that will be achieved by the inclusion of technological resources; and determined a process for measurement and evaluation of the outcomes and a process to modify the plan accordingly.

Connecting the bits. A reference for using technology in teaching and learning in K-12 schools. (2000). The National Foundation for the Improvement of Education.
<http://www.ericit.org/fulltext/IR020862.pdf>

This book provides information for integrating technology into teaching and learning in K-12 schools, based upon findings from two past programs of the National Foundation for the Improvement of Education. "The Road Ahead" program explored how technology can facilitate teaching and learning in both formal and informal education settings, and the "Learning Tomorrow" program funded pilot projects that investigated how technology can improve teaching and learning for underserved students.

How the research has been and will be used: The research in this book was used in the discussion and development of ideas for integrating technology. As recommended throughout this document, Noble Avenue focused its attention first on establishing learning goals for students, not technology goals. The emphasis of the LNSD plan is to help teachers become comfortable and highly competent in the integration of technology throughout the curricula and project-based learning. Integral to the plan, and supported by this research and others, is the belief that successful integration of technology depends on teachers who are knowledgeable, have opportunities for continuous learning, and who challenge their students academically while providing the support necessary to ensure their success. The professional development programs at Noble have been designed to incorporate these concepts.

Designs for learning: An introduction to high quality professional development for teachers. The California Department of Education.
<http://www.cde.ca.gov/pd/pdf/designsintro.pdf>

This document provides the framework for designing high quality professional development. It is based on three guiding principles: (1) High quality professional development helps teachers to more ably address the learning needs of every student, thereby improving the learning of all students; (2) High quality professional development designs will vary in accordance with the different phases of a teacher's development; and (3) Administrators who are actively involved in their own learning are better able to create and support conditions that result in high levels of teacher competency and students achievement.

How the research has been and will be used: Noble has designed a professional development program consistent with the recommendations made in this document. The professional development programs address the needs of professionals at their respective levels. The training of administrators is also addressed in the plan. All professional development activities will be monitored, evaluated and modified, as described in the plan.

Ringstaff, Cathy; Kelley, Loretta. (2002). The learning return on our educational technology investment. A review of findings from research. West Ed.
http://www.wested.org/online_pubs/learning_return.pdf.

This paper summarizes major research findings related to educational technology use and draws out implications for how to make the most of technology resources, focusing on pedagogical and policy issues. The distinctions between learning "from" computers and learning "with" computers are delineated. The findings of the research focus on adequate and appropriate teacher training; changing teacher beliefs about learning and teaching; sufficient and accessible equipment, including adequate computer-to-student ratio; long-term planning; technical and instructional support.

How the research has been and will be used: Consistent with this research, the Noble Avenue plan has been designed to address the benefits and rationale for both learning "from" technology (i.e., using computers to assist students in learning skills, etc.) and learning "with" technology (i.e., using technology to assist students with projects and other higher order thinking skills lessons). The plan also addresses sufficient and accessible equipment, especially as it relates to student-to-computer ratios, and technical and instructional support. Long-term planning and monitoring of the plan is built into the plan.

Valdez, G., McNabb, M., et. al. (May, 2000). Computer-based technology and learning: Evolving uses and expectations. North Carolina Regional Educational Laboratory.
<http://ericit.org/fulltext/IR020868.pdf>

This research report takes an in-depth look at the three distinct phases in technology uses and expectations: Print Automation, Expansion of Learning Opportunities, and Data-Driven Virtual Learning and, for each, addresses two very important and highly interrelated questions facing educators as they try to determine the best use of technology in K-12 settings: (1) What evidence is there that the use of computer-based technology in each phase has a positive effect on learning?; and (2) What significance do the findings from each phase have for educators today as they try to make technology-related decisions that have an impact on student learning?

How the research has been and will be used: Consistent with this research, and following the recommendations made in the report, Noble has designed and will continue to: implement a plan that provides an opportunity for technology to make learning more interactive; individualize and customize the curriculum to match learners' developmental needs as well as personal interests;

capture and store data for informing data-driven decision making; enhance avenues for collaboration among family members and the school community; and improve methods of accountability and reporting.