

Facilities and Technology Bond Task Force

*Technology Initiatives Presentation
March 17, 2004*



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PISD Technology Division
PISD Technology Steering Committee
Curriculum and Technology Teams***

***Reviewed by:
Superintendent's Cabinet***

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Bond Considerations for Fall 2004

Since the beginning of this school year, staff members from schools, the curriculum department, the technology department and other support services departments have been studying and identifying possible technology needs to be addressed in an upcoming bond initiative. This document is designed to give you an overview of the projects that have been recommended for consideration.

There is a critical and essential need to protect and maintain the investment made by previous technology bond funds (1990, 1996, 1999, 2000 and 2003). In particular, those bonds have enabled Plano ISD to create an initial wide area network (1990) and begin the replacement of that network with more capacity and capability (1999). Our elementary classrooms have a standard technology configuration throughout the entire district to integrate closely with our curriculum (1996). Many of our secondary classrooms received significant technology implementations via a curriculum-requested process on a case-by-case basis (1996 and 2000). Others were provided with only classroom presentation stations. The data networks within each campus have been and will continue to be upgraded to take advantage of Internet access and our new wide area network (1996, 1999). We've installed over 20,000 computers, 4,000 printers, 1,100 projection systems and 1,000s of TV/monitors, VCRs and video image display cameras as a result of the 1996 and 2000 bond initiatives to increase student achievement through technological improvements in the classroom. We believe that appropriately replacing and upgrading this equipment should be a high priority in the upcoming bond issue.

In addition, there is a need to continue the improvement in the PISD classroom environments in terms of technology access that our students use regularly in their learning activities. The districtwide technology initiatives and curriculum specific technology initiatives support and improve on those additions made as part of our previous technology bond investments. In addition, improvements to our safety and security systems, transportation, food and nutrition services (FANS) and information management systems have been identified as priorities in providing needed services to students, parents and staff.

This document is organized in the following fashion to assist with the discussion of the various initiatives to be presented for consideration:

- Summary of Technology Bond Initiatives Costs
- Replacement Program
- Classroom Technology Initiatives
 - Districtwide
 - Curriculum Specific
- Central/Auxiliary Services Initiatives

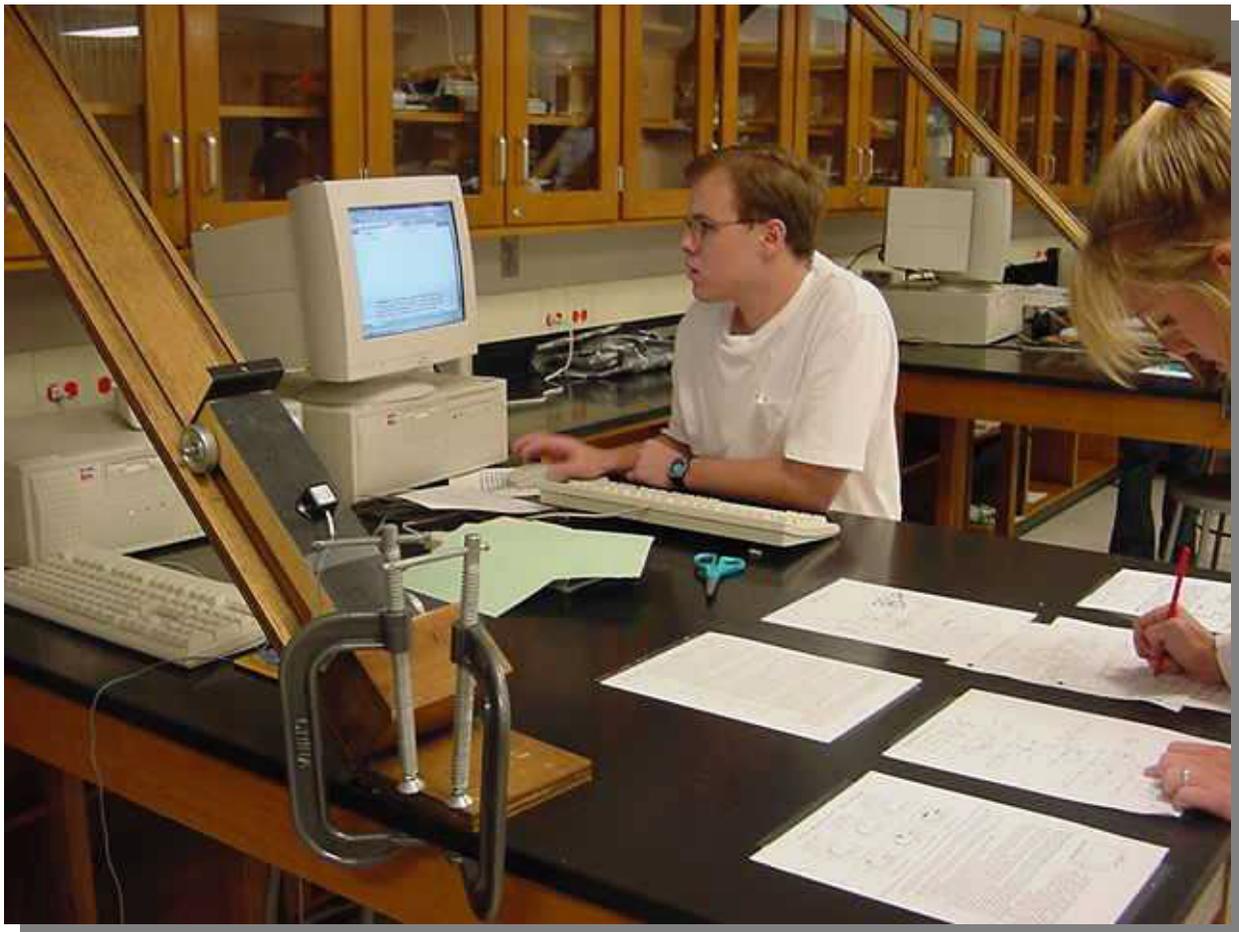


Cost Summary of Technology Bond Initiatives

Item	Cost	Page #
Replacement Program	\$30,812,998	7
Classroom Technology Initiatives	\$17,497,358	
<i>Districtwide</i>	<i>\$10,360,846</i>	
Classroom Configurations	\$5,414,346	8
PC operating and productivity systems upgrade	\$4,171,500	8
Storage Area Network	\$775,000	8
<i>Curriculum Specific</i>	<i>\$7,136,512</i>	
Art (6-12)	\$134,656	9
Art and Speech (9-12)	\$503,120	14
Business and Information Technology (9-12)	\$96,920	17
Commercial Foods (11-12)	\$10,376	20
Computer Science/Internetworking (11-12)	\$68,470	22
Co-op (11-12)	\$7,782	25
Creative Writing (11-12)	\$96,240	27
Early Childhood Classrooms (11-12)	\$31,653	29
Elementary (K-5)	\$1,102,063	31
ESOL/Bilingual (K-12)	\$151,000	36
Family & Consumer Science (9-12)	\$103,760	38
Fashion Design (11-12)	\$88,118	41
Foreign Language (6-12)	\$711,304	43
Health (8-12)	\$40,364	48
Health Science Technology (9-12)	\$87,944	51
Journalism (9-12)	\$227,551	54
Learning Media Services (K-12)	\$807,990	57
Marketing (11-12)	\$3,891	61
Mathematics (6-12)	\$1,010,017	63
Multimedia (9-12)	\$15,400	69
Music (6-12)	\$54,000	72
Music Theory (11-12)	\$38,614	76
Physical Education (K-12)	\$572,844	80
ROTC (9-12)	\$61,762	87
Skills for Living (6-8)	\$140,520	90
Special Education (K-12)	\$776,119	93
Theater Arts (6-12)	\$194,034	107



Central/Auxiliary Services Initiatives	\$3,477,000	
Communications	\$40,000	112
Facilities Maintenance	\$450,000	114
Food and Nutrition Services (FANS)	\$517,000	116
Information Management Systems development	\$1,500,000	117
Records Management	\$500,000	118
Technology	\$470,000	119
Total of all technology initiatives	\$51,787,356	



Replacement Program

Plano ISD and its community commit a significant portion of budget dollars to support and improve the use of technology in the district. In 1996, 1999, 2000, and 2003, the community approved technology bond packages totaling \$109 million that provided the needed funding to enable the strategic technology plan to be put into place and maintained. A combination of operating funds and 5-year equipment bonds will be needed to insure the plan can be implemented and maintained in an appropriate fashion. Due to the Chapter 41 legislative mandates that require the district to pay taxes on assessed valuation greater than \$305,000 to other school districts, the district must fund replacement costs in bond packages while the operating budget funds ongoing support of technology. A determination was made in the spring of 1999 by district administration and the Board of Trustees that a replacement fund for technology would become part of an ongoing bond program. The chart below gives the current recommendation as to those replacements that should be provided as part of the Fall 2004 bond initiative.

Item	Current Inventory	# to Replace	Unit Cost	Total Cost	Year(s) to implement
Desktop PCs ¹	26,201	16,240	747	\$12,131,280	2005-08
Laptop computers ²	2,998	2,998	1,666	4,994,668	2005-07
Macintosh computers	244	244	1,200	\$292,800	2005-07
Laser printers	2,017	972	1,060	\$1,030,320	2005-08
Inkjet printers	1,999	998	388	\$387,224	2005-08
Network servers	275	275	8,000	\$2,200,000	2005-08
Network LAN switches	2,000	150	1,500	\$225,000	2005-08
Network Core switches	80	80	62,500	\$5,000,000	2005-06
Data center switches	2	2	40,000	\$80,000	2006
Network firewall	1	1	75,000	\$75,000	2005
Wireless access points	135	135	500	\$67,500	2005-08
Video conferencing systems	10	5	76,698	\$383,490	2005-06
UPS systems	400	300	750	\$225,000	2006-08
TV/monitors	2,711	678	295	\$200,010	2005-08
VCRs	3,871	968	215	\$208,120	2005-08
Flatbed scanners	347	87	405	\$35,235	2005-08
Scan converters	3,871	1,936	169	\$327,184	2005-08
Digital cameras	418	105	369	\$38,745	2005-08
Camcorders	237	36	547	\$19,692	2005-08
VIDs/Flexcams	864	173	2,500	\$432,500	2005-08
Probeware/Microscopes/Lab interfaces	9,006	8,773	110	\$965,030	2005-08
Projection systems/light sources	1,182	110/1182	3,200/600	\$1,061,200	2005-08
Data processing equipment (AS400, etc.)	1	1	433,000	\$433,000	2005-08
Total replacement costs				\$30,812,998	

Notes:

¹ All PCs below 2.8Ghz will be replaced as part of this plan; current PCs have an anticipated useful life of five years

² Laptops have an anticipated useful life of three years (100% replacement each cycle)



Districtwide Classroom Technology Initiatives

Classroom Configurations

Proposals under consideration would affect classrooms in each school throughout the district. These include adding three wireless, mobile laptop labs to each of our twelve middle schools to augment the need for large group computing activities. As part of the 2000 bond, only core classrooms in the secondary schools received DLP projection systems. This proposal would provide the remainder of identified secondary school classrooms with similar projection systems. Additionally, each classroom presentation computer would be provided with a DVD/CD-RW drive and wireless keyboard/mouse combination to enable the use of enhanced digital curriculum resources. Finally, each school would receive additional printers, digital cameras, scanners and video image display devices to bring all schools to the identified district standard.

Item	Number to add	Unit Cost	Total Cost	Year(s) to implement
Wireless, mobile laptop lab	36	41,500	\$1,494,000	2005-06
DLP projection systems	437	4,000	\$1,748,000	2005-07
DVD/CD-RW drives	3500	150	\$525,000	2005
Wireless keyboard/mouse	3500	69	\$241,500	2005
Printers	281	1,500	\$421,500	2005-06
Digital cameras	182	498	\$90,636	2005-06
Scanners	182	405	\$73,710	2005-06
Video image display devices	410	2000	\$820,000	2005-07
Total bond funding request			\$5,414,346	

PC operating and productivity systems upgrades

We anticipate a need to upgrade our operating systems on our complete inventory of PCs during Summer 2005. At the same time, we will provide an update to our productivity software suite as well as curriculum systems that would be incompatible with a new operating system.

Item	Current Inventory	# to Upgrade	Unit Cost	Total Cost	Year(s) to implement
Windows XP	29,000	29,000	67.50	\$1,957,500	2005
Office XP	29,000	29,000	66	\$1,914,000	2005
Curriculum system software				\$300,000	2005-06
Total bond funding request				\$4,171,500	

Storage Area Network

We need to collapse our districtwide four terabytes of data from our distributed server arrangement into a large, centralized disk array to provide for better reliability, availability and redundancy and to take advantage of the wide area network capacity for data transport.

Item	Total Cost	Year(s) to implement
Storage Area Network (SAN)	\$775,000	2005-06
Total bond funding request	\$775,000	



Curriculum Specific Classroom Technology Initiatives

Teamwork for Excellence



PLANO

Independent School District

Art (6-8)

Subject Area/Level	Art/Middle School
Submitted by	Janice Truitt and Jim Long
Curriculum and Technology Team Members	Janice Truitt, Jim Long, Deborah Moore, Laura Barker, and Christina Paine
Planning Meetings (include schedules and members attending)	11/21/03 – Janice Truitt, Jim Long 12/8/03 - Janice Truitt, Jim Long, Deborah Moore, Laura Barker, and Christina Paine
Description of current classroom technology environments (include hardware and software resources)	teacher computer 4 enhanced student computers per classroom (networked) HP Scan Jet Cxi HP Deskjet Cxi 4 Intuos 4x5 serial Tablets 4 licenses for Adobe Photoshop 5.5 TV & VCR
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Students are required to use the computers in the curriculum. All middle school art teachers are required to submit two works that demonstrate that the students have used the computers either in the creation or in the final version of an art project to the secondary technology exhibit in the spring. Teachers are using Power Point to create presentations for their teaching units.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	In addition to the existing classroom technology the following is needed in each classroom: DLP projector Ready access to Elmo presentation device add art tablet, CD burner and DVD capabilities to teacher computer upgrade 4 enhanced student computers as necessary to meet system requirements for newest version of Adobe Photoshop



	5 current licenses for Adobe Photoshop ready access to digital cameras
Staff Training Needs	Training for Adobe Photoshop 7, and burning CD's
Rationale for Initiative	Using DLP projectors and Elmos would be a more effective means to deliver the district curriculum. Having Adobe Photoshop on the teacher computer would help when demonstrating how to use Adobe Photoshop to the class. Since art presentations take up a great deal of memory the teacher computers need to have CD burners. DVD capability is necessary since art resource materials are increasingly using this format. Digital cameras have become an important resource for the art curriculum. Students shoot images that can be manipulated with a variety of media. Digital cameras need to be in constant use. On most campuses it is impossible to check out the cameras for long-term use.
Supporting Research (documenting improved student achievement – attach articles of reference)	
Site Visits to Examine Existing Models	
Suggested Timeline for Implementation	Summer of 2005 provide training in new version of Adobe Photoshop to allow for transition during the school year of 2005-2006.

2004 Bond Planning
Middle School - Art

	Total	Cost	Total Cost
Campuses	13		
Classrooms (All)	16		
Art Tablets	24	170	4,080
Adobe Photoshop	83	130	10,790
TOTALS			14,870





PLANO

Independent School District

Art (9-12)

Subject Area/Level	Art/ High School and Senior High School
Submitted by	Janice Truitt and Jim Long
Curriculum and Technology Team Members	Janice Truitt, Jim Long, Deborah Moore, Laura Barker, and Christina Paine, Douglas Darracott
Planning Meetings (include schedules and members attending)	11/21/03 – Janice Truitt, Jim Long 12/3/03 – Janice Truitt, Douglas Darracott 12/8/03 – Janice Truitt, Jim Long, Deborah Moore, Laura Barker, and Christina Paine
Description of current classroom technology environments (include hardware and software resources)	teacher computer 3 enhanced student computers per classroom HP Scan Jet Cxi HP Deskjet Cxi 3 Intuos 4x5 art tablets 3 licenses for Adobe Photoshop 5.5 1 Digital Camera per department Network drops and electrical for all computers and printers TV & VCR
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Students are required to use the computers in the curriculum. All high school art teachers are required to submit two works that demonstrate that the students have used the computers in the creation of an art project to the secondary technology exhibit in the spring. Teachers are using Power Point to create presentations for their teaching units.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	In addition to the existing technology the following is needed in each classroom: DLP Projector Ready access to Elmo presentation device Add CD burner, DVD capability and art tablet to teacher computer upgrade 3 enhanced student computers where needed for newer version of Adobe Photoshop



	<p>upgrade student computers with CD burners</p> <p>1 additional enhanced student computer where space is available with art tablet (networked)</p> <p>5 licenses for newest version of Adobe Photoshop</p> <p>Ready access to digital cameras</p> <p>Add: 1 11"x17" color printer to 11⁻¹² grade schools. (Bring all 9-10 and 11-12 schools to the same specifications.)</p> <p>11" x 17" scanner</p> <p>slide scanner for 11th and 12th grade schools</p>
<p>Staff Training Needs</p>	<p>Training for Adobe Photoshop and burning CD's</p>
<p>Rationale for Initiative</p>	<p>Using DLP projectors and Elmos would be a more effective means to deliver the district curriculum. Having Adobe Photoshop on the teacher computer would help when demonstrating how to use Adobe Photoshop to the class. Since art presentations take up a great deal of memory the teacher computers need to have CD burners. DVD capability is necessary since art resource materials are increasing using this format.</p> <p>As teachers have become more proficient in integrating technology in the art curriculum the demand for student access has increased necessitating the need for at least one additional student computer in each classroom. This will bring the high school art classrooms up to the current standard of the middle school art classroom.</p> <p>Digital cameras have become an important resource for the art curriculum. Students shoot images that can be manipulated with a variety of media. To comply with copyright law, it is necessary for students to use digital cameras for reference material.</p> <p>The College Board requires slides to be shot of the student works. The teachers need the capacity to convert these slides to digital images. As colleges begin to require CD portfolios the students need access to CD burners.</p> <p>The students create works larger than the standard flatbed scanner. An 11" x 17" scanner would allow the high school students to scan and manipulate larger works of art that they create for their portfolio.</p>
<p>Supporting Research (documenting improved student achievement – attach articles of reference)</p>	



Site Visits to Examine Existing Models	
Suggested Timeline for Implementation	Summer of 2005 provide training in new version of Adobe Photoshop to allow for transition during the school year of 2005-2006.

2004 Bond Planning

HS/SHS - Art

	Total	Cost	Total Cost
Campuses (Art 9-12)	9		
Classrooms (All) (Art 9-12)	24		
Art Tablets	56	170	9,520
Drops	24	250	6,000
Electrical (Quad)	24	250	6,000
Tables	24	50	1,200
Large format (11X17) scanner (Art 9-12)	24	1,500	36,000
Slide scanner (SHS classrooms only) (Art 11-12)	8	380	3,040
Printer - Wide Carriage - SHS (Art 11-12)	8	500	4,000
Computer - Enhanced ** (Student)	24	1,074	25,776
Data	24	250	6,000
Electrical (Quad)	24	250	6,000
Adobe Photoshop (Art 9-12)	125	130	16,250
TOTALS			119,786





PLANO

Independent School District

Art & Speech (9-12)

Subject Area/Level	Speech & Art – HS/SHS (Proposal for laptop lab to be shared between Speech and Art departments)
Submitted by	Nancy Connors, Secondary Speech Coordinator, Janice Truitt, Art Coordinator, and Jim Long, Instructional Technology Specialist
Curriculum and Technology Team Members	<p>Speech - Karen Wilbanks, Hillary Risser, Alicia Elliott, Patti Weinbrenner, Emiley Henry, Pam Ballow, Nancy Connors, Jim Long</p> <p>Art - Janice Truitt, Jim Long, Deborah Moore, Laura Barker, and Christina Paine, Douglas Darracott</p>
Planning Meetings (include schedules and members attending)	<p>Speech - 12/10/03</p> <p>Art - 12/8/03</p>
Description of current classroom technology environments (include hardware and software resources)	No available lab access
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	<p>Speech - The curriculum for Communication Application (required for graduation) involves using technology to make presentations. Each classroom currently contains four student computers and a Plus. This also allows students to use the technology when making. In addition to Communication Applications, we are also able to use this equipment for presentations in the other speech courses – Oral Interpretation, Debate and Radio-TV.</p> <p>Art - Students are required to use computers in the curriculum. All high school art teachers are required to submit two works that demonstrate that the students have used the computers in the creation of an art project to the secondary technology exhibit in the spring.</p>
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	<p>Wireless laptop lab (30 computers)</p> <p>Latest version of Adobe Photoshop</p> <p>Drawing Tablets</p>



Staff Training Needs	Training in use wireless lab
Rationale for Initiative	<p>Since this lab will be shared by two departments, it will be in regular use.</p> <p>Speech - With class sizes averaging about 30 students, it's difficult enough to get presentations in during a one-semester course, but it is impossible to find time to rotate 30 students through four computers. A wireless laptop lab will allow us to move a lab to the students in speech classes; this would prevent the need for an additional classroom in which to create a lab for speech. With the laptops, students will be able to complete curriculum requirements for the various speech classes.</p> <p>Art - Currently the teacher has to train each group as they rotate onto the student computers. As class sizes increase less time is available for students to rotate onto the computers. Less time is available for teachers to provide technology training instruction. Teachers need to focus on introducing Adobe Photoshop without distractions from other art activities. In a lab students could be introduced to the technology curriculum as a class. Then the students could follow up with their assignments on the student computers in the art classrooms. AP art students need to create online portfolios.</p>
<p>Supporting Research (documenting improved student achievement – attach articles of reference)</p>	<p>Though students in Texas are now required to take a speech course to satisfy graduation requirements, speech is generally not viewed as a “testable” subject. As a result, there is a lack of research evaluating the effectiveness of technology in the speech classroom. Fortunately, “proof” need not come in the form of quantitative data. We offer the following information in the support of speech’s technology proposal:</p> <p>Research Skills –</p> <p>Access to information and effective research skills are crucial to the development of ethical and persuasive speech presentations. The TEKS make it clear that the research process is an important component in the speech classroom.</p> <ul style="list-style-type: none"> ○ TEKS 110.56.b.4.D “The student is expected to research topics for speeches...using electronic sources...” ○ TEKS 110.57.b.3.D “The student is expected to research topics using primary and secondary sources, including electronic technology ○ TEKS 110.57.b.4.C “The student is expected to research topics using primary and secondary sources, including electronic technology ○ TEKS 110.59.b.3 “The student uses relevant research to promote understanding of literary works.” ○ TEKS 110.60.b.6.A “The student utilizes research and proof in debate. The student is expected to locate and



	<p>use a variety of reliable technological and print sources.</p> <p>In the speech classroom, a majority of student assignments include a research component. As is true in all curriculum areas, current research strategies must involve technology in the acquisition of information.</p>
Site Visits to Examine Existing Models	Speech teachers and coaches have visited extensively with colleagues at state conference and at speech tournaments to discuss the type of technology being used in classrooms.
Suggested Timeline for Implementation	

2004 Bond Planning

Art & Speech Lab

	Total	Cost	Total Cost
Campuses	8		
Classrooms (All)	8		
Art Tablets	240	170	40,800
Mobile Lab - Access Point	32	710	22,720
Mobile Lab - Security Cart	8	1,580	12,640
Mobile Lab - Wireless Laptop	240	1,649	395,760
Photoshop	240	130	31,200
TOTALS			503,120





Business and Information Technology (9-12)

Subject Area/Level	Business and Information Technology 9-12
Submitted by	Judy Cordell, Carol Light
Curriculum and Technology Team Members	Judy Cordell, Carol Light, Tina Veri, Cindy Wisdom, Judy Hassack, Jackie McKnight, Mary Jo Case, Sheri Storer, Christine Ristow, Mary Shallenberg
Planning Meetings (include schedules and members attending)	December 3, 2003; Carol Light, Judy Cordell, Tina Veri, Cindy Wisdom, Judy Hassack, Jackie McKnight, Mary Jo Case, Sheri Storer, Christine Ristow, Mary Shallenberg
Description of current classroom technology environments (include hardware and software resources)	See spreadsheet attached for description of PISD business labs.
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	<p>Computers are used every class period in the business classes throughout the district. All teachers teach by demonstrating with the mounted projectors. Students print assignments most class periods. Digital cameras and scanners are used in preparing student projects.</p> <p>The existing technology includes a teacher computer that is used for taking attendance, entering grades, attending to school and parent e-mails, and typing worksheets, handouts and tests.</p>
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	<p>Teacher Workstation: DVD Rom Drive, CD burner, cordless mouse and keyboard, and cordless pointing device</p> <p>NetOp for all labs</p> <p>Exam View for all teachers</p> <p>Upgrade MicroPace Pro software (current version 1.0)</p> <p>Access to Digital Camera</p>



Staff Training Needs	Training on NetOp, Exam View, digital cameras, and cordless pointing device
Rationale for Initiative	<p>NetOp – Current business lab configurations are different throughout the district. Labs are crowded, and it is impossible for teachers to view the activity at all of the student monitors. NetOp will allow teachers to see all of the students' monitors at one time, thus reducing the opportunity for students to be playing games, participate in student messaging, or be on the Internet. It will also allow teachers to use the projectors to teach a lesson without being bound to the teacher computer, show a student's work via projector to the entire class, and send teacher messages to the student computer. It will also allow the teacher to place information on the teacher computer and have it appear at the student workstation. NetOp is critical to the effective management of the business labs.</p> <p>Exam View – is currently effectively used in technology applications courses. Since students are positioned so closely together at the computer workstations, cheating is easy. Exam View will reduce cheating by providing each student a unique order of test questions. Teachers will be able to construct tests and administer them online, thus reducing reproduction of hard copies. Additionally, teachers will be able to easily modify and update test questions. It allows computerized grading, thus reducing teacher grading time, and provides immediate grading results for the students.</p> <p>Upgrading MicroPace Pro – Typing speed and accuracy are key to being productive in the world of work. Upgrading this software is essential to effectively continue to assist students build speed and accuracy. The current program is outdated. This program is used in both Keyboarding and BCIS, thus affecting a large number of students on every 9-12 campus.</p> <p>DVD-ROMs – DVD's available that could be used for student viewing of videos of more current subject matter than what is available in VHS format. VHS is becoming obsolete and cannot be purchased in some cases.</p> <p>CD Burners – teachers need CD burners to save large student projects for taking home to grade, for sending in to state competition, for archiving student projects to free up home directory space.</p> <p>Digital Cameras – students must create original graphics, including digital photos, to use in their projects in BCIS, Intro to Business, and International Business. Creating original graphics is emphasized so that students will appreciate the importance of following copyright laws.</p>



Supporting Research (documenting improved student achievement – attach articles of reference)	<p>NetOp - currently piloted at Williams High School and found to be effective in monitoring the student activity at each computer.</p> <p>Exam View – currently being used with great success by the PISD technology applications courses.</p> <p>Digital Camera – currently used throughout the district in many of the business labs, especially in PowerPoint presentations prevalent in each business course; also used for varying contests in Future Business Leaders of America and Business Professionals of America</p>
Site Visits to Examine Existing Models	
Suggested Timeline for Implementation	As soon as funds are available

2004 Bond Planning

Business & Information Technology 9 - 10

	Total	Cost	Total Cost
Campuses	6		
Classrooms (All)	23		
Net OP	23	2,000	46,000
Exam View (License per teacher)	11	99	1,089
Micro Pace Pro Upgrade	17	413	7,013
TOTALS			54,102

2004 Bond Planning

Business & Information Technology 11-12

	Total	Cost	Total Cost
Campuses	3		
Classrooms (All)	19		
Net OP	19	2,000	38,000
Exam View (License per teacher)	7	99	693
Micro Pace Pro Upgrade	10	413	4,125
TOTALS			42,818





PLANO

Independent School District

Commercial Foods (11-12)

Subject Area/Level	Commercial Foods (Family and Consumer Science) 11-12 PESH only
Submitted by	Judy Cordell, Carol Light
Curriculum and Technology Team Members	Judy Cordell, Carol Light
Planning Meetings (include schedules and members attending)	December 9, 2003
Description of current classroom technology environments (include hardware and software resources)	There are no student computers. This same classroom (PESH) is used for Career Studies and Sports Nutrition.
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	The existing technology consists of a teacher computer, which is used for taking attendance, entering grades, attending to school and parent e-mails, and typing worksheets, handouts and tests.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	Standardize all Family and Consumer classrooms to 8 student computers, a projector and a teacher computer. The teacher workstation will include a DVD ROM, cordless mouse and keyboard, and a cordless pointing device. School: PESH Student computers Mounted Projector Teacher Workstation: DVD ROM, cordless mouse and keyboard, cordless pointing device Access to a Digital Camera Network drops Electrical drops Computer Tables:
Staff Training Needs	Training in use of projectors, digital camera



<p>Rationale for Initiative</p>	<p>Student Computers – Students need computers to access current food industry and nutritional information and research.</p> <p>Mounted Projector – Will allow more extensive use of materials for newly purchased curriculum from the Texas Restaurant Association. It will support ancillary materials for the newly adopted Culinary Essentials textbook and allow more effective teacher illustrations and demonstrations.</p> <p>Career Studies (taught in same classroom) regularly uses computers to access Internet and do activities job-seeking/acquiring searches and resume-building. Access to Bridges software for career research is also needed. Also, pilot program with EDS necessitates students using e-mail for communication with EDS mentors. There is great difficulty in scheduling a campus computer lab, and class activities must be scheduled around availability of computer lab.</p> <p>DVD-Rom drives in the teacher computers will accommodate viewing up-to-date videos that integrate with the curriculum. It is becoming increasingly more difficult to find resources that still produce VHS tapes and often the content of VHS is obsolete.</p>
<p>Supporting Research (documenting improved student achievement – attach articles of reference)</p>	
<p>Site Visits to Examine Existing Models</p>	<p>Greater Dallas Restaurant Association/Texas Restaurant Association</p> <p>EDS</p>
<p>Suggested Timeline for Implementation</p>	<p>As soon as funds become available</p>

2004 Bond Planning

Commercial Foods 11-12 (Family & Consumer Science) PESH only

	Total	Cost	Total Cost
Campuses	1		
Classrooms (All)	1		
Computer	8	747	5,976
Drops	8	250	2,000
Electrical (Quad)	8	250	2,000
Tables	8	50	400
TOTALS			10,376





PLANO

Independent School District

Computer Science/Internetworking (11-12)

Subject Area/Level	Computer Science/Networking
Submitted by	Jim Wohlgehagen/Barbara Landingin
Curriculum and Technology Team Members	Mike Coe, Nancy Milliken, Tracy Ishman, Barbara Landingin, Jim Wohlgehagen, Don Dempsey
Planning Meetings (include schedules and members attending)	January 25, 2004 Mike Coe, Nancy Milliken, Tracy Ishman, Barbara Landingin, Jim Wohlgehagen, Don Dempsey
Description of current classroom technology environments (include hardware and software resources)	All secondary computer science classrooms have a teacher computer, ceiling mounted projection device, and a VID.
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Computer technology is the main focus of the curriculum in both computer science and networking. Students are taught the most advanced technology curriculum. College credit and networking certification, which require hands-on use of computers, can be obtained through these two programs.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	<p>Wireless Keyboard/Mouse 1 for each teacher workstation (6)</p> <p>Cordless Pointing Device (Mouse) 1 for each classroom (6)</p> <p>USB 2.0 Flash Drive 1 for each teacher (6)</p> <p>CD burners 1 for each department (3)</p> <p>19" monitors Computer Science: 1 for each teacher and student workstation (186) InterNetworking: 1 for each teacher workstation (2)</p> <p>Computer Workstations InterNetworking: 15 per campus (30)</p>



Staff Training Needs	Training would not be required for the technology requests in this proposal.
Rationale for Initiative	<p>Wireless Keyboard/Mouse These are needed to better conduct our hands-on lecture style. It helps considerably to keep students on task as I teach from the back of the lab area where I can see students' progress on their monitors.</p> <p>Cordless Pointing Device (Mouse) Teachers need the cordless pointing devices so they can present their PowerPoint presentations from various places in the room. Being tied to the computer makes it impossible for the teachers to monitor the students in the classroom while a presentation is being delivered.</p> <p>USB 2.0 Flash Drive Teachers need a convenient way of transporting data from teacher to teacher and between home and school. The flash drives provide a cheap, reusable way of transporting data; in addition, they are compact, light, reliable and easy to handle. Also, a wide variety of digital content can be stored on a single drive.</p> <p>CD burners All schools need at least one CD burner for the department. With the number (and size) of programs being written, files can be archived using CDs. A CD is a much better way to store this information than taking up hard drive space. It also allows an easy way of transporting information from teacher to teacher within the school and across the district.</p> <p>19" monitors Students typically have the following windows open:</p> <p style="padding-left: 40px;">Two or three editor windows, The compiler error window, The Sun.com website, and The problem statement document.</p> <p>Anything smaller than a 19" monitor makes it difficult for the students to create their programs efficiently.</p> <p>Computer Workstations A testing lab is needed in this course that will run up-to-date operating systems.</p>
Supporting Research (documenting improved student achievement – attach articles of reference)	



Site Visits to Examine Existing Models	
Suggested Timeline for Implementation	

2004 Bond Planning

Computer Science/Internetworking 11-12

	Computer		Total	Cost	Total Cost
	Science	Networking			
Campuses	3	2	5		
Classrooms (All)	6	2	8		
19" Monitor	186	2	188	245	46,060
Computer Workstation (15 per campus)		30	30	747	22,410
TOTALS					68,470





PLANO

Independent School District

Co-op (11-12)

Subject Area/Level	Co-Op (Family and Consumer Science) 11-12
Submitted by	Judy Cordell, Carol Light
Curriculum and Technology Team Members	Judy Cordell, Carol Light Patti Berry, Lee Ann Begis
Planning Meetings (include schedules and members attending)	December 4, 2003
Description of current classroom technology environments (include hardware and software resources)	PWSH has 8 student computers PSHS has 12 student computers PESH – 2 teachers – each room has 5 student computers
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	The existing technology consists of a teacher computer, which is used for taking attendance, entering grades, attending to school and parent e-mails, and typing worksheets, handouts and tests. Student computers currently used for career projects, i.e. resume building, job-seeking, Internet projects.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	Standardize all Family and Consumer classrooms to 8 student computers, a projector and a DVD Rom drive in teacher computer. Schools: 3 senior highs Rooms: 4 (2 at PESH) Student computers Mounted Projectors Teacher Workstation: DVD ROM, cordless mouse and keyboard, and a cordless pointing device Access to a Digital Camera Network drops Electrical outlets Computer Tables



Staff Training Needs	Training in use of projectors, digital cameras
Rationale for Initiative	<p>Student Computers – PESH only -- to bring equity to district cooperative education classrooms.</p> <p>Mounted Projectors – Teachers currently need to roll a TV into the room for student viewing. Students have difficulty seeing the TV screen and cords are a hazard. Mounted projectors will allow the teachers to use PowerPoint for instruction and the students to present their PowerPoint projects that they are doing as assignments.</p> <p>DVD Rom – Will allow purchase of DVD's currently available for instruction but not accessible due to lack of DVD player. VHS tapes are obsolete and becoming more difficult to purchase.</p>
Supporting Research (documenting improved student achievement – attach articles of reference)	
Site Visits to Examine Existing Models	
Suggested Timeline for Implementation	As soon as funds become available

2004 Bond Planning

Co-op 11-12

(Family & Consumer Science)

	Total	Cost	Total Cost
Campuses	3		
Classrooms (All)	3		
Computer	6	747	4,482
Drops	6	250	1,500
Electrical (Quad)	6	250	1,500
Tables	6	50	300
TOTALS			7,782





Creative Writing (11-12)

Subject Area/Level	Creative Writing 9-12
Submitted by	Karen McKenzie-Wilson
Curriculum and Technology Team Members	Karen Wilbanks, Karen McKenzie-Wilson, Mary Pfeiffer
Planning Meetings (include schedules and members attending)	1-7-04: Wilbanks, Pfeiffer, McKenzie-Wilson
Description of current classroom technology environments (include hardware and software resources)	At PSHS: 4 student workstations, teacher workstation, mounted projector; all other sites use regular English classroom with 0 to 7 computers per room.
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Attached report of Palm project - 2 semesters
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	Class set (35) Palms (color) with keyboards and appropriate software (Docs to Go & IRPrint) for each of 3 Senior High Schools and 5 High Schools.
Staff Training Needs	One on one by IT staff and teachers
Rationale for Initiative	<p>The Creative Writing course requires constant writing, but students do not have access to sufficient computers in the classroom or in a lab. Students must do their writing at home, so the teacher cannot conference with them during the drafting process.</p> <p>In the PSHS pilot class, students are encouraged to capture descriptions on their Palms as they occur throughout day, whatever their location. Portability of the Palm/keyboard makes this possible. Also, the teacher is able to conference with students at any time throughout the writing process since all students have access to the Palm.</p>
Supporting Research (documenting improved student achievement – attach articles of reference)	2 semesters of pilot with students in Creative Writing at PSHS show positive results.



Site Visits to Examine Existing Models	Regular visits to Pilot classroom at PSHS.
Suggested Timeline for Implementation	Fall of 2004 or 2 nd semester of 2004-2005 school year

2004 Bond Planning
Creative Writing 9-12

	Total	Cost	Total Cost
Campuses	8		
Classrooms (All)	8		
Palm (m130)	240	249	59,760
PDA keyboard	240	79	18,960
Docs to Go	240	49	11,760
IRPrint	240	24	5,760
TOTALS			96,240





PLANO

Independent School District

Early Childhood Classrooms (11-12)

Subject Area/Level	Early Childhood (Family and Consumer Science) 11 – 12
Submitted by	Judy Cordell, Carol Light
Curriculum and Technology Team Members	Judy Cordell, Carol Light, Raylene Eldridge, Patricia Koslan, Joyce Pulgia, Cynthia McCutchan
Planning Meetings (include schedules and members attending)	January 13, 2004; Judy Cordell, Carol Light, Raylene Eldridge, Patricia Koslan, Joyce Pulgia, Cynthia McCutchan
Description of current classroom technology environments (include hardware and software resources)	<p>In Pre-School room PESH 2 (old); not networked PSHS 4 (old); not networked PWSH 4 good computers</p> <p>In Early Childhood Professions classroom: PESH - 1 student computer and 1 printer PWSH - 0 student computers PSHS - 1 student computer</p>
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	<p>The existing technology consists of a teacher computer that is used for taking attendance, entering grades, attending to school and parent e-mails, and typing worksheets, handouts and tests.</p> <p>Pre-school student computers are used for enhancement in math, reading, science, etc.</p>
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	<p>Standardize all Early Learning Centers: 4 student computers and 1 touch screen in the Pre-School room 6 student computers and a mounted projector in the Early Childhood Professions classroom</p> <p>Student computers Mounted Projectors Touch Screen Teacher Workstation: DVD ROM, cordless mouse and keyboard, cordless pointing device Access to a Digital Camera Network drops Electrical outlets Computer Tables</p>



Staff Training Needs	Training in use of projectors, touch screens
Rationale for Initiative	<p>Pre-School Computers - The Early Learning Center pre-school is a tuition-based program available for children ages 3-5. A broad range of curriculum is provided for the pre-schoolers, and parents expect technology to be included as a component. Children will use programs that will incorporate math, reading, science, etc. activities. One touch-screen computer at each campus will allow for younger children who are having trouble manipulating the mouse.</p> <p>Computers - Early Childhood Professions students need classroom technology in order to access current early childhood research, complete Internet projects and use curriculum-appropriate software. Scheduling the use of a campus technology lab is ineffective and labs are unavailable on a frequent basis.</p> <p>Mounted Projectors - Students in existing lab cannot see the TV screen. Mounted projectors will allow visibility for all and allow teachers to teach using PowerPoint presentations. It will also allow students to access Early Childhood web based libraries.</p> <p>DVD Rom drives in the teacher computers will accommodate viewing up-to-date videos that integrate with the curriculum. It is becoming increasingly more difficult to find resources that still produce VHS tapes and often the content of VHS is obsolete.</p>
Supporting Research (documenting improved student achievement – attach articles of reference)	
Site Visits to Examine Existing Models	
Suggested Timeline for Implementation	

2004 Bond Planning

Early Childhood (11-12) (Family & Consumer Science)

	Total	Cost	Total Cost
Campuses	6		
Classrooms (All)	6		
Computer	24	747	17,928
Drops	23	250	5,750
Electrical (Quad)	23	250	5,750
Tables	16	50	800
Touch Screen	3	475	1,425
TOTALS			31,653





PLANO

Independent School District

Elementary Curriculum (K-5)

Subject Area/Level	Elementary Curriculum
Submitted by	Elementary Curriculum Technology Committee
Curriculum and Technology Team Members	<p>Jan Whelan and Candy Atwood (co-chairs)</p> <p>Marlene Williams, Christie Duke, Julia Haun, Ginger Britain, Phyllis Stoup, Karen Lantz, Sarah Lake, Emelia Ahmed, Dot Pitts, Ingrid Huisman, Lisa Awbrey, Jan Gerick, Maria Galvan, Harriet Bell, Cynthia Williams</p>
Planning Meetings (include schedules and members attending)	<p>December 9, 2003</p> <p>January 6, 2004</p> <p>January 20, 2004</p>
Description of current classroom technology environments (include hardware and software resources)	<p>7 student computers per classroom K-4</p> <p>8 student computers per classroom 5th</p> <p>27" TV/monitor for display of computer and video sources</p> <p>VCR; laserdisc players; Cable TV; district wide broadcast network; digital video library</p> <p>Available for Classroom Use:</p> <p>VIDS (1 per campus)</p> <p>digital camera (1 per campus)</p> <p>mobile broadcast cart (1 per campus)</p> <p>wireless lab with 16 laptops (1 per campus)</p> <p>video conferencing unit (1 per campus)</p> <p>digital projector (1 per campus)</p> <p>digital microscopes (2 per campus)</p> <p>calculators</p>
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	<p>The kindergarten program incorporates technology as an integral part of learning. Technology tools include the computer, CD-ROM, laserdisc player, VCR, large screen monitor, streaming video library, online reference resources, and digital camera. Numerous computer software programs allow students to research information, create multimedia presentations, problem solve, read stories, develop vocabulary and phonological skills, write stories and reports, and use critical thinking skills. This software supports the instruction in the classroom, extending and enriching learning experiences.</p> <p>The language arts program provides for instruction to achieve the goal of all students reading and writing at their potential. To</p>



achieve this goal, teachers utilize classroom technology to support the delivery of the balanced literacy program. Teachers use computers, large screen monitors, overhead projectors, and VIDS for modeled and shared reading and writing activities.

In the classroom, students have access to a variety of technological resources that support the district-adopted curriculum in language arts. These include the specific software for phonics/spelling, reading and writing; district-approved web sites; computer software specific to Integrated Curriculum content; streaming video library and online reference resources, keyboarding and word processing software. Students learn to operate computers and associated peripherals while using software applications both as instructional aides and for production. Computers provide opportunities for the practical application of listening, speaking, reading, and writing. Students use technology to research and synthesize information as they create multimedia presentations.

Technology is an integral part of the elementary **mathematics** program. In the Texas Essential Knowledge and Skills students at grades K-5 are expected to use mathematical tools (real objects, manipulatives, and technology) to solve problems. The use of technology allows teachers to teach traditional topics in a different way as well as teach new topics that are not accessible without technology. Students are taught the appropriate use of calculators to support concept development, problem solving, and critical thinking skills. Computer software programs support the development of mathematical skills, conceptual understanding, problem solving and logical reasoning. These computer programs and tools are used to support instruction, support multi-tasking opportunities, and to extend and enrich learning experiences. Internet resources and streaming video are referenced throughout the curriculum as additional tools to support student achievement.

Integrated Curriculum (science, social studies, and health) incorporates technology as an integral part of learning from Kindergarten through fifth grade. Students have access to 8 or 9 computers in their classroom with Internet capability. They use a variety of software applications such as databases and simulations, which include multimedia presentation tools. Additional technology tools include CD-ROMs, laser discs, VCRs, large screen monitors, and digital cameras, VIDS, wireless lab cart, and a mobile broadcast cart. Inkjet and laser printers and scanners are also utilized. A large number of Web sites, streaming video library, online reference resources and *PowerPoint* presentations are available to teachers and students through an electronic curriculum planner. This database includes the Integrated Curriculum program description, instructional sequence, assessments, standards and TEKS, support programs, and teacher and parent resources. Technology in the elementary Integrated Curriculum classroom facilitates flexible grouping, multitasking, and individualized instruction.



<p>Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)</p>	<p>Video Imaging Device (1 per grade level) USB Microscope (1 per grade level) Digital Cameras (2 per campus) Calculators, TI-15, 3-5th (11 per class) 616 classrooms TI-10, K-1st (5 per class) 439 classrooms TI-10, 2nd (11 per class) <u>221</u> classrooms 1276 total</p> <p>Grades K-1, TI-10 (5 per classroom) Grade 2, TI-10 Teacher Kit plus one demo calculator per teacher (11 total) Grades 3-5, TI-15 Teacher Kit & one demo calculator per teacher (11 total)</p> <p>Purchase software:</p> <p>Destination Reading Course I-II</p> <p>Destination Math Course I-V</p>
<p>Staff Training Needs</p>	<p>PDH will be offered for equipment such as Video Imaging Devices, USB microscopes, calculators, and cameras.</p>
<p>Rationale for Initiative</p>	<p>The state mandates, as outlined in the TEKS.</p> <p>Changing instructional methods require better ways of sharing information. Use of the Video Imaging Device would allow teachers to share books and other print materials, student writing, using manipulatives to solve math problems, view science specimens and models, and student work. A VID allows for student interaction, the sharing of classroom experiences, and immediate feedback, components necessary for a brain-compatible classroom.</p> <p>The USB microscope allows students to observe the finer details of plants, animals, and objects early in their science experience. In digital microscopy, the computer screen becomes the microscope eyepiece, making focusing specimens easier for young students and providing opportunities for the whole class to see the images. Digital microscopes also provide the capability to take snapshots and save the images on the computer for other instruction or assessment activities.</p> <p>Digital cameras can document any learning experience, which is so important during K-2, the portfolio years. Photos can document simulations, student products, events for a class book, collected data, problem solving experiences, citizenship events, and investigations in social studies and/or science.</p> <p>Calculators The Texas Essential Knowledge and Skills identify the use of technology as a student expectation in the elementary grades. The National Council of Teachers of Mathematics state in the Technology Principle of the <u>Principles and Standards for School Mathematics</u> that technology is essential in teaching and</p>



	<p>learning mathematics; it influences the mathematics that is taught and enhances students' learning. Studies show that mathematical problem solving is enhanced by the use of calculators because students feel more confident in initiating problem solving; they do more exploration using a calculator; students focus more on the problem to be solved and less on the algorithm for solving it; explain their strategies through deductive reasoning more consistently and interpret their answers more readily. Making calculators available, as a mathematical tool will not replace the need for students to learn basic facts and algorithms. Instead use of calculators and computers will allow students to learn what each tool can do and to determine which tool (if any) is appropriate for which task.</p>
<p>Supporting Research (documenting improved student achievement – attach articles of reference)</p>	<p>Video Imaging Device Using multimedia in instruction provides an electronic hands-on experience that creates more meaningful learning and a higher motivation for at-risk students (Technology in the Classroom)</p> <p>Bowman (1998) points out the importance of starting early. She suggests that all young children must be provided with chances to use technology both in ways that will prepare them for modern society and as tools to represent their creative ideas, deepen their thinking, and help them with problem solving.</p> <p>“Teachers need to include the use of real-life activity, including classroom demonstrations, projects, field trips, and visual imagery of certain experiences and performances. Success depends on using all of the senses and immersing the learner in a multitude of complex and interactive experiences.” (<i>Making Connections, Principles of Brain-Based Learning</i>, Caine and Caine, 1991)</p> <p>A learner needs “much opportunity to manipulate information, and talking with others in a workgroup is an effective way to manipulate information. “ (Effective Collaboration and Immediate Feedback Components of a Brain Compatible Classroom)</p> <p>USB Microscope “The <i>National Science Education Standards</i> for grades K-4 recommend elementary students begin using microscopes to observe the finer details of plants in their science experiences (NCR 1996). In digital microscopy, the computer screen becomes the microscopic eyepiece, making focusing specimens easier and providing opportunities to view images as a class. Another advantage... is the ability to take snapshots and save these images. The images can also provide useful assessment applications, as they can be exported into a word-processing document and labeled.” (<i>Discovering Flowers in a New Light</i>, McNall and Bell, NTSA Science and Children, January 2004)</p> <p>Digital Camera “Technology adds tools that facilitate access to the people, content, strategies, activities, guidance and opportunities to apply new information, making learning a personal process.”</p>



	<p>(<i>Electronic Leaf Project</i>, Hargis and Houston, Science and Children, May 2000). Video imagery has been described as a “tool of the mind” (Forman 1999) that has the potential to help children relive their experiences and process them in deeper, more focused, and more detailed ways. In the case of digital imagery, records of children’s experiences can be loaded onto the computer where children can seek them out and review them at will or under adult guidance.</p> <p>Calculator “Technology has always been an integral part of science. Calculators, digital cameras, computers, and appropriate software all can be integrated in solving real problems/investigations in the classroom.” (<i>C is for Change</i>, William “Bumper” White, Science and Children, March 2001)</p> <p>Calculator technology can be used in various ways in mathematics classrooms beyond replacing paper-and pencil computation. Potential uses include developing number sense, exploring mathematical concepts such as geometry, representing and graphing data, and solving complex problems. Resistance to the use of calculators in the teaching and learning of mathematics has been voiced. However, the calculator-use research concludes that when calculators when used in a variety of ways, students performed as well as, or better than, those who used paper-and-pencil methods. Internationally, as students’ in-class calculator use increased, so did their level of performance on mathematics assessments. (<i>What we Know about Mathematics Teaching and Learning</i>, Mid Continent Research for Education and Learning)</p>
Suggested Timeline for Implementation	Phased in throughout the length of the bond.

2004 Bond Planning
Elementary Campuses

	Total	Cost	Total Cost
Campuses	288		
Classrooms (All)	1,277		
Camcorder/tripod	1	620	620
Microscope - USB	245	425	104,125
TI-15 (grades 3-5)	6,732	12	81,390
TI-10 (grades k-2)	4,626	12	55,928
Destination Reading Course I-II	43	10,000	430,000
Destination Math Course I-V	43	10,000	430,000
TOTALS			1,102,063





PLANO

Independent School District

ESOL/Bilingual (K-12)

Subject Area/Level	Secondary ESL, all grades
Submitted by	Multilingual Education Department, Vangie Cortez, Director
Curriculum and Technology Team Members	Vangie Cortez, Penny Phariss, Don Dempsey
Planning Meetings (include schedules and members attending)	January 20, 2004
Description of current classroom technology environments (include hardware and software resources)	<p>All ESL classrooms have <u>Rosetta Stone</u> and <u>ELLIS</u>, English language development software. <u>Rosetta Stone</u> is used principally with newly arrived students to quickly build basic vocabulary and to attune their ear to listening to English. <u>ELLIS</u> is used with intermediate and advanced students who need to master listening, pronunciation, culture, grammar, vocabulary and communicative competence. These skills are necessary for English language learners to master the TEKS and pass TAKS. <u>ELLIS</u> helps these students develop their listening, speaking, reading, and writing skills, which will be reported for Adequate Yearly Progress for No Child Left Behind of 2001.</p> <p>SPECIAL SITE LICENCE FOR COMPLETE DISTRICT</p>
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	<p>In addition, all ESL students have access to the standard technology and software available to regular ed students. Attached is a copy of one project done by a class of beginner ESL students at Haggard MS during November. Research was done on the internet, and keyboarding was done by the students themselves, many of whom are using a new alphabet when writing in English.</p>
<p>Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)</p> <p>Gayle – (972) 618-1049</p> <p>Deanna – (972) 712-0067 / (972) 841-7140 cell</p> <p>Chrissie – (972) 608-8839</p>	<p>District license for Ellis system software Rosetta Stone Chinese language system software</p>



Staff Training Needs	Provided by the Instructional Technology Department
Rationale for Initiative	All ESL classrooms have <u>Rosetta Stone</u> and <u>ELLIS</u> , English language development software. <u>Rosetta Stone</u> is used principally with newly arrived students to quickly build basic vocabulary and to attune their ear to listening to English. <u>ELLIS</u> is used with intermediate and advanced students who need to master conversation, grammar, vocabulary and conventions. Both programs are often used according to the needs of individual students.
Supporting Research (documenting improved student achievement – attach articles of reference)	<u>ELLIS</u> was awarded the 16 th annual Software Award of Excellence Award by <u>Technology and Learning</u> magazine. Awards were presented to 41 winners, 30 in the School category, and 11 in the Home Learning category. More than 60 educator-judges, students and editors of <u>Technology and Learning</u> spent many hours testing the programs to determine the winners.
Site Visits to Examine Existing Models	Rather than visit sites, a survey was taken of secondary ESL teachers and whether or not they felt the device would allow them to deliver the standard curricula to English language learners. All the teachers felt the devices were needed to address those needs as well as the curriculum needs of ESL courses themselves. A few teachers whose classrooms already have them expressed relief that all ESL students and teachers would have equal access to curriculum.
Suggested Timeline for Implementation	Installation should occur as soon as possible after the bond issue passes, as it is important that the VIDs be available at the earliest possible time to ensure LEP students have the exposure to the same curricula as other students.

2004 Bond Planning
ESOL/Bilingual - All Grades

	Total	Cost	Total Cost
Campus	63		
Classrooms (All)			
Ellis (District License)	1	150,000	150,000
Chinese and Rosetta Stone replacement	1	1,000	1,000
TOTALS			151,000





PLANO

Independent School District

Family and Consumer Science (9-12)

Subject Area/Level	Family and Consumer Science (Interior Design, Management, Family Living, Food Science, Child Development, Career Studies, Sports Nutrition) 9 -12
Submitted by	Judy Cordell, Carol Light
Curriculum and Technology Team Members	Judy Cordell, Carol Light, Wana Baker, Ruth Ann Zaugg, Laura Denson, Stacha Hicks, Debbie Dobbs, Judi Housewright, Wendy McKay
Planning Meetings (include schedules and members attending)	January 8, January 12, 2004
Description of current classroom technology environments (include hardware and software resources)	<p>Most Family Living, Interior Design, Child Development, Career Studies, Sports Nutrition, Food Science and Management classes have no student computers. There are no student computers in Family and Consumer Science at any of the 5 high schools</p> <p>PWSH 1 classrooms PSHS 1 classroom PESH 3 classrooms</p>
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	The existing technology consists of a teacher computer which is used for taking attendance, entering grades, attending to school and parent e-mails, and typing worksheets, handouts and tests.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	<p>Standardize all Family and Consumer classrooms to 8 student computers, a projector and a DVD-ROM drive in teacher computer.</p> <p>Student computers: Mounted Projectors: Teacher Workstation: DVD ROM, cordless mouse and keyboard, and a cordless pointing device</p> <p>Access to a Digital Camera Network drops Electrical outlets Computer Tables</p>



Staff Training Needs	Training in use of projectors, digital cameras
Rationale for Initiative	<p>Student Computers – Students need computers to access the Internet and gain current information in all of the curriculum areas, i.e. management, housing, food science and nutrition, child development, career studies, etc. Computers will allow students to use instructional materials that are available with the newly adopted textbooks. Books are: <i>Strengthening Family & Self, Working With Young Children, Homes Today and Tomorrow, Succeeding in the Work of Work, and The Developing Child</i>. Software is available in varying areas but cannot be used due to lack of computer accessibility. Access to student computers is only available by reserving a campus computer lab, and the labs are seldom available when needed.</p> <p>Mounted Projectors – Both teacher and students need the ability to present PowerPoint projects and use monitors for group instruction. There are no TV's in the current classrooms. Teachers must acquire a TV and roll it into the classroom. Additionally, students have difficulty seeing the small monitor.</p> <p>Digital Cameras – Digital cameras will allow students to take photos of projects and incorporate them into their PowerPoint projects. Also, photos can be taken of student/teacher demonstrations and used during instruction.</p> <p>DVD ROM – Currently available and could be used for instruction, rather must use VHS tapes, which are becoming obsolete.</p>
Supporting Research (documenting improved student achievement – attach articles of reference)	
Site Visits to Examine Existing Models	
Suggested Timeline for Implementation	As funds become available



2004 Bond Planning

*Family & Consumer Science 9-10
(Personal & Family Development, Apparel,
Nutrition & Food Science,
Preparation for Parenting)*

	Total	Cost	Total Cost
Campuses	5		
Classrooms (All)	5		
Computer	40	747	29,880
Drops	40	250	10,000
Electrical (Quad)	40	250	10,000
Tables	40	50	2,000
TOTALS			51,880

2004 Bond Planning

*Family & Consumer Science -- All Other 11-12
Interior Design, Management, Family Living,
Food Science, Child Development,
Career Studies, Sports Nutrition)*

	Total	Cost	Total Cost
Campuses	3		
Classrooms (All)	5		
Computer	40	747	29,880
Drops	40	250	10,000
Electrical (Quad)	40	250	10,000
Tables	40	50	2,000
TOTALS			51,880





PLANO

Independent School District

Fashion Design (11-12)

Subject Area/Level	Fashion Design (Family and Consumer Science) 11 -12 PWSH and PSHS only
Submitted by	Judy Cordell, Carol Light
Curriculum and Technology Team Members	Judy Cordell, Carol Light, Jodi Miller, Bonnie Turnbo
Planning Meetings (include schedules and members attending)	January 12, 2004
Description of current classroom technology environments (include hardware and software resources)	PSHS has 1 student computer. PWSH has 0 student computers.
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	The existing technology consists of a teacher computer, which is used for taking attendance, entering grades, attending to school and parent e-mails, and typing worksheets, handouts and tests.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	Standardize all Family and Consumer classrooms to 8 student computers, a projector and a DVD-ROM drive in teacher computer. Student computers Mounted Projectors Teacher Workstation: DVD ROM, cordless mouse and keyboard, and cordless pointing device Access to a Digital Camera Network drops Electrical outlets Computer Tables Software – SnapFashun and PhotoShop 7.0
Staff Training Needs	Training in use of projectors, digital cameras Training on Adobe software; SnapFashun software training funded by Career Education



Rationale for Initiative	<p>Student Computers are needed for students to use SnapFashun software, which will be purchased by the Career Education Department. This software will provide instruction and assist students in creating and producing designs, and do merchandising projects. Additionally, computers will enable students to complete Internet projects and access current fashion industry standards and information.</p> <p>Computers are needed to allow Fashion Design students to use Bridges software for career research and for creating resumes.</p> <p>Mounted Projectors – Will allow SnapFashun to be projected to all students. Teachers have no mounted TV in classroom and must roll in a portable unit. It is difficult to for students to see. Additionally, students and teacher need to use PowerPoint for class instruction and display of projects.</p> <p>DVD ROM – DVD's are currently available and could be used to facilitate instruction; VHS tapes are currently being used and are becoming obsolete and hard to find.</p> <p>Digital cameras - to enable students to take pictures of their designs and prepare merchandising projects (teacher is currently bringing her personal camera from home)</p>
Supporting Research (documenting improved student achievement – attach articles of reference)	
Site Visits to Examine Existing Models	<p>Teacher workshop at Dallas Art Institute using SnapFashun</p> <p>Teacher visit to Fashion Institute of Design & Merchandising, Los Angeles</p>
Suggested Timeline for Implementation	As soon as funds become available

2004 Bond Planning

Fashion Design 11-12 (Family & Consumer Science) PWSH and PSHS only

	Total	Cost	Total Cost
Campuses	2		
Classrooms (All)	2		
Computer	15	747	11,205
Drops	15	250	3,750
Electrical (Quad)	15	250	3,750
Tables	15	50	750
Adobe Illustrator CS	17	99	1,683
SnapFashun Women's Library	17	1,495	25,415
SnapFashun Men's Library	17	2,445	41,565
TOTALS			88,118





PLANO

Independent School District

Foreign Language (6-8)

Subject Area/Level	Middle School Languages Other Than English (LOTE) 6 - 8
Submitted by	Loretta Garcia Williams, Clara Jackson
Curriculum and Technology Team Members	Doug Adams, April Aly, Ben Benavides, Antony Christophe, Ana Dubin, Patrick Duffy, Becky Elizondo, Claudia Keller, Alex Na, Scot Pott, Charlotte Salmon, Susan Schackman, Greg Shields, Hector Torres, Aaron Wilkerson, Clara Jackson, Loretta Williams
Planning Meetings (include schedules and members attending)	11-17-2003, 12-08-03, 01-14-04 Members Attending: See Above
Description of current classroom technology environments (include hardware and software resources)	Mounted Television, VCR, and Teacher Computer Workstation in every middle, high, and senior high classroom; Analog Language Labs at all High School and Senior High Campuses
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Current amount of student speaking time has increased and has shown improvement on standardized test scores. Students are achieving the expected low- to mid-level novice proficiency of the language.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	<p>The Department of Languages Other than English proposes that the standard LOTE classroom contain the following:</p> <p>A mounted PLUS projector with remote. Along with the projector remote,</p> <p>The standard LOTE classroom should contain a minimum of 8 student computer workstations.</p> <p>Each LOTE teacher workstations should have a CD-Burner and DVD player installed and/or activated. Each teacher should have a wireless mouse and keyboard and/or a Cordless Pointing Device.</p> <p>Access to a scanner and access to a Mobile Lab with 25 wireless laptops.</p> <p>Access to a scanner.</p> <p>Additional Ancillary Textbook Software.</p> <p>Campuses: 12 – Classes: 29</p>



Staff Training Needs	Mobile lab training – local training done at campus.
Rationale for Initiative	<p>LOTE classrooms need updating to stay current with technology advances in education. Ease in using presentation software, video streaming is doable in most classrooms in Plano. The LOTE classroom however, does not have the capabilities. Software is necessary to assure cultural and phonological diversity. It will also ensure comparisons of languages.</p> <p>Results will Include better teaching and better learning in LOTE classrooms throughout Plano ISD. Technology will never replace teachers but technology allows students and teachers to accomplish those things that cannot be done individually in a classroom. Speaking time is maximized in a laboratory. Proficiency in a second language is the result of consistent, repetitive practice over a sustained period of time. Students produce the best language in technological environments that allows the student to focus without distraction.</p>
Supporting Research (documenting improved student achievement – attach articles of reference)	The LOTE curriculum contains a great deal of software and digital content that is currently not being used by students because of the lack of student computers.
Site Visits to Examine Existing Models	<p>Spring 2003 – TSI in Arlington: Visited the company for a hands-on demonstration of the Sony Virtuoso Digital Lab.</p> <p>December 2003 – Five vendors visited Clark HS to show visual demonstrations of their Digital Labs. They included, ASC, Sony, Educational Media, Stevens Learning Center</p>
Suggested Timeline for Implementation	<p>2003 – Study and research</p> <p>01/2004 – Bond Proposal Submitted</p>

2004 Bond Planning

Middle School Foreign Language

	Total	Cost	Total Cost
Campuses	12		
Classrooms (All)	29		
Computer	232	747	173,304
Drops	272	250	68,000
Electrical (Quad)	272	250	68,000
Ancillary Textbook Software	12	2,000	24,000
TOTALS			333,304





PLANO

Independent School District

Foreign Language (9-12)

Subject Area/Level	High School Languages Other Than English (LOTE) 9 - 12
Submitted by	Loretta Garcia Williams, Clara Jackson
Curriculum and Technology Team Members	Doug Adams, April Aly, Ben Benavides, Antony Christophe, Ana Dubin, Patrick Duffy, Becky Elizondo, Claudia Keller, Alex Na, Scot Pott, Charlotte Salmon, Susan Schackman, Greg Shields, Hector Torres, Aaron Wilkerson, Clara Jackson, Loretta Williams
Planning Meetings (include schedules and members attending)	11-17-2003, 12-08-03, 01-14-04 Members Attending: See Above
Description of current classroom technology environments (include hardware and software resources)	Mounted Television, VCR, and Teacher Computer Workstation in every middle, high, and senior high classroom; Analog Language Labs at all High School and Senior High Campuses
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Current amount of student speaking time has increased and has shown improvement on standardized test scores. Students are achieving the expected low- to mid-level novice proficiency of the language.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	<p>The Department of Languages Other than English proposes that each campus have a Sony Virtuoso Major System Digital Learning Lab. The digital lab would be integrated into the current room where the analog lab is housed. It will incorporate existing furniture and electricity. However the following components would need to be added:</p> <p>Mixers, one power supply for every two mixers, two sets of cables per student station, student software at each station, network drops per student station, web cameras for the ASL courses</p> <p>Each LOTE teacher workstations should have a CD-Burner and DVD player installed and/or activated. Each teacher should have a wireless mouse and keyboard and/or a Cordless Pointing Device.</p> <p>The LOTE Department also proposes that the standard LOTE classroom contain the following:</p>



	<p>A mounted PLUS projector with remote.</p> <p>Access to a scanner.</p> <p>Additional Ancillary Textbook Software.</p> <p>Campuses: 8 Classrooms: 69</p>
<p>Staff Training Needs</p>	<p>Sony/TSI training for one teacher per campus (campus trainer)</p> <p>Campus Trainers: Part 1- Introduction to the Sony Virtuoso; Part 2 – Extended training for LOTE teachers</p>
<p>Rationale for Initiative</p>	<p>New LOTE technology has moved from analog to digital. Digitized technology allows students and teachers access to hardware and software from anyplace and acts seamlessly with the internet and intranet. Curriculum based audio files that students hear, manipulate and use are in digital format.</p> <p>LOTE classrooms need updating to stay current with technology advances in education. Ease in using presentation software, video streaming is doable in most classrooms in Plano. The LOTE classroom however, does not have the capabilities. Software is necessary to assure cultural and phonological diversity. It will also ensure comparisons of languages.</p> <p>Results will include better teaching and better learning in LOTE classrooms throughout Plano ISD. Technology will never replace teachers but technology allows students and teachers to accomplish those things that cannot be done individually in a classroom. Speaking time is maximized in a laboratory. Proficiency in a second language is the result of consistent, repetitive practice over a sustained period of time. Students produce the best language in technological environments that allows the student to focus without distraction.</p>
<p>Supporting Research (documenting improved student achievement – attach articles of reference)</p>	<p>The digital lab is the cornerstone of the new language multimedia center. "We will soon have to teach students who have been brought up on interactive electronic 'texts' and we will have to prepare them for a world of work that relies on the electronic word." (Armstrong, Yelter-Vassot, FL Annals, 27, No. 4.</p> <p>Results show that digital language labs produce higher scores on oral proficiency examinations as well as an increase in departmental examination for credit. Students are able to hear more clearly and there is no interference of other classroom noises. Also, the computer at the student station allows each to student to view video, hear audio, and take oral examinations in a more private manner.</p>



Site Visits to Examine Existing Models	<p>Spring 2003 – TSI in Arlington: Visited the company for a hands-on demonstration of the Sony Virtuoso Digital Lab.</p> <p>December 2003 – Five vendors visited Clark HS to show visual demonstrations of their Digital Labs. They included, ASC, Sony, Educational Media, Stevens Learning Center</p>
Suggested Timeline for Implementation	<p>2003 – Study and research 01/2004 – Bond Proposal Submitted</p>

2004 Bond Planning

High School Foreign Language

	Total	Cost	Total Cost
Campuses	6		
Classrooms (All)	46		
Sony Digital Learning Lab	5	45,000	225,000
Ancillary Textbook Software	6	2,000	12,000
TOTALS			237,000

2004 Bond Planning

Sr. High Foreign Language

	Total	Cost	Total Cost
Campuses	3		
Classrooms (All)	23		
Sony Digital Learning Lab	3	45,000	135,000
Ancillary Textbook Software	3	2,000	6,000
TOTALS			141,000





PLANO

Independent School District

Health (8-12)

Subject Area/Level	Health 8-12
Submitted by	Melinda Smith and Rita Turner
Curriculum and Technology Team Members	Elementary and Secondary Physical Education, Foundations and Health Teachers, one Elementary and Secondary School Principal, Instructional Technology Specialist and Health and Physical Education Coordinator: Members of the Leadership Team include: Larry Barbour, Connie Beaney, Courtney Becker, Julie Becker, Sheryl Bridges, Lori Campbell, Diane Davey, Jennifer Estill, Randi Frank, Jim Garcia, Kelli Haas, Tracy Habern, Carol Johnson, Tavena Kondziela, Cheryl Kool, Mary Jo Landingham, Saul Laredo, Kristy Logan, Aaron McNeil, Johnny Parks, Don Patterson, Susan Peel, Ben Pirillo, Lilian Quigley, Shanda Reese-Jones, Melinda Smith, Angie Spangler, Bruce Strong, Jan Thomas, Rita Turner, Bradley Warren
Planning Meetings (include schedules and members attending)	<p>November 20: Planning Meeting for Technology, Melinda Smith and Rita Turner</p> <p>November 21: Planning Meeting for Technology: Mary Jo Landingham, Johnny Parks, Ben Pirillo, Melinda Smith</p> <p>December 11: Leadership Team: Technology Discussion Meeting: Connie Beaney, Courtney Becker, Julie Becker, Sheryl Bridges, Lori Campbell, Diane Davey, Jennifer Estill, Randi Frank, Jim Garcia, Kelli Haas, Tracy Habern, Carol Johnson, Tavena Kondziela, Cheryl Kool, Mary Jo Landingham, Kristy Logan, Aaron McNeil, Johnny Parks, Don Patterson, Susan Peel, Ben Pirillo, Lilian Quigley, Shanda Reese-Jones, Melinda Smith, Angie Spangler, Jan Thomas, Rita Turner, Bradley Warren</p> <p>January 13: Planning and Writing Meeting for Technology: Tracy Habern, Cheryl Kool, Melinda Smith</p> <p>January 20: Discussion meeting with Dr. Wussow</p> <p>January 21: Discussion meeting with Rita Turner</p>
Description of current classroom technology environments (include hardware and software resources)	<p>Current technology environments at the Middle School (8) include a teacher computer, student computers, Plus Projectors with audio systems, and a printer. Our teachers have use of the PISD digital curriculum and multimedia access.</p> <p>Current technology environments at the High School and Senior High include: teacher computer, most have student computers,</p>



	only one school has the Plus Projectors with audio system, and some have, share or no printers at all. Three classrooms do not have the whiteboards.
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Our middle school curriculum is on-line and all teachers at this level are using the technological enhancements to instruct their students.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	See attached spreadsheets.
Staff Training Needs	Staff training and dissemination of information would include introduction of new technology and curriculum during curriculum development days, new teacher in-service and on-going support from the Coordinator and the Physical Education and Health Leadership Team.
Rationale for Initiative	<p>The Leadership Team for Physical Education and Health would like to request the following vital technological and curriculum materials to effectively reach every student in their classroom. A rationale for each request is outlined below.</p> <p>Plus Projectors with audio systems (High School/Senior High) The Leadership Team would like to implement a ceiling mounted Plus Projector with audio for their classroom needs. The projectors will allow the teacher to present up to date information and presentations. It will provide easy access to digital curriculum, multimedia viewing, PowerPoint presentations, and be a useful tool for group discussions. The Plus Projector will provide an opportunity for students to use technology to present information.</p> <p>Some TEKS requirements for incorporating technology:</p> <p>(b)(4)(B) analyze the health messages delivered through media and technology</p> <p>Internal DVD drive (on Teacher computers) (8-12) As writers of curriculum change their format for delivery, the DVD drive is becoming a necessity for vital updated health information. The Laserdiscs are no longer accessible through the publishers.</p> <p>Manipulatives, Models and Displays As students learn and discuss the varied topics in health, models and displays are available as an instructional tools. Students who can see 5lbs of fat, might be more conscious of the nutritional value of what they put in their mouth. Visual models and displays of what tobacco does to the lungs or what smokeless tobacco can do to the mouth would have a greater impact on the students. Cardiopulmonary Resuscitation (CPR) manikins will be used in the classroom for demonstration only at</p>



	<p>the 8th grade level.</p> <p>The 7th and 8th grade TEKS (b)(5)(G) demonstrate basic first-aid procedures including Cardiopulmonary Resuscitation (CPR) and the choking rescue</p> <p>Technology is an integral part of our curriculum. Impacting students' decisions on their health and well-being is the cornerstone of our curriculum. Any enhancements we can make to our classroom delivery of the necessary and vital curriculum will assure student understanding and help promote and create independent learners.</p>
Supporting Research (documenting improved student achievement – attach articles of reference)	N/A
Site Visits to Examine Existing Models	Plano ISD Middle School campuses where technology is being used daily.
Suggested Timeline for Implementation	See attached proposal on spreadsheet.

2004 Bond Planning

Health 8

	Total	Cost	Total Cost
Campuses All	12		
Classrooms (All)	13		
CPR Manikins	13	161	2,092
Manipulatives, Models and Displays	21	1,196	25,116
TOTALS			27,208

2004 Bond Planning

Health 9-12

	Total	Cost	Total Cost
Campuses All	8		
Classrooms (All)	11		
Manipulatives, Models and Displays	11	1,196	13,156
TOTALS			13,156





PLANO

Independent School District

Health Science Technology (9-12)

Subject Area/Level	Health Science Technology, Grades 9-10																
Submitted by	Judy Cordell, Carol Light																
Curriculum and Technology Team Members	Judy Cordell, Carol Light Jane Shovlin, Sandy Thorson, Janie Gilkison, Janet Bailey, Kelley Adams, Nanci Kistler, Amanda Hellmann																
Planning Meetings (include schedules and members attending)	December 11, 2003																
Description of current classroom technology environments (include hardware and software resources)	<table border="0"> <tr> <td>Clark</td> <td>8 student computers</td> </tr> <tr> <td>Williams</td> <td>8 student computers</td> </tr> <tr> <td>Vines</td> <td>7 student computers</td> </tr> <tr> <td>Jasper</td> <td>0 student computers</td> </tr> <tr> <td>Shepton</td> <td>7 student computers</td> </tr> <tr> <td>PESH</td> <td>5 student computers, 1 mounted projector</td> </tr> <tr> <td>PSHS</td> <td>2 rooms each have 5 student computers and 1 mounted projector. 3rd room (Building B-lower) has no student computers and no mounted projector.</td> </tr> <tr> <td>PWSH</td> <td>8 student computers in 1 room, mounted projector</td> </tr> </table>	Clark	8 student computers	Williams	8 student computers	Vines	7 student computers	Jasper	0 student computers	Shepton	7 student computers	PESH	5 student computers, 1 mounted projector	PSHS	2 rooms each have 5 student computers and 1 mounted projector. 3 rd room (Building B-lower) has no student computers and no mounted projector.	PWSH	8 student computers in 1 room, mounted projector
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PWSH	8 student computers in 1 room, mounted projector																
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	<p>Teacher computer, which is used for taking attendance, entering grades, attending to school and parent e-mails, and typing worksheets, handouts and tests.</p> <p>Student computers are used for Internet projects, current event assignments, and medical research.</p>																
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	<p>Student Computers to bring consistency to HST labs in district</p> <p>Mounted projectors for the high school health science technology labs.</p> <p>Teacher Workstations: DVD player, cordless mouse and keyboard, and cordless pointing device.</p> <p>A.D.A.M. Interactive Anatomy software</p> <p>USB Microscopes</p>																



<p>Staff Training Needs</p>	<p>Mounted projector training provided by the Career Ed technology liaison</p> <p>A.D.A.M. software Training</p> <p>USB Microscope Training</p>
<p>Rationale for Initiative</p>	<p>Mounted Projectors –Schools currently have a free-standing projector. Due to the configuration of the classrooms, the cords must extend across the room, which provides a safety hazard. Numerous students have tripped over the cords and one was slightly injured. Machines must be secured in a locked area each night, thus necessitating disconnection of all of the cords. The HST CD produced by the Texas Education Agency provides a wealth of information that the teachers use as PowerPoint presentations. Other PowerPoint instructional material is used regularly. This would allow instruction using instructional ancillary materials available with the newly adopted textbooks, <i>Diversified Health Occupations</i> and <i>Health Care Science Technology</i>.</p> <p>ADAM Interactive Anatomy software – allows students to do full dissection and provides in-depth 3-D models of all of the systems. It also provides for teaching medical terminology with audio in order for the students to hear the pronunciation, and it can be changed into different languages. There is currently no comprehensive material for medical terminology. Anatomy and physiology as well as medical terminology are taught in Medical Science.</p> <p>USB Microscopes – Allows students to view cells, tissue, specimens and to capture them for graphics to be incorporated into student projects.</p> <p>DVD-Rom Drives – Allows teachers to show DVD (available with new textbooks). VHS are becoming difficult to purchase.</p>
<p>Supporting Research (documenting improved student achievement – attach articles of reference)</p>	
<p>Site Visits to Examine Existing Models</p>	
<p>Suggested Timeline for Implementation</p>	<p>As soon as funds are available</p>



2004 Bond Planning
Health Science 9-10

	Total	Cost	Total Cost
Campuses	5		
Classrooms (All)	5		
Computer	10	747	7,470
Drops	10	250	2,500
Electrical (Quad)	10	250	2,500
Microscope - USB	5	425	2,125
Tables	10	50	500
A.D.A.M. Interactive Anatomy Lab Pack (6)	8	2,195	17,560
TOTALS			32,655

2004 Bond Planning
Health Science Technology 11-12

	Total	Cost	Total Cost
Campuses	3		
Classrooms (All)	5		
Computer	25	747	18,675
Drops	26	250	6,500
Electrical (Quad)	26	250	6,500
Microscope - USB	6	425	2,550
Tables	26	50	1,300
A.D.A.M. Interactive Anatomy Lab Pack (6)	9	2,196	19,764
TOTALS			55,289





Journalism (9-12)

Subject Area/Level	Journalism, Yearbook, and Newspaper																																																																												
Submitted by	Karen McKenzie-Wilson, English Coordinator and Mary Pfeiffer, Instructional Technology Specialist																																																																												
Curriculum and Technology Team Members	Karen McKenzie-Wilson, Chrissie Lint, Gayle Johnson, Deanna Martin																																																																												
Planning Meetings (include schedules and members attending)	January 22, 2004 & emails																																																																												
Description of current classroom technology environments (include hardware and software resources)	<table border="1"> <thead> <tr> <th></th> <th>PESH</th> <th>PSHS</th> <th>PWSH</th> </tr> </thead> <tbody> <tr> <td>4-G4 (Mac) @533mhz,</td> <td>4</td> <td>10</td> <td>0</td> </tr> <tr> <td>G3</td> <td>6</td> <td>0</td> <td>10</td> </tr> <tr> <td>12 G3 @ 300mhz, added 128mb memory to each workstation to equal 256 mb ram,</td> <td>0</td> <td>0</td> <td>12</td> </tr> <tr> <td>G3 w/6gb hard drive</td> <td>0</td> <td>0</td> <td>10</td> </tr> <tr> <td>G2 w/40 gb hard drive</td> <td>0</td> <td>0</td> <td>2</td> </tr> <tr> <td>G3 @233mhz as server (Mac)</td> <td>1</td> <td>1</td> <td>1</td> </tr> <tr> <td>MAC stand alone</td> <td>0</td> <td>0</td> <td>1</td> </tr> <tr> <td>Scanner</td> <td>1 SCSI type (only compatible with G3)</td> <td>1 USB type (compatible with G4)</td> <td>1 updated USB HP 8200, Mac compatible</td> </tr> <tr> <td>Laser printer (b/w)</td> <td>11 HP 4100</td> <td></td> <td>1</td> </tr> <tr> <td>Digital camera</td> <td>0</td> <td>11 MVC-FD97</td> <td></td> </tr> <tr> <td>OS 9.2.2</td> <td>yes</td> <td>yes</td> <td>yes</td> </tr> <tr> <td>PageMaker 6.5 (No longer available)</td> <td>yes</td> <td>yes</td> <td>yes</td> </tr> <tr> <td>Adobe Photoshop 7.0</td> <td>yes</td> <td>yes</td> <td>yes</td> </tr> <tr> <td>Adobe Illustrator 8.0</td> <td>yes</td> <td>yes</td> <td>yes</td> </tr> <tr> <td>Microsoft Office 98</td> <td>yes</td> <td>yes</td> <td>yes</td> </tr> <tr> <td>Picture Viewer (part of QuickTime v5.0)</td> <td>yes</td> <td>yes</td> <td>yes</td> </tr> <tr> <td>InDesign 2.0.2</td> <td>0</td> <td>0</td> <td>School purchase</td> </tr> <tr> <td>Stand alone Macs at Shepton & Jasper; PCs in Eng classrooms for other HSs</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		PESH	PSHS	PWSH	4-G4 (Mac) @533mhz,	4	10	0	G3	6	0	10	12 G3 @ 300mhz, added 128mb memory to each workstation to equal 256 mb ram,	0	0	12	G3 w/6gb hard drive	0	0	10	G2 w/40 gb hard drive	0	0	2	G3 @233mhz as server (Mac)	1	1	1	MAC stand alone	0	0	1	Scanner	1 SCSI type (only compatible with G3)	1 USB type (compatible with G4)	1 updated USB HP 8200, Mac compatible	Laser printer (b/w)	11 HP 4100		1	Digital camera	0	11 MVC-FD97		OS 9.2.2	yes	yes	yes	PageMaker 6.5 (No longer available)	yes	yes	yes	Adobe Photoshop 7.0	yes	yes	yes	Adobe Illustrator 8.0	yes	yes	yes	Microsoft Office 98	yes	yes	yes	Picture Viewer (part of QuickTime v5.0)	yes	yes	yes	InDesign 2.0.2	0	0	School purchase	Stand alone Macs at Shepton & Jasper; PCs in Eng classrooms for other HSs			
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Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Production of the school newspapers and yearbooks																																																																												
Proposed Initiative (include list of equipment and software, quantity, campuses,	Computer – Enhanced PCs																																																																												



<p># of classrooms, furniture, network cabling, electrical needs)</p>	<p>High School Only (48) Electrical for Computers (High School Only-48) Additional Data Drops: High School (48); SrHigh: (14) G5 Mac Server; X serve (w/server license) (2) G5 512 MAC; 512 MB, 40-60 GB hard drive; Apple Warranty; 17" Studio Display monitor; AirPort Extreme Card High School (20); SrHigh (30) OS X Server High School (2); SrHigh (3) Software: InDesign licenses High School (48); SrHigh (30) AirPort Extreme Base Station High School (2); SrHigh (3)</p>
<p>Staff Training Needs</p>	<p>InDesign training: 6 hrs x 8 teachers</p>
<p>Rationale for Initiative</p>	<p>Additional computers to accommodate growing programs.</p> <p>Upgraded technology – Video and graphic production processes are memory and file size intensive. More processor power as well as memory and hard drive space will be needed. In order to create and manipulate graphics in high quantity and large sizes. Computers require the additional memory to accommodate class needs. The Journalism and Publication programs must keep current with industry standards in order to train future professional journalists, prepare them for post-secondary education or the workplace as well as attract enrollment.</p> <p>Site [MAC] servers – Site-based servers with appropriate UPS (uninterruptible power source)/battery backup will allow users to access data from any workstation in the area served. This is a more productive environment for the users. It trains students on the technology that they will encounter in the workplace. It prevents error and loss of files and increases on-task time.</p>
<p>Supporting Research (documenting improved student achievement – attach articles of reference)</p>	
<p>Site Visits to Examine Existing Models</p>	<p>I have visited all three senior high schools as a part of my support for the Macintosh systems.</p>
<p>Suggested Timeline for Implementation</p>	



2004 Bond Planning
Journalism 9-12

	Total	Cost	Total Cost
Campuses	8		
Classrooms (All)	9		
Computer - Enhanced PCs	48	1,074	51,552
Electrical	48	250	12,000
Drops	62	250	15,500
G5 Mac server; X serve (w/ server license)	2	3,000	6,000
G5 Mac; 512 MB, 40-60 GB hard drive; Apple Warranty(\$119); 17" Studio Display monitor(\$700); AirPort Extreme Card(\$79)	50	2,598	129,900
G4 Mac with superdrive	0		0
G4 Mac laptop (256 mg; 40 GB)	0		0
OS X server	5	999	4,995
In Design	78	66	5,169
AirPort Extreme base station	5	199	995
Photoshop 7.0	0		0
PageMaker 6.5	0		0
Office 98	0		0
Illustrator 8.0 (Adobe)	0		0
Picture Viewer (QuickTime 5.0)	0		0
InDesign training: 6 hrs x 8 teachers	8	30	1,440
TOTALS			227,551





PLANO

Independent School District

Learning Media Services (K-12)

Subject Area/Level	Learning Media Services
Submitted by	Tish Mulkey
Curriculum and Technology Team Members	Tish Mulkey, David Schuster, Kelly Hamilton, Robin Cashman, Diane Lutz
Planning Meetings (include schedules and members attending)	<p>November, 2003 -- David Schuster & Tish Mulkey</p> <p>January 8, 2004 -- David Schuster, Tish Mulkey, Kelly Hamilton, Robin Cashman, Diane Lutz</p> <p>January 13, 2004 -- met with Elementary librarians</p> <p>January 20, 2004 -- met with Secondary librarians</p>
Description of current classroom technology environments (include hardware and software resources)	<p>Many libraries have very old portable PA systems that are used by principals, PTA officers, librarians and guest speakers.</p> <p>PSSH and PWSHS libraries currently have video editing equipment available for students and teachers to create video projects.</p> <p>All libraries currently use barcode scanners and light pens to circulate materials.</p> <p>Security systems currently operating in Bowman, Carpenter, Frankford, Hendrick, Renner, Rice, Robinson, Clark, Jasper, Shepton, Vines, Williams, PESHHS, PSHS, PWSHS</p> <p>Teacher presentation stations in the classroom allow teachers access to a variety of media for instruction.</p> <p>Classrooms have either a mounted TV or one as part of the teaching station. Librarians do not have a permanently mounted set, although there is one available on a cart.</p> <p>In schools with mobile labs, the library has been able to use them for large group instruction and inservice.</p> <p>Streaming video is available to all networked computers across the district.</p>



	<p>Dynix Server replacement/ Reporting tools for Horizon</p> <p>Streaming video is accessible from any networked computer in the district.</p> <p>Our LTS driver covers all schools several times a week</p>
<p>Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)</p>	
<p>Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)</p>	<p>Begin replacement of old portable PA units and add units to buildings that do not currently have one.</p> <p>Creation of a video product has been written into the curriculum for several high school courses. This requires access to a suite of video editing equipment and significant time for students to complete this project.</p> <p>Provide replacements of circulation scanners and light pens as necessary.</p> <p>Replacement of old library security systems over next 5 years.</p> <p>Addition of a lockable, rolling presentation cart that would include a video projector, VCR, speakers, a laptop, and space for a high-quality VID when needed.</p> <p>Mounting TVs in all libraries. This would require wall or ceiling mount, electricity, and network cable outlet to be installed</p> <p>Wireless antennae for mobile computer labs installed in all libraries.</p> <p>Installation of 1 (or up to 1 per cluster) PISD servers and connections to allow for receipt and storage of KERA content via datacasting.</p> <p>Replacement of old Dynix server (purchased in 1997-98) and addition of software in order to provide reporting for Horizon and student reports.</p> <p>Streaming video has been widely embraced by teachers, students and librarians. The flexibility of access to video on-demand has made a dramatic difference in the way media is included in instruction.</p> <p>Replacement of Library Services delivery van</p>



Staff Training Needs	None
Rationale for Initiative	<p>Portable PA systems are much in demand by principals and librarians to facilitate adequate presentations to large group meetings.</p> <p>Curriculum requiring student production of video assignments is placing heavy demand on editing and digitizing equipment. Many students have by-passed VHS format in their personal electronics and are needing access to digital equipment to complete their projects. At least three complete suites need to be placed at PESH and 2 at PSHS. PWSHS has recently purchased 2 new systems for themselves.</p> <p>Many of our current scanners and pens are approaching 9 years old and will require replacement. We would like to maintain a replacement cycle for these items.</p> <p>A number of middle and his schools have aging security systems and will no longer be under warranty nor will parts be available within the next five years.</p> <p>A presentation cart to be used by the librarian, principal, PTA, or others who would do large group presentations utilizing numerous types of media equipment.</p> <p>As more use is made of the MBC to broadcast morning announcements and other pertinent school information, it is appropriate to have a means of viewing these out in the library at each campus.</p> <p>Instruction and research using electronic resources in libraries and classrooms could be improved with more computers. If additional wireless labs are added to schools, it would be cost effective to allow for use in the libraries as well as classrooms.</p> <p>Depending on the success of the current KERA datacasting pilot, this means of delivery of video content would be another valuable source of curriculum support.</p> <p>The server is required in order to allow reporting of statistics and student reports from the Horizon automation system. It would be web-based so that anyone in the district could access it and request a report to be generated. The software has a graphical user interface and provides charts and graphs. The software is designed to run on Windows, and is currently not supported on Unix (on which our Horizon servers are currently running).The software can be quite CPU intensive, so it is recommended to have separate server. In addition to the running the reporting tool, this server would also host other existing applications currently running on the old server.</p> <p>Our current licenses with United Streaming, AIMS, and FUTURES are all subject to renewal between now and 2005.</p>



	The current van is 10 years old and is beginning to have major repair issues. Over 15 days within the last school year we have had no truck available to use for library deliveries. It is taking longer to get parts and services every time it goes in for repair. Missed library deliveries directly affect the efficient and timely access to books and media across the district.
Site Visits to Examine Existing Models	
Suggested Timeline for Implementation	

2004 Bond Planning

Library

	Total	Cost	Total Cost
Campuses	63		
Portable PA System (Add and Replace)	63	1,000	63,000
Digitizing equipment & software system for video production & editing (Senior HSs)	10	8,000	80,000
Circulation Scanners & Light Pens	25	700	17,500
Library Security System replacements	7	10,000	70,000
Video Presentation Cart (secondary schools)	20	300	6,000
TV/Scan-It	62	595	36,890
TV Wall or Ceiling Mount	62	300	18,600
Drops (for mounted TV in library)	63	250	15,750
Electrical (Quad)	63	250	15,750
Wireless antenna installation for each library	63	500	31,500
KERA Server & connections (one per cluster)	3	12,000	36,000
Windows Server for LTS	1	12,000	12,000
Digital Media Content (over 3 years)	3	120,000	360,000
Reporting Tools for Horizon	1	15,000	15,000
TOTALS			807,990





PLANO

Independent School District

Marketing (11-12)

Subject Area/Level	Marketing Education
Submitted by	Ron Winkelmann, Carol Light
Curriculum and Technology Team Members	Ron Winkelmann, Carol Light
Planning Meetings (include schedules and members attending)	Jan. 15 Ron Winkelman, Kay Gozbeck-Fuhaman, Tricia Cannon, Lois Hollingsworth
Description of current classroom technology environments (include hardware and software resources)	<p>PSHS – 8 student computers in each of 2 classrooms - - share a printer with other classes – has 1 digital camera</p> <p>PESH – 5 student computers in classroom - - share a printer with other classes</p> <p>PWSH – 8 student computers</p>
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Students currently use the computers to do research for assignments, to look at existing market trends in the corporate world, and to complete assigned worksheets and study sheets.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	<p>Computers – 3 at PESH to standardize the number of computers at each school</p> <p>Mounted projectors</p> <p>Teacher Workstation: DVD Rom Drive, wireless mouse and keyboard, and wireless pointing device</p> <p>Network Drops</p> <p>Electrical Quad's</p> <p>Computer Tables</p>
Staff Training Needs	Training on projectors



Rationale for Initiative	<p>Computers – students must have access to the computers to be able to complete the class assignments.</p> <p>DVD Rom drives for teachers -- The materials that accompany the proposed CEV Multimedia text (adoption recommendation Jan. 26) include CDs with teacher resources and DVD's for viewing by the class.</p> <p>Mounted Projectors – will allow teachers to present power points and other materials to a large group at once.</p>
Supporting Research (documenting improved student achievement – attach articles of reference)	Program has been adopted by Texas State Board of Education
Site Visits to Examine Existing Models	
Suggested Timeline for Implementation	As soon as funds are available

2004 Bond Planning
Marketing 11-12

	Total	Cost	Total Cost
Campuses	3		
Classrooms (All)	4		
Computer	3	747	2,241
Drops	3	250	750
Electrical (Quad)	3	250	750
Tables	3	50	150
TOTALS			3,891





PLANO

Independent School District

Mathematics (6-8)

Subject Area/Level	Mathematics 6-8
Submitted by	Jim Wohlgehagen & Barbara Landingin
Curriculum and Technology Team Members	Catherine Burrows, Carol Morgan, Barbara Lye, Judy Scott, Jean Smith, Kathy Keenan, Margaret Cregg, Ann Schlinkman, Mary Ellen Sablich, Sharon Eckert, Linda Pedigo, Kay Neuse, Ramona Perry, Susan Walker, Linda Yates, Francie Mikulas, Tracie Langford, David Farquhar, Melinda Hendricks, Neil Gander, Patt Henry, Barbara Landingin, Jim Wohlgehagen
Planning Meetings (include schedules and members attending)	December 10, 2003 Catherine Burrows, Carol Morgan, Barbara Lye, Judy Scott, Jean Smith, Kathy Keenan, Margaret Cregg, Ann Schlinkman, Mary Ellen Sablich, Sharon Eckert, Linda Pedigo, Kay Neuse, Patt Henry, Barbara Landingin, Jim Wohlgehagen
Description of current classroom technology environments (include hardware and software resources)	All secondary mathematics classrooms have a teacher computer, ceiling mounted projection device, and a VID, TI Interactive software (teacher utility), Study Works software (Teacher utility). Middle schools have three sets of graphing calculators.
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Calculator use is required on the TAKS test beginning in 9 th grade. Calculator use is also integrated into the curriculum at all levels. District visits to showcase district technology has shown the extensive use of the projection devices and the VIDs.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	<p>Calculators TI-83Plus - 4 sets (30 calculators) for 7-8 grades at each middle school, 5 each for Special Programs (1445) TI-15 - 3 sets (30 calculators) for 6th grade at each middle school, 5 for Special Programs (1085)</p> <p>Cordless Pointing Device (Mouse) 9 per middle school for each math classroom, 1 for Special Programs (109)</p> <p>Wireless Laptops, Equipment & Accessories Wireless Laptop – access to at least 12 per grade level at each middle school, excluding Special Programs (432) Wireless Tablet PC – 3 per grade level at each middle school, 1 for Special Programs (109)</p> <p>USB 2.0 Flash Drive 1 Per Teacher (109)</p>



	<p>Software - Understanding Mathematics 1 License for 50 users per middle school, including Special Programs (13)</p> <p>CD Burners 1 per middle school, including Special Programs (13)</p>
Staff Training Needs	<p>Understanding Math – Nuefeld includes training on this software as part of the purchase price. Teachers can be trained during regularly scheduled in-service time already in the calendar.</p> <p>Tablets – Fujitsu as part of the purchase price will provide training on the tablets. The training can be done during regularly scheduled in-service time.</p>
Rationale for Initiative	<p>Calculators Middle schools need additional graphing calculators because the 7th grade curriculum requires the use of graphing calculators, which we now borrow from 8th grade. Many times both grades need the calculators at the same time. We need the TI-15s at the 6th grade level because calculator use is integrated into the curriculum, but the 6th grade teachers have no calculators. 6th grade does not need the graphing capabilities of the 83 Plus, a simple calculator will do.</p> <p>Cordless Pointing Device (Mouse) Teachers need the wireless mice so they can present their PowerPoint presentations from various places in the room. Being tied to the computer makes it impossible for the teachers to monitor the students in the classroom while a presentation is being delivered.</p> <p>Wireless Laptops, Equipment & Accessories Middle schools need computers to use the “Understanding Mathematics” software. Computers from the mathematics classrooms were moved to other area to facilitate the middle school project. Portable, wireless computers would be ideal so they can be moved from room to room as the need arises. They could also be grouped together to create a lab situation. PC Tablets would give middle school teachers the ability to create dynamic, interactive presentations as well as being able to interact with previously prepared videos and PowerPoint presentations. This is a powerful and flexible tool requiring a minimal amount of training. The software aides the teacher in drawing geometric figures and algebraic curves by converting freehand drawings to perfectly formed geometric objects automatically and in real time, which is so essential to mathematics lessons. It also allows teachers the capability of saving all of their presentations and classroom work. These can then be duplicated for special education students and students who are absent.</p> <p>USB 2.0 Flash Drive Teachers need a convenient way of transporting data from teacher to teacher and between home and school. The memory sticks provide a cheap, reusable way of transporting data and they are compact, light, reliable and easy to handle. Also, a wide variety of digital content can be stored on a single stick.</p> <p>Software - Understanding Mathematics Middle schools are in desperate need of software that can be</p>



	<p>used for additional practice and remediation. This will allow the teachers to multitask during class time and be able to better serve students who come for tutoring. "Understanding Mathematics" would be appropriate software to meet this need.</p> <p>CD burners</p> <p>All mathematics departments need at least one CD burner for the department. With the number of presentations being done and the figures involved in these presentations, a CD is a much better way to store this information than taking up hard drive space. It also allows an easy way of transporting information from teacher to teacher and from school to home.</p>
Supporting Research (documenting improved student achievement – attach articles of reference)	
Site Visits to Examine Existing Models	
Suggested Timeline for Implementation	

2004 Bond Planning

Mathematics 6-8 (includes SP)

	Total	Cost	Total Cost
Campuses	13		
Classrooms (All)	52		
TI-15 (Grade 1-6)	1,085	12	13,118
TI-83 Plus Graphing Calculator (Sp Programs = 5)	1,445	86	124,704
Fujitsu Tablet PCs	109	2,000	218,000
Understanding Math (50 License)	13	4,095	53,235
	TOTALS		409,056





PLANO

Independent School District

Mathematics (9-12)

Subject Area/Level	Mathematics 9-12
Submitted by	Jim Wohlgehagen & Barbara Landingin
Curriculum and Technology Team Members	Catherine Burrows, Carol Morgan, Barbara Lye, Judy Scott, Jean Smith, Kathy Keenan, Margaret Cregg, Ann Schlinkman, Mary Ellen Sablich, Sharon Eckert, Linda Pedigo, Kay Neuse, Ramona Perry, Susan Walker, Linda Yates, Francie Mikulas, Tracie Langford, David Farquhar, Melinda Hendricks, Neil Gander, Patt Henry, Barbara Landingin, Jim Wohlgehagen
Planning Meetings (include schedules and members attending)	December 10, 2003 Ramona Perry, Susan Walker, Linda Yates, Francie Mikulas, Tracie Langford, David Farquhar, Melinda Hendricks, Neil Gander, Patt Henry, Barbara Landingin, Jim Wohlgehagen
Description of current classroom technology environments (include hardware and software resources)	All secondary mathematics classrooms have a teacher computer, ceiling mounted projection device, and a VID, TI Interactive software (teacher utility), Study Works software (Teacher utility). High schools have enough graphing calculators to serve every 9 th grade student. Senior highs have 210 graphing calculators. Williams has one 30-station computer lab and the Carnegie Learning software for Algebra I.
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Calculator use is required on the TAKS test beginning in 9 th grade. Calculator use is also integrated into the curriculum at all levels. District visits to showcase district technology has shown the extensive use of the projection devices and the VIDs.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	<p>Graphing Calculators (TI-83 Plus) As Needed per School: Clark 136, Jasper, Shepton 150, Vines 250, Williams 145, Plano East 1200, Plano Senior 1300, Plano West 1000, Special Programs 10, Total: 4251</p> <p>Cordless Point Device (Mouse) 1 for each 9-12 classroom: Clark 10, Jasper 13, Shepton 10, Vines 8, Williams 11, Plano East 15, Plano Senior 20, Plano West 16, Special Programs, Total: 104</p> <p>Wireless Tablet PC 1 for each teacher: Clark 10, Jasper 16, Shepton 10, Vines 9, Williams 13, Plano East 20, Plano Senior 17, Plano West 17, Special Programs 1, Total: 113</p> <p>USB 2.0 Flash Drive 1 for each teacher: Clark 10, Jasper 16, Shepton 10, Vines 9, Williams 13, Plano East 20, Plano Senior 17, Plano West 17, Special Programs 1, Total: 113</p> <p>CD burners</p>



	<p>1 per School (9) Sketchpad software for all high school mathematics teacher machines 1 Site License per School (9)</p>
Staff Training Needs	<p>Training would need to be done for all high school and senior high teachers on the Tablet PCs. This training is provided by the company and could be done during regular in-service time. All buildings already have at least one person trained on Sketchpad so they could train the remainder of the teachers in the building.</p>
Rationale for Initiative	<p>Graphing Calculators High schools need additional calculators to replace aging calculators. They are required to have enough calculators to give each student a calculator for the TAKS test. They are also needed to insure that there are enough calculators on campus for TAKS. The senior highs are required to supply all 11th grade students graphing calculators for the TAKS test. Thus far, we have transported calculators from the high schools to meet this need. It is difficult to move and clear the number of calculators required for the test between the schools quickly. The senior highs need enough calculators on their own campuses.</p> <p>Cordless Pointing Device (Mouse) Teachers need the wireless mice so they can present their PowerPoint presentations from various places in the room. Being tied to the computer makes it impossible for the teachers to monitor the students in the classroom while a presentation is being delivered.</p> <p>Wireless Tablet PC The high schools and senior highs need laptops available in their department. Many times teachers do not have rooms available during their conference periods to work and there are not enough computers in the mathematics offices to serve all of the teachers that work in the office at the same time. The laptops would help to alleviate this problem. It would also allow teachers who do not have computers at home a way to do some of their computer work at home.</p> <p>PC Tablets would give high school and senior high teachers the ability to create dynamic, interactive presentations as well as being able to interact with previously prepared videos and PowerPoint presentations. This is a powerful and flexible tool requiring a minimal amount of training. The software aids the teacher in drawing geometric figures and algebraic curves by converting freehand drawings to perfectly formed geometric objects automatically and in real time, which is essential to mathematics lessons. It also allows teachers the capability of saving all of their presentations and classroom work. These can be duplicated for special education students and students who are absent.</p> <p>USB 2.0 Flash Drive Teachers need a convenient way of transporting data from teacher to teacher and between home and school. The memory sticks provide a cheap, reusable way of transporting data and they are compact, light, reliable and easy to handle. Also, a wide</p>



	<p>variety of digital content can be stored on a single stick.</p> <p>CD Burner All mathematics departments need at least one CD burner for the department. With the number of PowerPoint presentations being done and the figures involved in these presentations, a CD is a much better way to store this information than taking up hard drive space. It also allows an easy way of transporting information from teacher to teacher and from home to school.</p> <p>Sketchpad software Sketchpad is teacher software for creating presentations. This software has all of the necessary tools for creating mathematical symbols and figures. Sketchpad gives teachers the capability to create interactive and animated presentations. Some of the mathematics teachers have already attended training on this software and have stand-alone copies of the software. We should have a district-wide license for this software so it is available to ALL teachers through the network.</p>
Supporting Research (documenting improved student achievement – attach articles of reference)	
Site Visits to Examine Existing Models	
Suggested Timeline for Implementation	

2004 Bond Planning

Mathematics 9-10 (includes SP)

	Total	Cost	Total Cost
Campuses	6		
Classrooms (All)	53		
TI-83 Plus Graphing Calculator (Sp Programs = 10)	751	86	64,811
Fujitsu Tablet PCs	59	2,000	118,000
Geometer's Sketchpad (50 License)	6	900	5,400
	TOTALS		188,211

2004 Bond Planning

Mathematics 11-12

	Total	Cost	Total Cost
Campuses	3		
Classrooms (All)	51		
TI-83 Plus Graphing Calculator (SP = 10)	3,500	86	302,050
Fujitsu Tablet PCs	54	2,000	108,000
Geometer's Sketchpad (50 License)	3	900	2,700
	TOTALS		412,750





PLANO

Independent School District

Multimedia (9-12)

Subject Area/Level	Multimedia -Technology Applications Course – High School/Senior High
Submitted by	David Hitt – Instructional Technology and Multimedia Curriculum Facilitator Mary Hewett – Director, Instructional Technology
Curriculum and Technology Team Members	Admin Staff: David Hitt, Mary Hewett – Instructional Technology Dept. Teaching Staff: Gary Carter (Williams); Claudia Keller (PWSH); Pat Ehlinger (PSHS); Carolyn Sinor (PESH)
Planning Meetings (include schedules and members attending)	October 9, 2003 and November 20, 2003
Description of Current Classroom Technology Environments (include hardware and software resources)	Multimedia (Technology Applications) Labs include: 25-30 district networked PC's, with 17" monitors per each workstation, mounted large screen projection system per lab, 1 flatbed scanner per lab, 1 digital camera per lab, 1 pair of headphones and a microphone per each workstation, with software licensing for digital audio editing, digital video editing, animation, graphics editing, and multimedia presentation.
Evidence of Use of Existing Technology Resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	<p>This course and these labs are in their 4th year in Plano ISD. The multimedia course began with 8 teachers on 6 campuses. It currently is offered on all 9 high school and senior high campuses and special programs ctr. There are 18 teachers with over 1,000 students enrolled in the current semester.</p> <p>During two of the course's first three years, student projects have placed in the top three places in state level contests.</p> <p>This state approved course provides students a choice that satisfies the Technology Applications credit required toward graduation.</p> <p>As this course is, by its very nature, technology oriented, all technology provided by the district is used thoroughly and routinely.</p>
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling,	Provide the following technology equipment for High School and Senior High Multimedia (Technology Applications) Labs. (11 labs



electrical needs)	total – district wide). Digital Cameras (Additional access) Flatbed Scanner (Additional access) Digital Camcorder (MiniDV with MPEG transfer option, extra battery, tripod, storage bag) (1 per lab) Hard Drive upgrades (size approx.150 – 200 GB) (2 per lab) CD Burners (internal) (Teacher computers) Wireless Keyboard (long range with built in mouse) (Teacher computers)
Staff Training Needs	Training in the use and operation of the MiniDV digital camcorders and transfer software will be provided by Instructional Technology.
Rationale for Initiative	Digital Cameras Digital cameras are a daily technology tool used in this course. Scanner Additional access to scanners is needed to accommodate growth. Digital Camcorder A digital camcorder is needed for the digital video portion of the multimedia curriculum. A number of projects in the second semester of the course require original video. Currently students are limited to only 15 seconds of video per “shoot”, due to the limitations of the current equipment. A digital camcorder will fill the needs for longer video, with higher quality audio, and will still provide a manageable method for moving the files to computer. Hard Drive Upgrades Additional hard drive space is needed on selected workstations to serve as download stations for digital video files. CD Burners Internal CD burners are needed for moving and archiving student multimedia projects and electronic portfolios. Wireless Keyboard (maximum range) with built-in mouse As many of the projects created in the multimedia curriculum culminate with live presentation and, as teachers provide demonstration and “best practice” examples routinely...students and teachers need a way to control projects “remotely”, at a distance from where the workstation is located.
Supporting Research (documenting improved student achievement – attach articles of reference)	Does not apply to this initiative.
Site Visits to Examine Existing Models	Does not apply to this initiative.
Suggested Timeline for Implementation	As funds become available through the course of the bond implementation.



2004 Bond Planning

Multimedia - Technology Applications (9-12)

	Total	Cost	Total Cost
Campuses	8		
Classrooms (All)	11		
Digital Camcorder (MiniDV with MPEG transfer option)	11	1,000	11,000
Hard Drive Upgrades (160 GB or bigger) 2 per lab	22	200	4,400
	TOTALS		15,400





PLANO

Independent School District

Music (6-12)

Subject Area/Level	Music – Middle School Band, Choir, Orchestra
Submitted by	Kathy Kuddes – Director, Fine Arts Carl Herrmann – Coordinator, Instrumental Music & Theatre Arts David Hitt – Specialist, Instructional Technology
Curriculum and Technology Team Members	Admin Staff: Kathy Kuddes, Carl Herrmann (Fine Arts Dept.); David Hitt (Instructional Technology) Middle School Teaching Staff: Dennis Langevin, Jason Tucker, Mary Corondun, Mary Kay Murray, Sue Ewing High School Teaching Staff: Bill Freeman, Bill Henderson, Jackie Digby, Andrew Goins Senior High Teaching Staff: Bill Stroud, Betsy Thomas, Jeff Turner, Jeremy Kondrat, Derrick Brookins, James Hannah, Jo Wallace-Abbey, Kathy Hackett
Planning Meetings (include schedules and members attending)	November 24, 2003; January 5, 14, 22, 2004
Description of Current Classroom Technology Environments (include hardware and software resources)	Current Middle School Band, Choir, and Orchestra classrooms include: 1 mounted 29" TV System. A network drop is available in the front of most classroom's (teaching) area. A teacher workstation is provided and located in the teacher's office. In addition to the district basic software load and licensing, music teachers are provided access to Sibelius 2.1 music notation software.
Evidence of Use of Existing Technology Resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Mounted TV Systems in classrooms (where completed, as there are a number of locations that still do not have this 2000 technology initiative completed)...have not received much use in these large classroom environments (40-70 students), as their size is not effective for communication or teaching. Several teachers have tried to teach (using PowerPoint-type slides, Web-based resources, and/or music notation software-based) with these systems, but have found their use not acceptable or effective with their typically large classes. Since receiving Sibelius music notation software, several staff members have developed a library of over 40 (and growing) Web-based music exercises and archive of teaching and



	<p>curriculum materials. These are in place and are receiving much use by other staff members teaching the same curriculum. By having Sibelius licensed and accessible to all music staff district wide...the curriculum materials can easily be developed, shared, opened, and used by all district music staff as needed.</p>
<p>Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)</p>	<p>Music Classrooms (Band, Choir, Orchestra) Digital Projection System (including all installation, mounting hardware, cabling, VGA-splitter/amps, screen) 1 per music classroom. Cordless Pointing Device (Teacher computer) DVD drive and DVD playback capability on teacher computer CHARMS Music Management System (one 3-program license per campus, with 6 year license agreement)</p>
<p>Staff Training Needs</p>	<p>Training in the use of projection systems will be provided by instructional technology. CHARMS Music Management systems and currently available local online curriculum materials, and state-sponsored Web-based curriculum materials training opportunities will be provided and taught by vendor(s), Kathy Kuddes, David Hitt and selected PISD Music Staff.</p>
<p>Rationale for Initiative</p>	<p>Projection Systems</p> <p>It has been established in brain-based research and through observation, that when teaching with large visual aids, there is less emphasis on lecture and more on students' active learning and acquiring knowledge and essential curriculum concepts and skills. As instruction increasingly is developed and intended for Web-based and digital delivery, the technology for delivering it should be available for teachers to effectively "teach" with it.</p> <p>In the last two years, there have been a number of curriculum materials that have been developed both locally, statewide, and nationally, that are designed to be delivered via this format. A number of additional resources are in development at the district and campus levels.</p> <p>A few examples of these include our locally developed and hosted online music curriculum song libraries, the availability of music education streaming videos from our digital curriculum (AIMS) streaming server as well as content from our own streaming video server.</p> <p>Cordless Pointing Device</p> <p>This wireless mousing device is needed to present and navigate computer-based curriculum content...from a distance from the source. This presentation/teaching tool provides the teacher with the ability to remain active and attentive with the class during the teaching process.</p> <p>DVD Activation</p> <p>The request for a DVD player has also been stated at all levels</p>



	<p>of music. There are already situations where media is only being provided in that format (performance evaluations and recordings from festivals and contests), so they have no way, (short of bringing in their own DVD players) to share and discuss it with their students.</p> <p>CHARMS Music Management System</p> <p>http://www.charmsmusic.com/ This relatively new information management system would provide a single, integrated system for tracking equipment inventory, checkout of school-owned instruments, music library holdings, and contest entries. While not a direct instructional tool, the efficiency of this system, would facilitate more teacher time for instructional planning. Discussions are now at the network level to ensure the security of student information.</p>
<p>Supporting Research (documenting improved student achievement – attach articles of reference)</p>	<p>Though high percentages of students take music courses in grades 7 – 12, there is a lack of hard data, or research, evaluating the effectiveness of technology in the music classroom. Research has focused mainly traditional instructional practices. However, the following information is presented in support of this music technology proposal:</p> <p>Research demonstrates that we (people in general) pay twenty-five times as much attention to visual-based instructional delivery versus audio-based.</p> <p>"For most educational environments in the 21st century, instructional possibilities are greatly extended with a digital projector. These devices stimulate and maximize collaboration, add a dynamic element, and introduce more multimedia capabilities to wider audiences." (The Case for Digital Projectors in Schools, T.H.E. Journal Online: Technological Horizons in Education, 10-30-2003)</p> <p>Using multimedia in instruction provides an electronic hands-on experience that creates more meaningful learning and a higher motivation for at-risk students. (<i>Technology in the Classroom</i>)</p> <p>Thanks to technology, teachers can conveniently get materials from the Web. Teachers can download images, lesson plans, etc. It's great that more arts organizations are looking to their Web sites to be really high-quality online resources for teachers because more teachers will take advantage of it. (<i>Curriculum Technology Quarterly</i>)</p> <p>"First, they will find that the music program is greatly enhanced by innovative applications of technology. In addition, they will find that music offers an exciting way for students and teachers alike to make technology come alive as an innovative instrument for creative expression. With imaginative and creative uses of technology to support a strong music program, everyone wins, especially America's students." (<i>Opportunity-to-Learn Standards</i>)</p>



	for Music Technology, MENC: The National Association for Music Education) http://www.menc.org/publication/books/techstan.htm
Site Visits to Examine Existing Models	Does not apply to this initiative.
Suggested Timeline for Implementation	Spring 2005 – delivery and setup of cordless pointing device and purchase of CHARMS Music Management systems. Training for staff in mid-spring semester. Summer 2005 - Map music classrooms for location of projection systems, with installation and implementation to begin Fall 2005 Fall 2005 - Training for staff on digital projection systems and all available online music curriculum materials, with follow up sessions as needed and as additional curriculum is available.

2004 Bond Planning

Middle School Music (Band, Choir, Orchestra)

	Total	Cost	Total Cost
Campuses	12		
Classrooms (All)	12		
CHARMS Music Management System (per campus, per 6 year)	12	2,700	32,400
TOTALS			32,400

2004 Bond Planning

High School Music (Band, Choir, Orchestra)

	Total	Cost	Total Cost
Campuses	5		
Classrooms (All)	5		
CHARMS Music Management System (per campus, per 6 year)	5	2,700	13,500
TOTALS			13,500

2004 Bond Planning

Senior High Music (Band, Choir, Orchestra)

	Total	Cost	Total Cost
Campuses	3		
Classrooms (All)	3		
CHARMS Music Management System (per campus, per 6 year)	3	2,700	8,100
TOTALS			8,100





PLANO

Independent School District

Music Theory (11-12)

Subject Area/Level	Music – Senior High Music Theory
Submitted by	Kathy Kuddes – Director, Fine Arts Carl Herrmann – Coordinator, Instrumental Music & Theatre Arts David Hitt – Specialist, Instructional Technology
Curriculum and Technology Team Members	Admin Staff: Kathy Kuddes, Carl Herrmann (Fine Arts Dept.); David Hitt (Instructional Technology) Teaching Staff: Brandon Pedigo, Bill Phillips, Cathy Koziatek
Planning Meetings (include schedules and members attending)	November 17, 2003; January 5, 14, 22, 2004
Description of Current Classroom Technology Environments (include hardware and software resources)	Each Senior High School Music Theory Lab (3 district wide) has 22 G3 Mac Workstations and 1 Mac G3 Server running OS 9.1 Server Software. They are networked locally to that server and for printer sharing purposes. The Teaching Mac Station includes Apple Network Assistant and Mac Manager Systems for managing this LAN. Student workstations include music keyboards, USB MIDI Cable Interfaces, Roland Sound Modules/Synthesizers, Specialized Headphones and adapters, and Specialized Curriculum Software (for Sequencing, Music Notation, Ear-Training, Music Theory Skills Training Lessons, and Microsoft Office).
Evidence of Use of Existing Technology Resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	<p>The music theory labs in PISD are known statewide and beyond. They have been featured with site visits from NSBA members and were featured in an innovative distance learning project, involving 3 other high schools across the United States. Dallas and Fort Worth Area teachers and administrators have visited the PISD Music Theory labs on numerous occasions, when planning for their own possible initiatives regarding the implantation of a first-class music theory curriculum and lab.</p> <p>Many students and other school departments have benefited from the special scoring and arranging services that the music theory classes routinely provide for its respective campus. Examples would include: help with campus' annual musicals and productions, involving the theatre and music departments, as well as special projects as requested by the instrumental and choral music departments.</p>



	<p>The student computers at Plano Sr. and Plano East Sr. were replaced (per district 5 year computer cycle) in 2002. However the student computers at Plano West music theory lab are due shortly for replacement. All three labs' servers are 5 years old and in need of replacement.</p>
<p>Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)</p>	<p>Provide the following technology equipment and systems for Senior High Music Theory Classrooms (3 labs total district-wide).</p> <p>Upgrade of the Mac Music Theory Labs (3 total, 1 per sr. high) client workstations to Mac OS X. (including compatible software versions and Apple Remote licensing)</p> <p>Apple Mac Xserve Server (including server licensing) 1 per lab</p> <p>Digital Projection System (including all installation, mounting hardware, cabling, VGA-splitter/amps, screen) 1 per music classroom.</p> <p>Cordless Pointing Device (Teacher computer)</p> <p>DVD drive and DVD playback capability on teacher computer</p> <p>Application upgrades to Mac OS X compatible versions: Finale 2004, Practica Musica, MacGAMUT, Sequencing Express, Microsoft Office for OS X</p> <p>ExamView Licensing (electronic testmaker application) 1 per lab</p>
<p>Staff Training Needs</p>	<p>Training in the use of projection systems will be provided by instructional technology. OS X Networking Management systems, new Mac OS X versions of music theory curriculum software versions, currently available local online curriculum materials, and state-sponsored Web-based curriculum materials training opportunities will be provided and taught by vendor(s), Kathy Kuddes, David Hitt and selected PISD Music Staff.</p>
<p>Rationale for Initiative</p>	<p>Projection Systems</p> <p>There are many currently available and additional (in development) electronic curriculum materials and content that needs to be delivered in this large screen format.</p> <p>Music Theory curriculum materials are currently under development locally, while software based materials are in constant revision and improvement to be delivered via this format.</p> <p>A few examples of these include our locally developed and hosted online music curriculum, the availability of music education streaming videos from our digital curriculum (AIMS) streaming server as well as content from our own streaming video server, Music Education site that contains a comprehensive set of tools and online curriculum materials intended for online delivery and use.</p> <p>It should also be stated that the music theory classrooms are unique in that they include a lot of equipment and custom furniture at each workstation, making it challenging for students in second, third, and fourth rows of the lab, to see visual teaching aids and video-based curriculum materials.</p>



	<p>Apple Mac Xserve Server (OS 10.3 Panther)</p> <p>The current servers and Mac LAN (network) are approximately 5 years old and are still running with Mac OS (operating system) 9 series. Both this hardware (server) and OS (server software) need replacing.</p> <p>This older OS and companion networking system are out-dated and have proven to be difficult to maintain. With OS X series operating system and server applications as the standard and (current) fully supported OS and Networking solution by Apple Computers, it is critical that we migrate our music theory Mac labs to the OS X environment. We feel that the networking and instructional support of this OS will be much more reliable, decreasing student and classroom “downtime”.</p> <p>DVD Activation</p> <p>The request for a DVD player has also been stated at all levels of music. There are already situations where media is only being provided in that format (performance evaluations and recordings from festivals and contests), so they have no way, (short of bringing in their own DVD players) to share and discuss it with their students.</p> <p>Application (software) Updates</p> <p>Several curriculum applications will need to be updated to Mac OS X compatible versions. This will also achieve the need to update these applications to more current “market” standard versions anyway, providing needed features and improvements made since the current versions were purchased several years ago.</p>
<p>Supporting Research (documenting improved student achievement – attach articles of reference)</p>	<p>Though high percentages of students take music courses in grades 7 – 12, there is a lack of hard data, or research, evaluating the effectiveness of technology in the music classroom. Research has focused mainly traditional instructional practices. However, the following information is presented in support of this music technology proposal:</p> <p>Research demonstrates that we (people in general) pay twenty-five times as much attention to visual-based instructional delivery versus audio-based.</p> <p>"For most educational environments in the 21st century, instructional possibilities are greatly extended with a digital projector. These devices stimulate and maximize collaboration, add a dynamic element, and introduce more multimedia capabilities to wider audiences." (The Case for Digital Projectors in Schools, T.H.E. Journal Online: Technological Horizons in Education, 10-30-2003)</p> <p>Using multimedia in instruction provides an electronic hands-on experience that creates more meaningful learning and a higher</p>



	<p>motivation for at-risk students. (<i>Technology in the Classroom</i>)</p> <p>As outlined by the College Board, "The ultimate goal of an AP Music Theory course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. The achievement of these goals may best be approached by initially addressing fundamental aural, analytical, and compositional skills using both listening and written exercises. Building on this foundation, the course should progress to include more creative tasks, such as the harmonization of a melody by selecting appropriate chords, composing a musical bass line to provide two-voice counterpoint, or the realization of figured-bass notation." The standard college program is now heavily technology based. The Plano Music Theory program is aimed at preparing students to compete in the high-tech music world at the next educational level. http://www.collegeboard.com/student/testing/ap/sub_music.html</p>
Suggested Timeline for Implementation	<p>Spring 2005 – Purchase Xserve Servers and migrate client workstations to OS X. Purchase and install new versions of curriculum applications. Training for staff in mid-spring semester.</p> <p>Summer 2005 - Map music theory classrooms for location of projection systems, with installation and implementation to begin Fall 2005 or Spring 2006.</p> <p>Fall 2005/Spring 2006 - Training for staff on digital projection systems and all available online music curriculum materials, with follow up sessions as needed and as additional curriculum is available.</p>

2004 Bond Planning

Senior High Music Theory

	Total	Cost	Total Cost
Campuses	3		
Classrooms (All)	3		
Apple Mac Xserve Server (include server license)	3	3,000	9,000
DVD (installed to teacher Mac)	3	50	150
OS upgrade to OS X for client (student) workstations	66	75	4,950
Apple Remote Desktop licensing	66	20	1,320
Music Notation - Finale 2004 (required for OS X use)	66	100	6,600
Practica Musica - Upgrade to OS X compatible version	66	50	3,300
MacGAMUT - Upgrade to OS X compatible version	66	50	3,300
microLogic AV upgrade/replacement of sequencing software	66	100	6,600
Microsoft Office for OS X	66	47	3,094
ExamView Licensing (electronic testing software)	3	100	300
	TOTALS		38,614





Physical Education (K-12)

Subject Area/Level	Physical Education/K-12
Submitted by	Melinda Smith and Rita Turner
Curriculum and Technology Team Members	Elementary and Secondary Physical Education, Foundations and Health Teachers, one Elementary and Secondary School Principal, Instructional Technology Specialist and Health and Physical Education Coordinator: Members of the Leadership Team include: Larry Barbour, Connie Beaney, Courtney Becker, Julie Becker, Sheryl Bridges, Lori Campbell, Diane Davey, Jennifer Estill, Randi Frank, Jim Garcia, Kelli Haas, Tracy Habern, Carol Johnson, Tavena Kondziela, Cheryl Kool, Mary Jo Landingham, Saul Laredo, Kristy Logan, Aaron McNeil, Johnny Parks, Don Patterson, Susan Peel, Ben Pirillo, Lilian Quigley, Shanda Reese-Jones, Melinda Smith, Angie Spangler, Bruce Strong, Jan Thomas, Rita Turner, Bradley Warren
Planning Meetings (include schedules and members attending)	<p>November 20: Planning Meeting for Technology, Melinda Smith and Rita Turner</p> <p>November 21: Planning Meeting for Technology: Mary Jo Landingham, Johnny Parks, Ben Pirillo, Melinda Smith</p> <p>December 11: Leadership Team: Technology Discussion Meeting: Connie Beaney, Courtney Becker, Julie Becker, Sheryl Bridges, Lori Campbell, Diane Davey, Jennifer Estill, Randi Frank, Jim Garcia, Kelli Haas, Tracy Habern, Carol Johnson, Tavena Kondziela, Cheryl Kool, Mary Jo Landingham, Kristy Logan, Aaron McNeil, Johnny Parks, Don Patterson, Susan Peel, Ben Pirillo, Lilian Quigley, Shanda Reese-Jones, Melinda Smith, Angie Spangler, Jan Thomas, Rita Turner, Bradley Warren</p> <p>January 13: Planning and Writing Meeting for Technology: Tracy Habern, Cheryl Kool, Melinda Smith</p> <p>January 20: Discussion meeting with Dr. Wussow</p> <p>January 21: Discussion Meeting with Rita Turner</p>
Description of current classroom technology environments (include hardware and software resources)	Currently there are approximately 60 district Heart Rate Monitors that are a part of the rotation equipment. Some campuses have a few of their own. These Heart Rate Monitors were purchased 8 years ago and are in poor condition. We currently have 30 pedometers that are in the rotation equipment. Each physical education office has at least one teacher computer, and most offices have a printer. Some of the schools have a stereo system but only a few with wired microphones.
Evidence of use of existing	Heart Rate Monitors and Pedometers are checked out through



<p>technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)</p>	<p>our district rotation schedule.</p> <p>Curriculum, TEKS</p>
<p>Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)</p>	<p>See attached spreadsheets.</p>
<p>Staff Training Needs</p>	<p>Staff training and dissemination of information would include introduction of new technology and curriculum during curriculum development days, new teacher in-service and on-going support from the Coordinator and the Physical Education Leadership Team.</p>
<p>Rationale for Initiative</p>	<p>Heart Rate Monitors, Heart Rate Monitor Pulse Bars, Pedometers, Laptops, TriFit Systems, and Companions</p> <p>As early as Kindergarten, The Texas Essential Knowledge and Skills (TEKS) for Physical Education requires Physical Education teachers to teach Kindergarten students how to observe and describe the immediate effect of physical activity on the heart and breathing rate (b)(4)(A). In 4th grade, it specifically mentions the use of Heart Rate Monitors (as one method of checking heart rate), to help students describe the effects of exercise on heart rate (b)(4)(A). And the 5th grade students will self-monitor the heart rate during exercise (b)(4)(B).</p> <p>At the Middle School level, starting in the 6th grade the TEKS state that students will learn to use technology such as heart rate monitors to assist in measuring and monitoring their own performance (b)(a)(2). And at the High School level, the students will select and use appropriate technology to evaluate, monitor, and improve physical development (b)(3)(F).</p> <p>The Physical Education Leadership Team would like to take our programs to the next level across the Plano ISD District and implement changes in our curriculum. These changes would allow us to use the necessary tools needed to electronically monitor, asses and document student effort and class performance, daily and over time, making adjustments specific to each child.</p> <p>We are asking the District and the Community to make necessary changes to our very limited amount of technology tools to enhance and teach our viable curriculum. The Leadership Team has a clear vision and focus to make a difference in the lives of our students. A difference that can impact their wellness for a lifetime.</p> <p>Current technological advances in the area of wellness make it problematic for our teachers to help students manage wellness and create opportunities for interdependence.</p> <p>Heart Rate Monitors (HRM), and Pedometers at all levels and Heart Rate Monitor Pulse Bars at the Elementary level will guide</p>



the personal growth of each student. Students will independently monitor, assess and manage levels of safe effective exercise. These technological tools provide quantifiable biofeedback necessary to have teachers assist students to set realistic achievable goals.

The Leadership Team has a definite focus in mind with vertical alignment. Starting at each elementary school with Polar E30 and E600 Heart Rate Monitors. The Polar E30 is specifically designed for elementary-aged children. It features accurate heart rate (HR) reading, programmable target heart rate zone with audio/visual alarm, cumulative time (total exercise, in zone, average HR of exercise. The E600 has all the above capabilities of the E30 and allows the teacher/student to download the HR information into a computer for further analysis. At the secondary level we will implement the E600 where the data can be used to build individual and class reports to get a comprehensive overview of participation level in physical education and objectively assess workout effectiveness. Both the E30 and the E600 will provide immediate individual assessment of exercise levels offering motivational opportunities for all students based on individual needs. A laptop computer will be available from the library to download the HR monitor information. This will assist the teacher and educate the student on monitoring, assessing, and managing the cardiac data. With large class size at the elementary level, the students will wear the Heart Rate Monitors approximately one time per week. The remaining students in the class can monitor their heart rate with the Heart Rate Monitor Pulse Bars. One will be located in each corner of the gym to allow students to randomly monitor their HR and enable the students to understand the relationship of exercise intensity and its effect on the heart.

A pedometer is another technology tool used to demonstrate accountability and guide personal growth. They enable all students to self-monitor progress toward an attainable goal. Pedometers let students know that all activity is important and teach students that activity accumulated throughout the day is just as good as activity completed in one session. Pedometers are very affordable and very user friendly. They keep track of steps taken, which can convert to distance traveled. The pedometers we would like to order have a time, distance and step counter on each one. At the secondary level, students can take their data and determine the caloric expenditure for their exercise period.

Some additional TEKS requirements for incorporating technology:

6th grade (a)(2) learn to use technology such as heart rate monitors to assist in measuring and monitoring their own performance.

6th grade (b)(3)(D) identify and know how to use technological tools used for measuring and monitoring fitness parameters such as computer programs, heart rate monitors, skin-fold calipers,



	<p>and impedance testing equipment.</p> <p>6th grade (b)(4)(D) analyze effects of exercise on heart rate through the use of manual pulse checking and recovery rates, heart rate monitors, perceived exertion scales, and/or computer generated data;</p> <p>7th grade (a)(2) Instruction is directed more toward encouraging the incorporation of physical activity into a daily routine</p> <p>7th and 8th (b)(2)(E) make appropriate changes in performance based on feedback</p> <p>(b)(3)(E) select and use appropriate technology tools to evaluate, monitor, and improve physical development</p> <p>8th grade (b)(3)(I) select and use appropriate technology tools to evaluate, monitor, and improve physical development</p> <p>High School</p> <p>Foundations (b)(2) The knowledge and skills taught in this course include teaching students about the process of becoming fit as well as achieving some degree of fitness within the class. Designing their own personal fitness program.</p> <p>Outdoor Education(b)(3)(F) select and use appropriate technology tools to evaluate, monitor, and improve physical development.</p> <p>Aerobics (b)(3)(B) analyze and evaluate personal fitness status in terms of cardiovascular endurance, muscular strength and endurance, flexibility, and body composition;</p> <p>Individual Sport and Team Sport (c)(2)(A) use internal and external information to modify movement during performance</p> <p>Climbing Walls – K-5 only</p> <p>Climbing Walls provide a unique opportunity for our students to develop upper body strength. Through fitness testing scores throughout our district, the physical education teachers generally see our students fall below healthy fitness levels in the areas of muscular strength and aerobic capacity. Climbing walls develop upper body strength, coordination, and aerobic capacity. Climbing can be a fun team building experience. It enables students to challenge by choice and select a difficulty level based on attainable goals. Students are able to see measurable improvements in their effort. Climbing walls also help with large class sizes. You can have a group of students bouldering on the wall, and another group actively participating in another activity in the gym.</p> <p>Each student travels horizontally across a variety of routes and patterns based on each students' ability level. The students' feet</p>
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never climb higher than three feet. In fact, there is a red relief line on the wall itself to remind them of this.

Each panel is made from a $\frac{3}{4}$ inch piece of plywood. It measures either 4' x 8' or 4' x 10' and is attached to the existing gym wall with 6 to 8 bolts. Careful consideration of each gymnasium's structure, electrical outlets and layout is taken into account. While the students are on the climbing wall, mats are on the floor below them. When the teacher is not using the wall the mats stand up and actually lock the wall with a steel cable that runs through loops connected on each mat and through the holds on the wall. The cable is locked with a padlock or combination lock.

A climbing program builds life-long wellness by developing characteristics such as problem solving, goal setting, courage, positive risk taking, perseverance, will power, patience and confidence. Climbing walls currently meet some of the requirements of our TEKS. 5th grade (b)(3)(A) participate in moderate to vigorous physical activities on a daily basis that develop health-related fitness; and

7th and 8th grade, (b)(1)(H) demonstrate introductory outdoor pursuit skills such as backpacking, rock climbing, orienteering, hiking, canoeing, cycling, or ropes course.

Physical Education Teachers are currently using every available resource to insure maximum participation and maximum interest. They would make a dynamic impact on our current physical education program.

PA Stereo Systems

The teachers will have access to a PA stereo system through the library.

The PA stereo systems provide opportunities for teachers to achieve certain TEKS requirements from Kindergarten through 12th grade.

Some additional Supporting TEKS requirements:

1st grade (b)(1)(F) create and imitate movement in response to selected rhythms.

2nd grade (b)(1)(L) perform rhythmical sequences such as simple folk, creative, and ribbon routines.

4th grade (b)(1)(I) perform basic folk dance steps such as grapevine, schottische, and step-together-step;

5th grade (b)(1)(I) perform selected folk dances;

6th grade (b)(1)(D) move in time to complex rhythmical patterns



	<p>such as 3/4 time or 6/8 time</p> <p>6th grade (b)(1)(E) design and refine a jump rope routine to music</p> <p>7th and 8th grade (b)(1)(D) perform selected folk, country, square, line, creative, and/or aerobic dances;</p> <p>7th and 8th grade (b)(1)(E) design and perform sequences of dance steps/movements in practiced sequences with intentional changes in speed, direction, and flow;</p> <p>Coordinated Physical Education/Health Materials</p> <p>A section of Senate Bill 19, which has a component that will take effect in the 2007 school year, states that every elementary school will have a coordinated health program designed to prevent obesity, cardiovascular disease, and Type II diabetes in elementary school students. The program must provide for coordinating, health education, physical education, nutrition, and parental involvement. Each school district shall participate in appropriate training for the implementation of the program approved by the agency. The Texas Education Agency (TEA) must approve the program that we choose. If we wish to write our own curriculum for this law the TEA must approve it. Sec. 38.013. COORDINATED HEALTH PROGRAM FOR ELEMENTARY</p>
<p>Supporting Research (documenting improved student achievement – attach articles of reference)</p>	<p>As we climb the obstacles of inactivity in youth today, we as educators find ways to maximize participation and strive toward total wellness of our students. Any of this equipment can be shared with staff members on campus providing resources for personal fitness development. Several of our current teachers have used the above technology through the rotation equipment available now. Unfortunately no current information can be obtained for our use due to the amount of equipment available to them for such a limited amount of time. What the teachers have seen is an increased motivation in their students. Most of the above technology that is available now offers a visual measurement that can be assure the students will become more independent learners with knowledge about their own health. The above technological and curriculum tools will provide a great opportunity for our students and teachers.</p> <p>The technology works with student achievement and motivation. There is an increased understanding of the heart and how exercise effects it. There is now an accurate measurement of HR, have you ever tried to manually check the pulse of an Elementary student? It beats so fast you can't count it. Numerous stories from some of our own teachers and teachers and coordinators from other districts that have used HR monitors with students and discovered medical problems or medication problems with their students. As a teacher at Skaggs Elementary, our staff was as excited about the HR monitors and</p>



	the opportunities they had to exercise with them.
Site Visits to Examine Existing Models	Site visits: HR Monitors used at Plano Senior High and Dooley and Skaggs Elementary, Pedometers used at Plano Senior High and Hendrick Middle School Climbing Walls, at McKinney ISD and Mesquite ISD
Suggested Timeline for Implementation	See attached proposal on spreadsheet.

2004 Bond Planning

Physical Education K-5

	Total	Cost	Total Cost
Campuses All	43		
Classrooms (All)	43		
Polar Heart Rate Monitor Intro Class Pack	43	3,900	167,700
Polar Heart Rate Monitor Training	1	1,500	1,500
Insta-Pulse Heart Rate Monitors with Stand	172	279	47,988
Pedometer Intermediate Class Pack	85	469	39,865
Fitnessgram Testing Equipment	43	792	34,056
Coordinated Physical Education/Health Materials	43	2,125	91,375
Climbing Walls	43	7,300	313,900
	TOTALS		696,384

2004 Bond Planning

Physical Education 6-12

	Total	Cost	Total Cost
Campuses All			
Classrooms (All)			
Polar Heart Rate Monitor Tech Pack	21	8,100	170,100
Polar Heart Rate Monitor Training	1	1,500	1,500
Pedometer Intermediate Class Pack	40	469	18,760
	TOTALS		190,360





PLANO

Independent School District

ROTC (9-12)

Subject Area/Level	ROTC 9-10
Submitted by	Larry Tucker, Carol Light
Curriculum and Technology Team Members	Larry Tucker, Carol Light, Maj. Jere Atchison, Lt. Col. Jim Coughlin, John Napoli, Darrel Crews, Debra McElyea
Planning Meetings (include schedules and members attending)	Nov. 11 -- Larry Tucker, Carol Light, Maj. Jere Atchison, Lt. Col. Jim Coughlin, John Napoli, Darrel Crews, Debra McElyea
Description of current classroom technology environments (include hardware and software resources)	<p>Clark – 2 rooms – share 1 unmounted CTX projector – no student computers Williams – 2 rooms – share 1 unmounted CTX projector, no student computers, no TV Vines – no student computers, no projector, no TV Shepton – have no student computers – no projector --currently using computers in an English room Jasper – have no student computers – no projector -- currently using computers in a Health room. PWSH – has unmounted CTX projector, no student computers. PSHS – has mounted TV (very small, donated), student computers, no projector, printer. PESH – has unmounted CTX projector, 1 student computer in classroom. Student office has 6 computers donated by parents and used as stand-alone computers. Three Instructor's offices each with a teacher computer. Shiloh – requisition clerk who communicates with US military on behalf of PISD instructors and students – is using a Pentium I computer and does not have a working printer.</p> <p>Software is provided by the US military. CD's contain instructor materials and student materials. The entire curriculum is on these CD's. This includes computer activities as well as internet activities that the students should be completing but are unable to because of the lack of computers.</p>
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Requisition clerk uses computer to enter records of materials, supplies, etc., on hand and to type correspondence.



<p>Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)</p>	<p>To standardize all ROTC classrooms with 5 student computers, a printer and a mounted projector.</p> <p>Student Computers Mounted Projectors Teacher Workstation: DVD ROM, wireless mouse and keyboard, wireless pointing device Network Drops Electrical Quads Access to Digital Cameras Tables</p>
<p>Staff Training Needs</p>	<p>Training on use of projectors and digital cameras.</p>
<p>Rationale for Initiative</p>	<p>Commencing in the fall of 2002, the military provides the ROTC curriculum electronically to all schools participating in the ROTC program. The government no longer produces any textbooks or printed materials for use in the class. The curriculum includes computer activities and internet activities for all students to complete. Students cannot do the required activities without computers.</p> <p>Projectors are needed to enable the Instructors to deliver course content to a large group. The electronic curriculum provided by the military includes power point presentations and other materials which need to be visible to all students during class lectures and discussions.</p> <p>Printers are needed so that the students can print their assignments. Particularly at the 3 senior high schools, it would not be feasible for the students to share printers with other classes because they are in remote areas of the building.</p> <p>DVD Rom drives are needed so students may view training videos provided by the US military.</p> <p>Digital cameras are needed to record Corp activities.</p> <p>Requisition clerk at Shiloh needs a newer computer and a printer so that she can type requisitions and other forms to send to the US military. Her computer should be on the network so she has internet access and can e-mail the ROTC instructors and can communicate with the US military.</p>
<p>Supporting Research (documenting improved student achievement – attach articles of reference)</p>	
<p>Site Visits to Examine Existing Models</p>	<p>Williams, Clark, PSHS, PESH</p>



Suggested Timeline for Implementation	Because ROTC is currently unable to meet the requirements of the curriculum, this initiative should be implemented as soon as funds become available.
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2004 Bond Planning
ROTC 9 - 10

	Total	Cost	Total Cost
Campuses	5		
Classrooms (All)	7		
Computer	36	747	26,892
Drops	36	250	9,000
Electrical (Quad)	36	250	9,000
Tables	36	50	1,800
TOTALS			46,692

2004 Bond Planning
ROTC 11 - 12

	Total	Cost	Total Cost
Campuses	3		
Classrooms (All)	3		
Computer	10	747	7,470
Drops	14	250	3,500
Electrical (Quad)	14	250	3,500
Tables	12	50	600
TOTALS			15,070





PLANO

Independent School District

Skills for Living (6-8)

Subject Area/Level	Skills for Living – Middle School – grades 6-8 offered at 11 middle schools – not offered at Wilson
Submitted by	Judy Cordell, Carol Light
Curriculum and Technology Team Members	Judy Cordell, Carol Light, Nancy Carr, Jean Rogers, Lois Conwell, Jo Jordan, Martha Moseley
Planning Meetings (include schedules and members attending)	Judy Cordell, Carol Light, Nancy Carr, Jean Rogers, Lois Conwell, Jo Jordan, Martha Moseley
Description of current classroom technology environments (include hardware and software resources)	Labs with technology modules at Schimelpfenig, Carpenter, Murphy, Frankford, Renner, Rice, Have no technology modules: Armstrong, Haggard, Hendrick, Bowman, Robinson (courses not offered at Wilson) Room at Armstrong was included in renovation 5 years ago, but modular furniture, computers, and software modules were never purchased.
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Existing module curriculum being implemented successfully at 6 schools named above. The existing technology includes a teacher computer that is used for taking attendance, entering grades, attending to school and parent e-mails, and typing worksheets, handouts and tests.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	Add modules to schools that have none. Haggard, Hendrick, Bowman, and Robinson: 4 modules for each school, 1 printer for each, 1 digital camera for each Armstrong: 9 computers, 9 software modules, 1 printer, 1 digital camera, modular furniture for 9 modules, 18 chairs, network drops, electrical wiring Mounted projectors at 11 schools Teacher Workstation at all 11 schools: DVD ROM, wireless keyboard and mouse, wireless pointing device.



<p>Staff Training Needs</p>	<p>Projector training (provided by Career Education technology liaison)</p> <p>Training on technology modules (included in cost with purchase of modules)</p>
<p>Rationale for Initiative</p>	<p>PISD has established technology modular labs for Skills for Living as a standard in each of the middle schools according to the Middle School Ed Specs. The technology modules have been quite successful in the 6 schools where they currently exist. The modules allow students to work in teams and cover a wider variety of curriculum and take a more comprehensive approach to the broad range of topics that are covered while at the same time honing their technology skills. The students in the 5 schools without technology labs do not have the same opportunity as the students in the other middle schools.</p> <p>Rather than the standard of 9, only 4 modules per lab are requested at Bowman, Haggard, Hendrick, and Robinson due to space constraints. Students are unable to complete any computer-based projects unless the teacher takes the class to a campus lab. Scheduling is difficult due to the high demand for lab use, and the software and manipulatives for the modules cannot be accessible in a computer lab used by the entire school.</p> <p>The standard lab of 9 modules are requested for Armstrong where the room was renovated five years ago to accommodate the modules yet the modules were never purchased due to lack of funds.</p> <p>Students cannot see a TV screen in the classroom. Mounted projectors are needed in order for students to see what is being shown, i.e. video. Projectors will also allow teachers to teach using PowerPoint presentations. With projectors, teachers will be able to use the accompanying materials that support the newly adopted textbook, <i>Discovering Life Skills</i>.</p> <p>DVD Rom drives in the teacher computers will accommodate viewing up-to-date videos that integrate with the curriculum. It is becoming increasingly more difficult to find resources that still produce VHS tapes and often the content of VHS is obsolete.</p>



Supporting Research (documenting improved student achievement – attach articles of reference)	Great success at the 6 PISD middle schools, which currently use the technology modules. Technology module curriculum meets the Skills for Living TEKS.
Site Visits to Examine Existing Models	Visits to Austin ISD, Denton ISD, and middle school in Medina, Illinois, to view modules prior to first lab implementation in Plano in 1998.
Suggested Timeline for Implementation	As soon as funds are available

2004 Bond Planning

Skills For Living - 6-8

	Total	Cost	Total Cost
Campuses	11		
Classrooms (All)	11		
Computer	25	747	18,675
Drops	30	250	7,500
Electrical (Quad)	30	250	7,500
Modular Furniture - # workstations	25	300	7,500
ITRAC Management	5	8,750	43,750
Modules -- Child Care	5	3,205	16,025
Modules -- Housing, Interiors	5	1,515	7,575
Modules -- Nutrition & Wellness	5	2,575	12,875
Modules -- Personal & Social	5	2,105	10,525
Modules -- Consumer Education	1	1,725	1,725
Modules -- Hospitality, Tourism	1	995	995
Modules -- Personal Appearance	1	3,305	3,305
Modules -- Resource Management	1	1,415	1,415
Modules -- Family Roles & Relationships	1	1,155	1,155
TOTALS			140,520





PLANO

Independent School District

Special Education Assistive Technology (K-12)

Subject Area/Level	Assistive Technology
Submitted by	AT Team– Karen Beard and Linda Conerly
Curriculum and Technology Team Members	Karen Beard and Linda Conerly, Assistive Technology Team
Planning Meetings (include schedules and members attending)	January 7, 2004
Description of Current classroom technology environments (include hardware and software resources)	<p>(1) Co: Writer software used on all campuses K-12 Write: Outload software used on all campuses K-12</p> <p>(2) Plano ISD currently has 28 multi-level dynamic display voice output communication devices. Plano ISD currently has Link, Tech Talk, and Tech Speak communication devices.</p> <p>(3) Used to perform hearing screenings on difficult to test special education and general students who cannot complete traditional testing methods</p> <p>(4) Special education and general education classrooms</p> <p>(5) Plano ISD currently has 9 head-pointing devices for alternate computer/communication device access.</p>
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	<p>(1) Co:Writer and Write Outload (word prediction software with auditory support and flexible spelling features) is made available on all campuses as needed for identified Special Education students through Assistive Technology.</p> <p>(2) Students use these devices to communicate throughout the school day.</p> <p>(3) Hearing screenings are mandated by State of Texas but some students cannot do traditional screenings. Therefore, additional equipment is needed for an objective screening for these students</p> <p>(4) FM Systems improve listening and hearing for persons with hearing loss and auditory difficulties in all classrooms</p> <p>(5) Students use head pointing devices to access the computer and their communication device.</p>
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	<p>(1) Upgrade Co:Writer and Write: Outload software for XP Replace 5 Dynavox 3100 with the new DV4 with accessories</p> <p>(2) Communication Devices Replace 5 Dynamyte 3100 with the new MT4 with accessories Replace 8 Vanguards with the new Vanguard II with head pointing and accessories Additional 4 Vantages with accessories Additional 5</p>



	<p>Springboards with PCS symbols and accessories</p> <p>Replace 3 Links with the Link Plus Additional 5 Tech Speak 6 x 32</p> <p>Additional 30 Tech Talk 12 x 8</p> <p>(3) Single-Patient Otoacoustic Emissions (OAE) Screener</p> <p>(4) FM Systems - Needed from expected growth</p> <p>(5) Replace 9 Head pointing devices and add additional 3 devices</p>
Staff Training Needs	Training will be provided at campus level as needed and as district workshop annually.
Rationale for Initiative	<p>(1) This software assists special education students by providing word prediction and grammar and vocabulary support to word processors. It is also a tool providing reduced keystrokes for written language for students with a variety of cognitive and physical handicaps.</p> <p>(2) Currently, the next generation devices are available for the Dynavox 3100, Dynamyte 3100, and the Vanguard. The manufacturers have stopped production of the Dynavox 3100, the Dynamyte 3100, and the Vanguard. Training, support, and repair of the older devices will be phased out over the next few years. We anticipate the need for additional Vantages and Springboards due to student population growth</p> <p>(3) It is important to verify hearing sensitivity for every student as mandated by the state regardless of cognitive functioning</p> <p>(4) As supported by numerous research articles, FM systems improve speech recognition for children with hearing loss and auditory difficulties</p> <p>(5) New devices are needed due to upgraded technology and anticipated student growth. The newer head-pointing devices now have USB ports and don't need an additional power source.</p>
Supporting Research (documenting improved student achievement – attach articles of reference)	
Site Visits to Examine Existing Models	Made throughout the year.
Suggested Timeline for Implementation	When appropriate





Special Education Centralized Structured Teaching

Subject Area/Level	Centralized structured teaching
Submitted by	Allison Bitter on behalf of the centralized structured teaching curriculum and technology team.
Curriculum and Technology Team Members	Kathy Savage-centralized structured teaching coordinator, Kristin Meggers-Saigling Elementary, Christina Murray-Saigling Elementary, Patricia Parker-Shepton High, Susie Krejci-Gulledge Elementary, Danette Morgan-Hightower Elementary, Allison Bitter-Beverly Elementary, Shane Langen-Hightower Elementary, Lisa Tueng-Davis-Armstrong Middle
Planning Meetings (include schedules and members attending)	December 3, 2003; December 11, 2003; December 16, 2003
Description of Current classroom technology environments (include hardware and software resources)	Software Structured Teaching Classroom basic needs (computers) Based on Campus inventories Digital Video Package
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	No direct evidence collected at this time.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	<p>The team would like to propose purchasing a variety of autism specific software that focus on teaching social skills and language building. In addition, each centralized structured teaching classroom would be supplied with all grade levels' software programs that are not on the network. The team has researched and included suggested software that would meet our students' needs. The listed prices are included. See attached "autism software," "vocational/life-skills software," "grade level software," and "additional software." This proposal should apply to the existing 18 structured teaching classrooms as well as planning for growth of 4 new classrooms. In addition, the proposal for grade level software should apply to the growth of three new self-contained classrooms for children with</p> <p>To bring all Elementary Centralized Classrooms up to a basic standard for existing software and hardware. Inventory showing what each Elementary classroom currently has based on the basic standard and 2. Inventory showing what will be needed with cost to bring Elementary classrooms up to a basic</p>



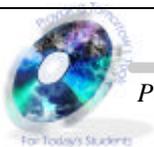
	<p>standard. Currently Plano ISD has 10 Elementary Structured Teaching Classrooms plus the possibility of new growth (2). To bring each elementary campus up to the basic standard emotional and behavioral disorders.</p> <p>To bring all secondary Centralized Classrooms up to a basic standard for existing software and hardware.</p> <p>Digital Video Camera, Tripod ,Digital camera batteries, DVD Player/Recorder, Digital video link, DVI+HDCP jack for compatible connection, DVD+R/RW, HD or HD ready TV</p>
<p>Staff Training Needs</p>	<p>The staff would require one training session of approximately two hours. A district technology specialist would be able to train teachers on how to maximize the use of this new software. Future centralized structured teaching meetings will include opportunities for current structured teaching staff to train new teachers on this software to ensure that it is used effectively.</p>
<p>Rationale for Initiative</p>	<p>Students with autism have significant impairments in communication and social development. In order to effectively educate children with autism, these deficits must be addressed in many ways. Technology as a teaching tool captures students' interests and allows them to learn important skills interactively. Children with autism tend to learn well from computers because the very nature of computers and computer programs appeal to their strengths. The computer is very visual and students with autism have difficulty with auditory processing. The computer is also predictable and allows the child to learn skills away from the pressure involved when trying to communicate and understand another person. Centralized structured teaching classrooms are supplied with many materials and tools effective for teaching children in general education as well as children with disabilities. However, we lack autism specific software that can address our students' weakest areas. The proposed software can help students learn about emotions, appropriate play and interaction, build receptive and expressive language, demonstrate appropriate behavior and peer interactions. Students with autism also tend to have "splinter skills." Their academic achievement is often scattered, leaving patches of skills not acquired while still being able to perform other skills that should be too difficult. A student might need to use several grade levels of software. General education classes have CDs of the programs that are not networked but structured teaching does not. For example, it is not appropriate to take a fifth grade student to kindergarten in order to utilize ability level appropriate software. Also, many of the students in structured teaching have severe behavior problems that interfere with their ability to stay in the general education setting for a significant amount of time. Therefore, each centralized structured teaching classroom needs a copy of all grade level software that is not on the network in order to meet the students' unique needs. New self-contained classrooms serving children with emotional and behavioral disorders will need grade level software in their room as their students have</p>



severe behavior problems interfering with all day placement in the general education setting. In addition, software devoted to teaching functional and vocational skills is imperative for our secondary students with autism. Students with disabilities begin learning vocationally oriented skills as early as elementary school and begin learning to work on job sites in high school. Because of the nature of the disability, it will often take students with autism longer to acquire simple functional skills needed to function as a working adult. In order for students to be as independent as possible, teachers must have the materials to begin teaching functional and vocational skills earlier than typical students. The additional software list includes software that should be available to the classrooms and speech-language pathologists that work with structured teaching classrooms. Because every child with autism has communication impairments, they all require speech services. In order to serve the children, speech-language pathologists must have access to this software in their offices/speech rooms as they must be able to have individual or small group sessions targeting these skills.

To bring all Elementary Centralized Classrooms up to a basic standard for existing software and hardware. All elementary campuses should have a basic software/hardware book available to alleviate the need to transfer and/or order software/hardware each time a student is transitioned to the next educational level campus classroom. This could save the possible loss of inventory in the transfer process and/or the loss of educational time with the students as we are waiting for software or hardware to be ordered and delivered.

To bring all secondary Centralized Classrooms up to a basic standard for existing software and hardware. The need to have a basic software book available at all secondary campuses to alleviate the need to transfer or order software each time a student is transitioned to the next educational level campus classroom. This could save the possible loss of inventory in the transfer process or the loss of educational time with the students as we are waiting for software to be ordered. Due to the nature of centralized classroom students, they would not be in a Centralized Classroom unless they have **severe behavior issues** and **intensive behavior plans**, all teachers in the Centralized classrooms need to be readily available and "on call" incase a behavior issue arises. With the new laws with Senate Bill 1196 and The Texas Behavior Support Initiative, that requires core trained teachers dealing with the behavior issues of our students, it is even more imperative that our Centralized Classroom Teachers are available. For this reason it is not practical for a teacher on conference to be away from the proximity of the classroom and the telephone in the event of emergencies. The need to have access to the teacher computer can be a conflict with the teacher in the room and a teacher on conference. It is not practical for teachers to use a student computer in the classroom if one is even available, because of the proximity to the students using the nearby student computers. The students in our classrooms are highly distractible and a teacher using a computer next to a student



	<p>disrupts the students learning process. Teachers teaching in the room need to have access to a computer to print out social stories or picture supports that can arise unexpectedly during their teaching time, therefore, a teacher on conference can not tie up the active teacher's classroom computer.</p> <p>Provide every Centralized Structured Teaching classroom with a digital video camera. Teachers are now required to provide documentation of student progress on Individual Educational Plan objectives for the Locally Developed Alternative Assessment (LDAA). Teacher observation of progress alone is no longer an acceptable method of documentation. Students using the Functional Curriculum are unable to write or take any type of formal assessment. Through the use of digital video technology the teacher can record progress toward objectives by video taping the student as they increase skill level on life skill objectives such as walking, feeding or dressing. Provide Centralized Structured teaching Classrooms with a DVD player/recorder. By providing the classrooms with a DVD player/recorder each class will be able to transfer the current VHS tape to a DVD and record the new material to the DVD. The DVD will be easily stored into the students file to document progress toward the LDAA. Currently, all video documentation is recorded onto VHS tapes, which are bulky, and soon to be obsolete</p>
<p>Supporting Research (documenting improved student achievement – attach articles of reference)</p>	<p>The Diagnostic and Statistical Manual of Mental Disorders-IV is used by educational diagnosticians to diagnose autism. This manual states that in order to produce a diagnosis of autism this individual must have a qualitative impairment in social interaction and communication. Autism is a lifelong neurological disorder which means that students with autism will need instruction and support services in these areas throughout their education.</p>
<p>Site Visits to Examine Existing Models</p>	<p>None</p>
<p>Suggested Timeline for Implementation</p>	<p>Begin implementation and training in the spring of 2005 or earlier, if possible.</p>





Special Education Deaf Education (K-12)

Subject Area/Level	Deaf Ed.-- All Subjects/All Levels
Submitted by	Marcia Crouch, Deaf Education Coordinator
Curriculum and Technology Team Members	Marcia Crouch, Cindy Williams, Rita Eakes, Debbie Martin, Leslie Walters
Planning Meetings (include schedules and members attending)	Marcia Crouch, Cindy Williams, Rita Eakes, Debbie Martin, Leslie Walters; 12-4-03, 12-11-03, 12-18-03
Description of Current classroom technology environments (include hardware and software resources)	<p>One digital camcorder available at each campus for the school.</p> <p>One digital camera available at each campus for the school.</p> <p>We are currently providing CART (captioning) services with a machine that is 6 years old.</p> <p>Vines currently has 2 computers in the deaf ed language arts classroom. The classes taught have 8-9 students in them. We will be adding a classroom for 2004-5 which does not currently have computers. Davis currently has 2 classes with only 2 computers in each.</p> <p>TTY payphones are not available at Vines High School and Haggard Middle School.</p> <p>Dri Aid - We do not currently own any of these systems; thus we are paying amplifier repair bills constantly.</p> <p>Elmo- The teachers are currently using overhead projectors that are noisy and interfere with the FM systems and/or hearing aids. Deaf ed students are currently using these FM receivers – this would account for replacements, upgrades, and growth during the life of the bond.</p> <p>Central Institute for the Deaf Auditory Training We currently are using parts of kits that were purchased 15 years ago. Mainstream teachers don't have any troubleshooting equipment. Teaching time is lost searching for tools.</p> <p>We are currently using borrowed equipment from UTD and it will no longer be available. The student and/or equipment must be transported to Callier-Richardson and this requires time and money for transportation.</p> <p>We currently have 40 FM transmitters in use with regular ed and deaf ed teachers.</p> <p>We are currently using borrowed equipment from Callier-UTD which will no longer be available.</p> <p>One Digital Camcorder available at Pre-Schools</p>



	<p>We will be adding classrooms and have classroom that do not currently have computers There are no printers in Deaf Ed. Classrooms</p>
<p>Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)</p>	<p>Assessment through language sampling to determine language goals.</p>
<p>Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)</p>	<p>Digital camcorders – pricing not available at this time for use at Pearson Early Childhood School, Davis Elementary and Haggard Middle School. Digital Camera - Access through school Real Time Caption Package - 2- Elan Cybra Machines. 3 - Case Catalyst software to run the machine. 2 - computer laptops for the student to read. For use at Vines High School and Plano Senior High School Computers – Add 4 computers to Vines to accommodate the new classroom and the existing classroom. Add 2 computers to Davis TTY Payphones– Vines High School and Haggard Middle School Dri-Aid Storage System. Systems would be placed in all deaf ed classrooms at Pearson, Davis, Haggard, Vines, and Plano Sr. 4 amplifier systems could be used in each Dri-Aid Storage System. Each student uses 2 amplifier systems—one for each ear. Elmos – Access provided at school FM Receivers Each student uses 2 receivers. This number accounts for replacements, upgrades, and growth. Central Institute for the Deaf Auditory Training Program to improve speech reception and comprehension, retention, and recall Teacher Listening Kits Hear Aid Test System –One to be kept at Pearson Early Childhood School and one at Davis Elementary where we have a large population of Deaf Ed. students. One to be kept at Haggard Middle School for Vines High School, Haggard Middle School and Plano Senior High School. FM Transmitters Portable Immitance Bridge 3 Digital Camcorders 14 additional computers Access to printers</p>
<p>Staff Training Needs</p>	
<p>Rationale for Initiative</p>	<p>To increase availability for teacher use to meet IEP objectives. to accommodate growth.</p> <p>To bring up to district standards of 3 computers per class</p> <p>To provide student access to communication after school hours during extra curricular activities.</p> <p>Federal Law (IDEA) specifies that students have working</p>



	<p>amplification. The system provides storage of FM amplifiers to remove daily moisture accumulations and to prolong the life of the FM amplifiers.</p> <p>Need synthesized receivers for maximum flexibility as enrollment increases. Cochlear implant users require upgrades for specific implants. Federal law (IDEA) requires that students are amplified at school.</p> <p>To improve students' speech reception and comprehension, retention, and recall. To provide software that is developmentally appropriate for attaining IEP auditory goals.</p> <p>We can electro-acoustically adjust the FM systems to provide adequate gain and prevent over-amplification. The system would be at the campus level and eliminate the need for the students to be transported to UTD and miss class time.</p> <p>To monitor the status of middle ear functioning and to eliminate transporting students to UTD which results in missed class time. Inadequate middle ear functioning could point to a need medical care to prevent further hearing loss.</p>
<p>Supporting Research (documenting improved student achievement – attach articles of reference)</p>	
<p>Site Visits to Examine Existing Models</p>	
<p>Suggested Timeline for Implementation</p>	<p>Fall 2005</p>





PLANO

Independent School District

Special Education Services (K-12)

Subject Area/Level	Elementary Special Education Services
Submitted by	Judy Haven
Curriculum and Technology Team Members	Linda Keesee, Marcia Davis, Cathy Young
Planning Meetings (include schedules and members attending)	January 16, 2004; January 26, 2004; January 30, 2004
Description of Current classroom technology environments (include hardware and software resources)	Most classrooms meet or exceed a district standard of 3 student computers, 1 teacher computer and 1 networked printer per classroom. However, most special education classrooms do not have technology to support Language Arts and Math curriculum areas such as Plus projectors and VID projectors.
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Computers are used by students who receive instruction in a special educational setting outside their general education classroom.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	Equipment needed to bring existing classrooms up to the district standard. Itemized equipment listed on attached spreadsheet.
Staff Training Needs	None
Rationale for Initiative	To provide students access to curriculum in a special education setting. Students frequently require direct instruction or supervision during use of applications, or use programs which are below their assigned grade level due to their individualized instructional needs.
Supporting Research (documenting improved student achievement – attach articles of reference)	
Site Visits to Examine Existing Models	





Special Education Speech Language Therapy (K-12)

Subject Area/Level	Speech Language Therapy
Submitted by	Speech Language Pathologists (K-12)
Curriculum and Technology Team Members	Mel Hays, Sheri Hewett, Mary Lyons, Vicki Prouty, Gale Vaughn, Natalie Simcik
Planning Meetings (include schedules and members attending)	December 16, 2003; V. Prouty, G. Vaughn, N. Simcik January 12, 2004; M. Hays, S. Hewett, G. Vaughn, N. Simcik
Description of Current classroom technology environments (include hardware and software resources)	1 teacher computer, printer. Current software: Speechviewer 3 and Earobics Step 2
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	Instructional software grade level and Access to Digital Cameras
Staff Training Needs	
Rationale for Initiative	Instructional software needed to support the speech curriculum. Digital camera necessary for the development of social stories, document of progress for student files and immediate feedback for students in therapy.
Supporting Research (documenting improved student achievement – attach articles of reference)	
Site Visits to Examine Existing Models	12-16-03 -Well Elementary – viewed social and language software.



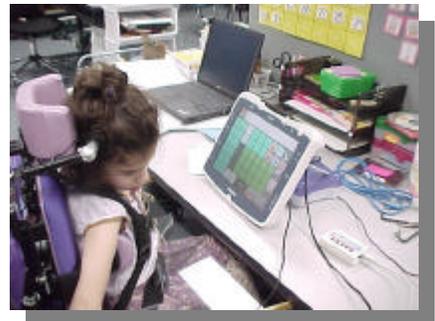


Special Education Vision Services (K-12)

Subject Area/Level	Vision Services/all grade levels
Submitted by	Susan Breeding and Brenda Szymkowiak
Curriculum and Technology Team Members	Susan Breeding, Brenda Szymkowiak, Louise Gannon, Susan Baxley, Yvette Benavides, Bobbi Lubinsky, Kay St. John, Karen Woodard, Mary Dell Donelson, Karen Beard, Laura Lemaster (Region 10), Sharon Nichols (TSBVI)
Planning Meetings (include schedules and members attending)	11/17/03 Susan Breeding, Brenda Szymkowiak, Karen Beard 11/19/03 Susan Breeding, Brenda Szymkowiak, Louise Gannon, Susan Baxley, Yvette Benavides, Bobbi Lubinsky, 12/3/03 Susan Breeding, Brenda Szymkowiak, Karen Beard 12/10/03 Susan Breeding, Brenda Szymkowiak 12/16/03 Susan Breeding, Sharon Nichols, Laura Lemaster 12/17/03 Susan Breeding, Brenda Szymkowiak, Laura Lemaster 12/18/03 Susan Breeding, Brenda Szymkowiak
Description of Current classroom technology environments (include hardware and software resources)	Hand-held magnifiers, CCTV's, 2 CCTV's with distance capability, 4 Braille Lites, 1 Tactile Graphic Embosser, 2 Braille Notes, JAWS (screen reading software for use with Windows)
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	The technology listed above is used on a daily basis by and/or for our students to complete IEP and TEKS objectives.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	Hand Held Video Magnifiers (12) Tactile Graphics Embossers (3) CCTVs with Distance Capability (12) Braille Notes with GPS (4) Thermaform Machine (1) Stand Alone Multimedia Braille Station (3 SALSA software 1) Voice-Output Scanners (3)
Staff Training Needs	Vision teachers training, if needed, will be accomplished through Region 10 and Texas School for the Blind Outreach program. There is no cost for the Region 10 services and Outreach services are available for a nominal fee.



<p>Rationale for Initiative</p>	<p>Vision Services currently serves 85 students across the district. About 50% of these students are low vision students being served in general education classrooms. Four additional students are currently Braille readers and two more use print and Braille with the expectation that their reliance on Braille will increase as print demands increase. For students with visual impairments, one of the largest challenges in the educational arena is ready access to print. This is particularly true in Plano since the implementation of both the integrated curriculum and the middle school project which use a large number of district-created materials. The following proposals address access to the wide variety of print materials currently used by Plano ISD.</p>
<p>Supporting Research (documenting improved student achievement – attach articles of reference)</p>	<p>Team members interviewed Sharon Nichols, technology outreach liaison for TSBVI, for her input.</p>
<p>Site Visits to Examine Existing Models</p>	<p>Team members visited the technology lab at Region 10 to view existing models.</p>
<p>Suggested Timeline for Implementation</p>	<p>Purchases of #1 & #3 would be divided equally through the bond cycle. All other requests would be purchased on the onset of the bond cycle.</p>



2004 Bond Planning
Special Education

	Total	Cost	Total Cost
Campuses			
Classrooms (All)			
Camcorder/tripod	3	620	1,860
Computer	135	747	100,845
Drops	76	250	19,000
Electrical (Quad)	74	250	18,500
Digital Video camera	3	500	1,500
OAE	1	3,500	3,500
Immitance Bridges	1	3,000	3,000
Teacher Listen Kits	35	75	2,625
Hearing Aide Test System	3	6,500	19,500
FM Transmitters	30	800	24,000
Auditory Training Program	10	350	3,500
TTY Payphone	2	1,500	3,000
Real Time Caption Package	1	4,800	4,800
Dri Aid	50	150	7,500
Digital Video package	26	850	22,100
Hand Held Video Magnifiers	12	750	9,000
Tactile Graphic Embosser	3	5,000	15,000
CCTV with distance capability	12	2,600	31,200
Braille Notes with GPS	4	4,800	19,200
Thermaform Machine	1	3,000	3,000
Multimedia Braille Station	2	4,600	9,200
Voice Output Scanners	3	3,300	9,900
Communication Devices	54	3,150	170,100
FM Systems (Multiple components totaling 236 pieces)	200	462	92,400
Head Pointing Devices	12	150	1,800
FM Receivers	150	750	112,500
Centralized Classroom software	22	1,000	22,000
Salsa Software	1	595	595
Speech lang. Pathologist Software	78	150	11,700
Required when XP installed			
Intellitools		5,020	5,020
Cause and Effect		718	718
Laurette Scanning software		1,050	1,050
JAWS		3,000	3,000
Duxbury Braille Translation		2,475	2,475
Co-writer	203	41	8,380
Write: Outloud	203	13	2,651
TOTALS			766,119





PLANO

Independent School District

Theatre Arts (6-12)

Subject Area/Level	Theatre Arts 6-12
Submitted by	Carl G. Herrmann, Instrumental Music and Theatre Arts Coordinator
Curriculum and Technology Team Members	Carl Herrmann, Jim Long, Greg Arp, Carmen McElwain, Jeni Helms, Kevin Moore, Mandi Wofford
Planning Meetings (include schedules and members attending)	11/18/2003: Carl Herrmann, Jim Long, Greg Arp, Carmen McElwain, Jeni Helms, Kevin Moore, Mandi Wofford 1/12/2004: Carl Herrmann, Jim Long, Kevin Moore (proxy for Carmen McElwain and Jeni Helms)
Description of current classroom technology environments (include hardware and software resources)	The current technology environment for theatre arts includes the following: Teacher computer 8MM Camcorder w/tripod Elmo video presentation unit Classroom TV monitor (some classrooms have overhead video projector/screen)
Evidence of use of existing technology resources (documented curriculum expectations, electronic versions of teacher logs/journals and/or student projects)	Current theatre classroom technology resources are used regularly to support district curricular expectations and staff program needs in the following ways: Teacher Computer: Daily classroom attendance, district e-mail, maintenance of campus prop/costume inventory records, writing, revision and cuttings of scripts to be used in the instructional environment, PowerPoint presentations for delivery of curricular instruction and student curriculum based presentations. 8MM Camcorder: Video taping of student classroom projects (Pantomime, Improvisation, Body Movement, Development of Acting Skills) for assessment and instructional reinforcement, creation of student video journals, videotaping of campus rehearsals and productions for critical analysis. Elmo: Development of student presentation skills employing the use of manipulatives in the classroom environment. TV Monitor: Viewing of video presentations related to theatre curriculum (Commercially produced and classroom acting projects, Elmo presentations, PowerPoint presentations, display



	of classroom announcements, lesson plans, assignments, etc.
Proposed Initiative (include list of equipment and software, quantity, campuses, # of classrooms, furniture, network cabling, electrical needs)	<p>5 classroom computers per theatre classroom, networked, w/student computer desk unit, appropriate cabling and electrical power (total of 88 units district wide, MS, HS, Sr HS)</p> <p>1 computer per Sr HS theatre box office networked, appropriate cabling and electrical power (3 units, Sr HS only)</p> <p>Digital Camcorder w/bag, tripod, cables, recording media. 1 per theatre classroom MS, HS, Sr HS (26 units)</p> <p>DVD Player, one per theatre classroom MS, HS, Sr HS (26 units)</p> <p>Recorder/Player CDR, Marantz SuperScope PSD 300, one per theatre program MS, HS, Sr HS (20 units)</p> <p>Computer CD Burner, one per teacher computer (MS, HS, Sr HS) one per student computer (HS, Sr HS), 28 teacher units, 70 student units (98 units total)</p> <p>Ceiling mount projector/screen, one per theatre classroom</p> <p><u>Video Wave</u> video editing software (one per teacher computer (MS, HS, Sr HS) one per student computer (HS, Sr HS), 28 teacher units, 70 student units (98 loads total)</p> <p><u>WYSIWYG</u> Lighting/Scenic Design software, student and teacher computers, HS/Sr HS (14 teacher loads, 70 student loads)</p> <p><u>TICK-IT!</u> Box Office software, one per Sr HS theatre box office</p>
Staff Training Needs	<p>Training on use of digital camcorder, integration with the computer through video editing software, creation of student portfolios.</p> <p>CD Recorder basic features, usage, integration with current curricular goals</p> <p>Computer CD Burner, basic usage</p> <p>Use of Lighting/Scenic design software, integration into technical theatre curriculum</p> <p>Use of Box Office Software, integration into SrHS Theatre Production curriculum</p>
Rationale for Initiative	<p>Classroom computers/Lighting Scenic Design Software</p> <p>Theatre students must conduct research for various classroom writing projects, create classroom presentations</p> <p>Creation of scripts, revision and editing of existing script material</p> <p>Technical theatre projects</p> <p>Lighting design projects can be done by multiple students using multiple light plots simultaneously and in safety, with assessment performed by the teacher before students work with actual lighting instruments, thus increasing the</p>



productivity of teachers and students. There would be much less "experimentation" with the stage lighting instruments, creating a lower margin of error in setting lights, and decreased wear on lighting fixtures, gels, bulbs, etc. Technical theatre students could research and create various sound effects in a digital environment. Sound effects could then be stored on CD for accurate sound cues during production.

Students could create professional portfolios including acting skills and technical theatre projects in a CD format consistent with the current university and professional practice.

Digital Camcorder and Video Editing Software

Creation of professional portfolios. Most university and acting professionals currently submit portfolios in a digital format. These first student portfolios are developed through the high school years.

The classroom teacher may record student performances and projects, and critiques for inclusion in a district assessment portfolio

The capability of the camera to take still shots will enhance the creation of publicity photos, advertising flyers, and playbills – all part of the current Theatre Production curriculum.

DVD Player

DVD has become the standard for video production. Digital video is optimal for theatre classroom instruction due to the clarity of picture and ability to pause without picture distortion. Students can closely study acting technique, set design, lighting, costuming, make-up in a way not currently available via videotape.

CD Recorder

Digital recording of music and sound effects for use during classroom instruction and theatre production is the current university and professional standard. Digital recording greatly reduces the margin of error for the timing and sequence of production sound cues and enhances quality of sound in general.

Computer CD Burner

Allows for the creation of assessment CD's and DVD's as well as professional portfolios. Digital sound effects, commonly available via internet, may be downloaded and copied to CD for use in theatre production.

Ceiling Mount Projector

Theatre classrooms are too large for the effective use of TV monitors. Students need to be able to see detail and read text from the back of the room. The TV monitors do not serve this purpose well.

Box Office Computer and Software

The senior high school Theatre Production curriculum is comprehensive, ranging from theatre acting through



	<p>publicity, promotions and front office operations. The box office computer and software will allow students to gain experience in front office ticket sales similar to that experienced in all university, community, and professional theatre organizations.</p> <p>Tickets for theatre productions could be sold accurately, with no chance of double bookings of the same seat.</p> <p>Accounting for ticket sales would be automatic and completely accurate, providing additional financial security and accountability.</p>
Supporting Research (documenting improved student achievement – attach articles of reference)	<p>Through contact with various university and professional theatre organizations, we have found that the industry standard for theatre arts (technical theatre, acting, and theatre production) has moved into the digital age. Most actors no longer submit a hard copy professional portfolio, but deliver their portfolio via electronic media such as Internet or CD/DVD. In order to prepare students to function adequately in this environment, it is necessary to provide adequate technological resources.</p> <p>Assessments of student learning in theatre can now be recorded digitally and chronicled in ways not previously available.</p>
Site Visits to Examine Existing Models	<p>Texas Educational Theatre Association Conference, Houston, TX</p> <p>Collin County Community College, Plano, TX</p> <p>Rowlett High School, Rowlett, TX</p>
Suggested Timeline for Implementation	2005-2006

2004 Bond Planning

Theatre - Middle School

	Total	Cost	Total Cost
Campuses	12		
Classrooms (All)	12		
Computer	35	747	26,145
Drops	35	250	8,750
Electrical (Quad)	35	250	8,750
Tables	35	50	1,750
CD Recorder (Marantz Superscope PSD300)	12	829	9,948
	TOTALS		55,343



2004 Bond Planning
Theatre - High School

	Total	Cost	Total Cost
Campuses	5		
Classrooms (All)	8		
Computer - Enhanced	36	1,074	38,664
Drops	36	250	9,000
Electrical (Quad)	36	250	9,000
Tables	36	50	1,800
CD Recorder (Marantz Superscope PSD300)	5	829	4,145
Digital Camcorder	8	1,000	8,000
Scenic Design software	48	100	4,800
Lighting Software	48	100	4,800
VideoWave	48	100	4,800
TOTALS			85,009

2004 Bond Planning
Theatre - Senior HS

	Total	Cost	Total Cost
Campuses	3		
Classrooms (All)	6		
Computer - Enhanced	20	1,074	21,480
Drops	20	250	5,000
Electrical (Quad)	20	250	5,000
Headphones	20	13	262
Microphones	17	9	153
Tables	20	50	1,000
CD Recorder (Marantz Superscope PSD300)	3	829	2,487
Digital Camcorder	6	1,000	6,000
Lighting Software	33	100	3,300
Scenic Design Software	33	100	3,300
Tick-It! (Box Office)	3	800	2,400
VideoWave	33	100	3,300
TOTALS			53,682



Central/Auxiliary Services Technology Initiatives

Teamwork for Excellence



PLANO

Independent School District

Communications

Administrative Area	Communications – TV studio
Submitted by	Carole Greisdorf, Special Assistant to the Superintendent
Central/Auxiliary Services Team Members	Rich Butler, Tamira Griffin, Linda Madon, Lecia Medlock, Mary Gorden, Bill Gilkison
Planning Meetings (include schedules and members attending)	Team meetings held in November, December, January, February
Description of current office technology environments (include hardware and software resources)	Two networked PCs(work stations) in office. Two stand-alone PCs for editing, animation and graphic generation in studio using Windows 2000. Two stand-alone PCs in cable room for cable channel displays(PowerPoint 97)
Proposed Initiative (include list of equipment and software, quantity, # of offices/locations, network cabling, electrical needs)	Upgrade TV studio
Staff Training Needs	Training for upgrade of PowerPoint. Training for proper assessment of digital signal monitoring.
Rationale for Initiative	Present studio VCRs (used for copying and other productions) are old and are repaired several times each year to maintain in working order. Routing equipment for audio and video signals in the studio are analog and are causing delay and loss in quality of digital information. Cable channel display computers cannot handle some graphic files being loaded due to memory limitations. Computers are regularly freezing up on the air. Graphics abilities are limited. Files with video will not air. Network drops for these computers are needed for remote access to the network and available upgrades in software.



	A second portable production camcorder (digital) is needed for taping outside the studio.
Suggested Timeline for Implementation	<p>Immediate replacement of VCRs</p> <p>Purchase of camcorder within six months of approval.</p> <p>Purchase of audio and video routing upgrades within one year of approval.</p> <p>Purchase of replacement CATV computers and network drops after any network hardware upgrades in the first year.</p>

2004 Bond Planning
Communications

TV Studio	1 digital camcorder with lens/accessories	15,000	
	1 portable tripod for camera	4,000	
	1 digital video routing system	2,700	
	1 digital audio routing system	3,500	
	workstation furniture to support editing system	2,700	
	10 S-VHS/VHS VCR's (replacements)	10,000	
	2 CA-TV computers (replacements) \$1,800	1,800	
	2 Network drops (for CA-TV computers) \$500	500	
TV Studio Total			40,200





PLANO

Independent School District

Facility Maintenance

Administrative Area	Facility Services
Submitted by	David Norton, Director of Facilities Maintenance
Central/Auxiliary Services Team Members	Rich Butler, Tamira Griffin, Linda Madon, Lecia Medlock, Mary Gorden, David Norton
Planning Meetings (include schedules and members attending)	Team meetings held in November, December, January, February
Description of current office technology environments (include hardware and software resources)	<p>1) <u>Radios</u> Current radios and pagers used by the Facility services technicians are very old and outdated. Many are faulty and falling apart. These radios and pagers are not consistently reliable for communicating.</p> <p>2) <u>Maximo Software</u> The existing core modules of Maximo software only allow updates and data entry from a centralized resource.</p>
Proposed Initiative (include list of equipment and software, quantity, # of offices/locations, network cabling, electrical needs)	<p>1) <u>Radios</u> New radios for facility services Total quantity radios requested = 100</p> <p>2) <u>Maximo Software</u> This mobile software will provide our technicians with mobile access to the full range of capabilities needed to work the Maximo system and processes more efficiently.</p>
Staff Training Needs	None
Rationale for Initiative	<p>1) <u>Radios</u> New radios will allow reliable, consistent communication amongst the facility service technicians and the central facilities office. Technicians can communicate their location, work/project status and essential details relative to their job duties and responsibilities.</p> <p>2) <u>Maximo Software</u> The software will provide the ability to record work status, time and materials, time and attendance, failure codes and comments.</p>



	<p>The ability to create work orders on demand.</p> <p>The ability to perform and record inspections</p>
Suggested Timeline for Implementation	<p>1) <u>Radios</u> As soon as bond funds become available.</p> <p>2) <u>Maximo Software</u> As soon as bond funds become available.</p>

2004 Bond Planning
Facilities Services

100	Radios	150,000	
1	Maximo mobile suite	300,000	
Facilities Services			
Total			450,000





PLANO

Independent School District

Food and Nutritional Services

Administrative Area	Auxiliary Services - Food and Nutritional Services
Submitted by	Rich Butler, Director, Auxiliary Services
Central/Auxiliary Services Team Members	Rich Butler, Tamira Griffin, Linda Madon, Lecia Medlock, Mary Gorden, Cynthia Lee
Planning Meetings (include schedules and members attending)	Team meetings held in November, December, January, February
Description of current office technology environments (include hardware and software resources)	<p>PCS Control Revenue Systems ScMP32 version 7.5 and DsMP32 version 5.6.2 software. These programs perform the following functions: Meal counting and claiming, Eligibility requirements, Accounting, Detail reports of daily activity, Costing, Parent information, and Point of sale maintenance.</p> <p>Nutrikids 4.8 Nutrient Analysis Software. Provides Nutritional breakdown, menu planning, costing, and production for the Food Service Department.</p>
Proposed Initiative	Upgrade all POS hardware and software at each campus and the Food and Nutrition Central office.
Staff Training Needs	Our future training wishes are to be able to create training modules that can be obtained via digital video. These enhancements will save time and money in that, FANS employees can have self- paced sessions that can be accessed from their administrative computer. This training would be available for all cafeteria managers and specialists. This would enable these employees to access training from their location rather than having the expense of time and travel going to different locations.
Rationale for Initiative	To establish a secure, and accurate knowledge base for all employees that provide services for the Child Nutrition Program.
Suggested Timeline	Spring 2005

2004 Bond Planning

FANS

1	Point of Sale equipment upgrade	372,000	
1	Point of Sale system software upgrade	145,000	
	FANS Total		517,000





PLANO

Independent School District

Information Management Systems

Administrative Area	Information Management Systems
Submitted by	Lecia Medlock, Director of Information Management Systems
Central/Auxiliary Services Team Members	Rich Butler, Tamira Griffin, Linda Madon, Lecia Medlock, Mary Gorden
Planning Meetings (include schedules and members attending)	Team meetings held in November, December, January, February
Description of current office technology environments (include hardware and software resources)	Business systems solutions consist of new development in the TEAMS application funded by the 2003 technology bond and the CIMS system provided by NCS/Pearson.
Proposed Initiative (include list of equipment and software, quantity, # of offices/locations, network cabling, electrical needs)	Continue development on new systems within the TEAMS framework to those applications planned for Phase 2 deployment. These systems include: Interfaces to existing databases such as EdSoft, Excelsior Pinnacle and the Curriculum Planners. Generalized report writing; Audit reporting; Field trip module; Expansion of ePay options; Depreciation tracking/calculation module; District facility rental
Staff Training Needs	Provided as new TEAMS applications are brought online.
Rationale for Initiative	The CIMS software applications are nearing end-of-life and need to be replaced. Development on the TEAMS software suite began in Fall 2003 when the board and community provided direction and funds via the last technology bond. The TEAMS development is based on industry standard tools and frameworks and delivered via a web-based application interface. We continue to use our iSeries computer investment in this software development process.
Suggested Timeline for Implementation	Continued development based on existing timelines and delivery schedule of new applications.

2004 Bond Planning

IMS

1	TEAMS system development	1,500,000	
IMS Total			1,500,000





PLANO

Independent School District

Records Management

Administrative Area	Records Management
Submitted by	Bettie LeCrone
Central/Auxiliary Services Team Members	Bettie LeCrone, Linda Madon, Lecia Medlock, Becky Garrett, Tamira Griffin, Connie Weaver
Planning Meetings (include schedules and members attending)	Team meetings held in November, December, January, February
Description of current office technology environments (include hardware and software resources)	There is no current process in place to do image processing and retrieving of documents. Many depts. use a microfilm processing, and many store paper copies.
Proposed Initiative (include list of equipment and software, quantity, # of offices/locations, network cabling, electrical needs)	Image Processing and Document Retrieval Software At least one scanner in every major department. Some departments could require more. Risk management proposes to use scanners by having one at each employee workstation and scanning all employee benefit documents. Personnel services would like to image employment applications, and Financial Services would like to image reports. The software could be accessible to all business related support positions in the first phase, thereby expanding to instructional needs in a later phase. The scanned data would be indexed and stored centrally on a server (s).
Staff Training Needs	Training provided by the vendor; train-the-trainer
Rationale for Initiative	Document imaging and retrieval is a more efficient way of storing documents. Filing and warehousing paper is inconvenient, bulky and expensive for PISD. With this method, documents could be scanned and retrieved from the employee's desktop. PISD is running out of room to store paper.
Suggested Timeline	As soon as bond funds are available.

2004 Bond Planning *Records Management*

1	Document imaging system	500,000	
Records Management Total			500,000





Technical Support Services

Administrative Area	Technical Support Services
Submitted by	Dan Armstrong, Director Technical Support Services
Central/Auxiliary Services Team Members	Dan Armstrong, David Dooley, Lecia Medlock
Planning Meetings (include schedules and members attending)	Team meetings held in November, December, January, February
Description of current office technology environments (include hardware and software resources)	We currently use a "fat" client on everyone's desktop and a terminal server to come in remotely. (using Citrix)
Proposed Initiative (include list of equipment and software, quantity, # of offices/locations, network cabling, electrical needs)	Portal - Back-end XML design would need to be customized to extract the needed data to put into a web format and delivered to the end user. The database back-ends would need to be tied together before we could begin a portal process. This project would let us build the back-end connectivity so the front end could be advanced.
Staff Training Needs	Advanced technical training sessions for 3 engineers at PISD.
Rationale for Initiative	To extract the data needed to provide enriched screens to end users in a web interface, we would need to synchronize some of the data fields between an IBM DB2 database and Novell's Directory service. This would require advanced knowledge of XML on syncing dissimilar system fields.
Suggested Timeline for Implementation	This product would take about 4 months to produce results.

2004 Bond Planning *Technical Support Services*

1	Portal system	155,000	
Technical Support Services Total			155,000





Telecommunications and Special Projects

Administrative Area	Telecommunications & Special Projects
Submitted by	David Dooley
Central/Auxiliary Services Team Members	David Dooley, Dam Armstrong, Lecia Medlock, Mary Hewett, Jim Powers, Jim Hirsch
Planning Meetings (include schedules and members attending)	Team meetings held in November, December, January, February
Description of current office technology environments (include hardware and software resources)	<p>The District currently has no ability to generate sufficient power to keep critical technology equipment up and running during power losses at the 4 hub locations providing data and voice service to all District facilities.</p> <p>The current technology environment for SchoolMessenger includes the following:</p> <p>Teacher computer</p> <p>SchoolMessenger USB unit and software</p> <p>Dedicated analog phone line</p>
Proposed Initiative (include list of equipment and software, quantity, # of offices/locations, network cabling, electrical needs)	<p>Purchase mobile diesel power generator</p> <p>School Messenger System includes a data server, web server and telephony server. Software is pre-installed and configured by Reliance Communications.</p>
Staff Training Needs	<p>None</p> <p>System Administrator would be trained immediately following installation for ½ day. This training is required and included in the purchase price.</p> <p>The help desk would receive a ½ day training to support staff use. This training is optional but recommended and included in the purchase price.</p>



<p>Rationale for Initiative</p>	<p>The purchase of a mobile power generator with sufficient power to keep critical technology equipment functional during power outages is a more efficient way to provide power in such instances than purchasing redundant power for each hub site. Each hub site would be retrofitted with an external outlet for connection to the generator and closet power concentrated in one box in each CDN that would allow power to be switched between local energy and mobile generator power.</p> <p>Custom built to district needs. Software is not pre-packaged. Can be easily upgraded or modified in the future. District staff can program and install updates without going back to the vendor with an optional add-on product.</p> <p>Provides a long-term solution for parent and staff communications. Provides for large event notifications that affect all students in the district.</p> <p>Transportation: Emergency notification of bus breakdowns or accidents to parents delaying delivery of students. Notification of bus route changes. Replacement for post card notifications in the summer of bus route information for the fall.</p> <p>Emergency notifications: Mass notification to staff of a district emergency or informational message. Quickly notify parents of a campus emergency or evacuation including instructions in approximately 15 minutes for a 1,500-student campus.</p> <p>Parents can login and specify how they want to receive their notifications. They can enter alternate phone numbers and also receive messages via e-mail. Parents can also see and hear messages via the parent portal that they may have missed.</p> <p>Easy access for teachers and administrative staff. Current single-line system only works well for administrative staff. Multiple schools and/or departments can use the system simultaneously.</p>
<p>Suggested Timeline for Implementation</p>	<p>During year 1 of the Bond implementation.</p>

2004 Bond Planning
Telecommunications

1	Mobile diesel power generator	150,000
1	School Messenger Enterprise system	165,000
Telecommunications Total		315,000

