AMPHITHEATER PUBLIC SCHOOLS
EDUCATIONAL TECHNOLOGY PLAN
JULY 1, 2010 – JUNE 30, 2013

LEA PROFILE

LEA Profile	
LEA NAME: Amphitheater Unified School District	
CTDS:	10-02-10-000
NUMBER OF SCHOOLS IN LEA	20
E-RATE BILLED ENTITY NUMBER (if not applicable, indicate N/A)	143117

TECHNOLOGY PLAN CONTACT INFORMATION

Primary Technology Plan Contact Information

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Secondary Technology Plan Contact Information

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TECHNOLOGY COMMITTEE

LEA Technology Committee

Member	Title (if applicable)	Constituency Represented
David Fernandez	Executive Director of Technology	Technology
Steve Frost	Network Manager	Technology
Cheryl Spaulding	Classified Staff	Technology
Dan Meyer	Community Member	Technology
Jean Scott	MIS Manager	Technology
Cathy Eiting	Chief Academic Officer	Curriculum & Instruction
Kevin Corner	Principal	Curriculum & Instruction
Lee Street	Teacher	Curriculum & Instruction
Shyla Sholl	Teacher – Special Ed	Curriculum & Instruction
Lourdes Oros	Teacher	Curriculum & Instruction
Lisa Wittrock	Teacher	Curriculum & Instruction
Roseanne Lopez	Pay for Performance Coordinator	Professional Development
Michael Capizzi	Teacher / Instructional Support Leader	Professional Development
Judy Shorrock	Teacher	Professional Development
Rayette Roberts	Teacher	Professional Development
Tami Shaw	Teacher	Professional Development
Tom Collins	Director of Federal Programs	Administration
Scott Little	Chief Financial Officer	Administration
Jay Midyett	Program Assessment Eval Analyst	Administration
Jon Lansa	Principal	Administration

TECHNOLOGY VISION & MISSION

The Amphitheater Technology Department is committed to the education and success of 21st century students and employees. Our vision includes:

- Implementation of a strong leadership plan to direct a unified, proactive, future-oriented department
- Utilization of a comprehensive standardization of policies, procedures, equipment, and software.
- Acquisition of a budget to secure the tools and resources needed to accomplish our goals
- Establishment of a creative, collaborative, and rewarding work environment that fosters clear, timely communication
- A dynamic, cross-trained department that empowers users through effective training
- Provision of excellent and responsive customer service

The Technology Department members will act respectfully, honestly, and cooperatively as we share and live our vision.

Mission Statement

The role of technology in support of the mission of Amphitheater Public Schools is to:
Inspire, Support, Educate and Empower (I SEE).

NEEDS ASSESSMENT

Student Learning

Current Reality

Internet Etiquette and Ethics: The teaching of Internet etiquette and ethics as well as grade based evaluation tools for student and teacher Internet use is inconsistent in the District.   In addition, capacity for consistent training is also constrained to prepare educators to deliver instruction in this area. Due to Federal filtering requirements, student self-assessment in their use of the Internet is constrained because teachers have only the opportunity to discuss appropriate and inappropriate use rather than model directly in all instruction.

Information Management: Procedures and training are in place but inconsistent to prepare educators to effectively search for, discern the quality of, and critically evaluate information. Therefore, transfer of that capability to students is hampered.

Technology Currently In Use by Teachers and Students: Technology use among students and staff is surveyed yearly. The Instructional Technology Plan Teacher Survey results currently administered annually could be better utilized to inform instruction. A limited but growing number of teachers and students are using varied technology in classroom instruction and learning (i.e., SmartBoards, scanners, digital cameras, Web 2.0 tools, etc).

Technology as a Tool to Enhance Thinking: Educators in the District are generally at the awareness level in promoting 21st century skills (communication, collaboration, critical thinking, and creativity) through the use of technology in the classroom. Many of our classrooms technology instruction could better connect activities to real world applications (i.e., PowerPoint vs. video, Word vs. Google Docs, etc.).

Amphitheater Public Schools' Needs

- **Technology as a Tool to Enhance Thinking: Students need to effectively use technology as a tool to promote communication, collaboration, critical thinking, and creativity in real world applications.**
- **Information Management: Students need to effectively search for, discern the quality of, and critically evaluate information on the Internet.**
- **Internet Etiquette and Ethics: All audiences need to be educated on the use, etiquette, and ethics involving the Internet.**

Leadership

Current Reality

Technology coaches, technology repair specialists, and teacher leadership positions support the site principal in implementing the effective use of software and technology at each school site. They also provide district leadership in the implementation of technology initiatives.

The District implements a plan to train administrators in the effective use of technology.

Current reality demonstrates a gap between expectations (i.e., Amphitheater Teacher Performance Evaluation System indicators) and the effective use of technology in all classrooms. While leadership at the

school and district levels supports the effective use of technology, the requirement for district staff to use technology as a tool to leverage student achievement or in their respective area of responsibility could be more closely monitored through employee evaluation.

There is a wide range of skills in usage of technology by job class.

There is evidence of community support to increase access to technology for teachers and students (i.e., Amphitheater Foundation, Oro Valley Community Foundation, bond projects, etc.).

The implementation of 21st Century skills is ongoing but challenged due to a lack of time and resources.

Amphitheater Public Schools' Needs

- The District needs to implement the full utility of its student management system, TEMS, to leverage student achievement. All staff needs continued training to be highly skilled in TEMS usage. The District needs a greater understanding of school needs and how those needs align with the student management system.
- Hiring recommendations with required technology skills components would benefit the District. Technology Coaches need to identify gaps in skills in various job classes to develop and implement training to close those gaps.
- The District and school site leadership need to encourage and support the continued and expanded use of 21st Century skills. Resources should be made available to embed or integrate 21st Century skills in all curricular areas.
- District and school leadership should increase efforts to access community support for technology in the classroom (i.e., community partnerships, grants, business partnerships, parent-teacher organizations, etc.).

Preparation and Development of Educators

Current Reality

Staff members rely on older rather than newly implemented programs. (i.e., Easy Grade Pro vs. Grade Book in TEMS, Microsoft Office vs. more advanced forms of technology, Power Point vs. Notebook)

Classified staff could take better advantage of opportunities for professional development in technology to the same extent as certified staff.

There are extensive classes in technology at the district level that are optional. There are very few at the site level.

People who choose to attend technology training tend to be those who are already versed in technology.

There are no incentives for attending technology training for most teachers.

Educators' use of technology in the classroom is limited by: availability of technology; teacher comfort with usage; the time needed to find and prepare technology rich lessons; and administrative support for integration of technology as a regular part of instruction.

A limited number of staff has attended training off site, such as Tech Camp, INTEL, ISTE Conference, Regional Support Center classes, etc.

A limited number of teachers have attended district-paid advanced training technology classes. These teachers are integrating technology into their curriculum at the highest levels.

We are currently using the "grass roots" approach to integrate technology in the classroom. For example, a teacher takes training and comes back to school then shares the new skill with a colleague.

Technology Coaches are available in every school. Each coach has a different level of skill and passion for the integration of technology in the classroom. Professional development is limited by the available time and skill or knowledge level of the coach.

Administrator opportunities for technology training are limited.

There are limited opportunities for classified staff to receive the technology training they need for their job assignment.

The role of the librarian is changing and those who are demonstrating 21st Century learning positively impact their school sites.

Models of good technology integration exist; however, there is limited access to these models.

Amphitheater Public Schools' Needs

- There is a need for extensive and ongoing teacher collaboration on technology use in order to build comfort levels for all staff. Time for the development of technology rich lessons needs to be built into the day and the products need to be shared.
- The District could develop diverse incentives that reach all staff who attend technology related training and integrate the acquired knowledge into the workplace.
- Continued training in the student management system (TEMS) gradebook, and time to implement this training, is needed for 100% of teachers so they can fully utilize the benefits of a web-based student management system. For example, parents will be able to closely monitor their child's progress through the TEMS parent portal.

Infrastructure

Current Reality

The District has one Internet connection that is shared among all schools; current connection is 100MB.

Wireless LAN (Local Area Network) access is currently limited to seven classrooms in one school (Amphi High School).

Resources are currently limited; as a result the Technology Department does not have the capacity to allocate enough hard disk storage space for staff and students.

Connectivity between sites is currently 20 Mbps for elementary schools and 100 Mbps for high schools and middle schools. Current technology for WAN (Wide Area Network) connectivity is microwave wireless.

An intranet portal that will be used for work collaboration and document storage is currently being tested. Currently the intranet is only being used for storage of documents and videos.

The passage of voter-approved bonds has allowed the District to re-cable (data, voice, and video) all schools over the next 5-6 years (with the exception of IRHS and Painted Sky).

The current resource scarce environment in Arizona K- 12 education and Amphitheater, specifically leads to the following:

- The login process for accessing the network on many computers is slow.
- Current network switching equipment has an average age of ten years. The equipment does not support the needs of a 21st Century Learning environment. In addition, the equipment is no longer supported by the manufacturer.
- The phone system is 12 years old. Its operating system and many of the system components are no longer supported by the manufacturer. Occasional system failures create safety concerns for students and staff.
- The District's infrastructure is not capable of handling the delivery of video distribution for extensive classroom use.
- The District's infrastructure lacks QoS (Quality of Service) which limits the ability to use the network for delivery of video, voice and other advanced technologies.
- The lack of dependability in the network infrastructure creates anxiety for teachers when using technology in the classroom.
- Based on the current refresh rate, the average age of computers is 7 years. Based on the needs of the 21st Century Classroom, computers should be refreshed every 5 years.

Amphitheater Public Schools' Needs

- There is a need to replace networking components to bring the District's infrastructure up to current technology standards.
- In an effort to provide increased access to Internet resources, the District should expand its WiFi network to all sites.
- The Refresh Program should be redesigned to accommodate 21st Century Classroom needs and current technologies.
- There is a need to increase bandwidth to the Internet to access resources. There is a need to increase bandwidth to school sites.

Amphitheater Public Schools Technology Plan 2010 – 2013 Strategies and Action Steps

STUDENT LEARNING

#1a Student Learning Strategy Title: Create Professional Development for Technology Use (NCLB Goal #7)

❖ **Create strands of professional development that effectively use technology as a tool to promote communication, collaboration, critical thinking, and creativity in real world applications.**

Action Step #1: Identify/Design Curriculum
- Identify current curriculum in use or design a curriculum for teachers that incorporate strands to promote communication, collaboration and critical thinking, and creativity with a focus on real world applications.

Action Step #2: Differentiated Teacher Training
- Implement differentiated teacher training strands that address the varied learning needs of all participants.

Action Step #3: Evaluate Training Strands
- Evaluate training strands and modify as needed.

#1b Student Learning Strategy Title: Design Instruction (NCLB Goal #2)

❖ **Design instruction that enables students to effectively use technology as a tool to promote communication, collaboration, critical thinking, and creativity in real world applications.**

Action Step #1: Instructional Units
- Research and plan instructional units by desired results

Action Step #2: Evidence of Learning
- Identify acceptable evidence of learning

Action Step #3: Integrate Skills into Curriculum
- Students integrate newly developed skills into daily learning across curriculum

#2 Student Learning Strategies Title: Internet Etiquette and Ethics (NCLB Goal #4)

❖ **To provide education to all audiences on use, etiquette, and ethics involving the Internet.**

Action Step #1: Survey Groups
- Survey groups to identify current knowledge base and assumptions

Action Step #2: Develop Training
- Develop training that is differentiated for all groups

Action Step #3: Implement Training
- Implement training according to identified needs

#3 Student Learning Strategy Title: Student Instruction for Safe & Effective Internet Searches (NCLB Goal #4)

❖ **Design instruction that enables students to effectively search for, discern the quality of, and critically evaluate information on the Internet.**

Action Step #1: Identify/Design Curriculum
- Identify/Design a curriculum for teachers that incorporates strands to promote communication, collaboration, and critical thinking, and creativity with a focus on real world applications.

Action Step #2: Differentiated Teacher Training
- Implement differentiated teacher training strands that address the varied learning needs of all participants.

Action Step #3: Evaluate Training Strands
- Evaluate training strands and modify as needed.

LEADERSHIP

#1 Leadership Strategy Title: Utilization of TEMS (NCLB Goal #1A)
❖ *Implement the full utility of TEMS to increase student achievement.*

Action Step #1: Needs Assessment
- Implement an on-going needs assessment (communication structure) with district stakeholders to understand school or department needs regarding the application of TEMS (student management software).

Action Step #2: Develop Training
- Develop training that meets school or department needs regarding the application of TEMS (student management software) so that district staff becomes proficient users.

#2 Leadership Strategy Title: TEMS Highly Trained Staff (NCLB Goal #1B)
❖ *Amphitheater Public Schools will have highly trained staff using TEMS.*

Action Step #1: Identify Gaps in Skills
- Identify gaps in skills in the workplace for district employees that limit their effectiveness in the application of TEMS.

Action Step #2: TEMS Training
- All staff will receive TEMS training for their respective workplace responsibilities to be highly effective in its use.

Action Step #3: Update Job Descriptions
- Review and update district job descriptions to ensure required and desired technology skills are incorporated which support the application of TEMS.

#3 Leadership Strategy Title: Strengthen Community Support (NCLB Goal #6)

❖ *Amphitheater Public Schools will strengthen community support that increases student access to technology.*

Action Step #1: Expand community Partnerships
- Continue and expand community partnerships, grants, business partnerships, and Parent-Teacher Organizations to garner technology resources.

Action Step #2: Develop Community Partnerships
- Develop community partnerships that pursue advocacy and awareness for the educational and technology needs of children.

PREPARATION AND DEVELOPMENT OF EDUCATORS

#1 Preparation and Development of Educators Strategy Title: Ongoing Collaboration (NCLB Goal #3)

❖ *Amphitheater teachers will participate in extensive ongoing collaboration related to technology use in order to: increase comfort levels when using technology; identify and share quality models of technology integration; and develop technology-rich lesson plans.*

Action Step #1: Professional Development Plans
- School administration will incorporate collaborative work time for technology integration into their site professional development plans.

Action Step #2: Technology Integration Discussions
- Teachers will include classroom technology integration discussions into their collaborative work time in order to increase comfort levels, develop lessons and share models.

Action Step #3: Tech Coaches
- Tech coaches will provide support for collaborative group discussions by sharing appropriate technology and demonstrating use of technology.

#2 Preparation and Development of Educators Strategy Title: Develop Diverse Incentives (NCLB Goal #7)

❖ *Amphitheater will develop diverse incentives to motivate all staff to participate in technology related training and/or to integrate technology into the workplace.*

Action Step #1: Survey Staff
- Gather information from staff as to what will motivate them to participate and integrate technology.

Action Step #2: Develop Incentives
- District and site administration will develop/utilize varied incentives for staff, including classified staff.

#3 Preparation and Development of Educators Strategy Title: Implement TEMS Gradebook (NCLB Goal #5)

❖ *100% of Amphitheater teachers will implement the TEMS grade book and attendance features to fully realize the benefits of the web-based student management system.*

Action Step #1: Comprehensive Training
- A comprehensive training program will be developed for teachers to include:
  - ➢ Reports
  - ➢ Screen issues
  - ➢ Data entry
  - ➢ Utility of the program
  - ➢ Specific/customized training
  - ➢ Report card preparation
  - ➢ Accurate taking of attendance

Action Step #2: Development of Training
- Training will be developed with comprehensive teacher input as to the functions that will benefit their work.

Action Step #3: TEMS-Related Communiqué
- The Technology Department will prepare and distribute a regular communiqué regarding issues related to the implementation of TEMS.

INFRASTRUCTURE

#1 Infrastructure Strategy Title: Develop Network Design (NCLB Goal #7)

❖ *Develop a network design to upgrade the District's infrastructure that will accommodate 21st Century Learning and Internet safety.*

Action Step #1: Inventory Network Components
- The Technology Department will inventory all current network components to identify what is adequate and what needs to be replaced to bring the District up to current technology standards.

Action Step #2: Research Current Technologies
- The Technology Department will research current technologies to identify components that will meet the needs of our educational objectives. Some of the known objectives are the ability to handle video, voice, and advanced multi-media content delivery.

Action Step #3: Develop Network Design
- Based on the results of the inventory and the current available technologies, the Technology Department will develop a network design that will bring the district infrastructure to current technology standards and provide for future demands.

Amphitheater 2010-2013 Technology Plan

#2 Infrastructure Strategy Title: WiFi Enhancement (NCLB Goal # 7)
❖ *Identify instructional areas where WiFi can enhance 21st Century Learning*

Action Step #1: Identify Programmatic Areas
- The Technology Department will collaborate with department heads and school representatives to identify instructional and programmatic areas where WiFi can enhance student learning.

Action Step #2: Review Network Design
- The Technology Department will review the network design to verify that appropriate components have been incorporated to support the expansion of the WiFi network.

Action Step #3: Site Surveys
- Site surveys will be performed to identify drop locations for wireless access points.

#3 Infrastructure Strategy Title: Refresh Program (NCLB Goal #7)
❖ *Re-evaluate the Refresh Program to accommodate 21st Century Classroom needs and current technologies.*

Action Step #1: Identify Key Personnel
- The Technology Department will meet with department heads to identify key personnel that will evaluate the changes needed in the current Refresh Program.

Action Step #2: Identify Devices
- The collaborative group will identify appropriate end devices and life cycles to be furnished in the Refresh Program.

#4 Infrastructure Strategy Title: WAN & Internet Bandwidth (NCLB Goal #7)
❖ *Increase bandwidth to Internet and school sites as needed based on utilization and projections.*

Action Step #1: Monitor Utilization
- The Technology Department will monitor WAN (Wide Area Network) and Internet utilization and identify trends.

Action Step #2: Options for Localization
- The Technology Department will research options for localizing video and Internet content to reduce or to prevent unnecessary bandwidth consumption.

Action Step #3: Bandwidth Recommendations
- Based on bandwidth utilization findings, the Technology Department will present recommendations for increasing bandwidth.

NCLB Related Goals from the Amphitheater Consolidated Plan

Goal 1A: Reading and Language Arts Proficiency
By the end of the 09-10 school year, 65% of Amphitheater students in all subgroups across grades 3-10 will demonstrate proficiency as measured by the AIMS reading test.

Goal 1B: Mathematics Proficiency
By the end of the 09-10 school year, 65% of Amphitheater students in all subgroups across grades 3-10 will demonstrate proficiency as measured by the AIMS mathematics test.

Goal 2: Highly Qualified Teachers and Para-Professionals
100% of Amphitheater teachers and paraprofessional will be highly qualified at time of hire as measured by completion of attestation forms and the HQT Input Position Report beginning with the 2009-2010 school year.

Goal 3: Proficiency in English for ELLs.
The Amphitheater Unified District will demonstrate meeting the Annual Measurable Achievement Objective (AMAO) of "Making Progress" and "Reclassification" for English language learners to the "Proficient" Level, as measured by AZELLA, by meeting or exceeding 25% growth for making progress and 35% reclassification rate for the English language learner population during the 2009-2010 school year.

Goal 4: Safe, Drug-Free Schools Conducive to Learning
By May 2010, the number of discipline infractions for smoking tobacco will decrease by 5% as measured by student referrals to site administrators.

Goal 5: High School Graduation
Amphitheater Public Schools will increase the graduation rate by 5% by the 2009-2010 school year.

Goal 6: Parent Involvement
By the end of 2009-2010, student-family interventionists implement two training sessions for parents on instructional strategies and activities from the schools reading and mathematics curricular programs (Comer Type 4).
(Note: The Comer Program includes six types of parent involvement: Type 1: Parenting Skills; Type 2: Two-Way Communication; Type 3: Volunteering; Type 4: Home Support for Learning (curriculum); Type 5: Decision Making and Governance; Type 6: Community Involvement)

Goal 7: Technology Literacy Goal
Students will be technology literate in the areas of telecommunications/internet, word processing, multimedia presentations, and the social/ethical aspects of technology.

ANNUAL FUNDING & COSTS

Average Annual Technology Funding

Funding Source	Amount	Restrictions
M&O	$1,589,043	Staff, support, maintenance, repairs, phone service, WAN, Internet
Capital	$ 0	
Title II-D Formula (EETT)	$25,000	Professional Development
Title I	$ 0	
Overrides/Bonds	$1,200,000	Cabling infrastructure
E-Rate	$287,043	Phones Service, WAN, Internet
Other		

Average Annual Technology Costs

Expense Type	Average Annual Cost
Hardware/Network	$250,000
Software Purchases/Licenses	$151,000
Professional Development	$ 25,000
Phone Services	$50,040
Internet Access/WAN	$428,364
Technology Support/Maintenance/Repair	$256,000
Other (utilities, construction, retrofitting, etc)	

2010-2011 Budget Summary

	M&O	Capital	Title II-D	Title I	Overrides & Bonds	E-Rate	Other	Totals
Hardware/Network		$ -						$ -
Software Purchases/Licenses		$ -						$ -
Professional Development			$25,000.00					$ 25,000.00
Phone Services	$ 20,016.00					$ 30,024.00		$ 50,040.00
Internet Access/WAN	$171,345.60	$ -				$257,018.40		$ 428,364.00
Support/Maintenance/Repair	$256,250.00	$ -						$ 256,250.00
Other (utilities, construction, retrofitting, etc)		$ -			$1,200,000.00			$ 1,200,000.00
Totals per funding source	$447,611.60	$ -	$25,000.00	$ -	$1,200,000.00	$287,042.40	$ -	$ 1,959,654.00

Estimated E-Rate Discount Percentage	60%	Please see http://www.usac.org/sl/applicants/step05/discount-matrix.aspx for more information on calculating E-Rate discounts

*If any figures in the E-Rate column are highlighted in red, that indicates you have calculated a higher E-Rate discount for that row than you indicated in the Estimated E-Rate Discount box. Please reduce the amount budgeted for E-Rate or double-check you have input the correct E-Rate discount percentage in cell B11.

Comments:

Amphitheater 2010-2013 Technology Plan

EVALUATION

The Amphitheater School District is committed to making the Technology Plan a continuous improvement plan and will use data to identify areas of strengths and weaknesses and then modifies the plan as needed. A variety of surveys, classroom observations, analysis of student scores, and other data is used as a part of the assessment process.

Evaluation Questions

The information gathered will be analyzed using the following questions to determine the effectiveness of the plan and to illustrate areas that need to be modified or additions that may need to be made to the plan.

- Is the program making a difference?
- How good (useful, effective, well-received) are the program's services and products, such as, professional development, technical assistance, resources, and infrastructure?
- Is the program doing what it is supposed to do, i.e., what was laid out in the technology plan?
- How have students been impacted by technology integration? Has technology improved student achievement, had no impact, or perhaps negatively impacted achievement?
- Are our teachers using technology in ways that achieve the district goals for 21st Century Learning?
- Have district technology resources been adequately allocated for students, teachers and staff?
- How effective has our professional development model been in helping teachers achieve technology proficiency?

The Amphitheater Technology Plan will be evaluated on an annual basis to monitor and assess progress in meeting the goals of plan. It will be evaluated by a committee composed of the Chief Academic Officer, Director of Federal Programs, Pay for Performance Coordinator, and the Executive Director of Technology. A yearly report that summarizes the data collected will be compiled and distributed to all stakeholders for review and recommendations.