

Sonora Elementary Technology Initiative

**Presented by Glenda Sinclair
For the Sonora Elementary Technology Committee**

By the end of this presentation you will have heard about:

- Our vision for technology upgrade
- Where we are today
- Our recommendations for deployment
- Critical timelines and assumptions for deployment
- An invitation to hear more about the technology
- Identification of next steps

SES Technology Plan Goals

- Based on International Society of Technology in Education Standards (ISTE)
- Incorporates standards for students and teachers
- Recognizes the need for change in education to prepare students to be adults in the digital age
- Identifies essential conditions for success

SES Technology Plan Goals 2014

- 100% of students will learn through the use of technology
- 100% of teachers will use technology to enhance student learning
- 100% of students will demonstrate grade level competency in SES defined 21st century skills;
- 100% of teachers will use data to make decisions to improve student achievement through differentiated instruction

SES Technology Plan Goals 2014

- 75% of families will access home \ school resources for school related communications and educational tools
- 100% of teachers will have participated in professional development on cyber literacy, 21st century classroom skills
- 100% of teachers will demonstrate intermediate to proficient skills on Ed Tech profile

The 21st Century Classroom

- Access to 21st Century classroom tools that include multi-media (visual, audio, interactivity) for student engagement
- Software tools to support a range of individualized learning activities and styles
- High bandwidth connectivity to the Internet
- A comfortable Learning environment
- Flexible learning spaces

The 21st Century Student Must

- Be able to work collaboratively
- Solve complex problems
- Connect Learning across disciplines
- Think Strategically
- Apply Knowledge to Real-life situations
- Use technology to do all of the above

SES Current Environment

- Mac Laptop program in 7th\8th grade
- Projectors\docucams in most classrooms
- Smartboards in 4th-6th grade
- Some Student devices in most classrooms
- Computer lab
- 2 portable student response systems
- Devices for administration and classified staff

The Reality...

- Most End user devices at end of expected life cycle of 3-5 years (2 more years of Mac program)
- Most teacher, student and lab computers are 4-5 years old
- Local area network not able to maintain mission critical classroom or administrative performance due to a variety of factors

The Reality...

- Local area network based on inadequate cabling infrastructure and a lack of a modern technology vision including server and switching technology
- Minimal technology support staff has been unable to support mission critical applications in the classroom
- Lack of support for teaching staff has made it difficult for many teachers to adopt new technology and 21st century teaching skills

The Reality...

- Lack of clearly stated goals for educational software tools has resulted in an unequal adoption of tools across all classrooms
- The technology plan vision has not been adequately communicated to all stakeholders and thus has not been uniformly adopted and supported
- The computer lab needs more support

Pockets of Success

- 7th\8th grade laptop program has been effective in advancing writing and research skills and supported digital literacy skills in this age group. Kids are more engaged in the classroom
- Smartboard technology has become a key and essential tool for student interaction, particularly amongst the early adopters (2 to 3 yrs of experience)

Pockets of Success (cont.)

- Most teachers are using their projectors and docucams as a way to introduce multi-media into their lesson plans to improve student engagement
- Variety of student apps used in the classrooms and lab
- More teachers are using email and teachers websites to communicate with their administration and parents

SES Technology Committee Vision

- Sonora Elementary School will be a model for a 21st Century Learning Environment in California
- One time bond monies must be leveraged to provide a sustainable, mission critical environment for technology adoption in the classroom
- Increase student\computer ratio in the classroom to 100% (4th-8th) and K-3 (to be determined)

SES Technology Committee Vision for 2011 to 2015

- Adopt sustainable technology framework solutions that will support us for 10 to 15 years
- Adopt a phased approach, building on existing initiatives that are underway
- Consider 2012 to 2015 as development years for staff to acquire 21st century teaching skills

Technology Review

- Multiple full day planning sessions with tech team
- Multiple meetings with 3 major vendors of storage and network solutions (Cisco, Dell and HP) to confirm technology direction
- Vendors were consistent on Infrastructure design
- Vendors reviewed current environment and SES technology committee goals
- Obtained 2 high level “proposals” to scope investment requirements through Phase 3 (every child has a computer on their desk)
- Proposals (list price) including VoIP phone systems are in million \$+ range including all implementation services through all phases

3 Phases to Success

Phase 1 – complete 8/1/2011

- Upgrade infrastructure (local area network and servers) to support high speed internet access, a Virtualized Desktop Environment (VDI) to reduce support costs and an infrastructure capable of supporting new VoIP phone and other applications
- Complete Interactive Whiteboard installation through all classrooms
- Add full time support (for 3 years) for Teaching staff for 21st century campus technology initiatives.

3 Phases to Success

Phase 2A – complete 12\2011

- Upgrade servers and computer lab to a virtualized desktop environment to support:
 - Longer productive lifecycle for end user devices
 - Centralized support\maintenance reduces technology support burden
 - Centralized environment highly scalable to support future growth needs while
 - Test of end-user acceptance of Thin client desktops and technology maintenance requirements. Lab support becomes easier.

3 Phases to Success

Phase 2B – complete 08\2012

- Teacher devices upgraded (either laptops or thin clients with remote access capability)
- Administration devices upgraded
- Up to 6 student devices in each classroom (K through 6, and all Resource classrooms) using approved educational software
- Teaching staff trained in use of new software applications for students

3 Phases to Success

Phase 3 – complete 2013-2015

- Increase student\computer ratio to up to 100% by 2015 by adding additional student devices and software applications for individualized learning(to be determined)
- Organizational development to focus on professional development and support for staff to meet curriculum goals

Opportunities

- Need to review curriculum standardization and assessment to ensure standards are met and exceeded in 21st century classrooms
- Review of classroom schedule to identify changes that better support 21st century classroom goals
- Technology support – opportunity for multi-district teams?
- Staff development and support – need to identify comprehensive support model (with focus on educational background) so that goals can be met

Assumptions

- SES Board of Trustees \ Administration approves project goals
- Network and Data Center can be upgraded without significant “rework” when modernization activities begin
- Bond Money is available in June to begin project
- Final specifications for Phase 1 are internally approved by March 31st, 2011

Assumptions (Continued)

- Project manager hired by March 2011
- Bid support is available in March to ensure legal requirements are met for RFP
- Request for Proposals complete and posted by April 15th, 2011
- Vendor selection and contract negotiations (for Phase 1 and 2A) complete by May 15th, 2011

Assumptions

- Technical support plan for organization approved by board by April 1st, 2011 (subject to change, depending on ability of vendors to provide support)
- Staff development support resource approved by board by April 1st, 2011 (primary focus to support development of Interactive Whiteboard implementations, identification of classroom and lab software applications and development of training plans for the above)

Next Steps – Board discussions

- Education on technology solutions
- Detailed discussions on recommended deployment
- Plan to develop organizational resources for staff development support; educational curriculum
- Plan to develop organizational resources for technology support
- Plan to develop agreement on equipment procurement approach (piggyback on existing contracts, WSCA contracts, RFP, etc.)