



# California Association of Independent Schools

## 2014 Trustee & School Head Conference

### Technology:

## Strategic IT Planning, Risk Assessment & Asset Protection

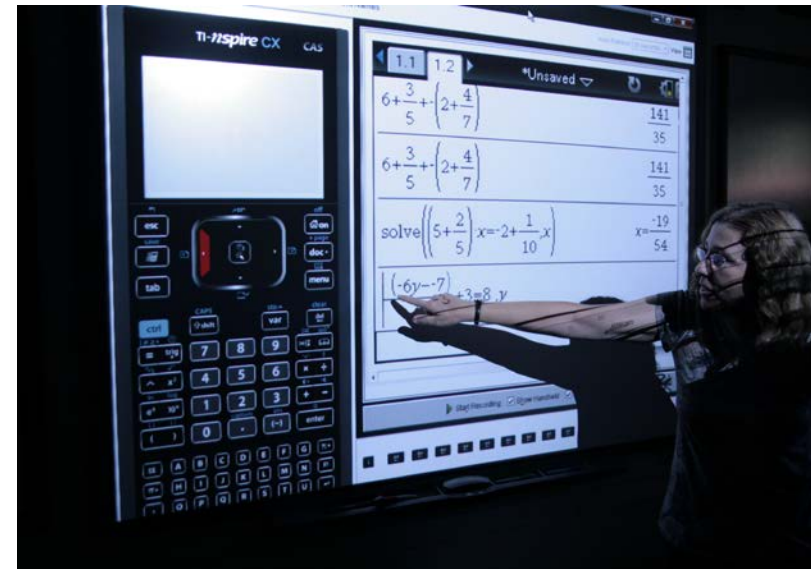
Presenters:

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# Work with Faculty

- Dir. Educational Technology
- Summer Tech Institutes
- Department-specific trainings  
(new building tech)
- Professional development days (full  
faculty & departmental)
- Lower School Technology Taskforce
- Drop-in Tech Discussions (Fridays)
- Peer-to-peer informal networks



# Initiatives in progress

- Evaluation of BYOD
  - eBooks
  - Flipped classrooms
- Cross-discipline collaboratives



# Technology at Buckley



# Essential questions for IT investment

- The waterpark problem
  - Pool? Waterslide? Superslide?
  - When to jump vs. when to dip toes
  
- How to best support a great teacher with technology vs. slow them down
  - Love the teacher, not the tool



# Strategic IT Planning Risk Assessment & Asset Protection

- Governance
- The Strategic Information Technology Plan
- IT Budgeting and Asset Management
- Staffing and Organizational Structure
- Policies and Procedures

# IT GOVERNANCE

*“IT Governance is about the **stewardship of IT resources** on behalf of the organization’s stakeholders who expect a return from their investment. The directors responsible for this stewardship will look to the **management to implement** the necessary **systems and IT controls**. Governance should encompass **risk management**, ensuring **compliance**, delivering value from IT, and **measuring IT performance**.”*

**Who at your school is responsible for IT Governance? Who should be? Do you need outside help to evaluate your IT function and environment?**

# THE STRATEGIC IT PLAN

## CRITICAL CONTENTS OF A STRATEGIC TECHNOLOGY PLAN INCLUDE:

- ❑ Link of IT initiatives to school-wide strategic initiatives and objectives
- ❑ IT initiatives – each is illustrated with:
  - ❑ Narrative of purpose, beneficiary, responsible party/sponsor, etc.
  - ❑ Link to academic and operational initiatives, risk management and compliance objectives
  - ❑ Budgets, resources and highlighted project plan
  - ❑ Critical success factors, risk factors, and measurement methodologies for each initiative

## REMINDERS:

- ❑ It is a living document – requires periodic **monitoring, prioritizing** and **updating**
- ❑ Bring in the IT planning early in an expansion or facilities project!



# IT Asset Management

- IT Inventory and Asset Replacement Plan
  - Hardware
  - Software
  - Infrastructure
- Research on new technology, trends, etc.
- Determining optimal time for replacement, upgrade or implementation of new IT

# IT Asset Management—BUDGETING

- 3-5 year budget
  - Hardware
  - Software
  - Capital Improvements
  - Staffing
  - Operations
  - Professional Development

***Typically, technology spending should average between 6-8% of the total operating budget***

# IT Asset Management—BUDGETING

- Professional Development
  - Faculty training
  - IT staff training and certifications
  - Conferences and workshops
  - Research of new technologies & trends
- Capital Improvements—INFRASTRUCTURE
  - Cabling
  - Network switching and routers
  - Wireless Access Points
  - Video distribution
  - Telecommunications
  - Security

# Total Cost of Ownership and Return on or Value of Investment

- ❑ **TCO focuses on ALL costs of asset acquisition**
  - ❑ Initial purchase
  - ❑ All costs to support and maintain (staff time; licensing; upgrades; etc.)
- ❑ **ROI or VOI**
  - ❑ Estimate the financial impact of a proposed project;
  - ❑ Determine the total cost of ownership;
  - ❑ Outline a project's qualitative benefits in support of a school's mission and enhancement of the learning environment.

# IT STAFF, COMPETENCY, FIT & STRUCTURE

## NEED TO EVALUATE SKILL, ATTITUDE, CONTINGENCY PLANS

- Staff competency – consistent with skills required for strategic IT initiatives?
- Do you have an appropriate mix of internal IT staff and outside resources?
- SuperRisk of departure (planned, or not) of your IT leader
  - They hold the keys to your kingdom
  - Can you ensure their tenure, and honesty? Can you take honesty to the bank?
- vision: who can, or should supervise: a) the IT staff? b) IT leadership c) IT advisors?
- Establish IT leadership departure protocols – and contingencies

**Is your school's IT environment in the right hands?**

# STAFFING AND ORGANIZATIONAL STRUCTURE

## ADEQUATE STAFF SUPPORT

- Corporate:** User/IT Staff = 50/1
- Schools Non-Academic IT Staff:**  
*# of Computers/IT Support Staff = Risk Level*
- Schools Academic IT Staff:**  
*# of Faculty/Academic IT Staff = Risk Level*

**RISK LEVEL:** The higher the number, the greater the risk of loss, downtime, lack of support, etc.

# INFORMATION SECURITY – Threats from inside and out

## OUTSIDE RISKS INCLUDE:

- Hacking into private information, registrar database, family financial data
- Takedown of systems

## INSIDE RISKS INCLUDE:

- Administrators, students or faculty abusing systems
- Compromising/stealing sensitive information
- Unauthorized access to software and data (registrar, financial aid, admissions, development)
- Inappropriate use of systems – causing litigation and criminal exposure

**Where do you believe your school has more exposure from? Inside, or outside?**

# DISASTER PREPAREDNESS

## ISSUES INCLUDE:

- Determining what risks to prepare for
- Satisfactory time for resumption of operations – and to what extent is needed?
- Cost/benefit of mitigation

## ACTIONS:

- Disaster Preparedness Assessment
- Prepare an overall Business continuity plan, including IT issues

**Has your school kept up on this important matter? What is the expectation from parents?**



# NETWORK INFRASTRUCTURE – Sustainability of your school's network design

- What is network infrastructure?
- Design choices: hosted, cloud, hybrid
- Important:
  - Quality of components
  - Effectiveness of configurations
  - Scalability
  - Maintenance and support policies

Is your school's network effectively designed?

Common example, sadly:



Cloud computing  
– Yes, this is really all you need if you are fully cloud-based. Consider where the risks are, now...



# NETWORK INFRASTRUCTURE – Documentation – for good measure

## DOCUMENTATION OF THE NETWORK INCLUDES:

- Topology (keep it current!)
- Vendor agreements and documentation, contracts, terms, expirations
  - (Hardware, software, connectivity, service providers, contractors, etc.)
- Password schemes and policy
- Maintenance logs
- Network management policies and procedures
- Disaster Recovery Plan - or - Business Continuity Plan (if available)
- Configurations
- Hardware profiles

**Is your school's network adequately documented? Is there a copy in a safe place?**

# INFORMATION MANAGEMENT

## “INFORMATION MANAGEMENT” INCLUDES PROCESSES TO:

- Store** and hold information
- Organize** information
- Secure** information
- Retain and/or systematically archive** information
- Destroy** information
- Utilize** information
- Timely delivery** of information
- Accurate delivery** of information

**Are you confident in your school's current information management practices?**

# SOCIAL COMPUTING, SOCIAL MEDIA PRACTICES

- THE RISK:** Lack of internal controls and monitoring can lead to rogue, non-monitored, non-regulated postings, websites, tweets – any ramifications??
- RECOMMEND:** Social Media policies, Monitoring, Self-governance (everyone plays a role)
- RELATED CHALLENGE:** budgeting for social media presence among school communications
  - Website – external facing
  - Website – internal facing, intranet
  - Facebook page(s)
  - Twitter, other mediums

Is your school's "brand" protected from abuse? Are there ramifications from unsuitable behavior?

# SOFTWARE, WORK FLOWS, AND THE USE OF INFORMATION

**FOCUS:** Mission critical applications, work flows, data

Secret: your processing tools and practices are NEVER done, or “perfect”

**FOCUS:** Information “model” – capture what matters most, then use it

**APPROACH:** work backwards – end in mind

So, how do you feel about your ability to get information that matters to you?

# IT BUDGETING

- CONTENTS** – are the line items valid, needed, appropriate?
- EXPENDITURES** – competitively priced? You sure?
- Don't just rubber stamp – same as last year... Investigate!*

Consider your school's approach to IT budgeting. Are monies being spent in concert with priorities from your strategic IT plan?

# IT POLICIES AND PROCEDURES

- Network Management
- Password
- Document retention and destruction (e-file management and email management)
- Disaster Recovery Plan
- Acceptable Use
- Internet Safety and Social Media
- Purchasing
- Inventory Control

# CLOSING

## **With regard to information technology, remember:**

- ✓ IT Governance is YOUR responsibility
- ✓ Assess your risks
- ✓ Prepare a Strategic IT Plan – and monitor it
- ✓ Information Technology initiatives should follow the school's objectives
- ✓ Prepare, manage, and measure IT staff, and system performance
- ✓ Prepare for disasters, contingencies, and loss of key IT personnel



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