

What are the Essential Skills of the K-12 Technology Leader?

NM Education in Technology Conference



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CEO
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5 Essential Skills for the Future



- **Leadership and Management**
- **Fiscal Management**
- **Organization and Culture Skills**
- **Tech Skills**
- **Business Skills**

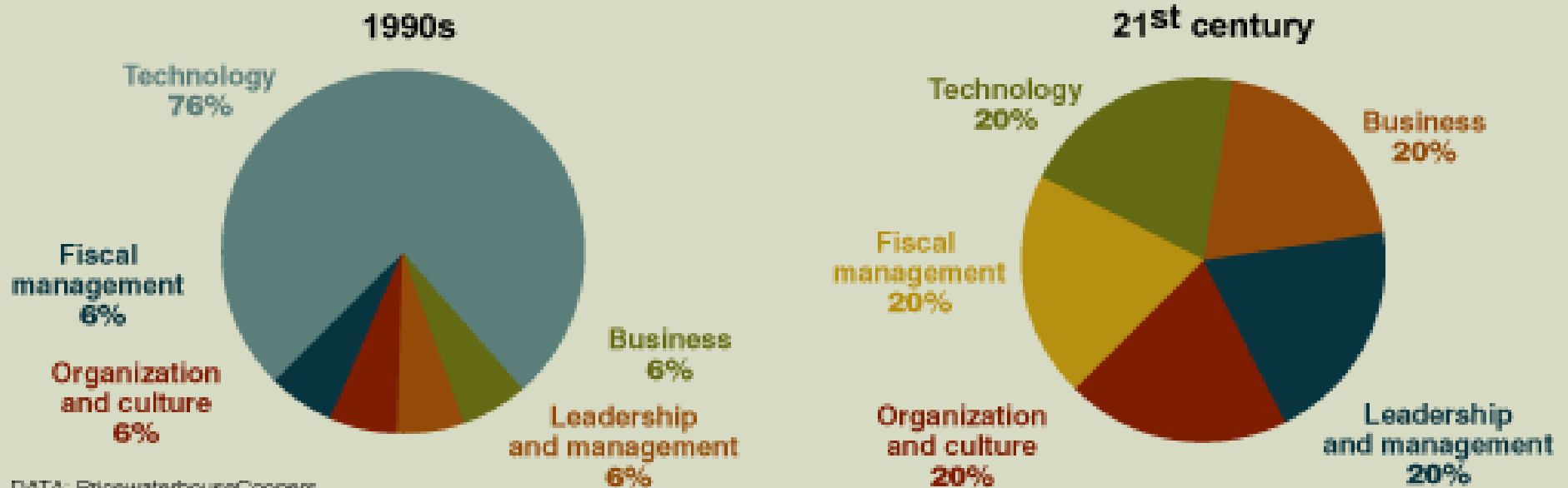
PRICEWATERHOUSECOOPERS 

How Has the Role of the CIO Changed?



Changing Roles

The skills CIOs need have diversified since the 1990s



DATA: PricewaterhouseCoopers

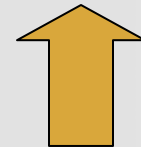




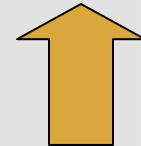
Leadership and Management



Fiscal Management Skills



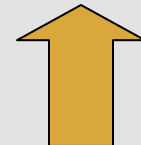
Organization and Culture Skills



Technology Skills



Business Skills



The New CIO Leader Ten Priorities



- Lead, don't just manage.
- Understand the fundamentals of your environment.
- Create a vision.
- Shape and inform expectations.
- Create clear and appropriate IT governance.
- Weave business and IT strategy together.
- Build a new IS organization.
- Build and nurture a high-performing team.
- Manage the new enterprise and IT risks.
- Communicate IS performance in business-relevant language.

CIO Magazine

3 Overarching Characteristics



- **Vision**
- **Influence**
- **Execution**



The Nine Essential Skills for School District CTOs



- **Leadership and Vision**
- **Planning and Budgeting**
- **Team Building and Staffing**
- **Systems Management**
- **Information Management**
- **Business Leadership**
- **Education and Training**
- **Ethics and Policies**
- **Communication Systems**

Core Values & Skills



- **Students and instruction**
- **Continual improvement**
- **Managing for innovation**
- **Data driven decision making**
- **Flexibility**
- **Results**
- **Creating value**

1. Leadership & Vision



Works closely with executive team and stakeholders to develop a shared vision and big-picture perspective on a district's goals to plan for meaningful and effective uses of technology.

2. Planning & Budgeting



Works with the instructional and technical teams to identify the steps needed to transform the technology vision into a long-range plan, complete with specific goals, objectives and action plans.

3. Team Building & Staffing



Creates and supports cross-functional teams for decision-making, technology support, professional development, and other aspects of the district's technology program as an integral part of strategic planning.

4. Systems Management



Directs, coordinates, and ensures the implementation of all tasks related to technical and infrastructure, standards, purchasing decisions, and the integration of technology into every facet of operations within the district.

5. Information Management



Oversees the establishment and maintenance of systems and tools for gathering, mining, integrating, and reporting data in usable and meaningful ways to produce an information culture in which data management is critical to strategic planning.

6. Business Leadership



Serves as a strong business leader who guides purchasing decisions, assists in determining the return on investment for all technology implementations, and fosters good relationships with vendors, potential funders, and other key groups.

7. Education & Training



Budgets, plans for and coordinates on-going, purposeful professional development for all staff using new technologies, including ensuring a sufficient budget through the implementation and assessment process.

8. Ethics & Policies



Oversees the creation, implementation and enforcement of policies and educational programs related to the social, legal and ethical issues involved in technology use throughout the district and models responsible decision-making.

9. Communication Systems



Directs and coordinates the use of email, district web sites, voice mail systems, and other forms of communication technology to facilitate decision making and enhance effective communication with key stakeholders.

Theory into Practice



Putting the Framework of Essential Skills into action, let's consider Leadership & Vision:

- **Skills**
- **Challenges**
- **Best Practices**

Leadership & Vision: Skills



- Ability to establish and lead governance committees to facilitate the process of priority-setting and decision making.
- Ability and willingness to work closely with all stakeholders.
- Effective approach to facilitating change.

Leadership & Vision: Skills



- **Big picture understanding of school organization and curriculum and the issues of greatest importance to teaching and learning.**
- **Ability to adapt known technologies to new uses and envision relationships between emerging technologies and the education process.**

Leadership & Vision: Challenges



- District governance structure may not provide IT staff the authority and support to do their jobs properly.
- District policy makers often lack the vocabulary to communicate with administrators, educators and IT staff.
- Lack of vision regarding technology's ability to support the curriculum.

Leadership & Vision: Challenges



- Lack of a district-wide strategic plan for technology.
- Difficulty building consensus around the role technology can play throughout the organization.
- Technology is viewed as an add-on, not central to the curriculum.
- Administrators cannot envision the future if they can't comprehend what is available now.

Leadership & Vision: Best Practices



- **Focus the technology plan on the broader strategic plan for the district.**
- **Build an inclusive leadership team.**
- **Conduct research to assess needs and evaluate progress.**

Exercise

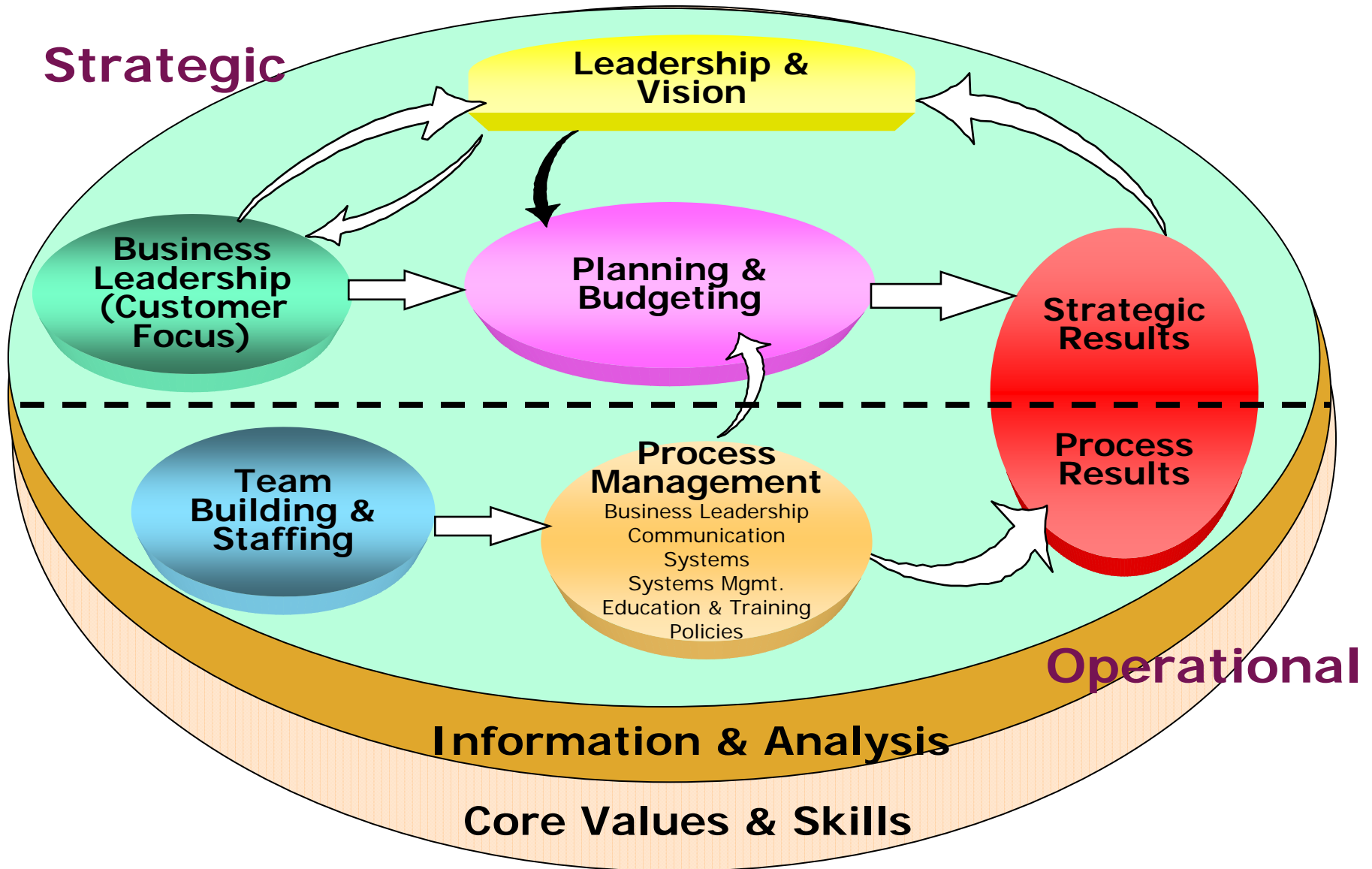


Exercise...

Fill out the Essential Skills Self-Assessment

Then we'll report back.

What it Takes: The Essential Skills of K-12 CTOs



CoSN Mission



Serving K-12 technology leaders who through their strategic use of technology, improve teaching and learning.

CoSN Core Value



The primary challenge we face in using technology effectively is human, not technical.

For that reason, CoSN focuses on **Leadership** and **Policy**.

2007 Goals



- 1) **Empower** K-12 technology leaders to participate actively as a key members of their organizations' leadership teams.
- 2) **Enable** district technology leaders to increase their knowledge and skills within CoSN's Framework of Essential Skills of District Technology Leaders.
- 3) **Develop** the capacity of technology leaders who aspire to accelerate strategic and system-wide uses of technology in their districts.

Who are CoSN Members?



Our membership includes a unique blend of education and technology leaders, policy makers, and influencers from the public and private sectors.

Our core audience are district technology leaders (Chief Technology Officers [CTOs], Chief Information Officers [CIOs], Technology Directors, etc.).

CoSN Initiatives



Highly Rated Leadership Initiatives provide educational technology leaders with the tools to increase their effectiveness and the ability to gain valuable insight into the needs of the K12 education technology market.

- Existing leadership initiatives include:
 - Budgeting with Taking Total Cost of Ownership (CTO)
 - Calculating the Value of Investment (VOI)
 - Cyber Security
 - Data-Driven Decision Making
 - Open Technologies

CoSN Coming Initiative #1



(Nov. 1 target)

Small District Technology Leadership Initiative, providing resources for districts of less than 2,500 students. Ties to CoSN's Framework of Essential Skills.

Opportunity for NM Districts to be part of this free, open wiki

BETA site at www.cosn.org/wiki

CoSN Coming Initiative #2



(February 2008 target)

Enabling 21st Century Learning: The Role of Superintendents & Technology Initiative, designed for superintendents to make the case about why they should care about technology and how it can advance their mission.

EdTech Next



- CoSN's new series of "mini-reports"
- **FREE** for CoSN members.
- Developed to keep educators up-to-speed on the latest trends in educational technology
- The first topics available:
 - Internet2
 - Instant Messaging

Providing Professional Development



High quality, vendor neutral, in-depth PD for district technology staffs. Fee-for-service.

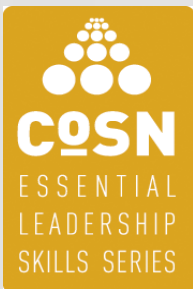
CoSN provides workbook, briefs, presenters PPT and notes. CoSN Expert presenters available and/or District Personnel can become a train-the-trainer.

Essential Leadership Skills Series



www.cosn.org/resources/essential/

- *Smart Budgeting with Total Cost of Ownership*
- *Data-Driven Decision Making*
- *Technology Planning Linked to Educational Goals*
- *Measuring Success: How Will We Know When We Get There?*
- *Telling the Technology Story: PR Strategies for School Leaders*
- *Crisis Preparedness: Leadership for IT Disaster Recovery*



CoSN Compendium



www.cosn.org/resources/compendium/

Annual series of leadership monographs exploring timely issues of importance to K-12 technology decision makers. Free to CoSN members. Available for sale to nonmembers.

2007 Monographs cover:

- *CTO Certification,*
- *Internet2,*
- *Identity Management,*
- *Interoperability Standards,*
- *Safety & Social Networking and*
- *IT Disaster Planning.*

CTO Forums



www.cosn.org/resources/cto_council/

- Three CTO Forums a year at CoSN annual conference, NECC & T+L.
- Enabling face2face PD for district technology leaders.

CoSN Blogs & Podcasts



- **Spinning the Globe**
www.cosn.org/blogkeith/
- **Video Podcasts**
www.cosn.org/resources/videopodcasts/index.cfm
- **NEW EdTech Hot Topics**
www.cosn.org/blogs/hottopics
- **PLUS** Stay tuned—
Each CoSN leadership initiative will launch a blog

Member Benefits



- eNewsletters - CoSN Member Bulletin twice monthly, Washington Update monthly, other updates and news.
- Discounts on annual K-12 School Networking Conference
- Annual CoSN Compendium
- Access mycosn member-area of www.cosn.org
- FREE Internet & Education Webcast Series
- Leadership development information
- Representation in Washington
- Opportunities to volunteer
- Plus state activities and networking

13th Annual K-12 School Networking Conference



Visionary Leadership: Scaffolding 21st Century Learning with Technology

- March 9-11, 2008 in Washington, DC
- Access presentations and video podcasts from the 2007 Conference at www.k12schoolnetworking.org
- Plus – Pre-conference workshops and International Symposium on March 9 and Washington Policy Summit, March 11-12.



CoSN 2007-08 Webcasts



- Oct. 24 – *Using CoSN's Value of Investment Methodology and Tools*
- Nov. 14 - *Ultra Light Portable Devices in K-12: The Quest for a \$100 Device*
- Dec. 5 - *Ignorance of Data Retention Law is No Defense*
- Jan. 16- *Think Before You Ban: How Classrooms Become Communities with Web 2.0 Technology*
- April 16 - *What is the Role of Gaming in Education?*
- May 14 - *Hot Technology Trends*

Past Webcasts archived at www.cosn.org/events/webcasts/

Regional CTO Clinics



- Four CTO Clinics coming to regions throughout the U.S. in Spring/Summer 2008

Sites TBD, but likely in PA, CA, TX or LA, GA or FL.

During NSBA T+L



- Oct. 17, 2 - 4 p.m.
CoSN CTO Forum

Assessing 8th Grade Technology Literacy: How are schools meeting the requirements of NCLB?

To Recap - Three Major Opportunities for NM Districts



- **Probe CoSN Small District Technology Leadership Wiki**
- **Investigate Essential Leadership Skills PD**
- **Leverage webcasts**

Contact Us



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