

THE EMPOWERED SUPERINTENDENT

PROFESSIONAL LEARNING MODULE 2
Four Action Steps for Strengthening
the Technology Leadership Team



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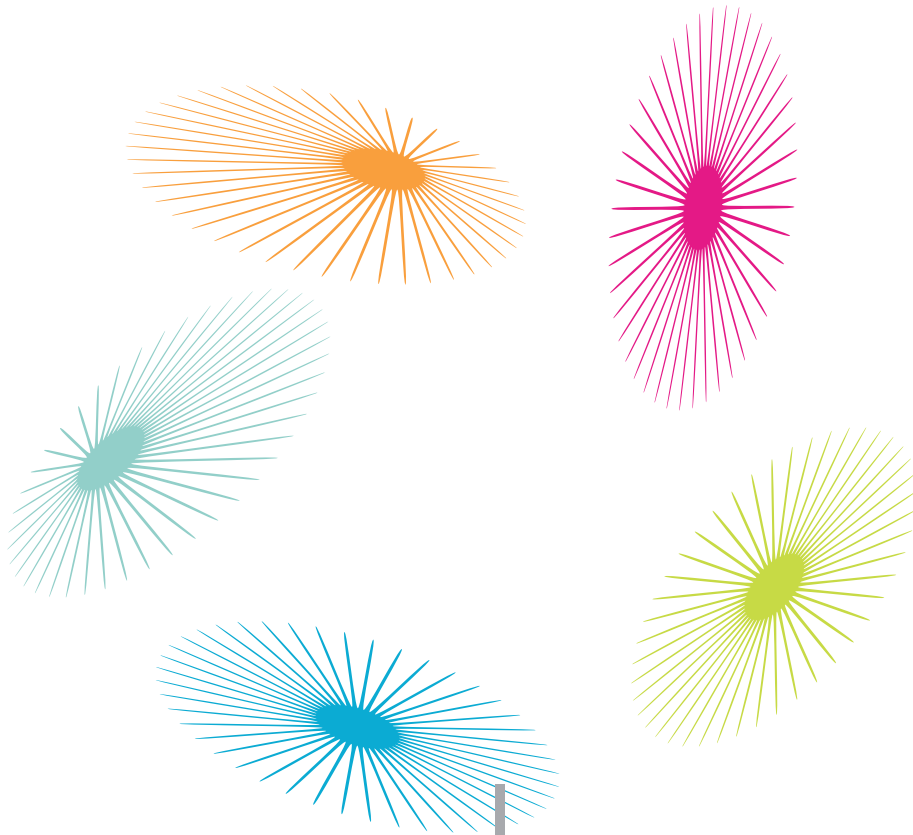
The Consortium for School Networking (COSN) is the premier professional association for district technology leaders. For over two decades, CoSN has provided leaders with the management, community building and advocacy tools they need to succeed. Today, CoSN represents over 10 million students in school districts nationwide and continues to grow as a powerful and influential voice in K-12 education.

www.cosn.org

About AASA

AASA, The School Superintendents Association, founded in 1865, is the professional organization for more than 13,000 educational leaders in the United States and throughout the world. AASA advocates for the highest quality public education for all students, and develops and supports school system leaders.

www.aasa.org



PARTNER WITH A
SKILLED
**CHIEF
TECHNOLOGY
OFFICER**

**Who in your district, who
guides all-encompassing
technology initiatives?**

Who is making sure that the technology you acquire is used effectively to:

- Strengthen district leadership to communicate with and inspire parents, educators and the community?
- Engage students, personalize learning, and accelerate mastery of core academic knowledge and critical skills?
- Create compelling learning environments?
- Deliver targeted professional development and connect educators to communities of practice across your district and beyond?
- Implement new assessments and make intelligent use of data?



“In the past, technology leaders concentrated on boxes and wires—the technical side of education. Today’s successful ed tech leaders also focus on how technology enables the mission of schools, understanding the educational environment, and providing leadership and vision to make that happen.”

Jean Tower
Director of Technology
Public Schools of Northborough
and Southborough (MA)

As the nation’s leading voice on district technology leadership, the Consortium for School Networking (CoSN) can help superintendents and human resources professionals cultivate the human capacity for visionary technology leadership. CoSN offers robust, practical tools that can be used to gauge how well your educational technology professionals understand how technology can bring 21st century learning and operations to your district and schools.

Highly qualified chief technology officers (CTOs) are like few other IT professionals: Not only do they know current and emerging technologies, they also have a deep understanding of how technology can be used to transform education and support innovative practices.

CoSN’s Framework of Essential Skills of the K-12 CTO identifies the 10 essential skill areas that CTOs must have to successfully implement technology strategies in their districts. Each category of the skill areas defines the responsibilities and knowledge needed to be a

successful educational technology leader. Expert, practicing educational technology leaders from around the country developed this framework, which is updated regularly to reflect changing demands in the field.

CoSN’s Certified Education Technology Leader (CETL™) certification examination is fully aligned with the framework. CETL certification is a meaningful and valuable credential that signals competency in the essential knowledge and skills required to be a successful education technology leader.

CETL is the only professional certification developed specifically for educational technology professionals. School districts and independent schools that hire CETL-certified professionals are assured that their technology initiatives and programs will follow industry best practices.

CoSN encourages school systems that are committed to creating compelling learning environments and cost-effective operations to pursue the benefits of CETL certification for their technology leaders and staff.

CTOs are educational technology leaders who are responsible for technologies that are increasingly complex, greater in number and scope, and ever more integrated into the daily instructional and administrative routines of school districts. CTOs are known by many titles, including Chief Information Officers (CIOs) and Technology Directors.

Understanding the Need

Educational technology leadership is in short supply in many districts.

Only about half of all districts (51 percent) employ a full-time individual responsible for educational technology leadership and about one-third (32 percent) employ a part-timer for this position, according to the most recent data from National Center for Education Statistics (Gray & Lewis 2009). Statistics for the position by poverty concentration are significant—in wealthy districts, 60 percent have a full-time technology leader. That drops to 47 percent for lower-income districts. Smaller districts—those with an enrollment size of less than 2,500—and rural districts are less likely than other districts to have a dedicated educational technology leader on staff.

Talented CTOs could be hard to find. Districts have traditionally hired CTOs for their technical skills. “Today, those skills comprise about 20 percent of the job,” says CoSN CEO Keith Krueger. “The other 80 percent is providing leadership, vision, and an understanding of the educational environment and the actual technology” (Molnar 2013). As districts begin to appreciate how much they need the technology leadership skill set, they could face a “huge shortage” of qualified people to take on this expanded role, Krueger says.

A cue from business: the new CTO as chief transformation officer.

Businesses, like schools, are trying to transform cultures and practices to succeed in the digital age. “CTOs must embrace the role of Chief Transformation Officer,” writes author

and CEO Daniel Burrus in a *Harvard Business Review* blog. “No longer will this position’s relevance be tied to how well he or she can oversee the development of technology. In the near future, the CTO will need to oversee the transformation of every business process, including how you sell, market, communicate, collaborate, and innovate. That means the CTO’s role will shift from aligning technology to applying technology to accelerate business strategy, from communicating technology plans to the executive team to integrating a transformation imperative and applying the process to all executive-level planning. That’s a huge shift” (Burrus 2013).

67% of CTOs/CIOs have earned a master’s or doctorate degree.

66% of CTOs/CIOs paid more than \$1,000 every year for their own personal training and professional development.

60% of CTOs/CIOs have been in their current positions for at least six years, compared to a superintendent’s average of 3.6 years.

59% of CTOs/CIOs earn less than \$100,000 a year, compared to \$195,000 for similar positions in the private sector—an income gap that hampers district recruitment efforts.

50% of CTOs/CIOs plan to retire within 10 years, including 20% over the next five years, threatening future stability of district technology leadership.

54% of CTOs/CIOs are unaware of a technology management succession plan.

48% of CTOs/CIOs say their primary professional background is education.

SNAPSHOT OF CTOS/CIOS

Sources: CoSN K-12 IT Leadership Survey, 2014; 2013





PLANNING INFORMATION AND PRACTICAL TOOLS FOR ADMINISTRATORS

Four Key Action Steps

Nurturing and partnering with skilled educational technology leaders, you and your leadership team can take key actions to promote transformation and innovation in your district:

- 1.** Recognize and better understand the evolving role of the CTO and how the CTO can elevate learning environments.
- 2.** Clearly identify the role of the CTO in the district leadership structure, preferably in the cabinet.
- 3.** Help guide the CTO interview and hiring process, seeking candidates with CETL credentials.
- 4.** Target professional training needs to build your technology staff to the CETL level.

ACTION STEP

1. Recognize and better understand the evolving role of the CTO and how the CTO can elevate learning environments.

Districts must ensure that they have technology leaders, ideally CTOs, who are able to align how students learn today with what will be expected of them in the future. District technology leaders must acquire the abilities needed to position themselves as educational leaders—not just technology experts. They must be able to:

- Create a vision of the transformative role of technology for improving student outcomes in education
- Contribute to multi-year strategic planning for technology
- Implement strategic planning and policy development
- Understand teaching and learning, assessment, and professional development needs
- Manage technology and support resources—and ensure sustainable funding for them
- Exercise the political and interpersonal skills to work effectively with all stakeholders

A skilled technology leader is necessary but not sufficient for districts to reach their goals of realizing a compelling learning environment. District leaders must understand the educational opportunities with technology, hire well, and support and nurture the CTO. In a 2013 CoSN survey, CETL-certified educational technology leaders stated that school administrators' involvement with them was critical to significant district progress.

CTOs are responsible for understanding the superintendent's vision and for applying knowledge and skills to make that vision a reality. For CTOs to make the most impact, it's important to understand what a capable CTO must know and be able to do—and it's important for the leadership team to partner with that CTO.

LEADERSHIP TOOL

- **CoSN's *Framework of Essential Skills of the K-12 CTO***



FRAMEWORK
of Essential Skills of the K-12 CTO



CONSORTIUM
FOR SCHOOL
NETWORKING

“Today’s workplace demands not only digital skills but also the ability to work collaboratively and creatively and engage in independent research—all skills that are enabled and enhanced by technology.”

—Every Child, Every Day
by Mark Edwards,
Superintendent
Mooresville Graded School
District (NC)

CoSN’s *Framework of Essential Skills of the K-12 CTO* provides information for administrators and curriculum leaders about what to expect from a technology leader who can help the district move into a strong digital learning environment. The framework is divided into three equally important categories:

1. **Leadership & Vision** outlines how education technology leaders can transform the technology vision into a long-range plan and use technology strategically in their school systems.
2. **Understanding the Educational Environment** identifies what education technology leaders must know about the educational environment to integrate leading-edge technology for learning.
3. **Managing Technology & Support Resources** describes the specific skills that education technology professionals must employ to ensure that the technology in their schools systems is operating effectively and sustainably, at peak performance and lowest cost.

Within the categories, the framework spells out the 10 essential skill areas that CTOs must have developed to successfully implement technology strategies in their education communities:

| LEADERSHIP & VISION | | | |
|---------------------------------------------------|-------------------------------------|------------------------|---------------------|
| 1. Leadership & Vision | 2. Strategic Planning | 3. Ethics & Policies | |
| UNDERSTANDING THE EDUCATIONAL ENVIRONMENT | | | |
| 4. Instructional Focus & Professional Development | 5. Team Building & Staffing | 6. Stakeholder Focus | |
| MANAGING TECHNOLOGY | | | |
| 7. Information Technology Management | 8. Communication Systems Management | 9. Business Management | 10. Data Management |

ACTION STEP

2. Clearly identify the role of the CTO in the district leadership structure, preferably in the cabinet.

The U.S. Department of Education’s National Educational Technology Plan (2010) calls for the district technology leader to be part of the superintendent’s cabinet. While other educational leadership positions have long been defined and established, the executive role for educational technology leadership is relatively new and still only sporadically realized.

School district leaders can use the *Framework of Essential Skills of the K-12 CTO* to identify both the current knowledge and skills of their technology staff and the knowledge and skills they still need.

LEADERSHIP TOOL

- CoSN’s *Framework of Essential Skills of the K-12 CTO*

ACTION STEP

3. Help guide the CTO interview and hiring process, seeking candidates with CETL credentials.

Superintendents, human resources professionals and school boards seeking a skilled technology leader can take advantage of CoSN's leadership tools to help define the profile of the position, prepare interview questions and evaluate candidates for the position.

LEADERSHIP TOOLS

- **CoSN's *Framework of Essential Skills of the K-12 CTO***
- **Chief Technology Officer Job Description**
- **Interview Questions for Hiring an Educational Technology Leader**

ACTION STEP

4. Target professional training needs to build your technology staff to the CETL level.

CoSN's *Framework of Essential Skills of the K-12 CTO* takes into account the evolving role of the CTO and provides a conduit for defining the professional development needs of these executive-level leaders.

District leaders must support and nurture the CTO in gaining the expanded set of skills and abilities necessary for helping the district reach its mission and goals and realize a 21st century learning environment. The framework can serve as a roadmap to help your district meet these goals.

CoSN's Self-Assessment for Chief Technology Officers (CTOs) and Technology Staff is designed to identify the abilities of the CTO and educational technology staff to bring 21st century learning environments to your district.

District technology leaders come to their positions from varied career paths—some instructional, some technical, and others from business. There can be chasms among instructional, technical and management skills required for skilled technology leaders.

CoSN recommends that you and human resources professionals review the Self-Assessment. This tool will help you understand the various disciplines and skills you should expect from your education technology leaders.

CoSN leadership tools also can be used to identify and support the professional learning needs of education technology staff, which will help you develop a deeper bench of talent and plan for succession.

LEADERSHIP TOOLS

- **CoSN's *Framework of Essential Skills of the K-12 CTO***
- **Self-Assessment for Chief Technology Officers and Technology Staff**
- **Evaluation Rubric for the Chief Technology Officer**
- **CETL Certification for Educational Technology Staff**



This CoSN resource is related to the **Leadership & Vision** and



Team Building & Staffing

categories of CoSN's *Framework of Essential Skills of the K-12 CTO*.





COSN
FOCUS AREAS
AND INITIATIVES

LEADERSHIP & VISION

Digital Equity

The Empowered Superintendent

Global Leadership

Emerging Technologies: K-12 Horizon Report

Online Communities of Practice

Protecting Privacy in Connected Learning

INSTRUCTIONAL FOCUS

Connected Learning

Data-Driven Decision Making

Leadership for Mobile Learning

IT MANAGEMENT

Becoming Assessment Ready

IT Leadership Survey

SEND (Smart Education Networks by Design)

Smart IT: Strategic Technology Planning & Management



COSN
EMPOWERED
SUPERINTENDENT
INITIATIVE
ADVISORY PANEL

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Amplify

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C. Blohm & Associates, Inc.

HP

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