



## SELF-ASSESSMENT FOR CHIEF TECHNOLOGY OFFICERS AND TECHNOLOGY STAFF

### 10 Essential Skill Areas in Three Professional Categories

#### **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 & SUPPORT RESOURCES**

7. Information Technology Management
8. Communication Systems Management
9. Business Management
10. Data Management

#### Plus: **CORE VALUES & SKILLS**

Critical personal skills and behaviors

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

## LEADERSHIP & VISION

**Leadership & Vision** Working closely with the executive team and stakeholders to develop a shared vision with long-term, big-picture perspectives on a district's goals to plan for meaningful and effective uses of technology; providing leadership into creating a vision of how technology can help meet district goals.

		Excel (5)	Proficient (4)	Inter- mediate (3)	Basic (2)	Need help! (1)
1	Champion and model effective/innovative use of educational technologies.					
2	Identify core business and culture of the school organization.					
3	Establish and lead advisory committees and facilitate process of priority setting and decision-making.					
4	Envision relationships among emerging technology resources and the education process.					
5	Describe the relationship among technology, assessment, curriculum and instruction					
6	Manage the change process and deal effectively with ambiguity					
7	Work jointly with other units to assist them in using technology more effectively and efficiently.					

**Strategic Planning** Having a high-level view across the school system of things needed to be successful; working 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.

		Excel (5)	Proficient (4)	Inter- mediate (3)	Basic (2)	Need help! (1)
8	Demonstrate a strategic approach and innovation in leading, planning and implementing district goals, including developing and evaluating the district's technology plan.					
9	Work with key system leaders, people networks (e.g., math teachers) and departments to identify budget and funding mechanisms and lead the district from vision to realization of goals.					
10	Assemble and lead implementation of industry best practice methodologies, tools and programs such as total cost of ownership (TCO) and value of investment (VOI) in support of technology					
11	Explain the impact and need for technology throughout the enterprise (e.g., instruction, assessment, finance, facilities, transportation, security, food service and others) to provide leadership regarding how technology can support each.					
12	Inform the organization of risk management strategies and design risk mitigation strategies in support of business and instructional initiatives.					

**Ethics & Policies** Overseeing the creation, implementation and enforcement of policies and educational programs relates to the social, legal and ethical issues involved in technology use throughout the district and modeling of responsible decision making.

		Excel (5)	Proficient (4)	Inter- mediate (3)	Basic (2)	Need help! (1)
13	Demonstrate high standards of integrity and professional conduct with consideration for fairness and honesty.					
14	Work closely with all stakeholders to ensure adherence to state and federal guidelines, regulations and laws.					
15	Identify relevant issues including safety, technology-related health concerns and guidelines for fair and ethical implementation of technology.					
16	Incorporate responsible environmental protection and energy-saving practices in all technology-related activities.					
17	Participate in the policy development process to ensure that appropriate technology supports a high-performing learning environment and equitable access for all stakeholders.					

## UNDERSTANDING THE EDUCATIONAL ENVIRONMENT

**Instructional Focus & Professional Development** Budgeting for, planning for and coordinating ongoing, purposeful professional development for all staff using technologies, including ensuring a sufficient budget through the implementation and assessment process of emerging technologies.

		Excel (5)	Proficient (4)	Inter- mediate (3)	Basic (2)	Need help! (1)
18	Design and coordinate professional development to develop teachers' technology proficiency for 21st century teaching and learning..					
19	Identify standards for innovative teaching and learning that develop student proficiency in 21st century skills.					
20	Model how technology can support educational best practices through collaboration with the district instructional leadership.					
21	Summarize the application of technology to address diverse needs of students and maximize student learning.					
22	Monitor state and national standards, benchmarks and frameworks for educational technology.					
23	Develop and coordinate professional development for staff to increase staff technology proficiency level and maximize business efficiency.					
24	Serve as a member of other district cross-functional project teams.					

**Team Building & Staffing** Creating and supporting 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.

		Excel (5)	Proficient (4)	Inter- mediate (3)	Basic (2)	Need help! (1)
25	Demonstrate strong leadership skills and mentor others to assume leadership roles..					
26	Coordinate and lead cross-functional teams to best address the district strategic plan					
27	Build an environment of trust through communication and transparency about decisions and how they are made.					
28	Incorporate quality improvement tools for decision-making.					
29	Identify strengths and areas of need to make effective hiring decisions.					
30	Ensure appropriate expertise is available to support different aspects of the IT program.					
31	Nurture an environment that encourages communication among team members.					

**Stakeholder Focus** Using knowledge you have about stakeholders and building relationships with all of them; taking a close look at how the district determines requirements, expectations and preferences of stakeholders as well as the key factors that lead to stakeholder satisfaction; understanding how the district seeks knowledge, satisfaction and loyalty of students and other stakeholders.

		Excel (5)	Proficient (4)	Inter- mediate (3)	Basic (2)	Need help! (1)
32	Develop buy-in for the vision for the district’s technology program.					
33	Communicate using emerging collaborative technologies to reach stakeholders.					
34	Build relationships with stakeholders.					
35	Develop effective partnerships with organizations that benefit district stakeholders.					
36	Assess and respond to needs and concerns of all knowledge workers and stakeholders.					

## MANAGING TECHNOLOGY & SUPPORT RESOURCES

**Information Technology Management** Directing, coordinating and ensuring implementation of all tasks related to technical, infrastructure, standards and integration of technology into every facet of district operations—among the many things considered are systems administration, backup and storage, data security, disaster recovery, network infrastructure, network management, network security, Internet bandwidth, federal and state compliance, desktop support and others.

		Excel (5)	Proficient (4)	Inter- mediate (3)	Basic (2)	Need help! (1)
37	Demonstrate knowledge and expertise about technical systems, network infrastructure and computer management					
38	Plan, implement and sustain all tasks related to technical systems, network infrastructure and desktop/notebook computer management.					
39	Develop, collect, interpret and report IT metrics for all aspects of the IT system.					
40	Make purchasing and implementation decisions based on needs of the total school system—and on an understanding of the full life cycle of technology purchases.					
41	Set practical and realistic timelines for technology implementation.					
42	Develop disaster recovery and business continuity plans that are an integral part of the district's technology program					

**Communication Systems Management** Using technology to improve communication; directing and coordinating the use of email, district websites, web tools, voice mail systems and other forms of communication to facilitate decision-making and enhance effective communication with key stakeholders.

		Excel (5)	Proficient (4)	Inter- mediate (3)	Basic (2)	Need help! (1)
43	Direct and coordinate use of email, district websites, web tools, voice systems and other forms of communication.					
44	Describe current and emerging communication tools, including emerging communication technologies to enhance engagement online					
45	Explain technical issues related to implementation of a range of communication tools					
46	Describe technical support issues and staffing needed to keep district communication systems updated, compliant and operational					
47	Identify design, accessibility and compliance issues necessary for keeping district, school and teacher websites and other communication tools updated and operational.					

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

		Excel (5)	Proficient (4)	Inter- mediate (3)	Basic (2)	Need help! (1)
48	Identify funding sources available to the district and appropriately leverage them to meet district and programmatic goals.					
49	Manage annual and long-term budgets, making purchasing decisions and coordinating all purchasing-related tasks.					
50	Apply basic financial and accounting principles and processes following relevant laws, policies and guidelines.					
51	Analyze market rates for acquisition of technology equipment and services, considering issues that determine TCO and VOI.					
52	Negotiate and maintain relationships with vendors and business partners.					

**Data Management** Overseeing 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.

		Excel (5)	Proficient (4)	Inter- mediate (3)	Basic (2)	Need help! (1)
53	Describe data-driven decision making and the role information plays in shaping and supporting a district's educational programs.					
54	Explain techniques and tools for data gathering, warehousing, mining, integrating and reporting data in useable and meaningful ways.					
55	Support district data-driven decision making initiatives.					
56	Identify data-related industry standards and governmental mandates with information reporting requirements.					
57	Use data-driven decision making to assess and respond to needs and concerns of a variety of knowledge workers.					

## CORE VALUES & SKILLS

These underlying values and skills cut across all others and are ones found in effective CTOs. They represent critical personal skills and behaviors necessary for accomplishing all other identified competencies.

		Excel (5)	Proficient (4)	Inter- mediate (3)	Basic (2)	Need help! (1)
58	Communicate directly, honestly and respectfully.					
59	Effectively communicate in all forms of speaking, writing and presenting, using emerging communication technologies when appropriate.					
60	Demonstrate courage.					
61	Be flexible, credible and adaptable.					
62	Be results-oriented in both organizational improvement and personal learning.					
63	Lead for innovation, modeling behaviors others are encouraged to adopt.					