

Partnership in Educational Professionalism (PEP)

Course number and title: PRDV 76325: METAA Chief Technology Officer Certificate Course

Credits: 3

Class dates and times: Instructor-led online course with required weekly participation for 14 weeks

Location: Online

Instructor: Loretta Cannistraci
lcannistraci@techdirectors.org
Tel: 781-775-2534

Course Description: This rigorous course will build an understanding of the essential skills and knowledge in three primary areas of Leadership & Vision, Understanding the Educational Environment, and Managing Technology & Support Resources as outlined in the Consortium for School Networking (CoSN) Framework of Essential Skills of the K-12 Chief Technology Officer (CTO). This course is for both prospective technology directors and incumbent technology directors. Upon completion of this course, participants will receive a course grade. The METAA Review Committee will review the LiveBinder portfolio and final project to determine the candidate's eligibility for the METAA CTO Certificate. This certificate will give employers assurance that they will be hiring or have hired a technology administrator who possesses the vast knowledge and skills necessary to be an effective educational technology leader in the K-12 environment.

The 10 essential skill areas to be covered are:

- Leadership and Vision
- Strategic Planning
- Ethics and Policies
- Instructional Focus and Professional Development
- Team Building and Staffing
- Stakeholder Focus
- Information Technology Management
- Communications Systems Management
- Business Management
- Data Management

Course Objectives: At the end of this course, participants will receive the course grade, be considered for the METAA certificate, and be able to:

- Create a vision for how IT (Information Technology) will build your organization's success
- Shape and inform expectations for an IT-enabled enterprise
- Create clear and appropriate IT governance
- Weave together business and IT strategies

- Build a new IS (Information Systems) organization
- Build and nurture a high-performing team in an IS organization
- Manage a new enterprise and associated IT tasks
- Communicate IS performance in business-relevant language

Course Expectations: Since this is an online course, the attendance requirement is met through consistent participation in discussion area focus activities. Participation is an asynchronous group activity. Students are expected to log into the course at least three times per week to stay current with assignments and expectations. Course participants whose responses and completion of activities do not meet the timelines each week impact the entire class. Please review the Online Discussion Rubric in Appendix A: Online Discussion Rubric.

Time Commitment: Approximately five hours a week includes reading/research, creation and maintenance of a Live Binder portfolio including weekly reflections. A key piece of this commitment involves posting and responding in the online discussion with citations noted. During each week, the participant is expected to work independently within the deadlines posted. The exact time required will vary from person to person.

Course Content and Requirements: Weekly schedule of the topics that will be covered and all assignments due for that week are listed in Appendix B: Course Content.

Course Materials:

- CoSN's CETL Exam Preparation Materials: Become a Highly Capable School System Technology Leader (provided through tuition)
- LiveBinder account (free electronic portfolio)
- Access to equipment that allows for online communications

The coursework will make clear reference to CoSN's Framework of Essential Skills of the K-12 CTO. The Frameworks can be accessed online at:

http://www.cosn.org/sites/default/files/Framework_1218_2013_Public.pdf?sid=8034

Grading Criteria:

Discussion Participation (40%)

The discussions are central to the online learning experience. The instructor will evaluate the learners' levels of engagement in the conversation and their abilities to raise ideas and questions that spark the thinking of others. These discussions are held in a threaded discussion board. All assigned readings and materials in this course are to be studied within the context of "information processing" rather than being able to recall each specific item. Your ability to process the information will not be measured in quizzes and tests but by your participation in the discussion forums.

There is the overarching expectation that postings are substantive, presenting new ideas as follows:

- At least three postings each week including citations from readings:
 - Initial posting responds directly to the week's question
 - Minimum of two additional postings respond to postings of at least one other student
- Postings build on the postings of others.
- Postings present your own ideas and examples of application, such as in your (or others') workplace.
- Postings are supported by properly cited readings.
- Postings are clearly written, with proper spelling and grammar.

Online Discussion Rubric is attached as Appendix A.

Live Binder Final Project and Weekly Reflections (30%)

Participants will complete the electronic portfolio for submission to the METAA Review Committee. All participants will maintain an electronic portfolio through LiveBinder (www.livebinders.com) that allows the user to combine uploaded documents, links, and multi-media content into an electronic portfolio. The electronic portfolio will be organized according to the skill areas and each section will contain any relevant work and research for each area. Students will also submit reflections into LiveBinder each week. Learners will explain their understanding of required readings and reflect on specific questions associated with the course readings and online discussion. The final project will be a compilation of the materials required for this course. The portfolio is intended to be a living document resource for the participant. Additionally, a combination of the course grade and recommendation of the METAA Review Committee will determine eligibility to receive the METAA CTO Certificate.

Final Essay (30%)

At the end of the course, participants will be asked to write an essay that demonstrates learning throughout this course as a response to a scenario that technology directors may encounter in the work experience. The essay response will be considered as 30% of the final grade and is also part of the portfolio to be reviewed by the METAA Review Committee to determine eligibility to receive the METAA CTO Certificate.

Requirements

Masters is highly recommended. Four years as technology director is necessary to be eligible to take the COSN CETL examination but not required for the METAA certificate or to take this course.

Withdrawal from Course

In order to withdraw from the course it is NOT enough to simply stop participating in the course. You must formally withdraw from a class. Otherwise a failing grade may be entered for a class you have not completed. Tuition is non-refundable.

Appendix A: Online Discussion Rubric

| | Unsatisfactory (0) | Satisfactory (10) | Exemplary (20) |
|--|--|---|--|
| Quality of Postings | Postings are not relevant to the question posted. | Postings reflect the reading but no information given to source of information. | Postings reflect the readings and information source is cited. |
| Quantity of Postings | Responds to the question posted and one of the following: neglects to respond to any student postings OR dominates the thread with excessive postings. | Responds to the question posted and responds to one student postings. | Responds to the question posted and responds to 2-3 students and responds throughout the week (not just at one time during the week). |
| Understanding of Readings | Responds to the question posted but does not mention material from the readings. | Responds to the question posted and makes reference to the readings. | Responds to the question posted and makes reference to the readings and provides links to other sources. |
| Interweaving other postings into discussion | Responds to question posted and to student posting but does not weave information into posting. | Responds to question posted and to student posting and weaves information into own posting. | Responds to question posted and to student posting and weaves information into own posting. Additionally, weaves information in from links to outside sources. |

Appendix B - Course Content Overview

| WEEK | Weekly Course Content | Required Reading | Activities |
|------|--|---|--|
| 1 | Orientation | | <ul style="list-style-type: none"> • Browse Introduction to Blackboard Tools Tutorial (https://help.blackboard.com/en-us/Learn/Reference/Blackboard_Learn_Videos/Student_Videos) • Complete Tutorial on Live Binder (http://www.livebinders.com/play/play?id=73210) |
| 2 | <p>Introduction</p> <p>District technology leaders must possess the range of skills and abilities needed to position them as educational leaders—not just technology leaders—who provide the vision for the role technology can play in innovation and in building 21st century learning environments. In this Module, you will examine the range of skill areas needed, consider how to acquire or strengthen your existing knowledge and skills, and identify areas that will require further study or activities to help you acquire or strengthen skills and competencies required for success as a 21st century education <i>technology leader</i>.</p> | <p>Introduction to Preparation Materials</p> <p>Associated readings</p> | <ul style="list-style-type: none"> • Complete and submit Pre-Assessment Assignment <p>Discussion:</p> <ul style="list-style-type: none"> • Who's in the Room? - Please introduce yourself to the class. How did you get here? Where do you work now? Why are you taking this course? What do you expect to gain from this class? What is your current position? Who are you outside of your workplace? How would you prefer being addressed in discussion posts? What else would you like to share? <p>This posting is not graded but you should submit what you want us to know about you. Then respond to 2 or 3 of your classmates' posts. Ask questions of your fellow classmates; talk about your similarities and differences. Keep it light! Add a picture, if you like! Get comfortable. This is a "Getting to Know You" activity! Sharing begins now!</p> |
| 3 | <p>Leadership & Vision</p> <p>The skill area of Leadership and Vision involves working closely with the executive team and stakeholders to develop a shared vision with long-term, big-picture perspectives on district goals to plan for meaningful and effective uses of technology and providing leadership when creating a vision of how technology can help meet district.</p> | <p>Leadership & Vision</p> <p>Associated readings</p> | <p>Discussion:</p> <p>Take a deep look and evaluate your school/district's vision according to what you have learned so far in this skill area. Is the vision easily accessible to anyone who wants to find it? What modifications would you consider to improve your school/district's vision taking into consideration technology integration and student success. Why is a shared vision necessary, or is it? (If you are not a technology director, envision yourself in this role within a school/district).</p> <p>Live Binder:</p> <p>Taking into consideration the contents of this module and the discussion activity, in the Leadership & Vision section of your portfolio write about what you have learned that will support your work as a technology leader. Describe your strengths and weaknesses in this area.</p> |

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| 4 | <p>Strategic Planning The skill area of Strategic Planning involves having a high-level view across the school system and working with instructional and technical teams to identify steps needed to transform the technology vision into a long-range plan, complete with specific goals, objectives, and action plans.</p> | <p>Strategic Planning Associated readings</p> | <p>Discussion: From the 2015-2016 Baldrige Performance Excellence Framework (Education) choose one of the 3 key aspects of organizational excellence important to strategic planning and reflect on how that aspect connects to technology planning. The 3 aspects are: 1. Student Centered Excellence 2. Operational performance improvement and innovation 3. Organizational learning and learning by workforce members Choose of these three and describe how you have witnessed progress in your district - or not? What has been your role in encouraging and making progress happen or which would you want to move forward in your scholl/district? Which of these three key aspects has been the most challenging and why? Live Binder: Taking into consideration the contents of this module and the discussion activity, in the Strategic Planning section of your portfolio write about what you have learned that will support your work as a technology leader. Describe your strengths and weaknesses in this area.</p> |
| 5 | <p>Ethics & Policies The skill area of Ethics and Policies involves managing the creation, implementation, and enforcement of policies and educational programs relating to the social, legal, and ethical issues related to technology use throughout the district and modeling responsible decision-making.</p> | <p>Ethics & Policies Associated readings</p> | <p>Discussion: Reflecting on your district's current acceptable use policy, is there any rethinking or revising that you and other stakeholders should consider adjusting in your district's policies in support of a 21st century learning environment? Is your district ready to consider transitioning a Responsible Use Policy? Live Binder: Taking into consideration the contents of this module and the discussion activity, in the Ethics & Policies section of your portfolio write about what you have learned that will support your work as a technology leader. Describe your strengths and weaknesses in this area.</p> |

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| 6 | <p>Instructional Focus & Professional Development The skill area of Instructional Focus and Professional Development involves budgeting, planning, and coordinating ongoing, purposeful professional development for all staff using technologies and ensuring a sufficient budget through the implementation and assessment process of emerging technologies.</p> | <p>Instructional Focus & Professional Development Associated readings</p> | <p>Discussion: What has been done in your district to help implement technology-supported professional development, professional learning communities, and communities of practice? Think about the P21 Framework of 21st Century Learning. Do you proactively collaborate with district leaders responsible for curriculum, instruction, and assessment? What tends to impede effective professional development in your district?</p> <p>Live Binder: Taking into consideration the contents of this module and the discussion activity, in the Instructional Focus & Professional Development section of your portfolio write about what you have learned that will support your work as a technology leader. Describe your strengths and weaknesses in this area.</p> |
| 7 | <p>Team Building & Staffing The skill area of Team Building and Staffing includes playing an integral role in the district's strategic planning process and creating and supporting cross-functional teams for decision making, technology support, professional development, and other aspects of the district's technology program.</p> | <p>Team Building & Staffing Associated readings</p> | <p>Discussion: You have read the Learning Accelerator Communications Planning Guide and the districts highlighted are some examples. Choose one and describe how your school/district compares? Some thought questions: How do you provide staff with a work environment characterized by high performance, open communication, and trust? How successfully do you organize and manage teams and your staff? What are your greatest strengths in this area? Where are your areas for improvement? Do you focus enough attention on addressing individual needs of team members? What are your strategies? Do you recognize and reward individuals for contributions and accomplishments?</p> <p>Live Binder: Taking into consideration the contents of this module and the discussion activity, in the Team Building & Staffing section of your portfolio write about what you have learned that will support your work as a technology leader. Describe your strengths and weaknesses in this area.</p> |

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| 8 | <p>Stakeholder Focus</p> <p>The skill area of Stakeholder Focus involves building relationships with all stakeholders, taking a close look at how the district determines requirements, expectations, and preferences and understanding the key factors that lead to stakeholder satisfaction, focusing on how the district seeks knowledge, satisfaction, and loyalty of students and other stakeholders.</p> | <p>Stakeholder Focus</p> <p>Associated readings</p> | <p>Discussion:</p> <p>Read Baltimore County Public Schools 2015-2019 Technology Plan. How does this plan meet the collaboration criteria outlined in this section of our course? Does this plan do a better or worse job of articulating technology plans than your school/district?</p> <p>Live Binder:</p> <p>Taking into consideration the contents of this module and the discussion activity, in the Stakeholder Focus section of your portfolio write about what you have learned that will support your work as a technology leader. Describe your strengths and weaknesses in this area.</p> |
| 9 | <p>Information Technology Management</p> <p>The skill area of Information Technology Management involves directing, coordinating, and ensuring implementation of all tasks related to technical, infrastructure, standards, and integration of technology into every facet of district operations.</p> | <p>Information Technology Management</p> <p>Associated readings</p> | <p>Discussion:</p> <p>Choose one of the 3 focus areas in this skill area - infrastructure, systems, or devices. Imagine that you are charged with leading a major initiative in your district/school in this area. Describe the scope of your initiative. What needs to be included in your plan?</p> <p>Live Binder:</p> <p>Taking into consideration the contents of this module and the discussion activity, in the Information Technology Management section of your portfolio write about what you have learned that will support your work as a technology leader. Describe your strengths and weaknesses in this area.</p> |

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| 10 | <p>Communications Systems Management</p> <p>The skill area of Communication Systems Management involves using technology to improve communication and directing and coordinating the use of e-mail, district websites, web tools, voice mail systems, and other forms of communication to facilitate decision-making and enhance effective communication with key stakeholders.</p> | <p>Communications Systems Management</p> <p>Associated readings</p> | <p>Discussion:</p> <p>Choose one of the two scenarios below and describe the scope of your initiative. What needs to be included in your plan?</p> <p>Scenario 1: Your school/district committee/board feels that your website and social media presence is dated and you have been asked to propose a plan to bring it up-to-date.</p> <p>Scenario 2: Your school/district has an unreliable, dated phone system and you have been to propose a plan to modernize.</p> <p>Live Binder:</p> <p>Taking into consideration the contents of this module and the discussion activity, in the Communications Systems Management section of your portfolio write about what you have learned that will support your work as a technology leader. Describe your strengths and weaknesses in this area.</p> |
| 11 | <p>Business Management</p> <p>The skill area of Business Management includes the budget and serving as a strong business leader who guides purchasing decisions, determines the return on investment for all technology implementations, and fosters good relationships with vendors, potential funders, and other key groups.</p> | <p>Business Management</p> <p>Associated readings</p> | <p>Discussion:</p> <p>How does your district use funding sources available to the district and leverage them to meet district and programmatic goals? In developing an annual and long-range budget what are the various elements that you may use or need to know to craft these budgets to support the district goals? What might be some strategies that you can use to direct, manage and negotiate with vendors and business partners?</p> <p>Live Binder:</p> <p>Taking into consideration the contents of this module and the discussion activity, in the Business Management section of your portfolio write about what you have learned that will support your work as a technology leader. Describe your strengths and weaknesses in this area.</p> |

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| 12 | <p>Data Management</p> <p>The skill area of Data Management involves managing 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.</p> | <p>Data Management</p> <p>Associated readings</p> | <p>Discussion:</p> <p>How does your district use data to improve student achievement and accomplish district goals and objectives? How effectively are stakeholders using data to make decisions? How do you ensure accuracy, security, confidentiality, reliability, and timeliness of data?</p> <p>Live Binder:</p> <p>Taking into consideration the contents of this module and the discussion activity, in the Data Management section of your portfolio write about what you have learned that will support your work as a technology leader. Describe your strengths and weaknesses in this area.</p> |
| 13 | <p>Completion of Final Project</p> | | <ul style="list-style-type: none"> • Complete and submit Post-Assessment Assignment • Complete Final Summary Refelction • Respond to Essay Question and add to LiveBinder • Prepare LiveBinder content to share with METAA Committee |
| 14 | <p>Final Project: Submission of Live Binder</p> | | <ul style="list-style-type: none"> • Live Binder will be submitted for METAA Committee approval |