

PROCESS CLASSIFICATION FRAMEWORKSM FOR EDUCATION

Version 3.0.0E

THE FRAMEWORK FOR PROCESS IMPROVEMENT

Experience shows that benchmarking's potential to drive dramatic improvement lies squarely in making out-of-the-box comparisons and searching for insights not typically found within intra-industry paradigms. To enable this beneficial benchmarking for K–12 Education, the APQC Process Classification FrameworkSM (PCF) for Education serves as a high-level enterprise model that allows educational organizations to see their activities from a cross-functional process viewpoint.

The original PCF was created in 1992 by APQC and a group of members, and the framework has experienced more than a decade of creative use by hundreds of organizations worldwide. The PCF for Education will continuously be enhanced as further definitions, processes, and measures are defined that are related to process management and improvement. This latest version for March 2013 incorporates changes and details established since the last update in 2008. Please visit us online at www.apqceducation.org periodically for updates. The PCF for Education is available for educational organizations of all sizes at no charge by visiting www.apqceducation.org/pcf. (A standard cross-industry PCF for other organizations can be found at www.apqc.org/pcf).

The PCF enables organizations to understand their inner workings from a horizontal process viewpoint, rather than a vertical functional viewpoint. The PCF does not list all sub-processes within a specific organization, and every process listed in the framework may not be present in every organization. However, the highest level for Enterprise Architecture would remain the same.

APQC would like to acknowledge the following organizations for their participation and help in revising and updating this latest version of the PCF for Education: Aldine ISD, TX; Arlington Public Schools, VA; Cypress-Fairbanks ISD, TX; Fort Bend ISD, TX; Harlingen CISD, TX; Klein ISD, TX; Lynchburg City Schools, VA; McAllen ISD, TX; and Washoe County Public Schools, NV.

INTERPRETING THE PCF

Category: The highest level within the PCF is indicated by whole numbers (e.g., 4.0 and 5.0).

Process Groups: All PCF items with one decimal numbering (e.g., 4.1 and 5.1) are considered a process area.

Process: All PCF items with two decimal numberings (e.g., 4.1.1 and 5.1.2) are considered processes.

Sub-Processes: Items with three decimals (e.g., 4.1.2.1 and 5.1.2.1) are considered activities within a process.

Task: Items with four decimals (e.g., 4.1.2.3.1 and 5.1.2.2.1) are considered tasks within an activity.

Example: Design and Manage Operations (Category) (4.0)
Plan for and manage student enrollment (Process Group) (4.1)
Manage student enrollment (Process) (4.1.1)
Conduct demographic analysis (Sub-Process) (4.1.1.1)
Develop long-range demographic forecast (Sub-Process) (4.1.1.2)
Develop performance measures for admissions and placements (Task) (4.1.2.3.1)

APQC Education PCF: Looking Forward _____	2
About APQC Education _____	2
PCF for Education K–12 Sector Overview _____	3
1.0 Develop District Vision and Strategy _____	4
2.0 Develop, Deliver, and Assess Curriculum, Assessment, and Instruction _____	5
3.0 Design and Deliver Student Support Services _____	7
4.0 Design and Manage Operations _____	9
5.0 Manage Student and Stakeholder Relationship and Engagement _____	11
6.0 Develop and Manage Human Capital _____	12
7.0 Manage Information Technology _____	14
8.0 Manage Financial Resources _____	17
9.0 Acquire, Construct, and Manage Facilities _____	20
10.0 Manage Enterprise Risk, Compliance, and Continuity of Operations (Resiliency) _____	21
11.0 Manage External Relationships _____	22
12.0 Develop and Manage District Capabilities _____	23
The PCF for Education: Rights and Permissions _____	26

APQC EDUCATION PCF: LOOKING FORWARD

The APQC Process Classification Framework is an evolving model, which APQC will continue to enhance and improve regularly. Thus, APQC encourages comments, suggestions, and more importantly, the sharing of insights from having applied the APQC PCF within your organization. Share your suggestions and experiences with the PCF by e-mail to: ctalasek@apqc.org.

ABOUT APQC EDUCATION

Founded in 1977, the American Productivity and Quality Center's 76 employees serve over 750 of the Fortune Global 1000 companies, as well as numerous government, healthcare and other private sector organizations. APQC is the leading resource for process and performance analytics, best practices, process improvement, and knowledge management, providing leaders with methodology to transform their organizations.

APQC Education was developed in 1996 with the vision of utilizing the same strategies that had transformed businesses to enhance the U.S. education system. Since then, APQC Education has worked in the U.S. as well as Canada and Australia, helping public school districts, charter schools, regional service centers and state departments in identifying improvement opportunities in routine operations, administrative and academic processes.

Led by a top notch team with decades of combined experience helping districts, our work at APQC Education is not based on ideology, politics, or theories, but on a practical methodology that has worked on other sectors business, healthcare, and government to name a few. Since 1977, the American Productivity and Quality Center has used this approach to help thousands of global organizations, and now hundreds of school districts increase productivity, quality, and effectiveness.

PCF for K–12 Education Sector Overview

OPERATING PROCESSES

1.0
Develop
District
Vision
and
Strategy

>>> **2.0**
Develop, Deliver,
and Assess
Curriculum,
Assessment,
and Instruction

>>> **3.0**
Design
and Deliver
Student Support
Services

>>> **4.0**
Design
and Manage
Operations

>>> **5.0**
Manage Student
and Stakeholder
Relationship and
Engagement

MANAGEMENT AND SUPPORT SERVICES

6.0 Develop and Manage Human Capital

7.0 Manage Information Technology

8.0 Manage Financial Resources

9.0 Acquire, Construct, and Manage Facilities

10.0 Manage Enterprise Risk, Compliance, and Continuity of Operations (Resiliency)

11.0 Manage External Relationships

12.0 Develop and Manage District Capabilities

1.0 Develop District Vision and Strategy

1.1 Define the district context and long-term vision

- 1.1.1 Assess the external environment
 - 1.1.1.1 Analyze and evaluate competition (surrounding districts, private and charter schools, virtual schools, etc.)
 - 1.1.1.2 Identify economic trends (tax base, revenue, state/federal funding and grants)
 - 1.1.1.3 Identify political and regulatory issues
 - 1.1.1.4 Assess new technology innovations (instructional, administrative, and operational)
 - 1.1.1.5 Analyze demographics
 - 1.1.1.6 Identify social and cultural changes
 - 1.1.1.7 Identify ecological concerns
- 1.1.2 Survey stakeholders and determine customer needs and requirements
 - 1.1.2.1 Conduct qualitative/quantitative assessments
 - 1.1.2.2 Capture and assess student and stakeholder needs
 - 1.1.2.2.1 Identify priorities
 - 1.1.2.2.2 Set goals/objectives
- 1.1.3 Conduct internal analysis of educational programs, support, and operation services
 - 1.1.3.1 Analyze organizational characteristics
 - 1.1.3.2 Create baselines for current processes
 - 1.1.3.3 Analyze systems and technology
 - 1.1.3.4 Analyze financial positions
 - 1.1.3.5 Identify enterprise (district) core competencies
- 1.1.4 Establish strategic vision
 - 1.1.4.1 Align stakeholders around strategic vision
 - 1.1.4.2 Communicate strategic vision to stakeholders

1.2 Develop district strategy

- 1.2.1 Develop overall mission statement
 - 1.2.1.1 Define purpose
 - 1.2.1.2 Formulate mission
 - 1.2.1.3 Communicate mission
- 1.2.2 Evaluate strategic options to achieve the objectives
 - 1.2.2.1 Define strategic options
 - 1.2.2.2 Assess and analyze impact of each option

- 1.2.2.3 Develop sustainability strategy
- 1.2.2.4 Develop support and shared services strategy
- 1.2.2.5 Develop continuous improvement strategy
- 1.2.3 Select long-term district strategy
- 1.2.4 Coordinate and align functional and process strategies
- 1.2.5 Create organizational design (structure, governance, reporting, etc.)
 - 1.2.5.1 Evaluate breadth and depth of district organizational structure to accomplish strategy
 - 1.2.5.2 Evaluate operations and instructional staffing needs
 - 1.2.5.3 Assess organizational implication of staffing
- 1.2.6 Develop and set district goals
 - 1.2.6.1 Seek Board of Trustee approval of strategy and strategic plan
 - 1.2.6.2 Communicate and share strategic plan with all staff
 - 1.2.6.3 Train employees on strategic plan and alignment with department and campus plans
 - 1.2.6.4 Post Strategic Plan to website
- 1.2.7 Formulate department and campus strategies
 - 1.2.7.1 Assess alignment of department and campus strategies/plan to district goals

1.3 Manage strategic initiatives

- 1.3.1 Develop strategic initiatives
- 1.3.2 Evaluate strategic initiatives
- 1.3.3 Select strategic initiatives
- 1.3.4 Establish high-level performance measures
 - 1.3.4.1 Develop district scorecards to monitor and report performance
 - 1.3.4.2 Align department and campus performance measures to district level measures

2.0 Develop, Deliver, and Assess Curriculum, Assessment, and Instruction

2.1 Develop curriculum

- 2.1.1 Define/Design curriculum development procedures
- 2.1.2 Align with federal/state/local standards
 - 2.1.2.1 Align with content standards developed by national organizations
 - 2.1.2.2 Align to assessment performance standards
 - 2.1.2.3 Ensure horizontal and vertical curriculum alignment
 - 2.1.2.4 Identify and review best practice research
- 2.1.3 Provide for key customer and stakeholder input
- 2.1.4 Develop scope/sequence/timeline
- 2.1.5 Develop instructional calendars/pacing guides/local assessments
- 2.1.6 Select instructional resources
 - 2.1.6.1 Develop instructional materials plan
 - 2.1.6.2 Form cross-functional team including curriculum and instruction, technology, procurement office
 - 2.1.6.3 Create overall plan
 - 2.1.6.4 Collaborate with suppliers and contractors
 - 2.1.6.5 Identify critical materials and supplier capacity
 - 2.1.6.6 Coordinate implementation plan
- 2.1.7 Pilot the curriculum
 - 2.1.7.1 Evaluate effectiveness of curriculum
 - 2.1.7.2 Revise curriculum based on feedback and local assessments
- 2.1.8 Implement curriculum
- 2.1.9 Monitor integrity of curriculum implementation

2.2 Design effective instructional programs

- 2.2.1 Use diagnostics to determine readiness to learn
 - 2.2.1.1 Use formative assessment to inform ongoing instruction
 - 2.2.1.2 Determine students' readiness to learn
- 2.2.2 Identify best practices based on data
 - 2.2.2.1 Document and share best practices

- 2.2.3 Establish best-practice instructional strategies
 - 2.2.3.1 Engage students in the instructional process
- 2.2.4 Develop an implementation plan
- 2.2.5 Determine expectation for lesson design
 - 2.2.5.1 Determine district expectations
 - 2.2.5.2 Determine campus expectations
 - 2.2.5.3 Determine level and rigor of instruction expectations
- 2.2.6 Provide differentiated instruction based on individual student needs
 - 2.2.6.1 Identify enrichment needs
 - 2.2.6.2 Identify acceleration needs
 - 2.2.6.3 Identify technology for program needs
- 2.2.7 Align after school and summer program curriculum
- 2.2.8 Design instructional programs to accelerate learning for students below grade level standards
 - 2.2.8.1 Plan for remedial instruction
 - 2.2.8.2 Manage the classroom for differentiated instructional strategies
 - 2.2.8.3 Provide academic coaches to support classroom instruction for students

2.3 Assess student achievement

- 2.3.1 Plan district assessment program
 - 2.3.1.1 Assess current assessment program
 - 2.3.1.1.1 Determine goal of the assessment program in school or system improvement
 - 2.3.1.1.2 Identify mandatory testing by local, district, state, and federal agencies
 - 2.3.1.1.3 Identify diagnostic, formative, and any voluntary assessment for program
 - 2.3.1.1.4 Determine target populations of current assessments
 - 2.3.1.1.5 Analyze current frequency and scheduling of assessments

- 2.3.1.1.6 Identify gaps in the assessment program; check for alignment
- 2.3.1.2 Design assessment program
 - 2.3.1.2.1 Determine learning (skills) to be assessed
 - 2.3.1.2.2 Determine performance standards for target populations
 - 2.3.1.2.3 Select most appropriate format
 - 2.3.1.2.4 Select vendor-developed assessment or develop the assessment
- 2.3.2 Develop formative assessment tools
 - 2.3.2.1 Determine the scope of content and skills to be addressed
 - 2.3.2.2 Determine assessment method for each objective (multiple choice, open-ended, essay, performance, portfolio, etc.)
 - 2.3.2.3 Determine appropriate delivery format (paper/pencil, online, oral administration, etc.)
 - 2.3.2.4 Develop blueprint for test development, including number and format of items or tasks for each objective or strand
 - 2.3.2.5 Develop test item specifications (number of distracters, level of vocabulary, level of thinking or mental processing, performance required)
 - 2.3.2.6 Develop rubrics that outline requirements for successful response and scoring criteria for performance tasks and open-ended items
 - 2.3.2.7 Develop items or tasks (locally or contractor)
 - 2.3.2.8 Review items for content/adherence to blueprint and item specifications by peer review
 - 2.3.2.9 Develop key or refine rubrics as necessary
 - 2.3.2.10 Review items for sensitivity and bias
 - 2.3.2.11 Pilot items or tasks
 - 2.3.2.12 Review and pilot completed assessment
 - 2.3.2.13 Revise as needed
- 2.3.3 Administer formative assessments
 - 2.3.3.1 Provide necessary training
 - 2.3.3.2 Distribute the tests or assessment materials
 - 2.3.3.3 Assess students using appropriate assessment procedures
 - 2.3.3.4 Monitor compliance with assessment procedures
 - 2.3.3.5 Monitor provision of appropriate accommodations for students
 - 2.3.3.6 Collect data on participation and possible irregularities and report
 - 2.3.3.7 Receive test materials from schools if stored and/or scored centrally
 - 2.3.3.8 Package and transmit materials to contractor, as appropriate
- 2.3.4 Administer summative assessments
 - 2.3.4.1 Provide necessary training to school-based staff
 - 2.3.4.2 Distribute materials
 - 2.3.4.3 Assess students using appropriate assessment procedures
 - 2.3.4.4 Collect data on participation and possible irregularities and report
 - 2.3.4.5 Receive and inventory test materials from schools
 - 2.3.4.6 Package and transmit materials per contractor instructions
- 2.3.5 Score and compile assessment data
 - 2.3.5.1 Plan for scoring of assessment
 - 2.3.5.2 Train key staff in scoring the assessment
 - 2.3.5.3 Score summative assessments
- 2.3.6 Analyze and evaluate results
 - 2.3.6.1 Identify and explore anomalies
 - 2.3.6.2 Disaggregate the data at the district, school, or classroom level as appropriate (e.g., grade levels, departments, subject areas, and subgroups [socio-economic status, ethnicity])
 - 2.3.6.3 Analyze for gaps and strengths in student achievement
 - 2.3.6.4 Check alignment of instruction with test content
 - 2.3.6.5 Identify trends (e.g., longitudinal, cohort)
 - 2.3.6.6 Identify over/under-achieving schools, programs, grade levels, teachers, etc.
 - 2.3.6.7 Determine gaps between actual student achievement and achievement targets or expectations

- 2.3.6.8 Feed data/results to appropriate decision makers
- 2.3.6.9 Provide feedback to state and federal testing agencies or test publishers on quality issues and needed improvements
- 2.3.7 Provide training on analyzing and using data
 - 2.3.7.1 Provide training on data analysis at the district, school, and classroom levels
 - 2.3.7.2 Provide data utilization training to district, school, and classroom levels
- 2.3.8 Report assessment results to students, stakeholders, and district leadership
 - 2.3.8.1 Identify a data management system to archive and retrieve data
 - 2.3.8.2 Identify audiences
 - 2.3.8.3 Determine information needs of each audience
 - 2.3.8.4 Determine products to meet audiences' needs

- 2.3.8.5 Determine format and content and specifications for each product
- 2.3.8.6 Develop timelines aligned with deadlines and audience requirements
- 2.3.8.7 Produce each reporting product
- 2.3.8.8 Publish each reporting product
- 2.3.8.9 Present findings
- 2.3.8.10 Gather feedback on the usefulness of the reports

2.4 Evaluate programs

- 2.4.1 Determine programs to be evaluated
 - 2.4.1.1 Determine (and develop instruments where necessary) the data to be collected, including perception and background surveys, student performance data, observation checklists, comparable schools' data, etc.
 - 2.4.1.2 Gather the data
 - 2.4.1.3 Analyze the collected data
 - 2.4.1.4 Evaluate the program/determine program recommendations

3.0 Design and Deliver Student Support Services

3.1 Identify requirements for support services

- 3.1.1 Interpret rules and regulations
- 3.1.2 Conduct a district needs assessment for support services
- 3.1.3 Provide clear process for identifying student needs for support service
 - 3.1.3.1 Develop referral committee guidelines
- 3.1.4 Identify gaps in services
- 3.1.5 Collaborate between services

3.2 Establish entrance and exit criteria for student support services

- 3.2.1 Establish referral criteria
- 3.2.2 Establish acceptance criteria
- 3.2.3 Establish exit criteria
- 3.2.4 Develop intervention programs
- 3.2.5 Identify the Least Restrictive Environment (LRE) for special education students

3.3 Evaluate support programs and services

- 3.3.1 Train educators to observe student response to intervention, support programs, and services

- 3.3.2 Monitor student progress resulting from intervention
- 3.3.3 Evaluate effectiveness of services to meet students' needs

3.4 Identify and coordinate community services related to student needs

- 3.4.1 Identify/maintain community partnership opportunities to support mentoring, tutoring, academic enrichment, etc.
- 3.4.2 Coordinate direct services of classroom volunteers
 - 3.4.2.1 Determine the capacity and expertise of community partners to deliver services
 - 3.4.2.2 Provide a connecting/marketing mechanism between community provider (before, after, and during school) and individual student/family needs
 - 3.4.2.3 Connect individual needs to best available services
 - 3.4.2.4 Provide support (staff development) for instructional aides

3.5 Design and implement parent engagement programs

- 3.5.1 Plan and evaluate student and stakeholder engagement in educational programs and services
 - 3.5.1.1 Establish family engagement policies and procedures
 - 3.5.1.2 Develop communication venues for key educational programs and services
 - 3.5.1.3 Assess satisfaction/engagement of students and stakeholders
 - 3.5.1.4 Analyze satisfaction/engagement data
 - 3.5.1.5 Use data to improve satisfaction/engagement
- 3.5.2 Provide parent education
 - 3.5.2.1 Identify parent education needs and services
 - 3.5.2.2 Implement parent education programs/services
 - 3.5.2.3 Evaluate effectiveness of parent education programs/services
 - 3.5.2.4 Revise and improve parent education programs and services
- 3.5.3 Coordinate and collaborate with parent/teacher organizations

3.6 Design and implement counseling services

- 3.6.1 Develop academic planning and counseling services
 - 3.6.1.1 Identify student needs and requirements to complete graduation requirements
 - 3.6.1.1.1 Develop graduation plans
 - 3.6.1.1.2 Monitor completion of graduation plans
 - 3.6.1.1.3 Provide intervention to students who are not on track to complete graduation plans
 - 3.6.1.2 Develop career counseling and pathways for post-graduation
 - 3.6.1.3 Communicate college and career opportunities
 - 3.6.1.3.1 Provide on-site and web-based information
 - 3.6.1.3.2 Develop K–12 strategies to communicate college and career opportunities
- 3.6.2 Develop counseling programs
- 3.6.3 Align guidance services to support instruction

- 3.6.4 Identify barriers to student academic achievement

3.7 Design and implement social services

- 3.7.1 Provide social service support for families/students
- 3.7.2 Provide homeless services
- 3.7.3 Provide migrant services
- 3.7.4 Utilize case management process to streamline and avoid duplication of services to individual student
- 3.7.5 Manage outsourced services (e.g., child psychologist)
- 3.7.6 Identify and communicate web-based support programs

3.8 Design and align extra-curricular services such as interscholastic athletics, clubs, and other enrichment opportunities

3.9 Design and implement alternative education and interventions

- 3.9.1 Create alternative academic and discipline schools or programs
- 3.9.2 Provide early intervention for at-risk students
- 3.9.3 Develop student attendance policies and procedures
 - 3.9.3.1 Develop student attendance tracking methods
 - 3.9.3.2 Monitor student attendance
 - 3.9.3.3 Develop interventions and diversion programs for student truancy
 - 3.9.3.4 Identify performance measures for student attendance and truancy
 - 3.9.3.5 Report performance measures for student attendance and truancy
- 3.9.4 Develop student behavior management policies and procedures
 - 3.9.4.1 Develop district discipline management plan
 - 3.9.4.2 Identify levels of student discipline management
 - 3.9.4.3 Identify appropriate consequences to discipline infractions
 - 3.9.4.4 Track student discipline infractions
 - 3.9.4.5 Develop discipline performance measures
 - 3.9.4.6 Analyze discipline data
 - 3.9.4.7 Revise discipline management plan, policies, or procedures

3.10 Design and implement student health services

- 3.10.1 Establish nursing services
- 3.10.2 Develop pregnancy services
 - 3.10.2.1 Identify student needs
 - 3.10.2.2 Provide teen parenting programs

- 3.10.3 Develop health and wellness strategies
 - 3.10.3.1 Develop diabetes identification and counseling services
 - 3.10.3.2 Develop vision and hearing screening

4.0 Design and Manage Operations

4.1 Plan for and manage student enrollment

- 4.1.1 Manage student enrollment
 - 4.1.1.1 Conduct demographic analysis
 - 4.1.1.2 Develop long-range demographic forecast
 - 4.1.1.3 Develop short- and long-term enrollment projections
 - 4.1.1.4 Monitor accuracy of enrollment projections
- 4.1.2 Manage student admissions and placement
 - 4.1.2.1 Develop policies and procedures for admissions and placements
 - 4.1.2.2 Identify support technologies for admission and placement
 - 4.1.2.3 Monitor effectiveness of admissions
 - 4.1.2.3.1 Develop performance measures for admissions and placements
 - 4.1.2.3.2 Solicit feedback from students and stakeholders
 - 4.1.2.3.3 Improve admission and placement procedures
- 4.1.3 Develop district school year calendar
 - 4.1.3.1 Engage stakeholders (community, parents, staff, teachers, etc.)
 - 4.1.3.2 Develop calendar options
 - 4.1.3.3 Present calendar to board for approval

4.2 Procure materials and services

- 4.2.1 Develop sourcing strategies
 - 4.2.1.1 Develop procurement plan
 - 4.2.1.2 Clarify purchasing requirements
 - 4.2.1.3 Develop inventory strategy
 - 4.2.1.4 Match needs to supply capabilities
 - 4.2.1.5 Analyze district's purchasing history

- 4.2.1.6 Seek opportunities to improve efficiency and value
- 4.2.1.7 Collaborate with suppliers to identify sourcing opportunities
- 4.2.2 Select suppliers and develop/maintain contracts
 - 4.2.2.1 Identify suppliers (create request for bids list)
 - 4.2.2.2 Certify and validate suppliers (receive and accept bids; create a bids list)
 - 4.2.2.3 Approve bids
 - 4.2.2.4 Manage contracts
- 4.2.3 Order materials and services
 - 4.2.3.1 Process/Review requisitions
 - 4.2.3.2 Approve requisitions
 - 4.2.3.3 Monitor vendor quotes
 - 4.2.3.4 Create/Distribute purchase orders
 - 4.2.3.5 Expedite orders and satisfy inquiries
 - 4.2.3.6 Record receipt of goods
 - 4.2.3.7 Research/Resolve exceptions
- 4.2.4 Manage suppliers
 - 4.2.4.1 Monitor/Manage supplier information
 - 4.2.4.2 Prepare/Analyze spending and vendor performance
 - 4.2.4.2 Support inventory processes
 - 4.2.4.4 Monitor quality of product delivered

4.3 Manage logistics and warehousing

- 4.3.1 Define logistics strategy
 - 4.3.1.1 Translate district requirements into logistics requirements
 - 4.3.1.2 Design logistics network
 - 4.3.1.3 Communicate outsourcing needs
 - 4.3.1.4 Develop and maintain delivery service policy
 - 4.3.1.5 Optimize distribution to schools' schedules and costs

- 4.3.1.6 Define key performance measures
- 4.3.2 Plan and manage inbound material flow
 - 4.3.2.1 Plan receipt of deliveries
 - 4.3.2.2 Manage receivables flow
 - 4.3.2.3 Monitor receivables delivery performance
 - 4.3.2.4 Manage flow of returned products
- 4.3.3 Operate warehousing
 - 4.3.3.1 Track inventory deployment
 - 4.3.3.2 Receive, inspect, and store receivables
 - 4.3.3.3 Track inventory availability
 - 4.3.3.4 Pick, pack, and ship materials delivery
 - 4.3.3.5 Track inventory accuracy
 - 4.3.3.6 Track third-party logistics storage and shipping performance
- 4.3.4 Operate delivery of materials
 - 4.3.4.1 Plan, transport, and deliver materials to schools
 - 4.3.4.2 Track delivery performance
 - 4.3.4.3 Manage delivery fleet
 - 4.3.4.4 Process and audit work orders, requisitions, and documents
- 4.3.5 Manage returns; manage reverse logistics
 - 4.3.5.1 Authorize and process returns
 - 4.3.5.2 Perform reverse logistics
 - 4.3.5.3 Perform salvage activities
 - 4.3.5.4 Manage and process warranty claims
 - 4.3.5.5 Manage repair/refurbishment and return to customer/inventory

4.4 Manage transportation of students

- 4.4.1 Design routes and schedules
 - 4.4.1.1 Build and maintain address and GIS (Geographic Information System) data
 - 4.4.1.2 Build and maintain student residence files
 - 4.4.1.3 Optimize routes and loads
 - 4.4.1.4 Evaluate cost effectiveness of transportation services
 - 4.4.1.4.1 Identify effectiveness/efficiency measures
 - 4.4.1.4.2 Develop transportation performance reports
- 4.4.2 Plan and deliver special routes and services to support instructional needs
 - 4.4.2.1 Schedule events
 - 4.4.2.2 Assign resources

- 4.4.2.3 Coordination with curriculum and instructional plans
- 4.4.3 Manage vehicle acquisition, maintenance, and replacement
 - 4.4.3.1 Inventory vehicles, maintenance logs
 - 4.4.3.2 Build requirements for vehicles, solicit bids, order

4.5 Manage food services

- 4.5.1 Certify individual student eligibility for meals
- 4.5.2 Comply with federal and state regulations
- 4.5.3 Develop meal plans following nutritional guidelines
- 4.5.4 Procure foods
- 4.5.5 Deliver meals
- 4.5.6 Coordinate and collaborate with other departments (e.g., maintenance, safety, custodial, etc.)

4.6 Provide library and media services

- 4.6.1 Develop collection plan and acquisition budget
- 4.6.2 Identify automated library service technology
- 4.6.3 Identify digital media services
- 4.6.4 Collaborate with educational staff to develop instructional support procedures and materials

5.0 Manage Student and Stakeholder Relationship and Engagement

5.1 Develop student and stakeholder listening strategies

- 5.1.1 Determine market requirements for educational programs and services
 - 5.1.1.1 Identify educational and program services needs and requirements of students and stakeholders
 - 5.1.1.2 Determine student and stakeholder support requirements
 - 5.1.1.3 Establish communication mechanisms for student and stakeholders to obtain educational and support services
 - 5.1.1.4 Develop innovation strategies to meet and exceed student and stakeholder expectations of educational programs and support services
- 5.1.2 Develop voice of the customer strategies
 - 5.1.2.1 Identify students and stakeholder segmentation
 - 5.1.2.2 Identify listening mechanisms for former, existing, and potential students and stakeholders (parents, community)
 - 5.1.2.2.1 Gather voice of the customer (VOC) data (focus groups, surveys, etc.)
 - 5.1.2.2.2 Disaggregate and analyze VOC data
 - 5.1.2.3 Analyze feedback of customer needs and requirements
- 5.1.3 Define customer service policies and procedures
 - 5.1.3.1 Identify district customer service standards
 - 5.1.3.1.1 Communicate district customer service standards
 - 5.1.3.1.2 Conduct training on district customer service standards
 - 5.1.3.1.3 Identify customer service performance measures

5.2 Plan and manage student and stakeholder relationship and engagement strategies

- 5.2.1 Plan and manage student and stakeholder relationship and engagement
 - 5.2.1.1 Identify student and stakeholder engagement strategies

- 5.2.1.1.1 Monitor quality of student and stakeholder engagement strategies
- 5.2.1.1.2 Evaluate quality of student and stakeholder engagement strategies
- 5.2.1.2 Develop strategies to acquire and retain students and stakeholders
- 5.2.2 Manage stakeholder requests/inquiries
 - 5.2.2.1 Receive customer information/open records requests/inquiries
 - 5.2.2.2 Route customer information/open records requests/inquiries
 - 5.2.2.3 Respond to customer information/open records requests/inquiries
- 5.2.3 Manage student and stakeholder complaints
 - 5.2.3.1 Receive student and stakeholder complaints
 - 5.2.3.2 Route student and stakeholder complaints
 - 5.2.3.3 Resolve student and stakeholder complaints
 - 5.2.3.4 Respond to student and stakeholder complaints
 - 5.2.3.4 Respond to student and stakeholder complaints
 - 5.2.3.5 Collect, track, and analyze complaint data

5.3 Measure and evaluate student and stakeholder service strategies

- 5.3.1 Measure customer satisfaction
 - 5.3.1.1 Gather and solicit students and stakeholder feedback on educational and support services
 - 5.3.1.2 Analyze educational and support services satisfaction data and identify improvement and innovation opportunities
 - 5.3.1.3 Report student and stakeholder feedback on educational and support services
- 5.3.2 Measure stakeholder satisfaction with complaint handling and resolution
 - 5.3.2.1 Solicit stakeholder feedback on complaint handling and resolution
 - 5.3.2.2 Analyze stakeholder complaint data and identify improvement opportunities

5.4 Manage district communications

- 5.4.1 Develop communication strategies

- 5.4.1.1 Formulate communication plan
 - 5.4.1.1.1 Identify key messages
 - 5.4.1.1.2 Identify target audiences
 - 5.4.1.1.3 Identify measurable objectives
 - 5.4.1.1.4 Develop strategies and tactics to support objectives
- 5.4.2 Develop district brand
 - 5.4.2.1 Define unique district brand message
 - 5.4.2.2 Embed brand in communications
 - 5.4.2.3 Measure and reassess branding activities against district strategy and vision
- 5.4.3 Manage social media
 - 5.4.3.1 Develop social media strategy
 - 5.4.3.2 Define social media performance measures
 - 5.4.3.3 Monitor and respond to social media activity
 - 5.4.3.4 Execute social media campaigns
 - 5.4.3.5 Evaluate social media performance measures
- 5.4.4 Design and develop publications
 - 5.4.4.1 Define publication objectives and strategy
 - 5.4.4.2 Define target audiences
 - 5.4.4.3 Identify publication performance measures
 - 5.4.4.3 Develop publications
 - 5.4.4.4 Evaluate publication performance measures
- 5.4.5 Develop and manage media campaigns
 - 5.4.5.1 Define media objectives
 - 5.4.5.2 Develop marketing messages
 - 5.4.5.3 Define target audience
 - 5.4.5.4 Engage media provider
 - 5.4.5.5 Develop and execute media campaign(s)
 - 5.4.5.6 Assess media campaign performance

5.5 Develop and manage district websites

- 5.5.1 Gather information on website design
- 5.5.2 Create plan for website development
- 5.5.3 Design websites
- 5.5.4 Develop websites
- 5.5.5 Test and launch websites
- 5.5.6 Maintain websites
- 5.5.7 Evaluate websites

6.0 Develop and Manage Human Capital

6.1 Develop and manage human resources (HR) planning, policies, and strategies

- 6.1.1 Develop human resources strategy
 - 6.1.1.1 Identify strategic HR needs
 - 6.1.1.2 Define HR and business function roles and accountability
 - 6.1.1.3 Determine HR costs
 - 6.1.1.4 Establish HR measures
 - 6.1.1.5 Communicate HR strategies
- 6.1.2 Develop and implement human resources plans
 - 6.1.2.1 Gather skill requirements according to district strategy and educational and operational needs
 - 6.1.2.2 Plan employee resourcing requirements per department and campus
 - 6.1.2.3 Develop compensation plan
 - 6.1.2.4 Develop succession plan
 - 6.1.2.5 Develop employee diversity plan
 - 6.1.2.6 Develop other HR programs
 - 6.1.2.7 Develop HR policies
 - 6.1.2.8 Administer HR policies
 - 6.1.2.9 Plan employee benefits
 - 6.1.2.10 Develop strategy for HR systems/ technologies/tools
 - 6.1.2.11 Develop work force strategy models
- 6.1.3 Monitor and update plans
 - 6.1.3.1 Monitor HR performance measures
 - 6.1.3.2 Analyze contribution to district goals and objectives
 - 6.1.3.3 Communicate plans and provide updates to board of education/ trustees

- 6.1.3.4 Determine value added from HR function
- 6.1.3.5 Review and revise HR plans

- 6.2.7.3 Identify and deploy substitute scheduling and tracking tools
- 6.2.7.4 Monitor substitute use and effectiveness

6.2 Recruit/Source and Screen/Select employees

- 6.2.1 Create and develop employee requisitions/vacancy posting
 - 6.2.1.1 Align staffing plan to work force plan and district strategies/resource needs
 - 6.2.1.2 Develop and open job requisition
 - 6.2.1.3 Develop job description
 - 6.2.1.4 Post requisition
 - 6.2.1.5 Manage internal/external job posting Web sites
 - 6.2.1.6 Change/Update requisition
 - 6.2.1.7 Notify hiring manager
 - 6.2.1.8 Manage requisition date
- 6.2.2 Recruit/Source candidates
 - 6.2.2.1 Determine recruitment methods
 - 6.2.2.2 Perform recruiting activities/events
 - 6.2.2.3 Evaluate recruitment effectiveness
- 6.2.3 Screen/Select candidates
 - 6.2.3.1 Identify and deploy candidate selection tools
 - 6.2.3.2 Interview candidates
 - 6.2.3.3 Test candidates
 - 6.2.3.4 Select and reject candidates
- 6.2.4 Manage pre-placement verification
 - 6.2.4.1 Complete candidate background information
 - 6.2.4.2 Conduct pre-employment screening
 - 6.2.4.3 Recommend/not recommend candidate
- 6.2.5 Manage new hire/rehire
 - 6.2.5.1 Draw up and make offer
 - 6.2.5.2 Negotiate offer
 - 6.2.5.3 Hire candidate
- 6.2.6 Track candidates
 - 6.2.6.1 Create applicant record
 - 6.2.6.2 Manage/Track applicant data
 - 6.2.6.3 Archive and retain records of non-hires
- 6.2.7 Manage substitute teaching staff
 - 6.2.7.1 Identify substitute qualifications and requirements
 - 6.2.7.2 Develop substitute hiring methods

6.3 Develop and counsel employees

- 6.3.1 Manage employee orientation and assignment
 - 6.3.1.1 Create/Maintain employee on-boarding program
 - 6.3.1.2 Introduce new employees to managers
 - 6.3.1.3 Introduce workplace
 - 6.3.1.4 Evaluate the effectiveness of employee on-boarding program
- 6.3.2 Manage employee performance
 - 6.3.2.1 Define performance objectives
 - 6.3.2.2 Review, appraise, and manage employee performance
 - 6.3.2.3 Evaluate and review performance program
- 6.3.3 Manage employee relations
 - 6.3.3.1 Manage health and safety
 - 6.3.3.2 Manage labor relations
 - 6.3.3.3 Manage collective bargaining process
 - 6.3.3.4 Manage labor management partnerships
- 6.3.4 Manage employee development
 - 6.3.4.1 Develop competency management plans
 - 6.3.4.2 Define employee development guidelines
 - 6.3.4.3 Develop employee career plans
 - 6.3.4.4 Manage employee skills development
- 6.3.5 Develop and train employees
 - 6.3.5.1 Align employee, school, and district development needs
 - 6.3.5.2 Align learning programs with competencies
 - 6.3.5.3 Establish training needs by analysis of required and available skills
 - 6.3.5.4 Develop, conduct, and manage employee and/or management training programs
 - 6.3.5.4.1 Reinforce training and development
 - 6.3.5.4.2 Provide coaching, mentoring, peer sharing

6.3.5.5 Evaluate training effectiveness and efficiency

6.4 Reward, retain, and engage employees

6.4.1 Develop and manage reward, recognition, and incentive programs

6.4.1.1 Develop salary/compensation structure and plan

6.4.1.2 Develop benefits, reward, and incentive plan

6.4.1.3 Perform competitive analysis of benefit, rewards, and incentives

6.4.1.4 Identify compensation requirements based on financial benefits and HR policies

6.4.1.5 Administer compensation, rewards, and incentives to employees

6.4.2 Develop and manage employee engagement and satisfaction

6.4.2.1 Determine key elements that affect workforce engagement

6.4.2.2 Differentiate engagement elements for different workforce groups and segments

6.4.2.3 Determine workforce engagement and satisfaction assessment methods

6.4.2.4 Administer assessments

6.4.2.5 Establish engagement and satisfaction performance measures

6.4.2.6 Analyze and report engagement and satisfaction results

6.4.3 Manage and administer benefits

6.4.3.1 Deliver employee benefits program

6.4.3.2 Administer benefit enrollment

6.4.3.3 Process claims

6.4.3.4 Perform benefit reconciliation

6.4.4 Manage employee assistance and retention

6.4.4.1 Deliver programs to support work/life balance for employees

6.4.4.2 Develop family support systems

6.4.4.3 Review retention and engagement indicators

6.4.4.4 Review compensation plan

6.4.5 Administer payroll

6.5 Redeploy and retire employees

6.5.1 Manage promotion and demotion process

6.5.2 Manage separation

6.5.3 Manage retirement

6.5.4 Manage leave of absence, sabbatical

6.5.5 Develop and implement employee reduction in force policies and regulations

6.5.6 Manage deployment of personnel

6.5.7 Relocate employees and manage assignments

6.5.8 Manage employment reduction in force and retirement

6.5.9 Manage former employees

6.5.10 Manage employee relocation process

6.6 Manage employee information

6.6.1 Manage reporting processes

6.6.2 Manage employee inquiry process

6.6.3 Manage and maintain employee data

6.6.4 Manage human resource information systems (HRIS)

6.6.5 Develop and manage employee metrics

6.6.6 Develop and manage time and attendance systems

6.6.7 Manage employee communication

6.6.7.1 Develop employee communication plan

6.6.7.2 Manage/Collect employee suggestions and perform employee research

6.6.7.3 Manage employee grievances

6.6.7.4 Publish employee communications

7.0 Manage Information Technology

7.1 Manage the business of information technology (IT)

- 7.1.1 Develop an information plan to collect data and provide information for data driven decision making
 - 7.1.1.1 Define a data dictionary and the periodicity for collecting and reporting data for each department, program, and school
 - 7.1.1.2 Describe the costs and benefits for collecting, reporting, and making data-driven decisions for each department, program, and school
 - 7.1.1.3 Identify the district-, department-, and campus-level staff responsible for knowledge management
- 7.1.2 Develop the enterprise IT strategy
 - 7.1.2.1 Build strategic intelligence
 - 7.1.2.2 Identify long-term IT needs of the enterprise in collaboration with stakeholders
 - 7.1.2.3 Define strategic standards, guidelines, and principles
 - 7.1.2.4 Define and establish IT architecture and development standards
 - 7.1.2.5 Define strategic vendors for IT components
 - 7.1.2.6 Establish IT governance organization and processes
 - 7.1.2.7 Build strategic plan to support business objectives
- 7.1.3 Define the enterprise architecture
 - 7.1.3.1 Establish the enterprise architecture definition
 - 7.1.3.2 Confirm enterprise architecture maintenance approach
 - 7.1.3.3 Maintain the relevance of the enterprise architecture
 - 7.1.3.4 Act as clearinghouse for IT research and innovation
 - 7.1.3.5 Govern the enterprise architecture
- 7.1.4 Perform IT research and innovation
 - 7.1.4.1 Explore technologies to innovate IT services and solutions
 - 7.1.4.2 Transition viable technologies for IT services and solutions development

- 7.1.5 Evaluate and communicate IT business value and performance
 - 7.1.5.1 Establish and monitor key performance indicators
 - 7.1.5.2 Evaluate IT plan performance
 - 7.1.5.3 Communicate IT value

7.2 Develop and manage IT customer relationships

- 7.2.1 Develop IT services and solutions strategy
 - 7.2.1.1 Research IT services and solutions to address business and user requirements
 - 7.2.1.2 Translate business and user requirements into IT services and solutions requirements
 - 7.2.1.3 Formulate IT services and solutions strategic initiatives
 - 7.2.1.4 Coordinate strategies with internal stakeholders to ensure alignment
 - 7.2.1.5 Evaluate and select IT services and solutions strategic initiatives
 - 7.2.1.6 Maximize the value of the IT Portfolio
- 7.2.2 Develop and manage IT service levels
 - 7.2.2.1 Create and maintain the IT services and solutions catalog
 - 7.2.2.2 Establish and maintain business and IT service level agreements
 - 7.2.2.3 Evaluate and report service level attainment results
 - 7.2.2.4 Communicate business and IT service level improvement opportunities
- 7.2.3 Manage IT customer satisfaction
 - 7.2.3.1 Capture and analyze customer satisfaction
 - 7.2.3.2 Assess and communicate customer satisfaction patterns
- 7.2.4 Market IT services and solutions
 - 7.2.4.1 Develop IT services and solutions marketing strategy
 - 7.2.4.2 Develop and manage IT customer strategy
 - 7.2.4.3 Manage IT services and solutions advertising and promotional campaigns
 - 7.2.4.4 Process and track IT services and solutions orders

7.3 Develop and implement security, privacy, and data protection controls

- 7.3.1 Establish information security, privacy, and data protection strategies and levels
- 7.3.2 Test, evaluate, and implement information security, and privacy and data protection controls
- 7.3.3 Perform Demand Side Management (DSM) for IT Services
 - 7.3.3.1 Understand IT services and solutions consumption and usage
 - 7.3.3.2 Develop and implement incentive programs that improve consumption efficiency
 - 7.3.3.3 Develop volume/unit forecast for IT service and solutions

7.4 Manage enterprise information

- 7.4.1 Develop the information management and content management strategies
 - 7.4.1.1 Identify information and content management needs including the role of IT services for executing the district strategy
 - 7.4.1.2 Assess the information and content management implications of new technologies
 - 7.4.1.3 Identify and prioritize information and content management actions
- 7.4.2 Define the enterprise information architecture
 - 7.4.2.1 Define information elements, composite structure, logical relationships and constraints, and derivation rules
 - 7.4.2.2 Define information access requirements
 - 7.4.2.3 Establish data custodianship
 - 7.4.2.4 Manage changes to content data architecture requirements
- 7.4.3 Manage information resources
 - 7.4.3.1 Define the enterprise information/data policies and standards
 - 7.4.3.2 Develop and implement data and content administration
- 7.4.4 Perform enterprise data and content management
 - 7.4.4.1 Define sources and destinations of content data
 - 7.4.4.2 Manage technical interfaces to users of content
 - 7.4.4.3 Manage retention, revision, and retirement of enterprise information

- 7.4.4.4 Develop data verification solutions

7.5 Develop and maintain information technology solutions

- 7.5.1 Develop the IT development strategy
 - 7.5.1.1 Establish sourcing strategy for IT development
 - 7.5.1.2 Define development processes, methodologies, and tools standards
 - 7.5.1.3 Select development methodologies and tools
- 7.5.2 Perform IT services and solutions life cycle planning
 - 7.5.2.1 Plan development of new requirements
 - 7.5.2.2 Plan development of feature and functionality enhancement
 - 7.5.2.3 Develop life cycle plan for IT services and solutions
- 7.5.3 Develop and maintain IT services and solutions architecture
 - 7.5.3.1 Create IT services and solutions architecture
 - 7.5.3.2 Revise IT services and solutions architecture
 - 7.5.3.3 Retire IT services and solutions architecture
- 7.5.4 Create IT services and solutions
 - 7.5.4.1 Understand confirmed requirements
 - 7.5.4.2 Design IT services and solutions
 - 7.5.4.3 Acquire/Develop IT service/solution components
 - 7.5.4.4 Train services and solutions resources
 - 7.5.4.5 Test IT service/solution
 - 7.5.4.6 Confirm customer acceptance
- 7.5.5 Maintain IT services and solutions
 - 7.5.5.1 Understand upkeep/enhance requirements and defect analysis
 - 7.5.5.2 Design change to existing IT service/solution
 - 7.5.5.3 Acquire/Develop changed IT service/solution component
 - 7.5.5.4 Test IT service/solution change
 - 7.5.5.5 Confirm customer acceptance

7.6 Deploy information technology solutions

- 7.6.1 Develop the IT deployment strategy
 - 7.6.1.1 Establish IT services and solutions change policies
 - 7.6.1.2 Define deployment process, procedures, and tools standards

- 7.6.1.3 Select deployment methodologies and tools
- 7.6.1.4 Evaluate deployment strategies
- 7.6.2 Plan and implement changes
 - 7.6.2.1 Plan change deployment
 - 7.6.2.2 Communicate changes to stakeholders
 - 7.6.2.3 Administer change schedule
 - 7.6.2.4 Train impacted users
 - 7.6.2.5 Distribute and install change
 - 7.6.2.6 Verify change
- 7.6.3 Plan and manage releases
 - 7.6.3.1 Understand and coordinate release design and acceptance
 - 7.6.3.2 Plan release rollout
 - 7.6.3.3 Distribute and install release
 - 7.6.3.4 Verify release
- 7.7 Deliver and support information technology services**
 - 7.7.1 Develop the IT services and solution delivery strategy
 - 7.7.1.1 Establish sourcing strategy for IT delivery
 - 7.7.1.2 Define delivery processes, procedures, and tools standards
 - 7.7.1.3 Select delivery methodologies and tools
 - 7.7.2 Develop IT support strategy
 - 7.7.2.1 Establish sourcing strategy for IT support
 - 7.7.2.2 Define IT support services
 - 7.7.3 Manage IT infrastructure resources
 - 7.7.3.1 Manage IT inventory and assets
 - 7.7.3.2 Manage IT resource capacity
 - 7.7.4 Manage IT infrastructure operations
 - 7.7.4.1 Deliver IT services and solutions
 - 7.7.4.2 Perform IT operations support services
 - 7.7.5 Support IT services and solutions
 - 7.7.5.1 Manage availability
 - 7.7.5.2 Manage facilities
 - 7.7.5.3 Manage backup/recovery
 - 7.7.5.4 Manage performance and capacity
 - 7.7.5.5 Manage incidents
 - 7.7.5.6 Manage problems
 - 7.7.5.7 Manage events

8.0 Manage Financial Resources

8.1 Perform planning and management accounting

- 8.1.1 Perform planning/budgeting/forecasting
 - 8.1.1.1 Develop and maintain budget policies and procedures
 - 8.1.1.2 Prepare periodic budgets and plans
 - 8.1.1.3 Prepare periodic forecasts
- 8.1.2 Perform cost accounting and control
 - 8.1.2.1 Perform inventory accounting
- 8.1.3 Perform cost management
 - 8.1.3.1 Determine key cost drivers
 - 8.1.3.2 Measure cost drivers
 - 8.1.3.3 Determine critical activities
 - 8.1.3.4 Manage asset resource deployment and utilization
- 8.1.4 Evaluate and manage financial performance
 - 8.1.4.1 Evaluate program and services effectiveness
 - 8.1.4.2 Evaluate new programs and services
 - 8.1.4.3 Perform life cycle costing

- 8.1.4.4 Optimize match of programs and services to student needs
- 8.1.4.5 Track performance of new program and services strategies
- 8.1.4.6 Prepare activity-based performance measures
- 8.1.4.7 Manage continuous cost improvement

8.2 Perform revenue accounting

- 8.2.1 Process taxpayer accounts
 - 8.2.1.1 Establish collection policies
 - 8.2.1.2 Assess and bill new properties
 - 8.2.1.3 Review existing properties
 - 8.2.1.4 Produce assessment/collection reports
- 8.2.2 Generate tax statements
 - 8.2.2.1 Maintain property/taxpayer master files
 - 8.2.2.2 Generate taxpayer billing data
 - 8.2.2.3 Transmit billing data to taxpayers
 - 8.2.2.4 Post receivable entries
 - 8.2.2.5 Resolve customer assessment inquiries

- 8.2.3 Process accounts receivable (AR)
 - 8.2.3.1 Establish AR policies
 - 8.2.3.2 Receive/Deposit payments
 - 8.2.3.3 Apply cash remittances
 - 8.2.3.4 Prepare AR reports
 - 8.2.3.5 Post AR activity to the general ledger
- 8.2.4 Manage and process collections
 - 8.2.4.1 Establish policies for delinquent accounts
 - 8.2.4.2 Analyze delinquent account balances
 - 8.2.4.3 Correspond/Negotiate with delinquent accounts
 - 8.2.4.4 Discuss account resolution with internal parties
 - 8.2.4.5 Process adjustments/write-off balances
- 8.2.5 Manage and process adjustments/deductions
 - 8.2.5.1 Establish policies/procedures for adjustments
 - 8.2.5.2 Analyze adjustments
 - 8.2.5.3 Correspond/Negotiate with taxpayer
 - 8.2.5.4 Discuss resolution with internal parties
 - 8.2.5.5 Prepare assessment adjustments
 - 8.2.5.6 Process related entries

8.3 Perform general accounting and reporting

- 8.3.1 Manage policies and procedures
 - 8.3.1.1 Negotiate service level agreements
 - 8.3.1.2 Establish accounting policies
 - 8.3.1.3 Set up and enforce approval limits
 - 8.3.1.4 Establish common financial systems
- 8.3.2 Perform general accounting
 - 8.3.2.1 Maintain chart of accounts
 - 8.3.2.2 Process journal entries
 - 8.3.2.3 Process allocations
 - 8.3.2.4 Process period-end adjustments (e.g., accruals and currency conversions, etc.)
 - 8.3.2.5 Post and reconcile interagency transactions
 - 8.3.2.6 Reconcile general ledger accounts
 - 8.3.2.7 Perform consolidations and process eliminations
 - 8.3.2.8 Prepare trial balance

- 8.3.2.9 Prepare and post management adjustments
- 8.3.3 Perform fixed asset accounting (facilities)
 - 8.3.3.1 Establish fixed asset policies and procedures
 - 8.3.3.2 Maintain fixed asset master data files
 - 8.3.3.3 Process and record fixed asset additions and retires
 - 8.3.3.4 Process and record fixed asset adjustments, enhancements, revaluations, and transfers
 - 8.3.3.5 Process and record fixed asset maintenance and repair expenses
 - 8.3.3.6 Calculate and record depreciation expense
 - 8.3.3.7 Reconcile fixed asset ledger
 - 8.3.3.8 Track fixed assets including physical inventory
 - 8.3.3.9 Provide fixed asset data to support tax, statutory, and regulatory reporting
- 8.3.4 Perform financial reporting
 - 8.3.4.1 Prepare departmental financial statements
 - 8.3.4.2 Prepare consolidated financial statements
 - 8.3.4.3 Perform departmental reporting/review management reports
 - 8.3.4.4 Perform consolidated reporting/review of cost management reports
 - 8.3.4.5 Prepare statements for board
 - 8.3.4.6 Produce quarterly/annual filings and public reports
 - 8.3.4.7 Produce regulatory reports

8.4 Manage fixed assets budgets

- 8.4.1 Perform capital planning and project approval
 - 8.4.1.1 Develop capital investment policies and procedures
 - 8.4.1.2 Develop and approve capital expenditure plans and budgets
 - 8.4.1.3 Review and approve capital projects and fixed asset acquisitions
 - 8.4.1.4 Perform justification for bond/project approval
- 8.4.2 Perform capital project accounting
 - 8.4.2.1 Create project account codes
 - 8.4.2.2 Record project-related transactions

- 8.4.2.3 Monitor and track capital projects and budget spending
- 8.4.2.4 Close/Capitalize projects
- 8.4.2.5 Measure variance in budgeted and actual expenditure on completed capital projects

8.5 Process payroll

- 8.5.1 Report time
 - 8.5.1.1 Establish policies and procedures
 - 8.5.1.2 Collect and record employee time information
 - 8.5.1.3 Analyze and report paid and unpaid leave
 - 8.5.1.4 Monitor regular overtime and other hours
 - 8.5.1.5 Analyze and report employee utilization
- 8.5.2 Manage pay
 - 8.5.2.1 Enter employee time into payroll system
 - 8.5.2.2 Maintain and administer employee earnings information
 - 8.5.2.3 Maintain and administer applicable deductions
 - 8.5.2.4 Monitor changes in tax status of employees
 - 8.5.2.5 Process and distribute payments
 - 8.5.2.6 Process and distribute manual checks
 - 8.5.2.7 Process end-of-period adjustments
 - 8.5.2.8 Respond to employee payroll inquiries
- 8.5.3 Process payroll taxes
 - 8.5.3.1 Calculate and pay applicable payroll taxes
 - 8.5.3.2 Produce and distribute employee annual tax statements
 - 8.5.3.3 File regulatory payroll tax forms

8.6 Process accounts payable and expense reimbursements

- 8.6.1 Process accounts payable (AP)
 - 8.6.1.1 Verify AP pay file with purchase order vendor master file
 - 8.6.1.2 Maintain/Manage electronic commerce
 - 8.6.1.3 Audit invoices and key data into AP system
 - 8.6.1.4 Approve payments
 - 8.6.1.5 Process financial accruals and reversals

- 8.6.1.6 Process taxes
- 8.6.1.7 Research/Resolve exceptions
- 8.6.1.8 Process payments
- 8.6.1.9 Respond to AP inquiries
- 8.6.1.10 Retain records
- 8.6.1.11 Adjust accounting records
- 8.6.2 Process expense reimbursements
 - 8.6.2.1 Establish and communicate expense reimbursement policies and approval limits
 - 8.6.2.2 Capture and report relevant tax data
 - 8.6.2.3 Approve reimbursements and advances
 - 8.6.2.4 Process reimbursements and advances
 - 8.6.2.5 Manage personal accounts

8.7 Manage treasury operations

- 8.7.1 Manage treasury policies and procedures
 - 8.7.1.1 Establish scope and governance of treasury operations
 - 8.7.1.2 Establish and publish treasury policies
 - 8.7.1.3 Develop treasury procedures
 - 8.7.1.4 Monitor treasury procedures
 - 8.7.1.5 Audit treasury procedures
 - 8.7.1.6 Revise treasury procedures
 - 8.7.1.7 Develop and confirm internal controls for treasury
 - 8.7.1.8 Define system security requirements
- 8.7.2 Manage cash
 - 8.7.2.1 Manage and reconcile cash positions
 - 8.7.2.2 Manage cash equivalents
 - 8.7.2.3 Process and oversee electronic fund transfers (EFTs)
 - 8.7.2.4 Develop cash flow forecasts
 - 8.7.2.5 Manage cash flows
 - 8.7.2.6 Produce cash management accounting transactions and reports
 - 8.7.2.7 Manage and oversee banking relationships
 - 8.7.2.8 Analyze, negotiate, resolve, and confirm bank fees
- 8.7.3 Manage debt and investment
 - 8.7.3.1 Manage financial intermediary relationships
 - 8.7.3.2 Manage liquidity

- 8.7.3.3 Manage issuer exposure
- 8.7.3.4 Process and oversee debt and investment transactions
- 8.7.3.5 Produce debt and investment accounting transaction reports
- 8.7.3.6 Process and oversee interest rate transactions
- 8.7.4 Monitor and execute risk
 - 8.7.4.1 Manage interest-rate risk
 - 8.7.4.2 Manage exposure risk
 - 8.7.4.3 Monitor credit

8.8 Manage internal controls

- 8.8.1 Establish internal controls, policies, and procedures
 - 8.8.1.1 Establish board audit committee
 - 8.8.1.2 Define and communicate code of ethics
 - 8.8.1.3 Assign roles and responsibility for internal controls
 - 8.8.1.4 Define business process objectives and risks
 - 8.8.1.5 Define entity/unit risk tolerances
- 8.8.2 Operate controls and monitor compliance with internal controls policies and procedures
 - 8.8.2.1 Design and implement control activities
 - 8.8.2.2 Monitor control effectiveness

- 8.8.2.3 Remediate control deficiencies
- 8.8.2.4 Create compliance function
- 8.8.2.5 Operate compliance function
- 8.8.2.6 Implement and maintain controls-related enabling technologies and tools
- 8.8.3 Report on internal controls compliance
 - 8.8.3.1 Report to external auditors
 - 8.8.3.2 Report to regulators, share-/debt-holders, securities exchanges, etc.
 - 8.8.3.3 Report to third parties (e.g., board)
 - 8.8.3.4 Report to internal management

8.9 Manage grants

- 8.9.1 Develop grant application and management procedures
- 8.9.2 Collaborate across educational and operation functions to determine funding needs
- 8.9.3 Identify qualified grants
- 8.9.4 Submit grant proposal
- 8.9.5 Establish grant budget
- 8.9.6 Monitor grant requirements
- 8.9.7 Evaluate grant effectiveness

9.0 Acquire, Construct, and Manage Facilities

9.1 Design and construct/acquire capital assets

- 9.1.1 Develop capital improvement plan and long-term vision
 - 9.1.1.1 Confirm alignment of property requirements with district strategy
 - 9.1.1.2 Assess the external environment
 - 9.1.1.3 Make build-or-buy decision
 - 9.1.1.4 Select property
- 9.1.2 Develop, construct, and modify sites
- 9.1.3 Plan facility
 - 9.1.3.1 Design facility
 - 9.1.3.2 Analyze budget
 - 9.1.3.3 Conduct bid and contract selection for facility construction
 - 9.1.3.4 Manage construction or modification to building

- 9.1.4 Provide facilities
 - 9.1.4.1 Acquire facilities and furnishings
 - 9.1.4.2 Change fit/form/function of facilities and furnishings

9.2 Plan maintenance work

- 9.2.1 Develop a work order process
 - 9.2.1.1 Collect data on work order cycle time and flow
 - 9.2.1.2 Monitor performance against industry standards
- 9.2.2 Perform routine maintenance
- 9.2.3 Perform corrective maintenance
- 9.2.4 Overhaul or replace equipment
- 9.2.5 Manage facilities operations
 - 9.2.5.1 Relocate people
 - 9.2.5.2 Relocate materials, supplies, and furnishings

9.3 Obtain and install assets and equipment

- 9.3.1 Develop ongoing maintenance policies
 - 9.3.1.1 Analyze assets, and predict maintenance requirements
 - 9.3.1.2 Develop approach to integrate preventive maintenance into production schedule
- 9.3.2 Obtain and install equipment

9.4 Dispose of facilities and assets

- 9.4.1 Develop disposition strategy
- 9.4.2 Perform sale or abandonment

9.5 Manage facility housekeeping

- 9.5.1 Identify cleaning needs, standards, and requirements
- 9.5.2 Develop process cleaning guidelines
- 9.5.3 Evaluate cleaning effectiveness

9.6 Maintain grounds

- 9.6.1 Plan and develop maintenance schedules
- 9.6.2 Coordinate maintenance activities
- 9.6.3 Monitor quality of service

10.0 Manage Enterprise Risk, Compliance, and Continuity of Operations (Resiliency)

10.1 Manage enterprise risk

- 10.1.1 Establish the enterprise risk framework and policies
 - 10.1.1.1 Determine risk tolerance for organization
 - 10.1.1.2 Develop and maintain enterprise risk policies and procedures
 - 10.1.1.3 Identify and implement enterprise risk management tools
 - 10.1.1.4 Coordinate the sharing of risk knowledge across the organization
 - 10.1.1.5 Prepare and report enterprise risk to executive management and board
- 10.1.2 Oversee and coordinate enterprise risk management activities
 - 10.1.2.1 Identify enterprise level risks
 - 10.1.2.2 Assess risks to determine which to mitigate
 - 10.1.2.3 Develop risk mitigation and management strategy, and integrate with existing performance management processes
 - 10.1.2.4 Verify risk mitigation plans are implemented
 - 10.1.2.5 Monitor risks and risk mitigation action
 - 10.1.2.6 Report on risk activities
- 10.1.3 Coordinate department/campus and functional risk management activities
 - 10.1.3.1 Monitor that each department, campus, and function follows the enterprise risk management process
 - 10.1.3.2 Monitor that each department, campus, and function follows the enterprise risk reporting process
- 10.1.4 Manage department, campus, and function risk
 - 10.1.4.1 Identify risks
 - 10.1.4.2 Assess risks using enterprise risk framework policies and procedures
 - 10.1.4.3 Develop mitigation plans for risks
 - 10.1.4.4 Implement mitigation plans for risks
 - 10.1.4.5 Monitor risks
 - 10.1.4.6 Analyze risk activities and update plans
 - 10.1.4.7 Report on risk activities
- 10.1.5 Manage regulatory compliance
 - 10.1.5.1 Develop the regulatory compliance strategy
 - 10.1.5.2 Identify applicable regulatory requirements
 - 10.1.5.3 Monitor the regulatory environment for changing or emerging regulations
 - 10.1.5.4 Assess current compliance position, and identify weaknesses or shortfalls
 - 10.1.5.5 Implement missing or stronger regulatory compliance controls and policies

- 10.1.5.6 Monitor and test, on an ongoing and scheduled basis, regulatory compliance position and existing controls, defining controls that should be added, removed, or modified as required
- 10.1.5.7 Maintain relationships with regulators as appropriate

10.2 Manage continuity of operations

- 10.2.1 Develop and manage continuity of operations
 - 10.2.1.1 Develop the continuity of operations strategy
 - 10.2.1.2 Perform continuous district operations planning
 - 10.2.1.3 Test continuous district operations
 - 10.2.1.4 Maintain continuous district operations
 - 10.2.1.5 Share knowledge of specific risks across other parts of the organization

10.3 Manage environmental health and safety (EHS)

- 10.3.1 Determine environmental health and safety impacts
 - 10.3.1.1 Evaluate environmental impact of services and operations
 - 10.3.1.2 Conduct health and safety and environmental audits
- 10.3.2 Develop and execute functional EHS program
 - 10.3.2.1 Identify regulatory and stakeholder requirements
 - 10.3.2.2 Assess future risks and opportunities
 - 10.3.2.3 Create EHS policy
 - 10.3.2.4 Record and manage EHS events
- 10.3.3 Train and educate functional employees
 - 10.3.3.1 Communicate EHS issues to stakeholders and provide support
- 10.3.4 Monitor and manage functional EHS management program
 - 10.3.4.1 Manage EHS costs and benefits
 - 10.3.4.2 Measure and report EHS performance
 - 10.3.4.3 Implement emergency response program

- 10.3.4.4 Provide employees with EHS support
- 10.3.5 Ensure compliance with regulations
 - 10.3.5.1 Monitor compliance
 - 10.3.5.2 Perform compliance audit
 - 10.3.5.3 Comply with regulatory stakeholders' requirements
- 10.3.6 Manage remediation efforts
 - 10.3.6.1 Create remediation plans
 - 10.3.6.2 Contact and confer with experts
 - 10.3.6.3 Identify/Dedicate resources
 - 10.3.6.4 Investigate legal aspects
 - 10.3.6.5 Investigate damage cause
 - 10.3.6.6 Amend or create policy
- 10.3.7 Plan and develop security program
 - 10.3.7.1 Evaluate facility security vulnerabilities
 - 10.3.7.2 Develop security program
 - 10.3.7.3 Identify security equipment and funding source
 - 10.3.7.4 Install and maintain security equipment
 - 10.3.7.5 Monitor security equipment
 - 10.3.7.6 Implement security policies and procedures
 - 10.3.7.7 Test efficacy of security protocols
 - 10.3.7.8 Monitor security compliance
 - 10.3.7.9 Evaluate security protocols

11.0 Manage External Relationships

11.1 Build financial relationships

- 11.1.1 Plan, build, and manage relations with federal, state, and local funding entities
- 11.1.2 Plan, build, and manage financial analyst/ratings relations
- 11.1.3 Communicate with stakeholders

11.2 Manage government and other district relationships

- 11.2.1 Manage government relations
- 11.2.2 Manage relations with quasi-government bodies
- 11.2.3 Manage relations with associations, stakeholder, and education groups
- 11.2.4 Manage lobby activities

11.3 Manage relations with Board of Trustees/ Education

- 11.3.1 Report results
- 11.3.2 Address audit findings

11.4 Manage legal and ethical issues

- 11.4.1 Create ethics policies
 - 11.4.1.1 Identify key measures or indicators of ethical behavior
 - 11.4.1.2 Monitor ethical behavior across the organization
 - 11.4.1.3 Identify a confidential method to report breaches in ethical behavior
 - 11.4.1.4 Implement a confidential method to report breaches in ethical behavior
- 11.4.2 Manage district governance policies
- 11.4.3 Develop and perform preventative law programs
- 11.4.4 Ensure compliance

- 11.4.4.1 Plan and initiate compliance program
- 11.4.4.2 Execute compliance program
- 11.4.5 Manage outside counsel
 - 11.4.5.1 Assess problem and determine work requirements
 - 11.4.5.2 Engage/Retain outside counsel if necessary
 - 11.4.5.3 Receive strategy/budget
 - 11.4.5.4 Receive work product and manage/monitor case and work performed
 - 11.4.5.5 Process pay for legal services
 - 11.4.5.6 Track legal activity/performance
- 11.4.6 Protect intellectual property
 - 11.4.6.1 Manage copyrights and patents
 - 11.4.6.2 Maintain intellectual property rights and restrictions
 - 11.4.6.3 Administer licensing terms
 - 11.4.6.4 Administer options
- 11.4.7 Resolve grievances and litigations
- 11.4.8 Provide legal advice/counseling
- 11.4.9 Negotiate and document agreements/contracts

11.5 Manage public relations program

- 11.5.1 Manage community relations
- 11.5.2 Manage media relations
- 11.5.3 Manage relations with association and education groups
- 11.5.4 Manage relations with vendors and suppliers
- 11.5.5 Promote political stability
- 11.5.6 Create news releases
- 11.5.7 Issue news releases

12.0 Develop and Manage District Capabilities

12.1 Manage educational programs, support services, and operational processes

- 12.1.1 Establish and maintain process management governance
 - 12.1.1.1 Define and manage governance approach
 - 12.1.1.2 Establish and maintain process tools and templates
 - 12.1.1.3 Conduct process governance activities

- 12.1.2 Define and manage process frameworks
 - 12.1.2.1 Establish and maintain process framework
 - 12.1.2.2 Identify cross-functional processes
- 12.1.3 Define processes
 - 12.1.3.1 Scope processes
 - 12.1.3.2 Analyze processes

- 12.1.3.3 Map processes
- 12.1.3.4 Publish processes
- 12.1.4 Manage process performance
 - 12.1.4.1 Provide process training
 - 12.1.4.2 Support process implementation
 - 12.1.4.3 Measure and report process performance
- 12.1.5 Improve processes
 - 12.1.5.1 Identify and select improvement opportunities
 - 12.1.5.2 Manage improvement projects
 - 12.1.5.3 Perform continuous improvement activities

12.2 Manage district projects and programs

- 12.2.1 Manage educational, support services, and operational program strategy
 - 12.2.1.1 Establish educational, support services, and operational program strategy
 - 12.2.1.2 Define educational, support services, and operational program governance
 - 12.2.1.3 Monitor and control educational, support services, and operational programs
- 12.2.2 Manage educational, support services, and operational programs
 - 12.2.2.1 Establish program structure and approach
 - 12.2.2.2 Manage program stakeholders and partners
 - 12.2.2.3 Manage program implementation
 - 12.2.2.4 Review and report program performance
- 12.2.3 Manage projects
 - 12.2.3.1 Establish project scope
 - 12.2.3.1.1 Identify project requirements and objectives
 - 12.2.3.1.2 Identify project resource requirements
 - 12.2.3.1.3 Assess culture and readiness for project management approach
 - 12.2.3.1.4 Identify appropriate project management methodologies

- 12.2.3.1.5 Create project rationale and obtain funding
- 12.2.3.1.6 Develop project measures and indicators
- 12.2.3.2 Develop project plans
 - 12.2.3.2.1 Define roles and resources
 - 12.2.3.2.2 Identify specific IT requirements
 - 12.2.3.2.3 Create training and communication plans
 - 12.2.3.2.4 Design recognition and reward approaches
 - 12.2.3.2.5 Design and plan launch of project
 - 12.2.3.2.6 Deploy the project
- 12.2.3.3 Implement projects
 - 12.2.3.3.1 Evaluate impact of project management (strategy and projects) on measures and outcomes
 - 12.2.3.3.2 Report the status of project
 - 12.2.3.3.3 Manage project scope
 - 12.2.3.3.4 Promote and sustain activity and involvement
 - 12.2.3.3.5 Realign and refresh project management strategy and approaches
- 12.2.3.4 Review and report project performance
- 12.2.3.5 Close projects

12.3 Manage district quality and organizational performance

- 12.3.1 Develop quality strategy and plans
 - 12.3.1.1 Define and maintain quality processes and standards
 - 12.3.1.2 Establish quality measurements and targets
 - 12.3.1.3 Establish and maintain quality tools and templates
- 12.3.2 Plan and manage quality work force

- 12.3.2.1 Develop and maintain quality assessment training
- 12.3.2.2 Develop and maintain quality-process tools training
- 12.3.2.3 Develop and maintain quality recognition programs
- 12.3.3 Perform quality assessments
 - 12.3.3.1 Assess process compliance
 - 12.3.3.2 Assess standards compliance
 - 12.3.3.3 Perform risk assessment
 - 12.3.3.4 Perform organizational effectiveness assessment
 - 12.3.3.6 Measure and report quality performance

12.4 Manage change

- 12.4.1 Plan for change
 - 12.4.1.1 Select process improvement methodology
 - 12.4.1.2 Assess readiness for
 - 12.4.1.3 Determine stakeholders
 - 12.4.1.4 Engage/Identify champion
 - 12.4.1.5 Form design team
 - 12.4.1.6 Define scope
 - 12.4.1.7 Understand current state
 - 12.4.1.8 Define future state
 - 12.4.1.9 Conduct organizational risk analysis
 - 12.4.1.10 Assess cultural issues
 - 12.4.1.11 Establish accountability for change management
 - 12.4.1.12 Identify barriers to change
 - 12.4.1.13 Determine change enablers
 - 12.4.1.14 Identify resources and develop measures
- 12.4.2 Design the change
 - 12.4.2.1 Assess connection to other initiatives
 - 12.4.2.2 Develop change management plans
 - 12.4.2.3 Develop training plan
 - 12.4.2.4 Develop communication plan
 - 12.4.2.5 Develop rewards/incentives plan
 - 12.4.2.6 Establish change adoption metrics
 - 12.4.2.7 Establish/Clarify new roles
 - 12.4.2.8 Identify budget/roles
- 12.4.3 Implement the change
 - 12.4.3.1 Create commitment for improvement/change

- 12.4.3.2 Reengineer educational support and operational processes and systems
- 12.4.3.3 Support transition to new roles or exit strategies for incumbents
- 12.4.3.4 Monitor change
- 12.4.4 Sustain improvement
 - 12.4.4.1 Monitor improved process performance
 - 12.4.4.2 Capture and reuse lessons learned from change process
 - 12.4.4.3 Take corrective action as necessary

12.5 Develop and manage enterprise-wide knowledge management (KM) capability

- 12.5.1 Develop KM strategy
 - 12.5.1.1 Develop governance model
 - 12.5.1.2 Establish a central KM core group
 - 12.5.1.3 Define roles and accountability of the core group versus departments/campuses
 - 12.5.1.4 Develop funding models
 - 12.5.1.5 Identify links to key initiatives
 - 12.5.1.6 Develop core KM methodologies
 - 12.5.1.7 Assess IT needs and engage IT function
 - 12.5.1.8 Develop training and communication plans
 - 12.5.1.9 Develop change management approaches
 - 12.5.1.10 Develop strategic measures and indicator
- 12.5.2 Assess KM capabilities
 - 12.5.2.1 Assess maturity of existing KM initiatives
 - 12.5.2.2 Evaluate existing KM approaches
 - 12.5.2.3 Identify gaps and needs
 - 12.5.2.4 Enhance/Modify existing KM approaches
 - 12.5.2.5 Develop new KM approaches
 - 12.5.2.6 Implement new KM approaches
- 12.5.3 Identify and plan KM projects
 - 12.5.3.1 Identify strategic opportunities to apply KM approach(es)
 - 12.5.3.2 Design process for knowledge sharing, capture, and use

12.5.3.3 Assess alignment with district goals

12.6 Measure and benchmark

12.6.1 Create and manage organizational performance

12.6.1.1 Create enterprise measurement systems model

12.6.1.2 Measure process productivity

12.6.1.3 Measure cost effectiveness

12.6.1.4 Measure staff efficiency

12.6.1.5 Measure cycle time

12.6.2 Benchmark performance

12.6.2.1 Conduct performance assessments

12.6.2.2 Develop benchmarking capabilities

12.6.2.3 Conduct internal process and external competitive benchmarking

12.6.2.4 Conduct gap analysis to understand need for change and degree needed



RIGHTS AND PERMISSIONS

©2013 APQC. ALL RIGHTS RESERVED. APQC encourages the wide distribution, discussion, and use of the PCF for classifying and defining processes. APQC grants permission for use and adaptation of the PCF for internal use. For external use, APQC grants permission for publication, distribution, and use, provided that proper copyright acknowledgment is made to APQC. No modifications to the look or content should be made in external venues.

Please use the following text when reusing the PCF in external print or electronic content:

THE APQC PROCESS CLASSIFICATION FRAMEWORKSM (PCF) FOR EDUCATION

The PCF was developed by non-profit APQC, a global resource for benchmarking and best practices, and its member companies as an open standard to facilitate improvement through process management and benchmarking, regardless of industry, size, or geography. The PCF organizes operating and management processes into 12 enterprise level categories, including process groups and over 1,000 processes and associated activities. The PCF is available for organizations of all industries and sizes at no charge by visiting www.apqceducation.org/pcf.