BAYWORK
&
Colorado Springs Utilities

September 20, 2012
Safety & Housekeeping
About Us

• Four-service municipal enterprise
  • Electric, natural gas, water, wastewater
  • ~ 820,000 metered accounts
Colorado Springs Utilities

- Our mission is to provide safe, reliable, competitively-priced electric, natural gas, water and wastewater services to the citizen owners and customers of Colorado Springs Utilities.

- The University of Springs Utilities supports this mission by developing and maintaining a skilled workforce. USU delivers learning for:
  - 30 craft training programs (14 department of labor / veterans administration registered)
  - 52 safety and environmental certifications
  - 33 heavy equipment certifications
  - 7 customer service programs
  - 17 system specific IT systems and;
  - Multiple professional and leadership development opportunities
• Consolidated training function since 2001
• University concept implemented in 2004
• Managed by five Schools of Learning
  o Organizational and Professional Development
  o Customer Relationships
  o Technical Field Operations
  o Technical Plant Operations
  o Environmental, Health and Safety
University of Springs Utilities
Schools of Learning

School of Organizational and Personal Development
- Personal Effectiveness
- Supervisor & Manager Development
- Project Management
- Continuous Improvement
- Financial Management
- Computer Information Technology

School of Technical Field Operations
- Field Apprenticeship Programs
- Journey level training for field employees
- Equipment Operator Qualification
- Operator Qualification
- Water License and Certification

School of Customer Relationships
- Customer Relations
- Business Processes & Procedures
- Utility Knowledge
- Customer Information System

School of Technical Plant Operations
- Plant Apprenticeship Programs
- Journey level training for Power, Water Collection and Distribution Plants

School of Environmental, Health and Safety
- Environmental
- Safety and Health
- Business Continuity
Best New Corporate University
2004 - 2nd Place

Best-in-Class Instructional Design & Curriculum Development
2004 & 2005 – Honorable Mention

Instructional Design & Curriculum Development Leader of the Year
2004 – Honorable Mention
Training Request Process

- Customer requests training
  - Types of request: off-site vendor training, in-house, revised, regulatory, new development…
- USU performs needs analysis with customer
  - Training request form
  - Manager approval
  - Brainstorm possible solutions
    - Training methods
    - Development time
    - Process
- Request presented to advisory board
Prioritization Process

- **Advisory Board**
  - Discusses merits of request
  - Agree on ultimate goal of the training
  - Determine success factors or indicators
  - Determine severity of the issue.
    - Is the issue a “bench depth”, productivity, new process, new tool issue, etc…?

- A due date is agreed upon

- Project is listed in centralized training project management system
Prioritization Process (cont.)

• Project due date is integrated with all other projects
  o If due date is obtainable, project moves forward without further discussion
  o If due date appears to be at risk, further discussions are held with requesting customer

• Competing Priorities:
  o Within a single school of learning, the advisory board determines the higher priority
  o In multiple schools of learning, the deans are engaged and the priority is determined based on most critical factors, compliance, safety, bench strength, new process, new tools/equipment, productivity
Instructional Design Process

• ADDIE
  • Design
    o Action Mapping
    o Tools
    o Selecting SME
    o Initial SME Meeting
      • Building a relationship
      • Discuss solution
      • Benefits
      • Collaboration and SME involvement
      • Time commitment
      • Target dates and project plan
Instructional Design Process

• Development
  o SME Involvement
    • Engaged throughout the process
    • Pilot
    • Lectora Review Link

• Implementation
  o Trainer Communication with Customer
  o Reporting back to Advisory Board

• Evaluation
  o Kirkpatrick – 4 levels
    • Reaction
    • Learning
    • Behavior
    • Results
Instructional Design Process

- Apprenticeships / Training Programs
  - Performance Support System (PSS)
  - Overview of program and components
  - Curriculum functionality in ULS (our LMS)
Overview of Resources and Tools

- Content libraries
  - MindLeaders
    - Business library
    - Safety courses
  - General Physics
    - Operations and safety
  - New Media Learning
    - HR compliance
  - JJ Keller
    - Safety

- Software and equipment
  - Software
    - Video-editing
    - Audio-editing
    - DVD editing/burning
    - Graphics
    - Soundtrack
  - Equipment
    - Cameras – still/video
    - Microphones
    - Teleprompter
    - Lights
Overview of Resources and Tools

- Software tools and product samples
  - Avatars and interactivity
    - **Security Awareness**
      - **Tools used**: Lectora, Code Baby, Adobe Premier, Adobe Fireworks, ProShow Producer, SketchUp, Flash, SnagIt, Adobe Audition, video camera, photography
      - **SME development time**: 10 – 40 hours
      - **IDS development time**: 400+ hours

- **ITPP**
  - **Tools used**: Lectora, Adobe Audition, SnagIt, Adobe Fireworks, photography
  - **SME development time**: 30 – 40 hours
  - **IDS development time**: 110 hours
Overview of Resources and Tools

• Software tools and product samples
  • Supervisor Compliance
    • Tools used: Xtranormal, Adobe Premier, SnagIt
    • SME development time: 3 hours
    • IDS development time: 37 hours
  
• Creative video
  • Wastewater Calculation
    • Tools used: Video projector, video camera, Adobe Premier
    • SME development time: 5 hours
    • IDS development time: 40 hours
  
• Video field demonstration
  • Excavation & Trenching
    • Tools used: Camcorders, Adobe Premiere, Sonic Fire Pro
    • SME development time: Field – 6 hours, Recording – 3 hours
    • IDS development time: Pre-Production – 8 hours, Production – 12 hours, Post Production - 43 hours
Overview of Resources and Tools

- Skill Acquisition and Maintenance Program
  - Began in Energy Supply
  - Now incorporated across the organization
  - 13 programs currently in development
    - Energy Supply (four)
    - Water Resources (two)
    - Customer & Corporate Services (seven)
Overview of Resources and Tools

• Skill Acquisition and Maintenance Program
  • Program Goals & Objectives
    • Provide consistent and appropriate standards for workforce development
    • Provide optimum safety and competence
Overview of Resources and Tools

- **Skill Acquisition and Maintenance Program**
  - Workforce Development Manual
    - Outlines all components within SAMP program
    - Provides specific customer requirements for testing, training and ongoing maintenance
  - Project Plan
    - Provides schedule with tasks and dates for all aspects of the project
Overview of Resources and Tools

• Skill Acquisition and Maintenance Program
  • Job Task Analysis
    • Lists all tasks a group is responsible for performing
    • Broken down into functional areas of responsibility or other functional groupings
    • Provides hierarchical representation of steps to perform a task.
Overview of Resources and Tools

• Skill Acquisition and Maintenance Program
  • Skill Maps
    • Demonstrates progression of program training requirements
    • Ensures training progresses from basic to complex concepts
    • Describes minimum qualification requirements for each classification
Overview of Resources and Tools

- Skill Acquisition and Maintenance Program
  - Processes & Procedures
    - Provides step-by-step directions to complete a specific task
    - Ensures consistency during problem analysis
    - Ensures operation of tasks are performed exactly the same each time
Overview of Resources and Tools

- **Skill Acquisition and Maintenance Program**
  - **Training Materials**
    - Instructor Guide
    - Student
    - Knowledge Assessment (KA) – Formal, proctored test
    - Task Performance Evaluation (TPE) – assesses the student’s knowledge and skill level during task performance.
Overview of Resources and Tools

- **Skill Acquisition and Maintenance Program**
  - **Implement and Maintain**
    - Develop and implement Train the Trainer program
    - Place employees in program – entry level vs. competent level employee
    - Conduct annual audits
    - Maintain program/material modifications
Production Lab Tour

- Hardware / Equipment
- Pre-production, production, post-production
- Video shoot walk-through
- Software
- Deliverables