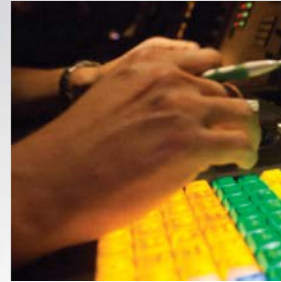
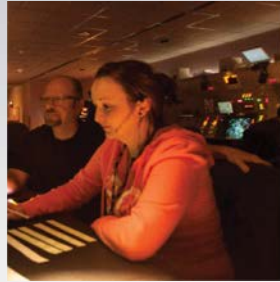


CENTERS OF EXCELLENCE

TECHNICAL TRAINING &
HUMAN PERFORMANCE



Developing and Maintaining Technical Training Curriculum

C Haley-Seikel M.Ed.

Manager, Curriculum Maintenance Team

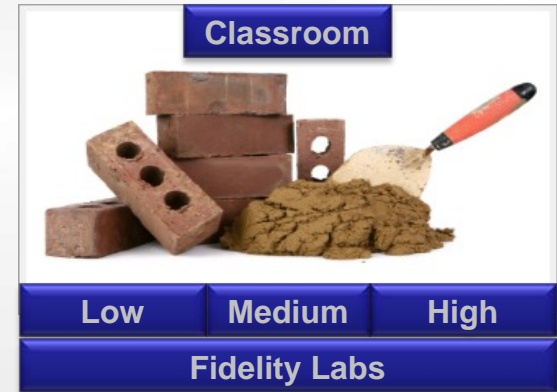
Public Meeting | October 21-22
DoubleTree by Hilton, Crystal City (Arlington), Virginia

www.faa.gov/go/coe

Developing and Maintaining Technical Training Curriculum: Current State Overview

ATO Technical Training utilizes the “brick and mortar” approach for most of the technical training

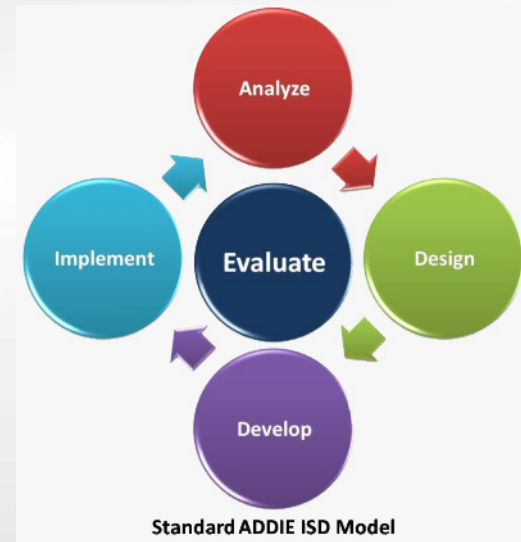
- Curriculum
 - Antiquated, but plans to improve
- Instructors in the classroom and labs
 - “Equipment” simulation, technology-based (not distance learning technology-based)
 - Curriculum design is centered on the instructor-led classroom environment
 - Traditional methods/traveling the students to set locations or traveling instructors to set locations
- Traditional Instructional Systems Design (ISD) model **ADDIE**
 - P-**ADDIE**-M



Developing and Maintaining Technical Training Curriculum: Current State of P-ADDIE-M Model

Planning

- Business processes to ensure authority to proceed
- Funds obligation
- Formal requirements documents
- Preliminary analysis based on the curriculum architect



Developing and Maintaining Technical Training Curriculum: Current State of P-ADDIE-M Model

Analysis: Analyzing current materials

- Curriculum Location(s)
- Curriculum Architecture
 - AJI-2 has linked the occupational job tasks with current curriculum.
 - Information/data sits in a flat data base which makes if labor intensive and the system is not user friendly.
- Learning Content Management System (LCMS)
 - AJI-2 utilizes the IBM Kenexa LCMS Premier Version 9.2 system.



Developing and Maintaining Technical Training Curriculum: Current State of P-ADDIE-M Model

Design

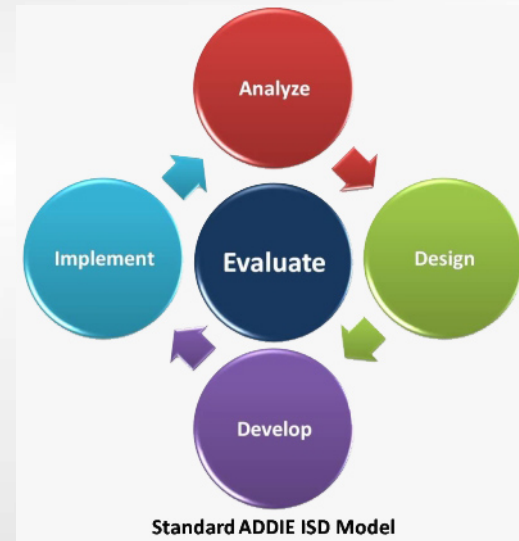
- Course Design Guide is our blueprint
 - Objectives and/or outcomes derived from performance-based job tasks
 - Best assessment method to measure how the objectives are met
 - Instructional strategies that gives learners the information, resources, and practice they need to successfully go from the objectives in the beginning to the assessments at the end
 - Able to evaluate the course
- Manual Media Selection Process
 - Preference instead of logic



Developing and Maintaining Technical Training Curriculum: Current State of P-ADDIE-M Model

Development Teams and Processes

- The workgroups consist of SMEs from our Unions, ISD vendor support, Program Management Offices, Leads from AJI representing the technical expertise and the educational process.
- We utilize processes such as, course walk-through's and operational try-outs for corrective purposes (prior to implementation)
- Changes are expensive
- Curriculum developed course-by-course



Developing and Maintaining Technical Training Curriculum: Current State of P-ADD!E-M Model

Implementation

- First Course Conduct
- Taught by technical experts (i.e., certified Air Traffic Controllers, Technicians, Engineers, Inspectors, etc.)
- Instructing is an alternative career position; we do not have a solid Train-the-Trainer program or...
- A continuous professional development program



Developing and Maintaining Technical Training Curriculum: Current State of P-ADDIE-M Model

Evaluation

- Program piloted 2015
- Use Kirkpatrick Model
- Volume
 - 324 Air Traffic Courses
 - 853 Technician Courses

Maintenance

- Program piloted in 2015
- Priority Scheduled
- Ensuring technical soundness
- Volume
 - 324 Air Traffic Courses
 - 853 Technician Courses



Developing and Maintaining Technical Training Curriculum: Current State Summary

“We’ve been working for several years to come to understand the state of our technical training curriculum and how to modernize it.”

Blended Learning



Developing and Maintaining Technical Training Curriculum

Vision of the Future

- Agile instructional systematic design approach
- Reacting to technology in the right way
- Robust intelligent tracking systems
- Create a curriculum program that is active not reactive
- Alternative career competencies and program
- Decisions tools based on data and not preference
- Media selection based on data and end user



Developing and Maintaining Technical Training Curriculum: Vision for the Future

*“We are in the business of higher learning,
and we need a holistic approach to
developing, maintaining, and administering training.”*

Blended Learning





Lunch