

Project #CMD007 - Managing Training Content Including Adaptive Learning Capabilities Using 21st Century Technology

PROJECT AT-A-GLANCE

- UNIVERSITY: Embry-Riddle Aeronautical University, Interamerican University of Puerto Rico
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21st Century Personalized/Adaptive Training

RELEVANCE TO TECHNICAL TRAINING AND HUMAN PERFORMANCE

- The goal of this project is to use LMS/LCMS technology to allow for customization and adaptive learning for FAA Aviation Safety Inspectors. In the long-term, this will transition from a training environment to a cost-effective workforce development environment.

STATEMENT OF WORK

1. Create a report that highlights 21st Century Personalized/Adaptive Training best practices and methods, and includes a technology comparative study that discusses handling of modular content.
2. Compare LMS/LCMS software from different companies to determine one that would be compatible with the needs of the FAA. Determine if the existing LMS used by the FAA is capable of delivering the desired courses in a manner consistent with the intended use for future ASI training. If no existing LCMS is used or required, then make recommendations regarding which one(s) can meet the goals of the FAA.
3. Analyze current AFS-500 training requirements and procedures and develop a framework to assist in selecting which topics should be taught in a face-to-face setting (either in a traditional classroom setting or a virtual classroom), which topics can be best taught via online/mobile learning, and how to test for/determine topics that employees can bypass if they possess adequate knowledge of the topic.
4. Develop a prototype lesson representative of an ASI training topic that will demonstrate the use of modular and mobile adaptive learning with the ability for rapid updating.
5. Produce a final report outlining the process used and all information determined during the research project that provides recommendations and a roadmap towards a fully integrated system.

STATUS

- Completed SOW 1 report
- Completed SOW 2 LMS comparison
- Completed SOW 3 analysis of current training requirements

FUTURE WORK

- Develop a prototype course that uses adaptive training methods
- Demonstrate the ability to rapidly update the training course
- Produce Final Report