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NETC Acquisition Planning Framework for Managing Training Delivery Requirements

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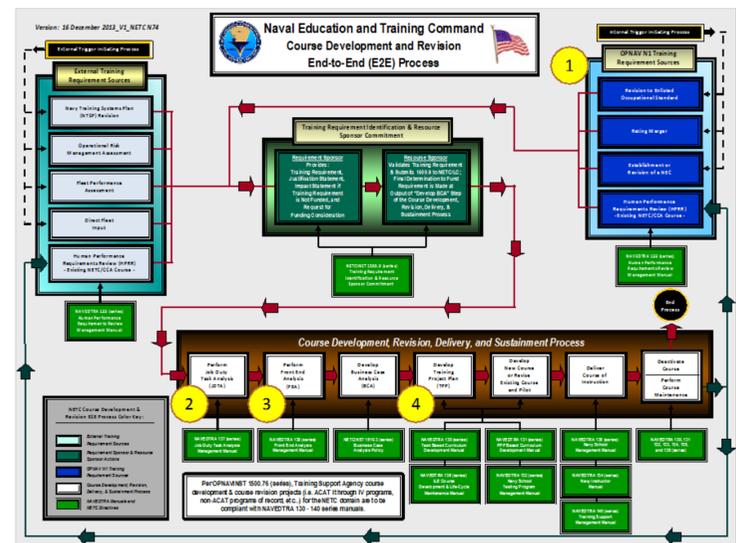
NETC ACQUISITION PLANNING FRAMEWORK FOR MANAGING TRAINING DELIVERY REQUIREMENTS



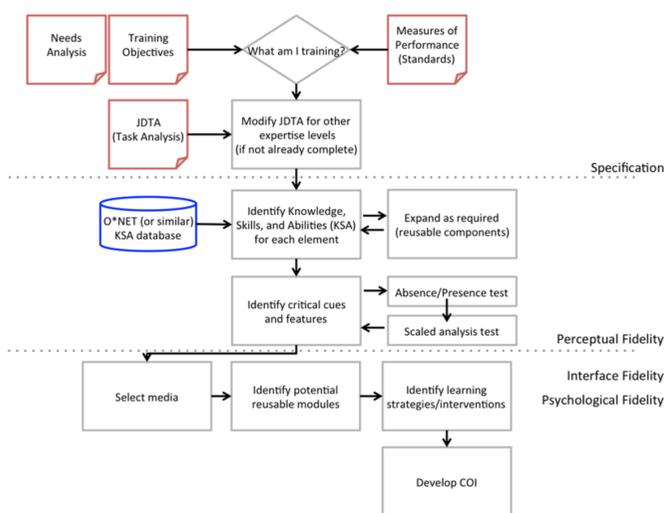
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Summary

- In 2015, we conducted an analysis of the Science of Learning (SoL) literature
- The goal of that work was to develop a methodology that would inform the training system design process in a way that could predict training outcomes to a reasonable degree
- Constraints: it could not require a major overhaul of the existing procedures that NETC currently uses.



The NETC End-to-End (E2E) Process



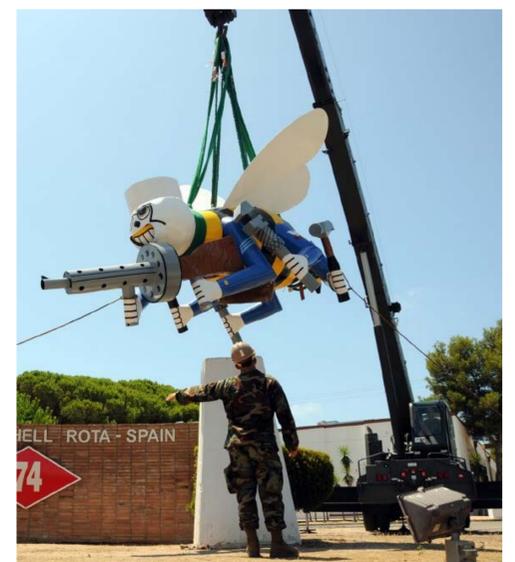
The SoL framework roadmap

Background

- The days of requiring months of on-the-job training after reporting for duty must end.
- The Navy requires a scientific approach that can apply across the broad set of problem domains and disciplines that constitute Navy training.
- It must be repeatable, predictive, and effective – and it must inform the Navy’s acquisition professionals responsible for training Navy personnel.

Methodology

- Create/develop measure of performance for task (see 1 in Fig. 1)
- Use existing JDTA docs to produce a baseline description of task execution
 - Ensure broken down to low enough level to be useful (see 2 in Fig. 1)
- Identify critical clues for trainee to perform task
- Map task analysis to what the trainee must do to accomplish the task.
 - Utilize DoL’s O* NET inventory of knowledge, skills, and abilities
- Follow the existing NETC practice for remainder of E2E process



Methodology Applied to Crane Operator Trainer

1. Receive/observe indications of instability (e.g., haptic sensations, signalman comms, etc.)
 - a. Perceive abnormal vibrations in the crane cab
 - b. Perceive crane’s abnormal attitude to level
 - c. Perceive abrupt movement in crane stabilizers
 - d. Perceive visual warning from signalman
 - e. Perceive aural warning from signalman
- 1a. Determine that the current location is unstable
 - a. Relate current situation to past experience
 - b. Assess if cues exceed minimum safety allowance
 - c. Make final determination



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