Game Engines as an Assessment Tool for Advanced Distributed Learning Applications
The Problem

• Combating cliches
  - Practice does not make perfect
    • Perfect practice makes perfect
    • Imperfect practice enforces bad habits
  - Make mistakes in live training, not in battle
    • Why not eliminate mistakes prior to live training
    • Make live training more effective
The Problem

• Military principles
  - Core doctrine
  - Taught primarily via live training
    • Lessons learned from pedagogy studies show that no pre-brief/instruction makes live training less effective
  - Simulated today via immersive sims
  - No established distance learning mechanism
The Problem

• Traditional web-based courseware assessment is lacking
  – Not engaging
  – Not sufficient to teach some principles
• PC games are lacking
  – Do not assess students against principles
  – Can offer negative training
• Intelligent tutoring systems do not stand alone
The Solution

Precursor to Live training:
• Web-based environment
• Principle-oriented courseware
• Game engine-based simulation for assessment
• Intelligent tutoring system to assess,

• More effective live training
Collaborative Training

• Complex scenarios
• Can set it up for beginner or advanced student
• Can do top 10 worst scenarios at once (terrorists, civilians in the mix, etc.)
• Teams that are geographically distant and functionally disparate can train together
Current Efforts

- STO: Training Tools for Web-based Collaborative Environments
- OSD SBIR, Reusable 3D Components for Virtual Environments, Phase II is getting started
- DA SBIR, Embedded C4I Training Using Courseware and a Game Engine
- UCF M & S Infrastructure Congressional Plus-Up
Wrap-Up

• Questions??
• Comments??
• Criticisms??
• Emotional outbursts??