



US Army Armor School Gaming Integration



LTC(P) Mark Alan Eastman
Patti Talbort
28 April 2008





Purpose



- To provide an information briefing on the integration of game simulation technology in Army Institutional Training

“There is nothing more **difficult to take in hand, more **perilous** to conduct, or more **uncertain** in its success, than to take the lead in the introduction of a new order of things.”**

Niccolo Machiavelli



Outline



- **Why Use Gaming?**
- **RFI**
- **Pilots**
- **Measures of Performance**
- **Initial Insights / Feedback**
- **Challenges**
- **Way Ahead**
- **Discussion Points**



Why Use Game Technology?



- ✓ **Create a semi-immersive environment to train cognitive individual and leader skills in a full spectrum environment**
- ✓ **Supplement training – reinforce or extend current training**
- ✓ **Augment training – fill training gaps**
- ✓ **Distribute synthetic environment training over the Internet using web technology**
- ✓ **Leverage commercial investment**
- ✓ **DoD involvement ensures no negative training**



Immersive Training Technology Enables Skills needed for...



- ✓ **Collaboration with diverse teams at a distance or face-to-face to accomplish mission essential tasks**
- ✓ **The creation, sharing and practical mastery of knowledge by assessing and filtering semi-accurate information**
- ✓ **Developing the ability to thrive on chaos**
- ✓ **Make rapid decisions based on incomplete information to resolve diverse dilemmas**



CG TRADOC RFI



- **How do you focus a game on specific learning objectives?**
- **How do you measure success/proficiency against these objectives?**
- **What is the cost (to include required overhead to operate and maintain the courseware)?**

GEN Wallace, Jan 07



CG USAARMC RFI



- **Can gaming technology teach ELOs and TLOs?**
- **What ELOs and TLOs are the right ones to use gaming technology to teach? How?**
- **What courses would this technology be applicable to?**
- **What technology is reasonably available right now and what should be pursued for future use?**
- **How much overhead would each system require (personnel, money, time, space, equipment)?**
- **Is the investment in the technology worth the end result?**

CG USAARMC, May 07



Pilots



- **19D BNCOC (Jul – Oct 07)**
 - **Perform Screen Operations**
- **19K BNCOC (Aug – Oct 07)**
 - **Direct Convoy Operations**
- **BOLC III (Aug – Oct 07)**
 - **Tank Platoon Tactical Training Module (multi-event)**

USAARMS is using DARWARS Ambush in lieu of/in addition to traditional terrain board exercises and evaluations; no additional POI time; no change in learning objectives



Measures of Performance



- **Training Effectiveness:** Does the game provide positive and effective training?
- **Resources:** Are resource requirements acceptable?
- **Technical Feasibility:** Is the use of the game in the classroom technically feasible?
- **Instructor Use:** Can instructors use the game effectively as a training tool?



Initial Insights



- **Students were more immersed during gaming instruction vs. traditional terrain board exercises**
- **Instructors can use the game effectively as a training tool**
- **Indicates positive and effective training**
- **Resource requirements (licensing agreements, peripheral equipment) for DARWARS implementation are acceptable**
- **Use in the classroom is technically feasible**
- **NETCOM has approved installing on Army networks**



Student Feedback



- **“Performance level increased because you see the result and see the battlefield.”**
- **“Leadership positions were more interactive and more realistic, made you think on your feet.”**
- **“The simulation will foster discussions outside the classroom.”**
- **“I am much more apt to take this home and practice by running missions than I am to take home a Power Point presentation and read notes.”**
- **“It was easy to learn in the amount of time that was provided.”**
- **“The simulation does not beat going to the field.”**

“I don’t think of this as playing a game. I’m learning my job.”



Instructor Feedback



- **“There is definitely much more participation of all Soldiers and they are all learning [as compared to terrain board exercise].”**
- **“The ability to tell the Soldiers “hands off” and then conduct some mentoring is nice.”**
- **“The simulation keeps the stress level up while conducting the PE.”**
- **“Orientation was good, and learned rather easily how to operate weapons, avatar, vehicles.”**
- **“DARWARS Ambush is more realistic than the terrain board.”**



Challenges



- **Technical**
- **Infrastructure**
- **Time**
- **SMEs**
- **Attitude / Culture shifts**



USAARMC Way Ahead



- **Continue to review POIs for tactical gaming applications in officer, NCO, and functional training**
- **Oversee development of 56 hours of DARWARS scenario development**
- **Expanding gaming efforts to include leadership and soft skill (i.e., cultural awareness) training**
- **Coordinate efforts with Infantry School for Maneuver Courses**
- **Transition from DARWARS to additional capability as infrastructure allows**
- **Continue to review emerging game technology (CLE, CITE, REALWORLD) for potential application**



Discussion Points



- How do we continuously review, evaluate, and integrate emerging gaming technology?
- How do Army agencies and schools achieve consensus, collaboration, and mutual support on gaming technology?
- How do we integrate institutional (TRADOC schools) and home station (BCTC) gaming efforts?
- How do we generalize Maneuver/Combat Arms gaming strategies to CS/CSS training environments?



Questions



Back-up Slides



Background



- **Jan 07 – CG TRADOC tasked USAARMC to examine applications of gaming technology to military training**
- **Apr 07 – USAARMC hosted a Game Day to explore various games**
- **May 07 – CG USAARMC directed action; Working Group reviewed RFIs and determined courses/POIs where gaming could be applied; DARWARS Ambush! Was selected as the initial game to be utilized based on availability and cost**
- **June 07 – Attended the Army Gaming Strategy Workshop**
- **Jul 07 – First DARWARS pilot with 19D BNCOC, including assessment**
- **Aug 07 – First DARWARS pilot with 19K BNCOC and BOLC III, including assessment**