

# Joint Technology Exchange Group (JTEG)

## Technology to Train the Workforce Forum

2 September 2014

### Questions and Answers

1300-1305: Welcome & Overview – OSD (MPP)

1305-1335: Virtual Workplace Simulator – Mary Beth Fennell, Fleet Readiness Center East and Hossein Nivi, Pendaran Inc.

1. Can the virtual workplace simulation be done virtually (on-line...via web in real time?)

To date, Pendaran has not developed this capability.

2. With travel being extremely restrictive, can this training be done virtually?

Same answer as questions #1

3. Do the folks who have been through the training believe that the training was beneficial?

It is not about liking the training. There is a point during the week long training where it is really tough for the attendees. The most important point is that the training is memorable for the folks that have attended the training. Even years after (they remember what they learned).

4. What other Depots/other have been through the training and are planning more?

The senior leadership at Fleet Readiness Center Southwest (FRC SW) has been sending personnel to attend the training. The commander at FRC SW has attended the training himself. The anticipate sending 180 employees to future training classes. Fleet Readiness Center East plans on sending it's critical mass for training in FY15.

5. Can DoD trainers learn the process and train their folks autonomously?

Yes, Pendaran will be happy to train DoD employees (train the trainer) at various depots and maintenance facilities. Once trained they will need to be Pendaran certified and there is a very clear process for training the certified trainers.

6. Still not clear to me what this "Pendaran" training method really is (separate attachment to address this question).

1335-1405: Immersive Virtual Training – Jeff Warwick, RDECOM, and Brenda Dorne, EXE

1. How is configuration management factored into this type of training?

*We have not built this into the training yet. However, there is a way to define versions and revisions to manage different configurations. We can build a more sophisticated system to deliver a configuration management interface to an existing system or enhance our current system to include it.*

2. How do you update the training material if there is a major change in the process?

*A software engineer certified in the program the courseware was created in must update the training material. For every major software or hardware release we assign application engineers to update the training material. If there is a change in the process, rather than the technology component, only a few documents need to be updated. The pilot program represented in the video trained Navy personnel to work proficiently, the equivalent of 1 year of traditional classes, in SolidWorks, StudioMax, PolyWorks and Unity software programs. These software programs were also used to create the courseware you see in the film and the maintenance procedural training courseware we provide to our military clients. The outcome was military personnel who could build and update visual based training courseware. EXE has always focused on empowering the DoD to become self sufficient and self-sustaining with all solutions we design and deliver. Our TIC Pilot program documented that immersive, visual based training accelerates learning and dramatically increases retention and created a learning environment where all the students, regardless of their previous experience, could successfully complete the course and demonstrate proficiency in the program objectives. This translates to almost any training mission.*

3. Have you been able to take available IETMS and create training content from it?

*EXE has not. We have only been provided paper manuals and PowerPoint documents to create our hierarchal models and animations for training.*

4. Brenda what serious games has DoD used to train maintainers?

*ARMY ECBC uses Unreal Version 4 for their animations. Most of the serious video game platforms are used for combat training. We primarily use the Unity platform as it provides for more than just the visual interface. With Unity we can provide hierarchal, interactive animations and simulations with engineering or mechanical accuracy.*

5. How is this being deployed to the end user? CDs? MilSuite's MilTube? Linked to existing tech manuals?

Many training products are delivered on a tablet and/or CD and are delivered to the PMs.

1405-1430: Computer Based Training for Metal Finishers / Paint Booth Simulator – Jeremy Smith, CCAD, and Ian Hansen, CCAD

1. Have any other depots who do hard chrome plating leveraged this training technology?

Have not heard of any other facility using this training. Other DoD depots that participated (acted as observers) on the CTMA project rec'd CDs of the training and final report.

2. Have you been able to quantify any of the benefits of the CBT and simulation for plating processes?

It is very difficult to justify the commit the manpower to count the time. The personal at a John Deere plant were successful in quantifying the benefits at that plant.

3. Does CCAD or Army have plans to prepare any additional CBT courses?

CCA would love to do additional training classes if they could secure the funding. There are specific areas of opportunity. The estimated cost is \$125K for a series of four courses.

4. Can you benchmark your waste reduction to other paint facilities?

Yes we have been able to benchmark waste reduction as a metric.

7. With regard to the CCAD electro-plating lessons, what kind of tech infrastructure did they need to have in place, and how do the learners access their materials (computer labs, their supervisor's desktop, computer kiosks)?

It is fairly simple. Terminals are in the shop that folks can log into. The training courses are available on the Army E Learning site.

8. What are their thoughts on being able to adapt this training to the brush-plating practice?

In regard to brush plating the emphasis is on calculating the surface area and it could be easily done.

1430-1455: Review of Naval Shipyard Training – [Ron Jorgenson, NAVSEA](#)

Do the shipyards have a strategic training technology roadmap?

No, not as a hand off deliverable product. It is a significant topic at the monthly shipyard meetings.

2. How do we know that the virtual welding training correlates to actual welding?

Talk to the SME's at every shipyard. They are all using the training and we always obtain user feedback.

3. How do you control yard-tube posting and content?

Went through pain staking efforts with IT that took a significant amount of time up front. NAVSEA created an SOP instruction that identifies who can create content and a step by step process that includes the security and IT personnel.

4. How difficult was IA certification for the table initiative?

It was not difficult, largely because the training information is not heave on basic control. We would like the maintainers to have the opportunity to use smart phones (although very difficult due to security levels).

1455- 1500: Summary and closing