



ADL supporting Innovation and Implementation in the Canadian Forces

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Video / Intro



Outline

- Canadian ADL Partnership Lab Mission
- How ADL is supporting CF implementation and innovation
- Individual Training and Education (IT&E) modernization within the Canadian Forces (CF)
- CF Mobile Strategy
- Virtual Worlds and Immersive Environments
- Online Government Advanced Research and Development Environment (ONGARDE)
- Conclusion



Canadian ADL Partnership Lab

- To build a collaborative network of ‘specialized’ co-labs within Canada in an effort to support and enhance modernized training and education.
- To improve the delivery of the most cost effective, measurable, learning technology supported training by improving collaboration within distance learning-based technology teams.
- To establish, maintain and promote standards while eliminating redundancy among CF IT&E initiatives.
- To support CDA’s role as the Functional Authority for IT&E Modernization



ADL supporting implementation and innovation in the Canadian Forces

Current activities in the CF where ADL is / has played a key role:

- Transitioning courseware between LMS's using existing SCORM standards.
- Providing foundational material that is being used in creating the mobile strategy and framework for the CF.
- Providing a framework for tracking student performance using Next Generation SCORM.
- Enabling data sharing and collaboration through federated repositories.
- Conducting and providing research on emerging learning technologies.



IT&E Modernization – Problem Situation

- Inadequate exploitation of modern learning methodologies and technologies
- Inability of current training establishment infrastructure to support use of modern learning methodologies and technologies
- Inadequate resources to support Individual Training & Education (IT&E) quality and quantity control
- Lack of synergy due to stove-piping
- Inadequate IT&E performance measurement
- Inadequate Learning Organization
- Lack of instructor and IT&E manager development
- Lack of synchronization with the personnel generation system



IT&E Modernization – Preparing the CF to:



Reach more learners

In more places

With more specialized knowledge

With higher expectations

And less time than ever



Question - #1

Does your organization have a Bring Your Own Device (BYOD) policy or framework?

- A. Yes
- B. No
- C. Don't know
- D. Don't care because I use my device at work anyways



Question - #2

Do you believe that your employer will provide you with a Smartphone or tablet to support your job performance within:

- A. The next 12 months
- B. The next 24 months
- C. The next 36 months
- D. Not in the foreseeable future
- E. They have already given me one!



The current situation with mobile in the CF



- High interest in using mobile across the CF
- CDA is the central focal point for providing leadership for individual training and education.
- Currently no overall strategy and no capital projects to support mobile learning.
- A progressive strategy using phased development endorsed by the Advanced Learning Technologies Working Group - (March 2012)



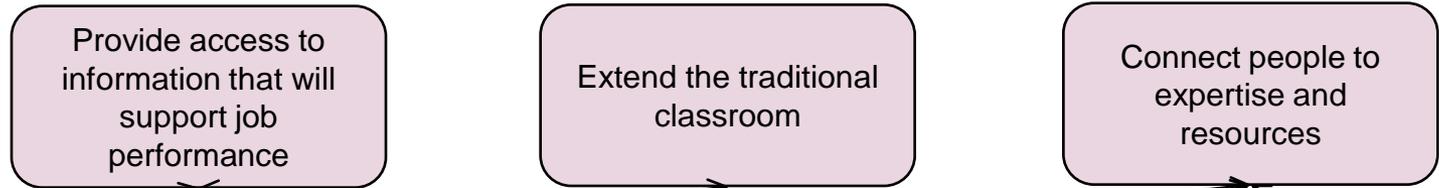
ADL 6 D's for Mobile Learning

Planning questions for a successful mLearning program



Progressive Mobile Strategy Map

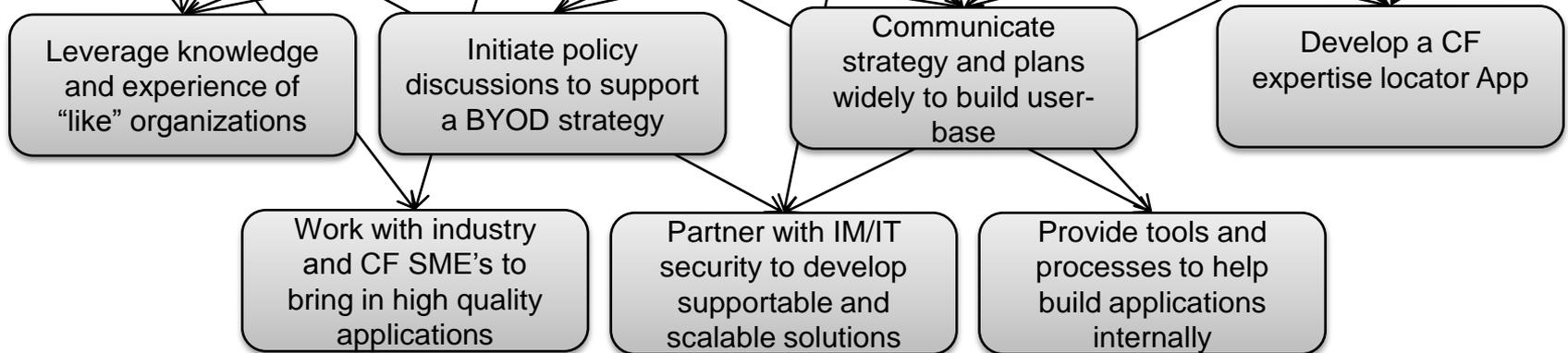
Objectives:



Goals:



Strategies:



Tactics



Project Information

Title: Training Immersion – Augmented Performance Support

Sponsor: CDA HQ

Point of contact: Bill Railer, DCOS Learning technology / Modernization team

Relative priority of project: 1/8

Resources

Partners: DRDC / CSIS / ADL / NRC

Delivery Centre: CDA HQ

In the case of DRDC delivery, resources to be provided by sponsor:

In the case of non-DRDC delivery, funding requested from PG4: .5FTE + \$150,000 (to fund development contract)

Objective

Background:

Mobile Performance Support System (mPSS) presents mlearning as a form of performance support system for educational and training purposes. Study will include the use of Augmented Reality simulations to engage people in enhanced learning activities that combine real world experiences with additional information supplied to them by mobile devices .

Objective:

Learners will have more flexibility and choice in where and when they learn; Members will use the technology in their study that would enhance their readiness for tomorrow's battle space. The CF want graduates who know how to use technology for learning and working; Mobility offers them an opportunity to maximize learning.

Deliverables

1. Report on the findings of the pedagogical research, data analysis from evaluation and effectiveness of mPSS;
2. Modules, courses in MPSS - A set of learning resources; description of adaptive scenarios; performance centered assessment methods and criteria for evaluation; and
3. Evaluation plan/strategy and the measurement instruments are aimed at measuring the effect of mPSS on knowledge, skills and attitudes of students and trainees.

Desired Delivery Date: 31 Mar 13

Potential Collaboration – Augmented Reality

Possible collaboration with *University of Central Florida* and *Army Research Laboratory Simulation and Training Technology Center*

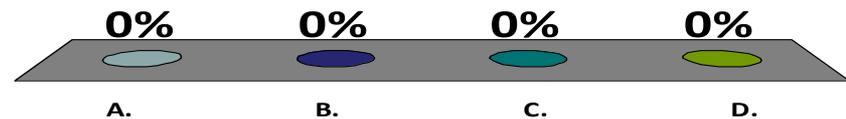
Utilize research already conducted on *The Combat Medic Card Game for Emergency Medical Procedures: Usability and Learning Study* to determine if augmented reality increases retention of critical care procedures.



Question - # 3

How long have you been using virtual worlds to support training and/or education in your organization ?

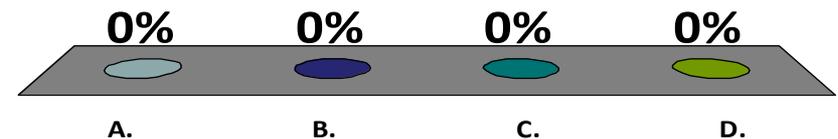
- A. Less than one year
- B. One to three years
- C. Longer than three years
- D. We are not using a virtual world for training & education



Question - # 4

For those of you who are using virtual worlds how satisfied are you that you are meeting your training / educational goals and objectives?

- A. Very satisfied
- B. Satisfied
- C. Not sure
- D. Dissatisfied



Virtual Worlds and 3D Environments

Technical Authority for current (NGRAIN) and future 3D Modelling and Simulation contract.



Enabling a collaborative team based approach to 3D model and application acquisition/sharing for Army, Navy, Air.



OpenSimulator

n-GRAIN®

VBS2



Video



Virtual Immersive Environments



How many times have you ...

- Attended meetings where the topics remain the same but the players are different
- Stumbled across similar R&D and training projects
- Purchased the same product / courseware from industry
- Had issues trying to test, evaluate and develop using new technology
- Been told our budgets and resources are decreasing yet our overall responsibilities remain the same



ONGARDE

online government advanced research and development environment

ERDAGD

environnement de recherche et de développement avancé du gouvernement en direct



The screenshot shows the web application interface for ONGARDE/ERDAGD. At the top, there is a navigation bar with 'Home', 'Apps', 'Browse', and 'Create' options, along with a search bar and a user profile indicator for 'Welcome, Hamid Boland'. The main content area is divided into several sections:

- New to ONGARDE?**: A list of links for 'Update Your Profile', 'User Acceptance and Terms', 'Learn More About ONGARDE', and 'Submit a Support Ticket'.
- Top Participants**: A list of user avatars and names: Remi Tremblay, Hamid Boland, John Evans, Michael Thompson, and Ralph Mercer.
- Newest Members**: A list of user avatars and names: Rita Kop, Lori Blais, Stephen Downes, Bruno Emond, and Line St-Pierre.
- The Online Government Advanced Research and Development Environment**: A central banner featuring the ONGARDE and ERDAGD logos, along with the NRC-CRC logo and various government crests.
- What would you like to do today?**: A set of six action buttons: 'Start a Discussion', 'Join a Community', 'Update Your Status', 'Share a Project', 'Find People of Interest', and 'Create a Group'.
- Recent Activity**: A list of recent posts and discussions, including a welcome message, a discussion about introducing oneself, '3D Repository Updates', and 'Bug Reports'.
- ONGARDE Toolbox**: A vertical sidebar on the right containing several tool icons and labels: 'LEARNING RESOURCE LIBRARY', 'LEARNING PROJECT REGISTRY', '3D REPOSITORY', 'WEB CONFERENCING', 'ONGARDE ERDAGD SECURITY CHANNEL', 'ONGARDE ERDAGD VIRTUAL WORLD', and 'HANDLE'.

The bottom of the screenshot shows a Windows taskbar with the Internet Explorer browser icon, a system tray with a volume icon and a 100% zoom level, and a taskbar with several open application windows.

Video



Tools and Resources in ONGARDE



Social Networking



Video Sharing



Web Conferencing



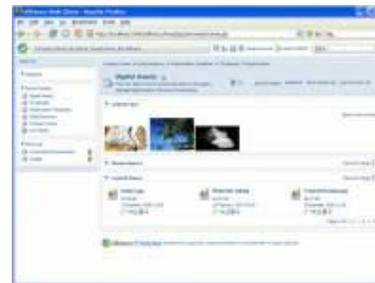
Web Analytics system



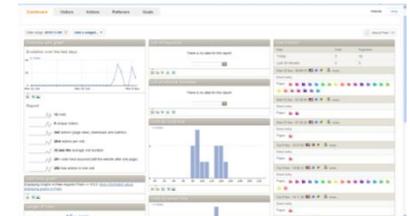
Wiki



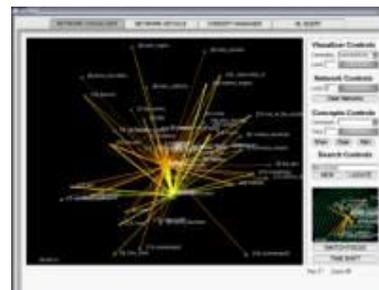
RSS Feed



Content Management Systems



Real-time Collaborative Document Editing



Semantic Content Analysis



Tools and Resources in ONGARDE



Learning Project Registry



ISAT



Learning Resources Database



ADL 3D Repository



Conclusion

Training Development Officer



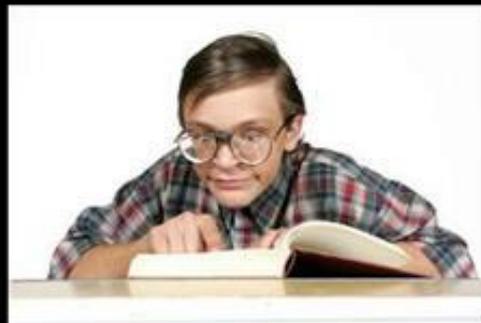
What my friends think I do



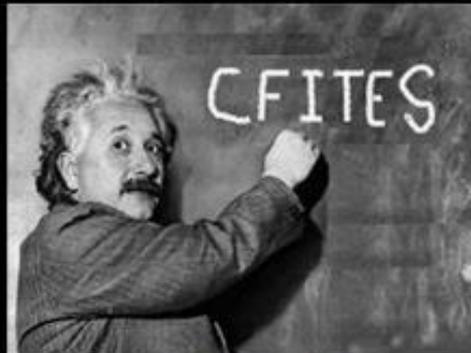
What my better half thinks I do



What society thinks I do



What my colleagues think I do



What I think I do



What I really do



DNDLearn – Next Generation

