



ADL State of the Union

Where We Are and Where We Are Going

Paul Jesukiewicz

Director

ADL Initiative

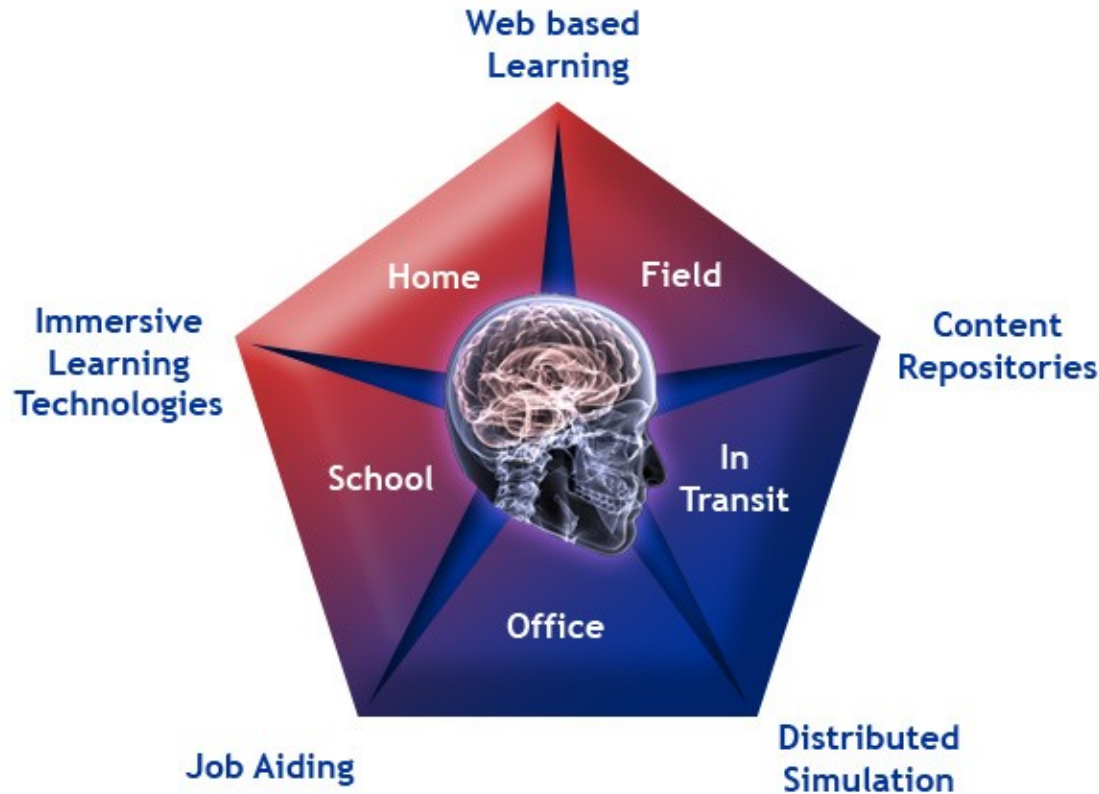
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- Vision
- New Direction
- Structure
- Co-Labs and Partnership Labs
- Partnerships
- Technical Direction
- Research and Evaluation
- Other Activities
- Job Performance Technology Center
- Resources



Provide access to the highest quality education and training, tailored to individual needs, delivered cost effectively, anywhere and anytime.



ADL Activities



■ Priorities

- New Strategic Plan (Sep 09)
- R&D (BAA)
- Technical
 - Harmonize with global community
 - Extend and Innovate
- Evaluation
 - DoD ROI (efficiency and effectiveness) data gathering and reporting
- New Partnerships
- Restructuring
 - New PM structure
 - Realignment of Co-Labs & Partnership Labs



Broad Agency Announcement (BAA)

W91CRB-08-R-0073

Amendment 2, Topic 7

- Partner with RDECOM-STTC to sponsor research and development
- Leverage projects and initiatives for dual use in both organizations



New Direction – Standards & Specs

- Retain stewardship of SCORM
- Re-engage with standards and specifications bodies including
 - AICC
 - IEEE
 - IMS
 - LETSI
 - Others
- Support organizations that profile ADL work
 - Schools Interoperability Framework Association (SIFA)
 - Medbiquitous



New Direction – Harmonization

- Independent development of point-solutions has caused fragmentation of e-learning technologies
- Contributing Factors
 - Community specific needs
 - Legacy content and systems
 - Advances in technologies (Web 2.0, mobile, etc...)
- ADL will
 - Engage stakeholders to initiate a needs analysis and scoping effort
 - Lead a harmonization effort and facilitate broad community engagement

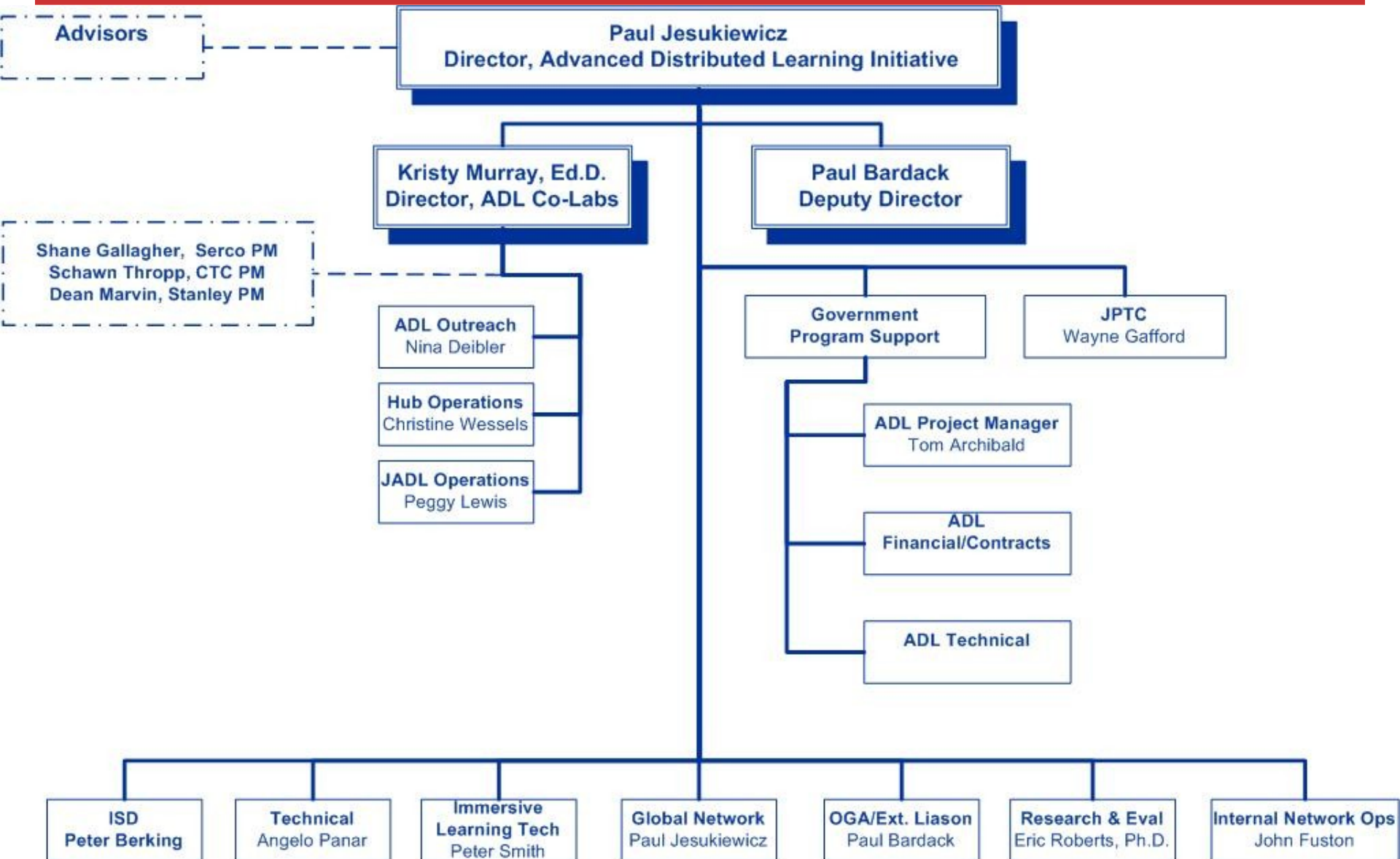


New Direction – Generalized API

- The current SCORM model has constrained interoperable innovation
 - LMS-centric delivery and tracking of SCOs
 - A JavaScript enabled host
 - No flexibility for community specific extensions
- ADL will initiate efforts to generalize SCORM API
 - Standards based
 - Broadly support a diverse set of content, delivery, and tracking technologies
 - Phased approach – ultimately leading to a general model



ADL Internal Structure



Current ADL Laboratories

Canada
ADL Partnership Lab

United Kingdom
ADL Partnership Lab

Norway
ADL Partnership Lab

German Workforce
ADL Partnership Lab
Pending

Romania
ADL Partnership Lab

Korea
ADL Partnership Lab

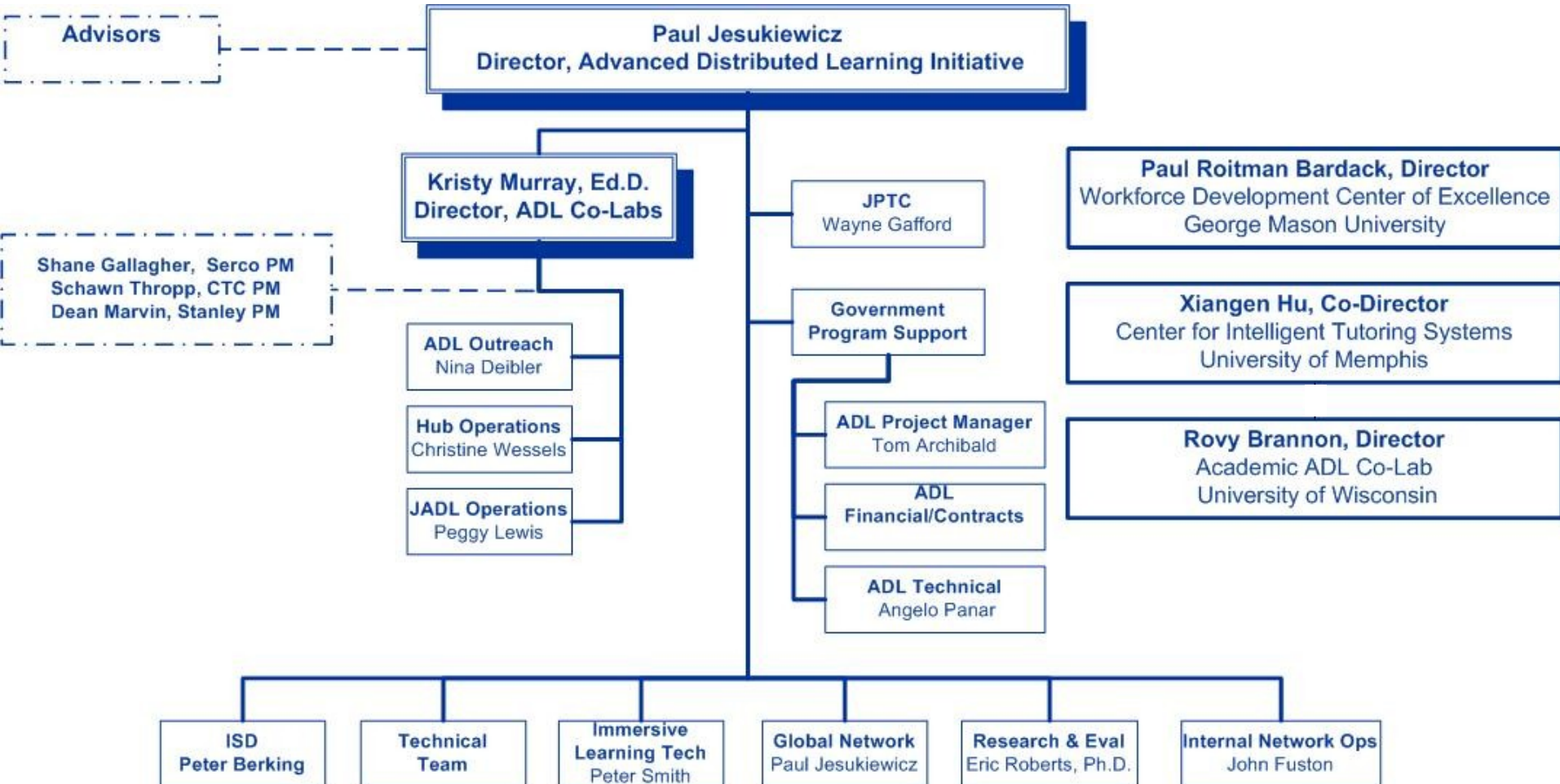
Latin American and Caribbean Regions
ADL Partnership Lab

Australia
ADL Partnership Lab

Restructuring

- ADL Hub Co-Lab and Joint ADL Co-Lab are now managed and integrated as one entity
- Migrating Workforce Development from Memphis to GMU
- Changing Workforce Co-Lab In Memphis to Center for Intelligent Tutoring Systems (ITS) Research and Development
- Partnership Labs currently being evaluated
 - Current UK Lab may realign with UK MOD

Proposed ADL Internal Structure



Proposed ADL Labs & Centers

Canada
ADL Partnership Lab

United Kingdom
ADL Partnership Lab

Norway
ADL Partnership Lab

German Workforce
ADL Partnership Lab
Pending

Romania
ADL Partnership Lab

Korea
ADL Partnership Lab

Latin America and Caribbean Regions
ADL Partnership Lab

Australia
ADL Partnership Lab



Expanding Existing Partnerships

- Defense Acquisition University (DAU)
 - Will be co-locating the DAU Teaching and Learning Lab at Joint ADL Co-Lab
 - Research on game and virtual worlds applications to support training
- Office of Science & Technology Policy (OSTP) – Executive Office of the President
 - Ed Tech Working Group
 - DoD designated as leader in learning technology research
 - Interest in CORDRA/ADL-R as framework for entire government
 - Interest in DARPA's Educational Dominance program
 - DoD (ADL and DARPA) advising and participating in ongoing working group meetings

Expanding Existing Partnerships

- U.S. JFCOM
 - Key user of ADL technologies (SCORM, ADL-R, ITS, Gaming)
 - Coded JKO LCMS to provide updates to ADL-R (dependent upon ADL-R deployment to NIPRNET)
 - Development of web-based courseware production capability (ROCCE) integrated with the JKO LMS
 - Currently in use by the COCOMs
 - Supporting M-FASR initiative
- Office of Naval Research (ONR)
 - The Multimodal Enabled Advanced Distributed Learning (ME ADL) Project
 - Advanced Distance Learning S&T workshop
 - Leveraging S&T resources

New Partnerships

- George Mason University (GMU)
 - Proposed new Workforce Development Center of Excellence (Sep 09)
 - Will promote the use of ADL technologies across America's workforce
- Naval Postgraduate School (NPS)
 - Collaboration with MOVES Institute
 - Focus on R&D, prototyping, evaluation
 - Immersive technologies, simulation, gaming, virtual worlds
 - Mobile
 - S1000D
 - ROI studies



Technical Direction

SCORM and the ADL Registry

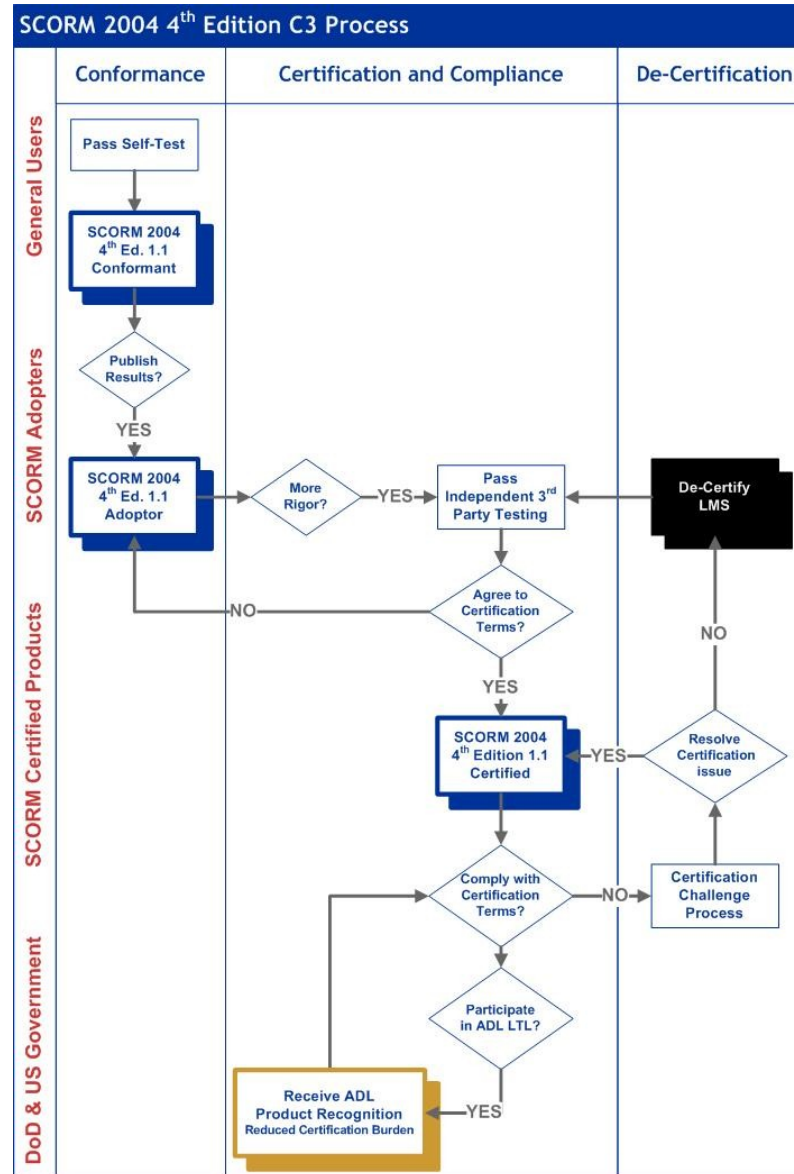


SCORM 2004 4th Edition

- Released Version 1.1 on August 14, 2009
 - Incorporates 2 ½ years of community feedback
 - Increases interoperability
 - Provides new features
- Supporting products updated and released
 - SCORM Testing Requirements
 - Test Suite
 - Sample Run-Time Environment (SRTE)
 - ADL RELOAD Editor



New Certification Process Workflow





Check-out the break-out session:
SCORM 2004 4TH EDITION

■ New Features

■ Multiple typed locations

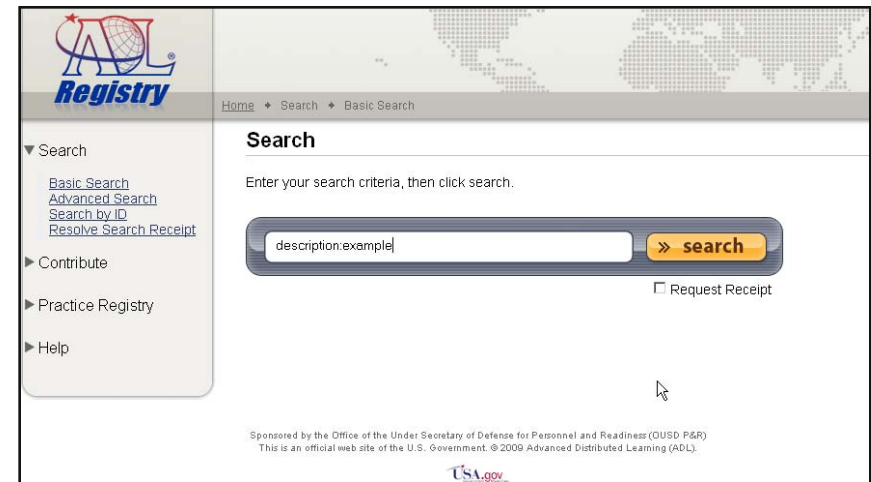
- Allows contributors to provide one or more ways of experiencing the object

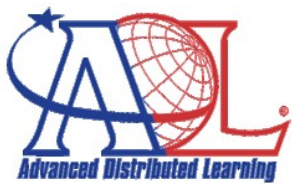
■ Search receipts

- Allows searchers to prove that a search was executed

■ Registry transaction file (REG-T) schema changes

- Minimal changes were made to support the new features





ADL Registry Contract Award

- New Contract Award (Aug 6th)
- Two-phased Effort
 1. Technology and Adoption Assessment – Current Policy, Architecture, & Usage (ICF lead)
 2. Finding a new .mil home, operationally testing candidates such as JFCOM, DISA, DMDC, Services, etc. against ADL-R requirements (BAH Lead)



Check-out the break-out session:
THE NEW ADL REGISTRY



Technical Direction

M-FASR

M-FASR Participants

- Purpose
 - To develop an infrastructure to allow multiple nations to search, discover, view, and share technical and instructional content
- Current Participants



- Metadata from participating registries federates to the Registry of Registries (RoR)
- The RoR serves as an metadata aggregator, enabling effective single-point search
- In contrast, distributed search would require the query to be submitted to multiple registries
 - Incurring potential network latency and availability
 - Requiring results to be filtered and post-processed
 - Losing relevant results due to semantic differences in metadata



Check-out the break-out session:

ADL PARTNERSHIP LABS





Technical Direction

Immersive Learning Technologies



- Game-based Training (Serious Games)
- Virtual Worlds
- Mobile Devices
- Web 2.0



Potential of Immersive Training

- Current beliefs
 - Better than conventional CBT
 - Faster than classroom
 - Cheaper than simulation
- Issues
 - Currently not enough research
 - No standards/metrics for doing research
 - No agreed upon definitions

Current ILT Initiatives

- Virtual World Standards Working Group Meetings
 - A working group comprised of experts in virtual worlds explore coming standards and the potential role of ADL
- Immersive Learning Pod-Cast Series
 - A coming series of pod casts where members of the ILT Team sit down with leaders in the ILT space



Current ILT Virtual World Initiatives

- Virtual World Test Bed
 - The test bed will be comprised of over a dozen functioning virtual worlds allowing us to test and compare affordances
- Team Orlando SecondLife Island
 - Part of Linden Labs MiLands Initiative, the ADL will be developing demonstrations and tests of ADL technologies



Current ILT Game Initiatives

- Games Test Bed
 - The test bed contains many of the games and supporting technologies used by the DoD today
- Mini-Game Development
 - A group of small games being developed with DAU covering many topics in their current curriculum





Research and Evaluation



- Programmatic Impact
 - ADL's Evaluation Team has been re-named and is being re-oriented toward assessments of how ADL technologies positively affect member organizations.
- Time-to-Train = ?
 - For example a “time-to-train” study, using Navy statistics, found that ADL technology-based instruction reduced seat time by as much as 47% -- while holding achievement constant.
 - We now choose to try to push the analysis to identify what mission tasks the Navy was able to achieve with that saved time.



On-going Projects

- Defense Ammunition Center (DAC)
- Navy ILE
- Battle Command Knowledge System (BCKS)
- Defense Acquisition University (DAU)



Check-out the break-out session:
**RESEARCH ON SOCIAL
NETWORKS IN LMS**





Check-out the break-out session:
**IMPLEMENTING A TRAINING INTERVENTION
TO INCREASE LEARNING AND
REDUCE ATTRITION**





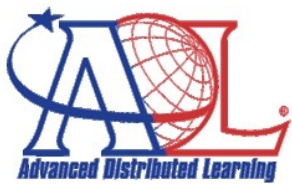
Other ADL Activities



NATO Training Group (NTG)

- NATO Training Group – Working Group on Individual Training & Educational Developments (NTG-IT&ED)
- Chairman – Joe Camacho (JFCOM)
- U.S. Delegate – Paul Jesukiewicz (OSD P&R)
- ADL Subgroup – LtCdr Geir Isaksen, (ADL SG CM)
 - Shared research, shared content
 - Joint projects (MFASR)
 - Bilateral agreements
 - Partnership for Peace (PfP) consortium shared use of open source LMS (ILIAS) and authoring tools

- ADL developed course for NATO Working Group - Training and Education for Peace Support Operations (TEPSO)
 - *Public Information Operations (PIO) Course*
 - ~1 hour seat time
- Used
 - New SCORM Editor in ILIAS to author
 - SCORM 2004 sequencing to deliver different content for three user groups
- Awaiting final SME review and approval



Virtual Cultural Awareness Trainer

- Investigate instructional strategies using Virtual Worlds to augment/enhance the existing VCAT POI
 - Synchronous/Asynchronous learning opportunities
 - Guided Practice / Pre-deployment
- Integrate Assessment middleware into a Virtual World
 - Collect user performance information from multiple individuals simultaneously and determine proficiency for each user based on their role
 - Collect Assessment data from multiple, disparate systems (Nexus and SGST)
- Identify requirements for delivering this capability via JKO



Check-out the break-out session:
**RESEARCH ON CURRENT CAPABILITIES,
ISSUES, AND TRENDS IN LMSs AND
AUTHORING TOOLS**



Job Performance Technology Center (JPTC)



- Support job performance through standards-based information technology
- Link learning content, in support of job performance, to authoritative sources
- Allow requirements *and* performance gaps to drive learning objectives
- Ensure learning content is accurate and available for job performance

Problems JPTC is Solving

- Absence of
 - Life cycle-based content management practices for ADL learning content
 - Timely change notifications for ADL learning content
 - Links in ADL learning content to authoritative sources

A diagram showing a green bridge-like structure with a central arch. Below the arch, the text 'THE BRIDGE PROJECT' is written. To the left of the arch, the text 'S1000D' is written, and to the right, the text 'SCORM' is written.

S1000D THE BRIDGE PROJECT *SCORM*

- Identifying learning/training performance objectives at the product design stage
- Integrating SCORM learning content tools into common source databases
- Designing technical learning content for better reuse in technical publications
- Developing “change notification” services to ensure training is notified when products are redesigned

Next Questions for JPTC

- How are learning content development, performance support, and retraining improved by the use of
 - Competency models?
 - Mobile devices?
 - Open source software?
 - Registries?



ADL Resources



- Vendor-neutral Evaluation Environment
 - Hosted at ADL Co-Lab Hub in Alexandria, VA – Virtually at JADI
 - Expert support to help resolve interoperability concerns
 - Unbiased facilitation for dispute resolution
- Will host a variety of LMS, LCMS, and authoring tools
 - Support test and evaluation of content across platforms
 - Showcase exemplar content and tools
 - Enable rapid troubleshooting to quickly identify problem areas



- Research environment hosted at the Joint ADL Co-Lab in Orlando, FL
 - Evaluate interoperability of immersive technologies with learning systems
 - Perform research to determine the instructional potential of immersive technology
 - Capture pertinent metrics related to assessment and tracking of student performance in immersive environments



Learning Opportunities

- Webinars: 1-hour sessions each week
 - Current topics
 - SCORM 2004 4th Edition Overview
 - Creating Reusable Content with SCORM 2004
 - Sequencing SCORM 2004 Content (2-part series)
 - Contributing to the ADL Registry Version 1.7
 - Federated Registry Architectures
 - Choosing Authoring Tools
 - Visual Design Principles for Reusable Learning Content
 - Custom sessions may be available
 - For details, visit www.ADLNet.gov

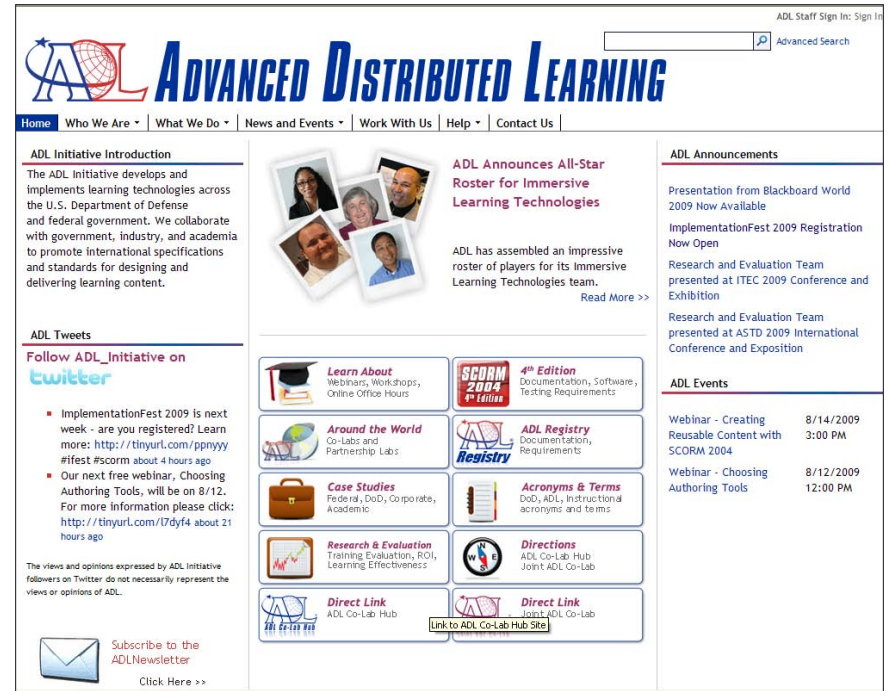


Learning Opportunities

- Online Office Hours
 - Every Thursday from 1:00 - 3:00 PM Eastern
 - Instructional Systems Designer (ISD) and technical expert support
 - For details, visit www.ADLNet.gov



- Bookmark ADLNet.gov
 - Topic sections with new feature stories each month
 - More resources for designers and developers
- *ADL Initiative Insights Newsletter* (monthly)
 - Subscribe at www.ADLNet.gov



The screenshot shows the ADL website homepage with the following sections:

- Header:** ADL logo, navigation menu (Home, Who We Are, What We Do, News and Events, Work With Us, Help, Contact Us), and a search bar.
- ADL Initiative Introduction:** A paragraph describing the ADL Initiative's mission to develop and implement learning technologies across the U.S. Department of Defense and federal government.
- ADL Tweets:** A section titled "Follow ADL_Initiative on twitter" with a list of tweets, including one about ImplementationFest 2009 and another about a free webinar on Choosing Authoring Tools.
- ADL Announces All-Star Roster for Immersive Learning Technologies:** A section featuring a group photo of team members and a link to "Read More >>".
- ADL Announcements:** A section with news items, including "Presentation from Blackboard World 2009 Now Available" and "ImplementationFest 2009 Registration Now Open".
- ADL Events:** A table listing upcoming events:

Event	Date	Time
Webinar - Creating Reusable Content with SCORM 2004	8/14/2009	3:00 PM
Webinar - Choosing Authoring Tools	8/12/2009	12:00 PM
- Footer:** A "Subscribe to the ADL Newsletter" button with a "Click Here >>" link.

- Follow ADL on  @ADL_Initiative



Questions or Comments?

Paul Jesukiewicz

Director, ADL Initiative

paul.jesukiewicz@adlnet.gov

+1.703.575.2000