ADVANCED DISTRIBUTED LEARNING

LMS and New Media

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Research and Evaluation Team

ADL Co-Lab Hub

08/19/2009

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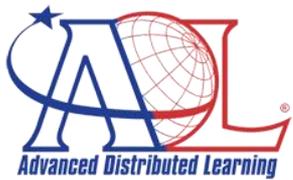
SCORM and New Media

- Accessibility
- Interoperability
- Durability
- Reusability

For traditional didactic instruction for individuals in the absence of a live instructor

Benefits of New Media

- High impact with a potentially sensual and compelling interactive experience through the use of spoken word, animation, graphics, and video.

- Freedom of choice through interactivity. Users like to feel in control and not be forced down a particular route. We like to browse.

- Usefulness because users value quality information delivered in a properly organized and easily understood fashion.

Benefits of New Media

- Instant availability from the desktop PC, or increasingly, the laptop, or even WAP phone or Pocket PC.New Media also provides many benefits for those who commission them
  - Kudos, through the use of innovative media
  - Effectiveness, which is doubled by using sight and sound, compared to sight or sound alone, as in old media.
  - Appropriateness, through the ability to deliver as much or as little information as the user requires in order to be convinced
  - The capability to sustain long term relationships with customers, without the need to visit.
  - Expandability as needs develop or change. New parts can be added, or old areas amended with reasonable ease.

http://www.rossiterandco.com/new-media-02-benefits.htm
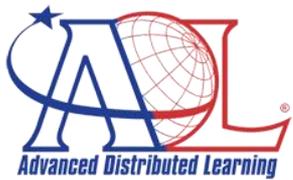
Benefits of Old Media

- Stable

- Authenticated

- Consistent ("curriculum drift")
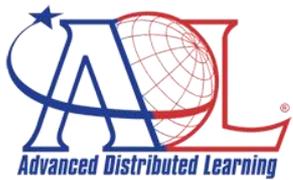
July 9, 2009, 6:39 PM

Does Social Networking Breed Social Division?

By RIVA RICHMOND
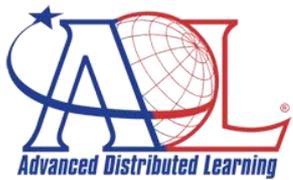
http://gadgetwise.blogs.nytimes.com/2009/07/09/does-social-networking-breed-social-division/

Evaluation of Evidence-Based Practices in Online Learning:

A Meta-Analysis and Review of Online Learning Studies (May 2009)

http://www.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf
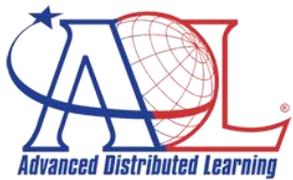
LMS and New Media

The meta-analysis found that, on average, students in online learning conditions performed better than those receiving face-to-face instruction. The difference between student outcomes for online and face-to-face classes—measured as the difference between treatment and control means, divided by the pooled standard deviation—was larger in those studies contrasting conditions that blended elements of online and face-to-face instruction with conditions taught entirely face-to-face. Analysts noted that these blended conditions often included additional learning time and instructional elements not received by students in control conditions. This finding suggests that the positive effects associated with blended learning should not be attributed to the media, per se.

Management of Social Media

Abstract.
Self (1999) argues that the essence of having a computer-based learning system that "cares" about its learners is that the system model its learners so as to be able to adapt to their needs. In this paper we discuss the notion of personal agents who care for their "owners" by representing the owners' interests in the learning system. We contextualise this discussion by showing how such personal agents are used in I-Help, a system that promotes caring and sharing by encouraging learners to help one another. In I-Help, personal agents themselves care for their learners by helping them to discover useful information and/or to find "ready, willing, and able" peer learners who can aid them in overcoming problems.

http://www.eee.bham.ac.uk/bull/papers-pdf/IJAIED-03.pdf

The Caring Personal Agent

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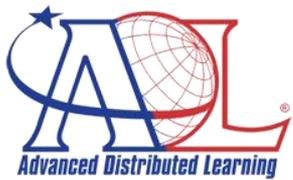
Mediated Experience

http://video.google.com/videosearch?hl=en&q=Marshall+McLuhan&um=1&ie=UTF-8&ei=OrSFSp6rFoOkswOQzNWuBw&sa=X&oi=video_result_group&ct=title&resnum=4#

Meat-iated Experience
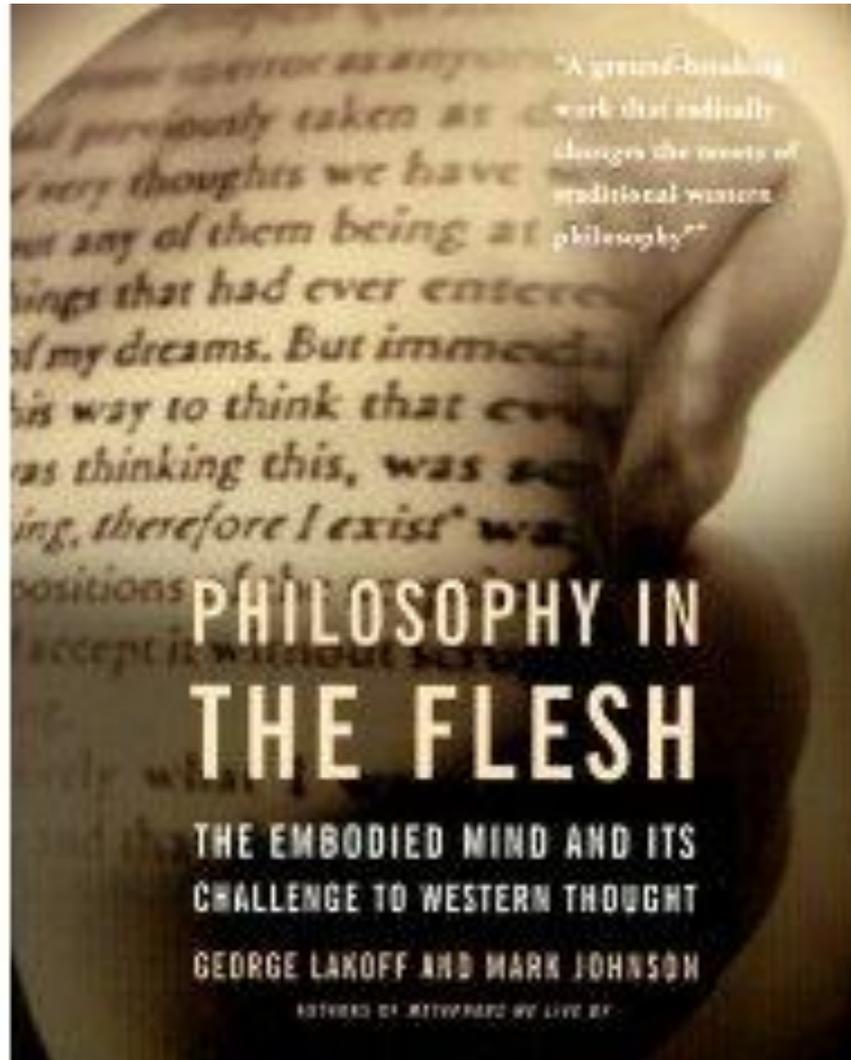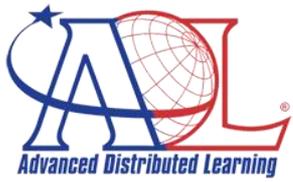
Battle Command Knowledge System
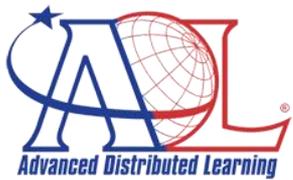
Battle Command Knowledge System

- Creation of virtual forums designed to build knowledge assets
- Leveraging the lessons-learned analysis and collaboration process within the training and doctrine system
- Providing input mechanisms for individual and organizational learning across directorate of resource management
- Including links and references to training and doctrine resource
- Enhancing the exchange of information thus reducing the mission decision cycle time

http://usacac.army.mil/CAC/functions/battlecommandsystem.asp

New York Times

14 August 2009

Care to Write Army Doctrine?

By NOAM COHEN

In July, in a sharp break from tradition, the Army began encouraging its personnel — from the privates to the generals — to go online and collaboratively rewrite seven of the field manuals that give instructions on all aspects of Army life.

CoP Typical Audience[1]

- Existing, geographically-dispersed community

- Collaboration within community

  - Deep / frequent integration

- Shared skills, language, tools and/or job aids

- Widespread knowledge of each others' competencies

1. Mozzetta, D., Epstein, E., Borden, M.J. and Littlefield, G. (2008) Harnessing the Promise of Social Networks Using Instructional Theory. IITSEC 2008 Presentation. NTSA Metapress
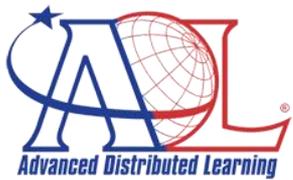
Case Study: Air Force FAMs CoP

- Designed for Functional Area Managers (FAMs)
    - Part-time duty for senior ranks
    - Role involves data interpretation, decision making, and coordination of multiple levels of personnel

Mozzetta, D., Epstein, E., Borden, M.J. and Littlefield, G. (2008) Harnessing the Promise of Social Networks Using Instructional Theory. IITSEC 2008 Presentation. NTSA Metapress

Why develop a CoP for FAMs?

- Users share a particular goal or interest
- Training can't be kept up to date
- Training unable to provide depth and flexibility of one-to-one interaction
- Requirement to be expert on day 1
  - Don't have time for instructor-led training during first few months of job
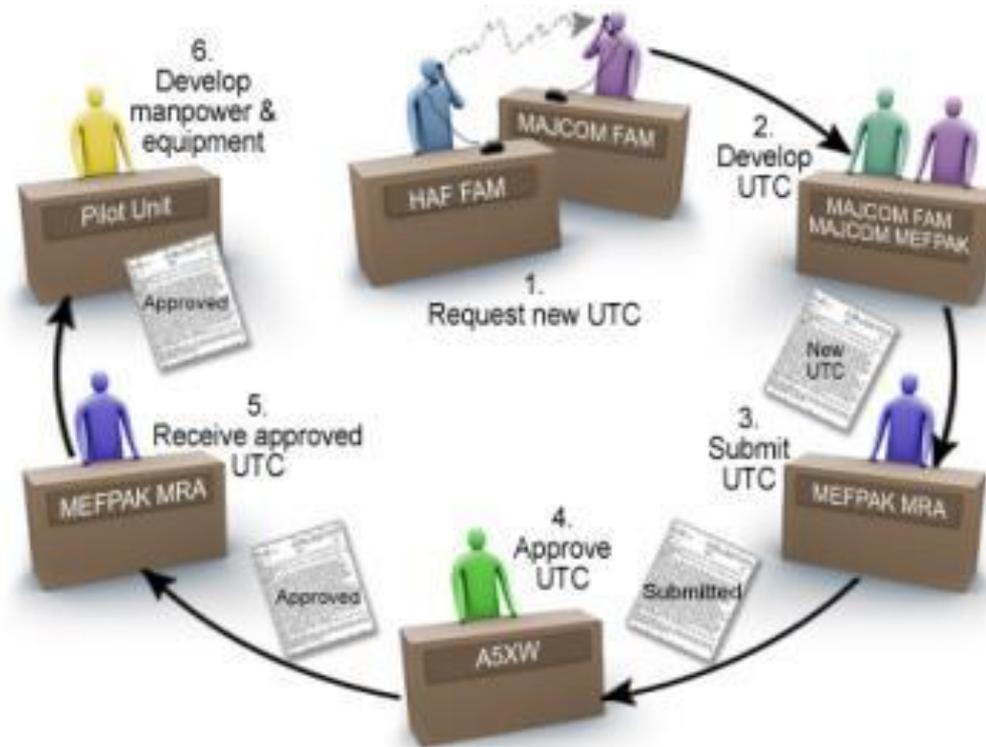
FAM CoP

FAM CoP features

- Hosted on AF Knowledge Now (AFKN)

- Features
    - User profiles ("registry")
    - Communication with members individually/group
    - "FAM of the Month" nomination
    - News (changes weekly)
    - Job aids (tutorials and support tools)
   - Discussion Forum
    - Documents and links: monitored for usage

Mozzetta, D., Epstein, E., Borden, M.J. and Littlefield, G. (2008) Harnessing the Promise of Social Networks Using Instructional Theory. IITSEC 2008 Presentation. NTSA Metapress

FAM CoP job aids

FUNCTIONAL AREA MANAGER TOOL

Tutorial   Print View

TPFDD Sample and Process Flow

US Government issues authority to Deploy AEF Forces

CCDR Develops Requirements → Determines Course of Action (COA) and Force Requirements → Turns COA into Requirement or UTC → Enters Requirement in TPFDD

FAMs, MAJCOMs, AFPC/DPW Source Requirements → AFPC/DPW Nominates Sourcing → AFPC/DPW Enters Unit Identifier in DCAPES → MAJCOM Reviews/Indicates Ability to Fill Requirement

Able to fill requirements
0-3 days to complete

Unable to fill requirements → MAJCOM Indicates Shortfall

Prov Org = X

Select each highlighted task in the flowchart to see its effect in DCAPES.

FAMs, MAJCOMs, CCDRs Verify Sourcing → MAJCOM Verifies Receipt of Tasking → (Proj Code = N or OTHER) AFPC/DPW Ensures 11 Trigger Fields are Filled for Automatic Unit Notification → (Proj Code = BX or OTHER) Force Provider Approves or Disapproves Tasking → Supporting MAJCOM Verifies Tasking

Proj Code = S or A (aviation)
0-6 days to complete

FAMs, CCDRs Validate Sourcing → Supported Component Validates (Proj Code = SC) → TRANSCOM Validates (USTC = V) → TRANSCOM Allocates Lift (USTC=A) → Requirements delivered to AOR

Interaction between CoP and WBT

- WBT course used to introduce CoP tools to audience

- WBT tutorials available on demand for each CoP tool

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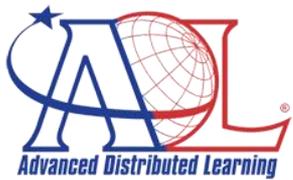
FAM CoP Evaluation

- CoP activities include:
  - Seeking and sharing advice
  - Sharing and reuse of assets
- Launch year statistics
  - 96th in Viewer Activity (out of 13,644 CoPs)
  - 24th in Membership with 1,385 members
  - 40% of CoP members log on at least once every 45 days
  - 1,000 FAM WB course graduates

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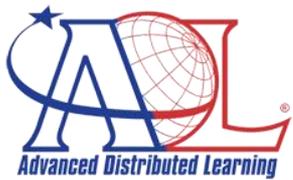
Social Media: Case Study

- Part of Lifelong Learning Center
  - US Army Signal Center, Fort Gordon, GA.

- Why LLC? Equipment updated more rapidly that formal (schoolhouse) education can handle

- Cianciolo (2008) examined six aspect of LLC
  - Instruction, Assignment-Oriented Training, Simulations, **Discussion Forums**, Leader Education, On Demand Learning.

Cianciolo, A. (2008) Study Report 2008-05. Program Evaluation for U.S. Army Lifelong Learning Centers (LLCs): Extension to Military Operational Specialty (MOS)-Based LLCs. Final.*United States Army Research Institute for the Behavioral Sciences.* Arlington VA.
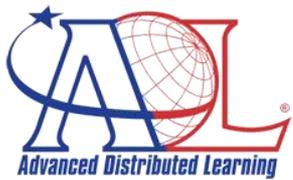
Discussion Forums

- Two LandWarNet eSignal discussion forums
  Hosted on Battle Command Knowledge System

  - Technical forum : Peer-assisted troubleshooting
    - Goals: knowledge management, cultural shift to anytime, anyplace learning
  - Leader's forum
    - Goals: self development, foster organizational culture

- How much and how well are these forums being used?

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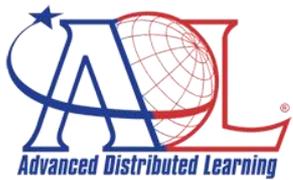
Leader's Forum Activity Analysis

Trainee's course Proficiency	BOLC (n=36)	BNCOC (n=10)	ANCOC (n=1)	All (n=47)
Start discussion	53%	10%	100%	45%
Participate in discussion	58%	0%	0%	44%
Upload file	0%	10%	0%	2%
Edit bio	86%	10%	100%	70%

BOLC:Basic Officer Leadership Course
BNCOC: Basic Non-Commissioned Officer's Course
ANCOC:Advanced Non-Commissioned Officer's Course

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Discussion Forums: Learner Bios

- "Edit bio" function
  - How much information were learners willing to disclose in their personal profile?

- Often provided
  - Middle Initial (74%)
  - Mobile Phone # (49%)
  - Education (38%)
  - Rank (38%)

- Rarely provided
  - Job Experience (21%),
  - Deployments (21%)
  - Expertise/Competencies (4%)

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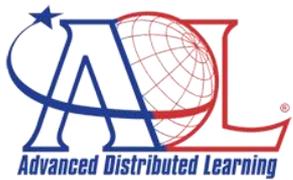
Discussion Forums Use

- Large proportion (>90%) cross registered with other BCKS forums

- Involvement
  - 83% of initial posts by users not facilitators

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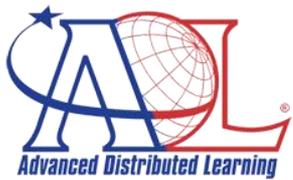
Discussion Forums: Content

- Initial post types (n=179)

  - Direct questions: 31%
  - Request for input: 22%
  - Request for expert: 8%
  - Other: 7%

  - Inferred questions: 15%
  - Request for resources: 13%
  - Rants: 4%

- Responsive
  - 44% initial posts responded to within 24 hours.
  - <15% posts asking questions were not responded to
- No "actionable content" spontaneously posted

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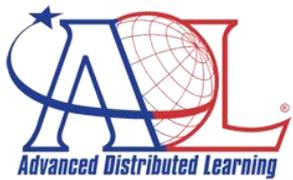
Discussion Forums Comments

- Low participation rates
- Trainees were cross – registered
- Much communication face-to-face, not online
- No initial content to 'seed' forum.
- No 'manufactured opportunities' to spur activity.

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Questions or Comments?

Advanced Distributed Learning

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