Unified Next Generation Learning Platform in Support of Blended Learning Communities and Collaboration

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Agenda

• Current State
  • Where are we today?

• Vision & Goals
  • Where do we want to be?

• Action Plan
  • How do we get there?

• Scope
  • What should we included

• Execution
  • How do we do it?

• Next Steps
  • Where do we go from here?

• Case Study
  • Integrated eLearning Community Platform
Learning Pyramid

average student retention rates

- Lecture: 10%
- Reading: 20%
- Audiovisual: 30%
- Demonstration: 50%
- Discussion: 75%
- Practice doing: 90%

Teach others

Source: National Training Laboratories, Bethel, Maine
Current State

• Limited communication with peers
• Sparse resources with minimal organizing
• “Push” mechanism – Instructor led gatherings

• Opportunity for Improvements
  – “Pull” mechanism – Self-directed
  – Increased collaboration with peers and experts
  – Expand as a library of abundant resources for reuse
  – Increased flexibility integrated with plethora of tools
  – Community Involvement - feedback and participation
Vision & Goals

• Taking to the ‘next level’
  
  – Build a **Community** Portal
  
  – Increase community participation
  
  – Reuse content and metrics
  
  – First place to go for answers
Vision & Goals Diagram

Learning Pyramid

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Source: National Training Laboratories, Bethel, Maine
Scope

• eLearning Strategy and Planning

• Technical Solution - Platform
  – Learning Management System (LMS)
  – Content management System (CMS)
  – Collaboration Suite of tools
  – Portal

• Domain SME and Content Development

• Operations, Support, and Process

• Performance Measure and Feedback
Scope Diagram

eLearning Community Portal Platform

- **Document & Knowledge Management**
- **Content Management**
- **Learning Management**
- **Authoring Tools**

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**Collaboration and Knowledge Sharing**

**Personalization and Customization**

**Interoperability: Social Media and Mobil Extensions**
Action Plan - Objectives

• Build a **Community** Portal
  – Strong foundational framework
  – Extensible platform with flexibility to grow
  – Phased approach in iterations (social media, mobile etc.)

• Increase community participation
  – Easily accessible and improved usability
  – Extensive collaboration tools

• Increase time spent on the portal
  – Expanded Training and knowledge sharing
  – Easy reach out to peers and experts

• First place to go for answers
  – Plethora of tools and resources
Execution

• Portal solution
  – Universal User Management
  – Reliable, Extensible, Scalable and Flexible

• Content Management System (CMS)
  – Organize, Categorize, Gather and Deliver content
  – Workflow, Versioning, Archiving, Customizing and Search

• Learning Management System (LMS)
  – Manage education and training material
  – Enroll/register and schedule training
  – Track and monitor progress/credits
  – Evaluation and gather feedback

• Suite of Collaboration tools
  – Forums, Webcasts, Blog, Wiki, Chat, IM, eBlast etc.
Integrate eLearning Community Solution
User Authentication
User Collaboration

Interactive Chat
Knowledge Base
File Sharing
webcast
ListServ
Voice Over IP
Discussion Forum
Message Board
webinar
Ask the Expert
Newsletter
Podcast
eblast
User Community Interactions
Training & Education Process

Define Process

Plan curriculum

Schedule Training

Notify

Social media

Live webinars

Training classes

Mobile apps

E-learning

Community Collaboration

Feedback, and New Topic Ideas

Program metrics

Training analytics

Member Training Tracking

Feedback

Rating

Quiz

Certificate
Content Management Process

Content Collection

Community Contribution

Existing Content Migration

Content from collaboration

Reference Resources and Tools

HRSA, BCRS, NHSC

Versioning & Archiving

Categorization

Content Management System

Content

Online Training and Continuing Education

Text and Media File sharing upload and download

Questions and Answers

Content from collaboration

Reference Resources and Tools

HRSA, BCRS, NHSC

Versioning & Archiving

Categorization

Content

Online Training and Continuing Education

Text and Media File sharing upload and download

Questions and Answers
High Level Architecture
Infrastructure

ICCP Physical Infrastructure Design

Private Cloud

Option 2: Dedicated Hosting Hardware Recommendation:
Dell R710
2x Quad Core 3 Ghz Processor, 24GB RAM
2 x 300GB SAS RAID 1
(For each environment – PROD & QA/DEV)
High level Component Architecture
Portal Benefits

Usage Benefits – Enterprise Horizontal Portal

• Modular Web Application Development
  – Easy to use, develop and integrate
  – Develop in any language and integrate for any application
  – Focus on Presentation Layer for App/Site Design

• Identity-Based Content Delivery (fine grained)

• Social Identity Application Development

• Depth of UI Tooling and Design Focus
  – Tool kit to rapidly build
  – Build once and reuse, code encapsulation (portlets, content)

• Quality and Depth
Portal Key Features

Content Management
- Web content asset library
- Asset Publishing
- Multi-Repository Integration
- Advanced publishing
- Faceted Search
- Multi-Language & sync localization

Design and Usability
- Dynamic web applications 2.0 techniques
- 508 compliancy (Tech readability)

Extensibility and Integration
- Identify provider
- Custom fields
- Asset Framework (plug ins)
- Rules Engine integration
- API and Workflows

Collaboration Suite
- Blogs
- Wikis
- Message Boards
- Enterprise Chat
- Ratings & Comments
- Tagging & Categorizing
- Social Equity encourages participation and input

Ease of Administration
- Page Templates

Analytics and Management
- Auditing Framework
- Reports Generation and BI integration
- Performance and Monitoring
LMS Key Features

Course Management Modules
- Assignments
- Chat
- Choice
- Dialogue
- Forums
- Glossary
- Journal
- Label
- Lessons
- Quiz
- Resources
- Survey
- Workshop

Learner Management
- Participants
- Groups
- Calendar
- Admin
- Scales
- Grades
- Logs
- Files
- Help

Learner Experience
- Login
- Enrollment Keys
- Notifications

Plugins
- Themes, Reports, Blocks, Formats, Tools, etc.
Next Steps

- Gather User Feedback
- Track High Usage Functions
- Analyze Stats and Reports
- Prioritize
- Improve
Integrated Open Source Tools

- Liferay: umbrella and integration applications
  - Extended collaboration and learning tools
  - Support tools Integration
    - Content, knowledge and documents management
  - Secure user authorization and authentication
- Moodle: leading open source LMS
  - Proven eLearning features
- Interoperable
- Integration with CM Tools
- Syndication
- Standards based (SCORM, IMS Content Packaging, AICC (CBT) etc.)
- Combined Portal and LMS provides flexibility to quickly pivot for future learning needs.
Multiple Instances of Liferay / Moodle LMS

Health Provider Users

Single Sign-On (SSO)

Liferay

Moodle

Content Management

Knowledge Management

Document Management

Database

Database

Database
Learning Management Portal Community – Ethos 2.0

Overview

• Portal Platform with integrated content management, learning management, and collaboration tools servicing 20,000+ health providers across the U.S.

• **Federal Health Learning Community** provides virtual networking and discussion, online training and continuing education, and reference resources and tools for NHSC clinicians and alumni to address the challenges they face working with communities of need.

• The **Federal Health Learning Community** Runs on Moodle under the Liferay Portal and Content Management Tool (CMS).

Features and Benefits

• Combined Portal and LMS provides broadest flexibility for initial features customization and agility to quickly adjust to future needs.

• Speed to market with an integrated platform (collaboration, social media).

• Low cost open source, zero-license-fee approach minimizes upfront investment, reduce operating costs and future extensions.

• Integrated with other open source access tools (blogs, wikis, twitter).

• Regional localization through multi-language support.

• Collaboration tools enables and promotes teamwork, information sharing, peer working and feedback.

Learning Community
www.primarycareforall.hrsa.gov