Advanced Distributed Learning (ADL) Initiative

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About the ADL Initiative

PROGRAM: Advanced Distributed Learning (ADL)

DIRECTOR: Sae Schatz, Ph.D. (CIV)

CHAIN OF COMMAND: Defense Human Resources Activity (DHRA)

PURPOSE: Facilitate interoperability and promote best practices for

Distributed Learning (DL)...

LINES OF EFFORT:

1. Modernization: R&D for DL

2. Documentation: Policy, specs, and standards for DL

3. Coordination: Facilitate DoD, Coalition, S&T groups

DoDI 1322.26: "The ADL Initiative is the principal steward for researching and facilitating the implementation of DL standards, specifications, and emerging technologies for DoD Components."



DOD INSTRUCTION 1322.26 DISTRIBUTED LEARNING (DL)

Originating Component: Office of the Under Secretary of Defense for Personnel and Readiness

Effective: October 5, 201

Releasability: Cleared for public release. Available on the Directives Division Website at

http://www.esd.whs.mil/DD/.

Reissues and Cancels: DoD Instruction 1322.26, "Development, Management, and Delivery of

Distributed Learning," June 16, 2006

Approved by: A. M. Kurta, Performing the Duties of the Under Secretary of Defense for

Personnel and Readiness

Purpose: This issuance, in accordance with the authority in DoD Directive (DoDD) 5124.02:

Establishes policy, assigns responsibilities, prescribes procedures, and establishes information
requirements for developing, managing, providing, and evaluating DL for DoD military and civilian
personnel, in accordance with the authority in Chapter 41 of Title 5, United States Code (U.S.C.), Title
10, U.S.C. and DoDD 1322-18.

Addresses emerging learning science and technology concepts and challenges and implements
policies from Chapter 41 of Title 5, U.S.C., various sections in Title 10, U.S.C. related to education and
training, DoDD 1322.18 and DoD Instruction (DoDI) 8320.07, pursuant to the authority in Sections 113
and 136 of Title 10, U.S.C., and Executive Order 13111.

· Authorizes the recording, analysis, portability, and management of learning experience data.

 Establishes the Defense Advanced Distributed Learning Advisory Committee (DADLAC) to identify, evaluate, and recommend adoption of innovative technologies and techniques to improve DoD DL.



ADL Initiative Program-wide Lines of Effort



Modernization

Documentation

Coordination

(1) Modernization (≈45%)	(2) Policy and Guidance (≈25%)	(3) Coordination (≈30%)		
Learning systems interoperability	Defense and NATO policy	Defense ADL Advisory Committee		
Learning analytics	Technical specifications	Coalition: NATO, PfPC, TTCP		
Associated learning science	DoD requirements coordination	R&D-Transition support		

...for Distributed Learning

Modernizing Learning

Download PDF

The *Modernizing Learning* book outlines the big-picture vision for the "future learning ecosystem," i.e., a system-of-systems to enable a continuum of learning across federated technologies. The book has a creative commons license, encouraging reuse. You can get the "raw" files from ADL (look in the notes section of this slide).

Integrated Technology

Driven by Data

Learning Science Informed

Formal and informal

Individual and Organizational



MODERNIZING Funding her late Language General Control of the Co Learning Ecosystem



Modernizing Learning: How do we get from here (status quo) to there (desired end state)?



INITIAL **BASIC MATURITY**



Disconnected learning experiences, one-size-fits-all, overreliance on expensive face-to-face, lack meaningful outcomes data, disconnect between training to ops, limited number of legacy digital learning tools

Resource innovative pilots, establish metrics for desired outcomes, show support for tech-enabled learning and learning engineering

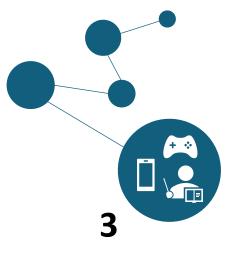


EXPLORATORY POCKETS OF EXCELLENCE



New technology-enabled learning explored, one-off examples of successful innovation, instructional quality regularly evaluated (but at local levels), still lack of meaningful data or enterprise-level controls

Establish enterprise quality control for content, elevate successful pilots, begin investing in enterprise infrastructure, establish data-centric processes



SYSTEMATIC CONNECTED SYSTEMS



Learning experiences begin to interconnect into a more cohesive continuum across diverse platforms, clear improvements in learning outcomes at organizational level, initial feedback loops among training, edu., ops

Show support during (ugly) shift from legacy to enterprise model, align intraorganizational goals, invest in Al pilots, establish ROI processes



LEARNER-CENTRIC AND AUTOMATED



Data drives tactical training and education decisions (learner-centric), flexible pathways for different people, individual and collective are connected. enterprise-level strategy, "ubiquitous learning"

Direct system integration across organizational silos, demand data for training/education decisions, use ROI analyses for functional-area decisions



INTERCONNECTED LEARNING ECOSYSTEM



Data drives strategic talent management, manpower and personnel intertwined with training and education, Al used throughout, realtime data supports decisions, feedback loop between talent mgmt. and operations

Use data-driven processes to support continuous improvement across functions, echelons, and at the strategic enterprise level







Enterprise Digital Learning Modernization

This section gives an overview of EDLM, which is a DoD-wide initiative. It aligns well with Service initiatives, e.g., Ready Relevant Learning or Army Learning Concept 2035, and it represents the program associated with the Modernizing Learning vision at an enterprise level.

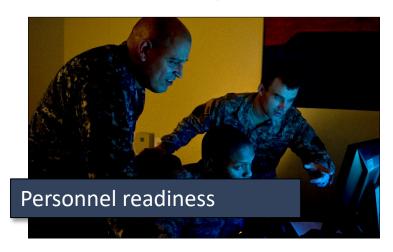
Enterprise Digital Learning Modernization EXSUM

EDLM's Goal: Acquire and deliver DoD digital learning more effectively and cost-efficiently. This requires improvements to (1) acquisition and sustainment processes and (2) modernization.

Why?





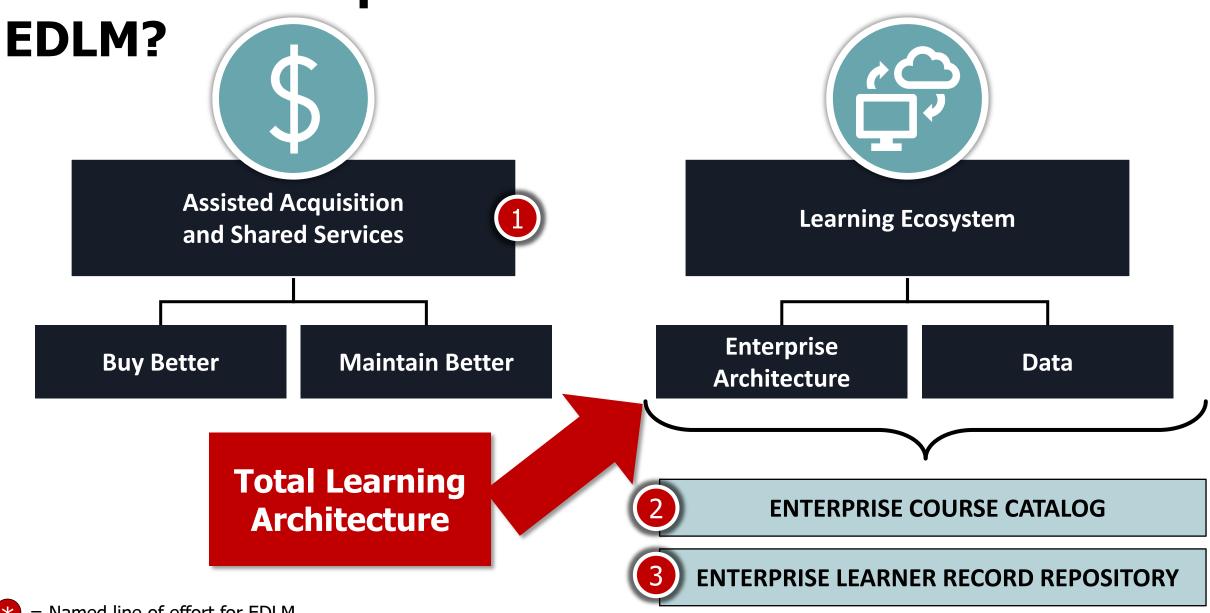


Meets growing operational demands



Implements policy guidance

What are the specific actions of



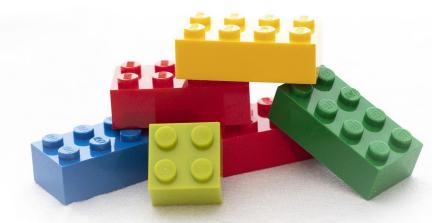
What's an enterprise architecture?

"...a coherent family of parent and subsidiary architectures, to help modernize its nonintegrated and duplicative business operations and the systems that support them." (SASC, 2012)

The "member architectures (e.g., Air Force, Army, and Navy) conform to an overarching corporate or parent architecture and utilize a common vocabulary...[and] governance across all business systems, functions, and activities." Among other things this approach includes "data standards, policies, procedures, and performance measures that are to be applied throughout the Department" (GAO, 2013).

- ✓ Directed by Congress
- ✓ Directed by GAO
- ✓ Directed by DoD Policy
- ✓ Supports Digital Modernization
- ✓ Supports Data Strategy
- ✓ Best practices for IT/data

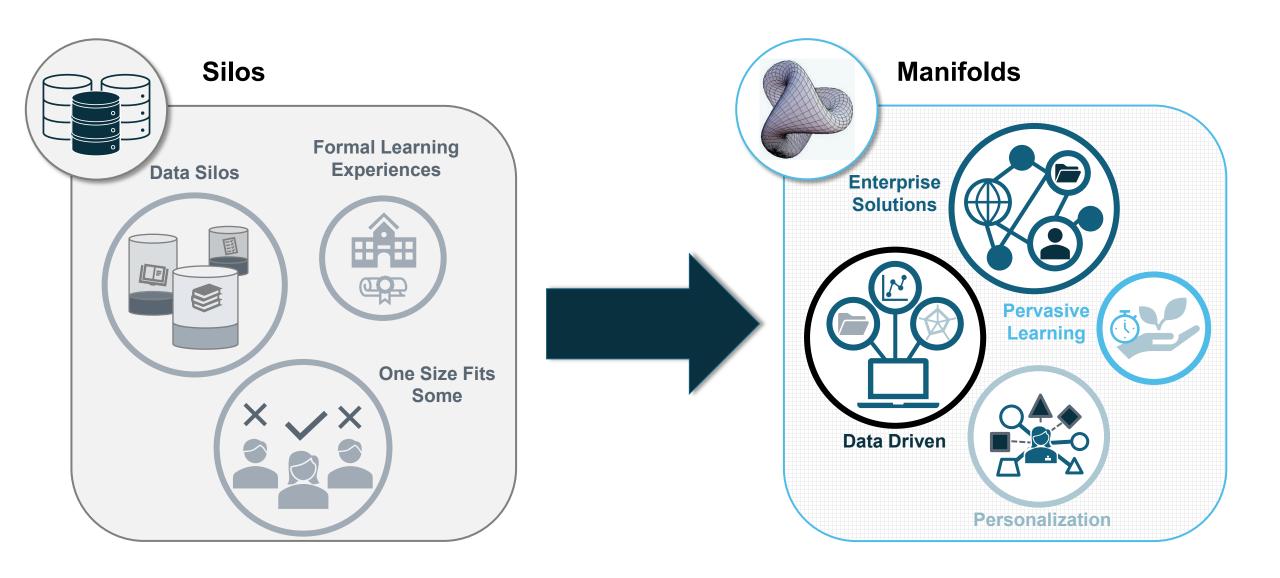




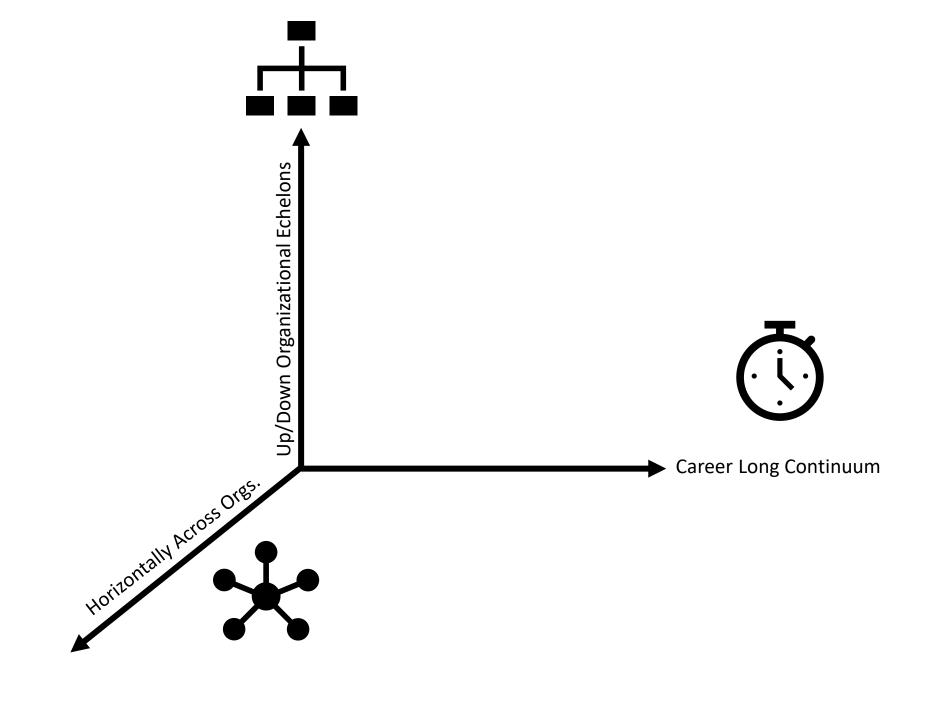
PART 3: THE TECHNOLOGY "HOW"

Total Learning Architecture

This section specifically examines the technology portion of the future learning ecosystem. This aligns with the *Modernizing Learning* vision and it directly supports the "business enterprise architecture" component of the Enterprise Digital Learning Modernization reform effort.



TRAINING AND EDUCATION



LEARNING OUTCOMES

(e.g., Run-time rules, individual runtime performance, paradata)

EXPERIENCES

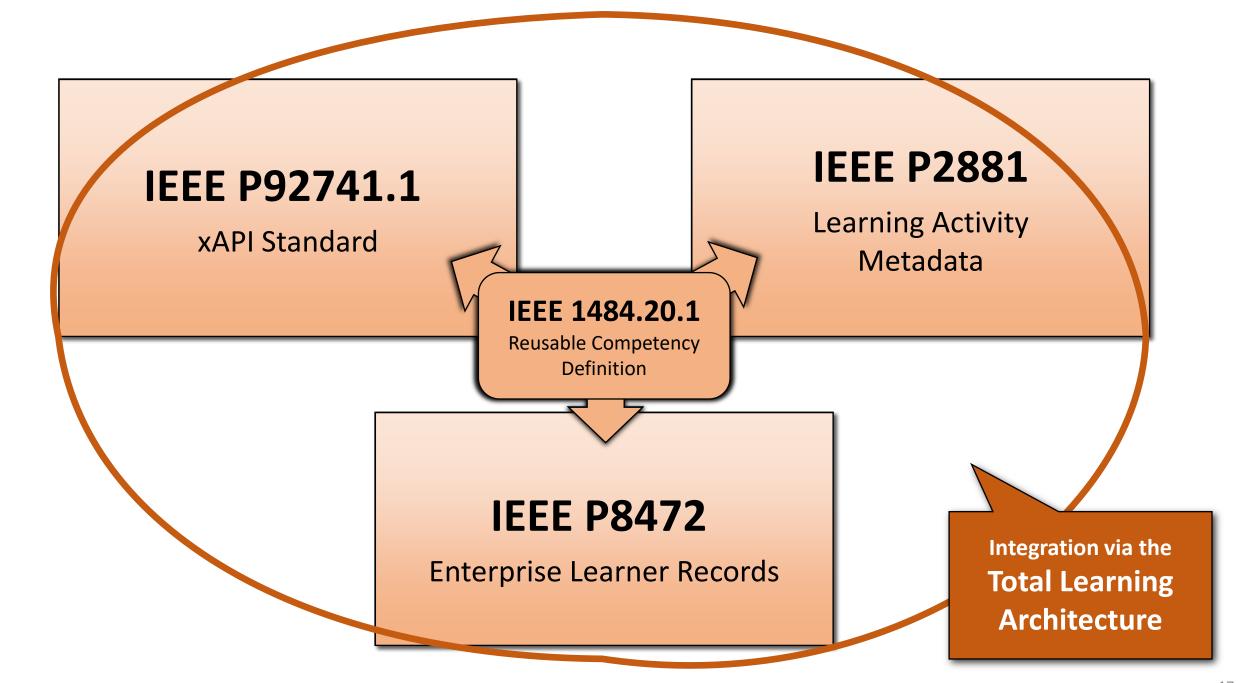
(Available Learning Opportunities, e.g., course, scenarios, learning multimedia, even jobs)

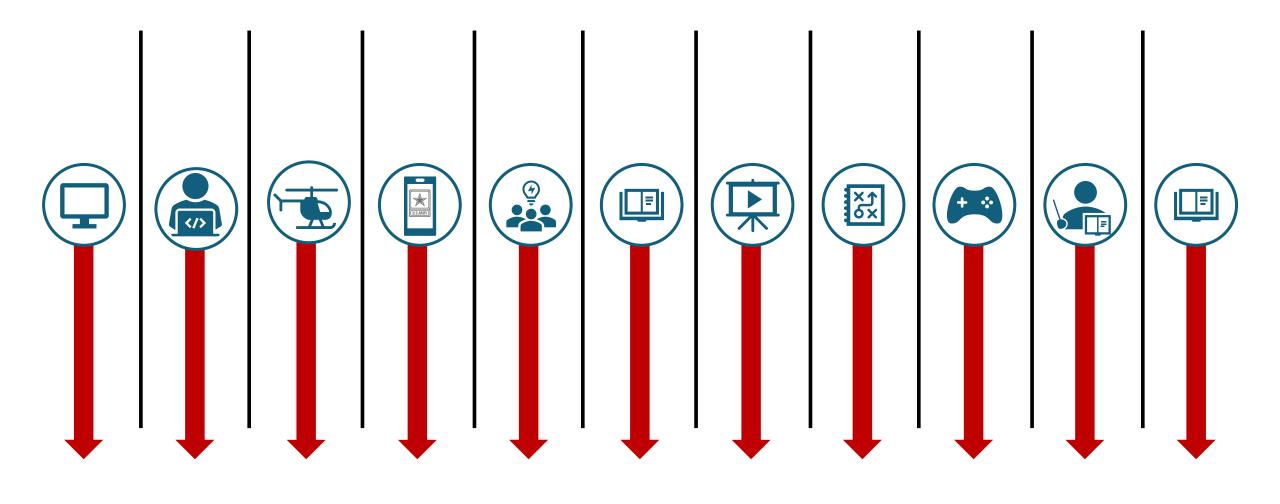
Competencies

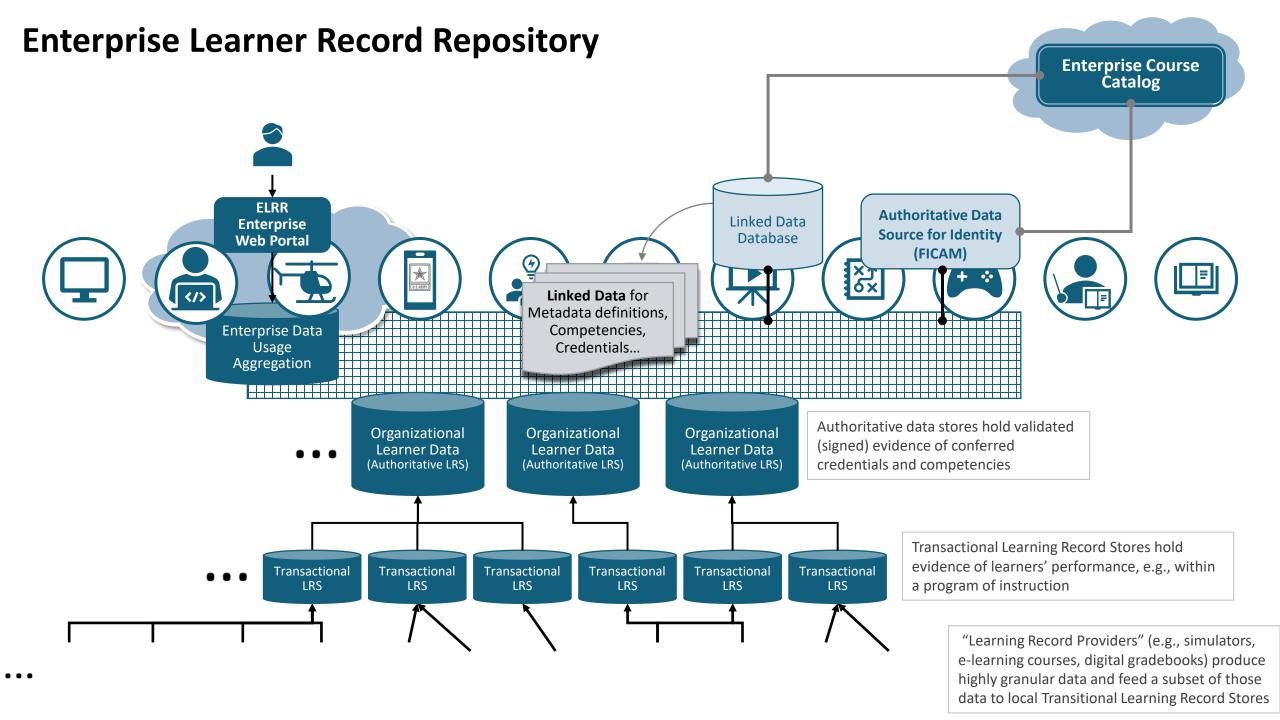
(Common Currency)

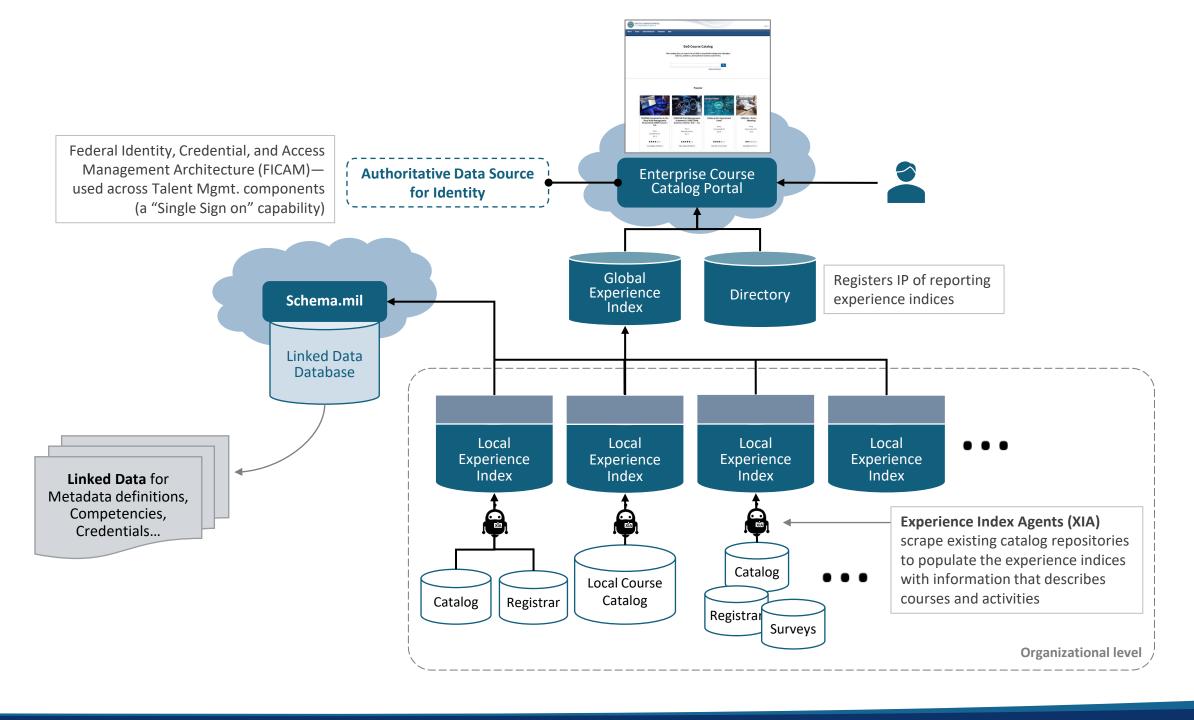
LEARNER PROFILE

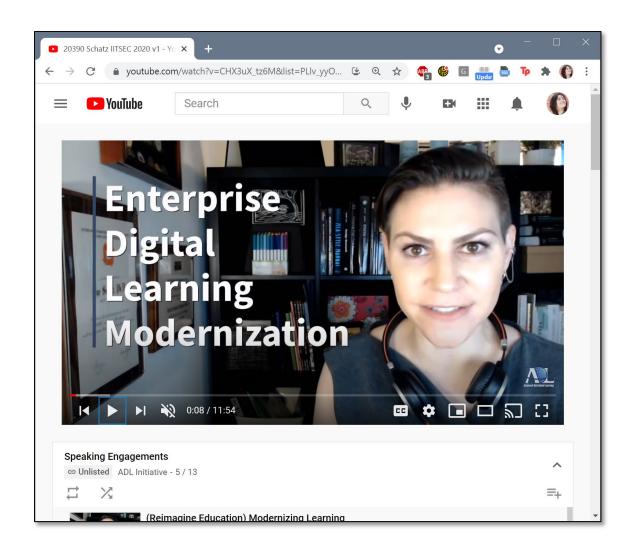
(e.g., longitudinal attributes, performance, enterprise learner records)

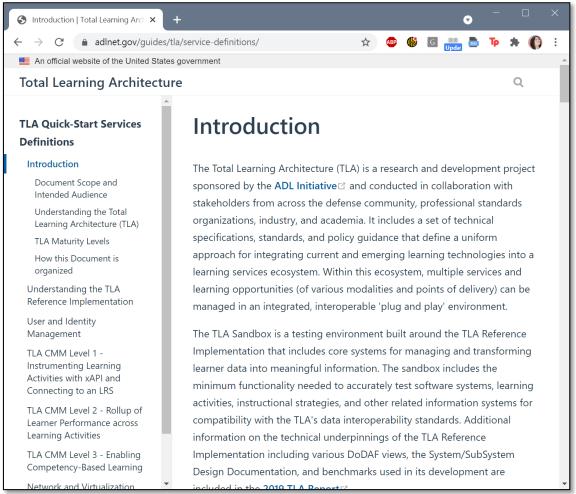






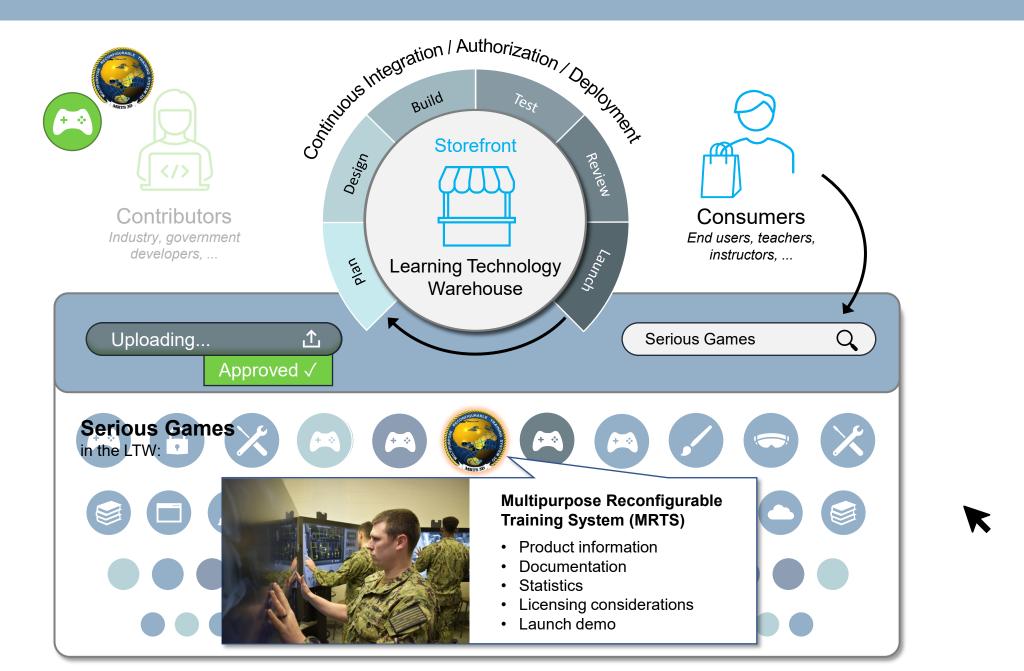




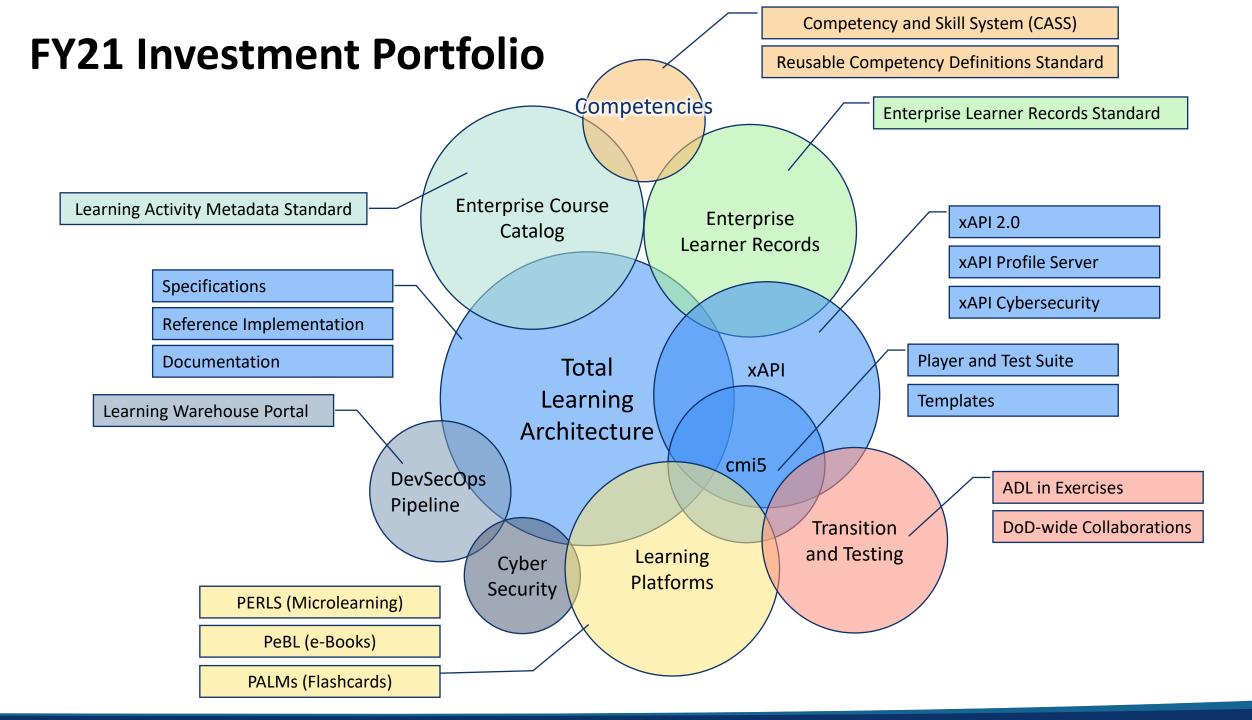


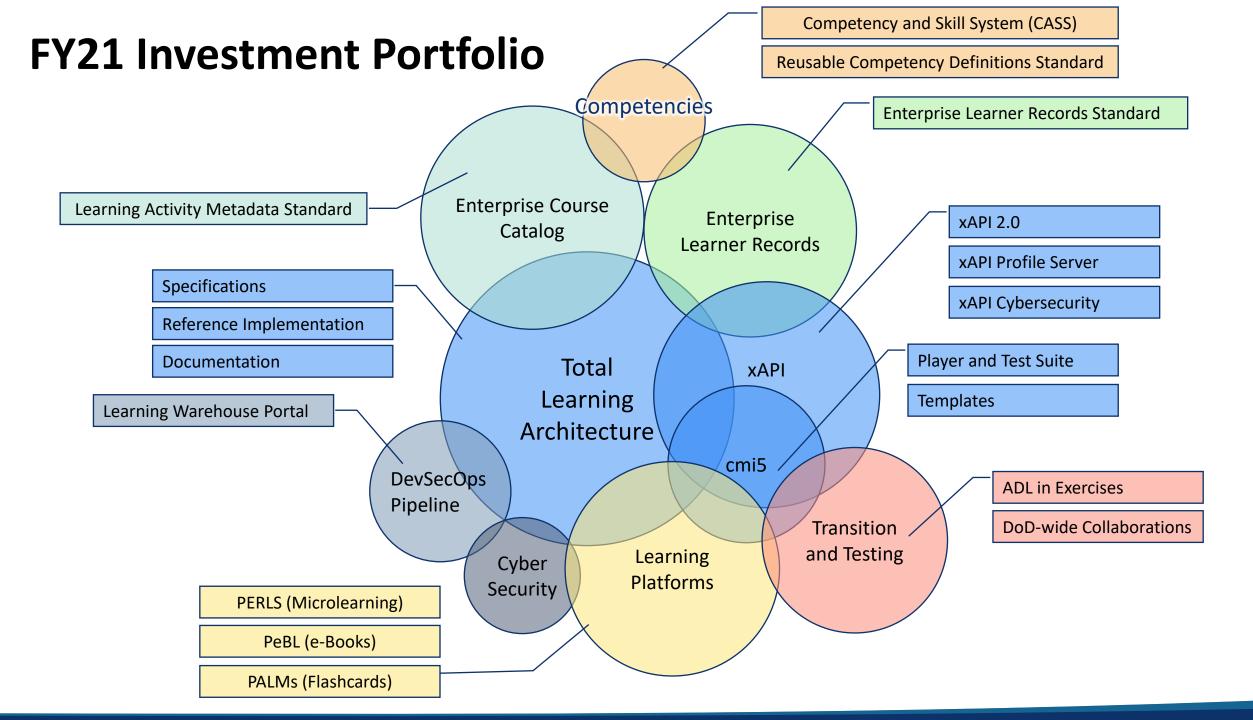
Watch: EDLM and Architecture (12 min.)

Read: System Admin Guide



ADL and Total Learning Architecture Programmatics





Maturation Timeline

Component	FY21	FY22	FY23	FY24	FY25	FY26	FY27+
EDLM Mgmt.	6	8	9	+	+	+	+
Enterprise Course Catalog	6	8	9	INTEGRATED INTO EDLM MGMT.			
Enterprise Learner Records	4	6	8	9 INTEGRATED INTO EDLM MGMT.			
Learning Services Ecosystem*	5	6	7	7	8	9	+
DevSecOps Integration	6	7	9	+	+	+	+

Technology Readiness Levels (1=Concept / 9=Full Implementation)

^{*} This is the Total Learning Architecture (aka enterprise architecture) and integration of components into it

Enterprise Course Catalog KPIs

Why?







Time Loss

Duplications (Cost)

Missed Opportunities

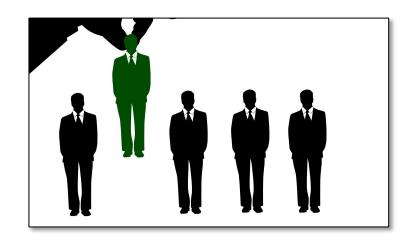
Name	Metric	Data Source	FY20	FY21	FY22	FY23
Utilization	Number of courses listed in the ECC	ECC Portal Sandbox (R&D)	1000	5000		
		ECC Operationally Deployed			10,000	20,000
Reduce time-to-find assigned courses	Time to find a set of required courses (X min/pp)(2M pp)(\$1/min)	Small-scale with Simulated Data (R&D)	5 min/pp	10 min/pp		
		Extrapolate from Surveys			15 min/pp - \$30M	20 min/pp - \$40M
Reduce duplication of courses Cost avoidance of unnecessary cour development (\$175K/course)	Cost avoidance of unnecessary course	ECC Portal Sandbox (R&D)	Identify 2	Identify 5		
	development (\$175K/course)	Extrapolate from Surveys			10 - \$1.75M	20 - \$3.5M

Enterprise Learner Record Repository KPIs

Why?







Time Loss

Personnel Readiness Insights

Personnel Readiness Insights

Name	Metric	Data Source	FY20	FY21	FY22	FY23
Access to learner record repositories	# of connected organizational learning record stores (Authoritative Data Sources)	ELRR Sandbox (R&D)		5	10	
		ELRR Operationally deployed			50	100
ELRR Utilization	Number of unique learner records (i.e., individual people) accessible	ELRR Sandbox (R&D)		1000	5000	
		ELRR Operationally deployed			1000 (first deploy)	100,000+
Reduce time-to-find learner records	Time to find a set of learner records (x min/pp) (2m pp) (\$1/min)	ELRR Sandbox (R&D)		5 min/pp	10 min/pp	
		ELRR Operationally deployed			15 min/pp	20 min/pp

Questions/Comments



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