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Sae Schatz

WILFM?



About the ADL
Initiative



A Few e-Learning
Resources



Learning Ecosystem
of the Future



USD(P&R)

Asst. Secretary
of Defense
(Readiness)



Deputy Asst.
Secretary of
Defense (Force
Education &
Training)



Established via
Executive Order in
1999



To conduct R&D on
learning science and
technology



To improve learning
effectiveness and
efficiency across
government

Budget Activity 6.3: Advanced Technology Development



TRL 4

Component and/or breadboard validation in a laboratory

Basic technological components are integrated to establish that they will work together; “low fidelity”



TRL 5

Component and/or breadboard validation in a relevant setting

Basic technological components and their supporting elements are tested in a realistic simulated environment; “high fidelity”



TRL 6

Prototype demonstration in a relevant environment

Prototype *system*, beyond that of TRL 5, is tested in a relevant environment to show the technology’s readiness



EXAMPLES



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LEADERSHIP



Help craft the future
vision of learning
science and tech

TRANSITION



Provide customer
support to facilitate
implementation

INNOVATION



Show the "art of
the possible" via
applied R&D



Alexandria

Orlando



GLOBAL PARTNERSHIP NETWORK





Activities

Thought Leadership:
Help craft the vision for future learning science and technology

Transition: Help bridge the research-practice gap

Innovation: Mature learning ideas and technologies

Emerging Concepts Exploration

Requirements Engineering

Visioning and Dissemination

Engage the Community

Design-Based Research

Internal R&D

BAA Research Portfolio

Via

ADL Partnership Network

Coalition: NATO, TTCP, PfPC

ADL Communities of Practice

Defense ADL Advisory Committee

Active Outreach to DoD/Gov

Collaborative Research

Emphasis on Open-Source

Policy and Specifications

DODI 1322.26

STANAG 2591

e.g.

SCORM

e-Learning

m-Learning

TLA infrastructure

Learning Theory

VWs / Simulations

Performance Data

Including

Learner Modeling

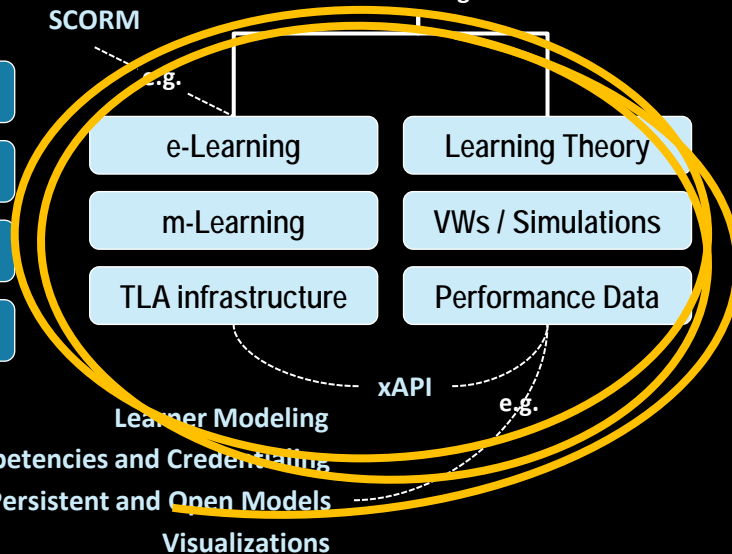
Competencies and Credentials

Persistent and Open Models

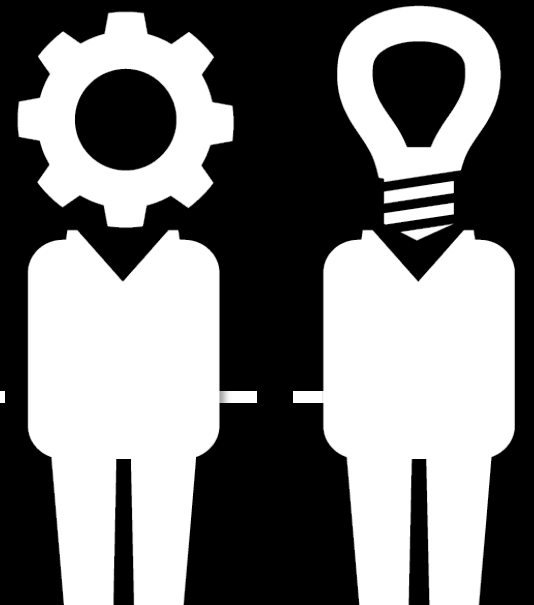
Visualizations

xAPI

e.g.



e-Learning Resources



Choosing Authoring Tools

Choosing a Learning Record Store (LRS)

Choosing a Learning Management System



Advanced Distributed Learning (ADL) Co-Laboratories

2 November 2015
Version 5.4



Advanced Distributed Learning (ADL) Co-Lab

Peter Berking

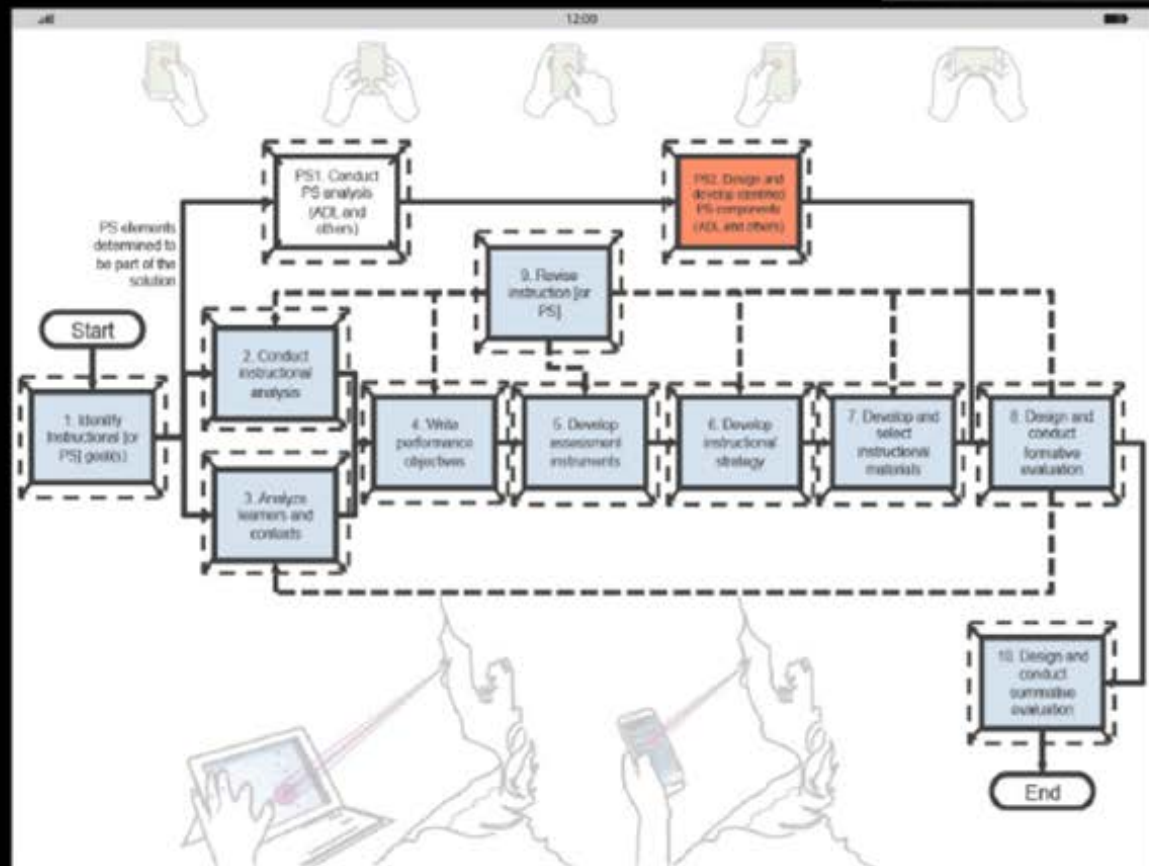
18 November 2015

Version 1.3



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www.adlnet.gov/adl-research/instructional-design



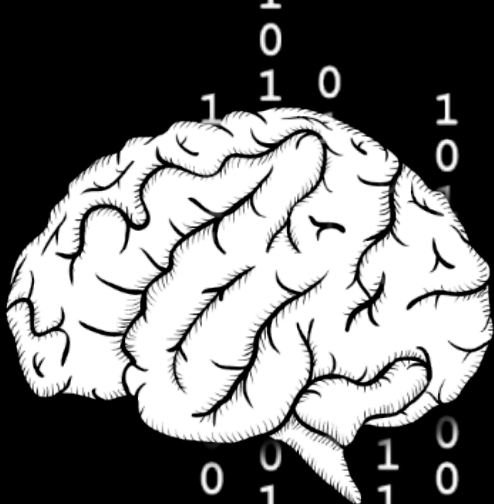
motifproject.org

The screenshot displays a 3D development environment. The main view shows a boat on a body of water with a mountain in the background. The boat has a blue wireframe overlay. The interface includes a top menu bar (File, Edit, Camera, Hierarchy, Create, Assets, Tools, Windows, Rendering, Help), a toolbar, and several panels:

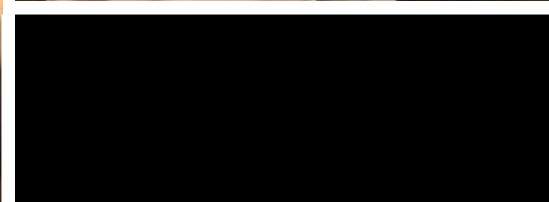
- Content Libraries:** A sidebar on the left with categories like My Entities, My Models, My Materials, My Textures, My Behaviors, and Demo Entities. It contains a grid of asset thumbnails.
- Hierarchy:** A panel on the right showing the scene's object tree, including 'Scene', 'asset-wf-Nf1bee40d', 'DDG51', 'FAC_MASTER', 'LockatCamera', and 'Ocean'.
- ScriptEditor:** A window titled 'ScriptEditor - sas-assets-1ad6dad-N560f3127' showing JavaScript code for a 'tick()' function. The code includes comments and logic for handling key presses (W) to apply force and torque to the boat's physics.
- Material/Physics/Players:** Additional panels on the right for managing these properties.
- ADL Team:** A communication panel at the bottom right with a team name and contact icons.

```
1 function tick()
2
3 // The tick function is called 20 times every second.
4 // Write code here to animate over time
5
6 if (this._keysDown.indexOf("W") !== -1)
7 {
8     var force = this.transformAPI.localToGlobal(-10 * mass, 0, 0);
9     this.physicsAPI.addForceAtCenter(force);
10 }
11 if (this._keysDown.indexOf("D") !== -1)
12 {
13     this.physicsAPI.addForceOffset(10, 0, 0);
14     this.physicsAPI.addTorque(1000, 0, 0);
15     this.physicsAPI.addTorqueImpulse(1000, 0, 0);
16     this.physicsAPI.getAngularVelocity();
17 }
```

sandbox.adlnet.gov



Future Learning Ecosystem



Simplify

Develop technology and systems

Prepare personnel to ~~cope with~~ VUCA !!

^
thrive in



CHAIRMAN OF THE JOINT CHIEFS OF STAFF
WASHINGTON, D.C. 20318-9999

NBSD Hosts Resilient Workforce Summit

Story Number: NNS151005-06 Release Date: 11/5/15

By Mass Communication Specialist Dawn P...



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Carter Details Force of the Future Initiatives

By Jim Garamone

DoD News, Defense Media Activity

PRINT | E-MAIL | CONTACT AUTHOR

- News ▲
- Secretary of Defense ▲
- Deputy Secretary of Defense ▲

WASHINGTON, November 5, 2015 — Secretary of Defense Ashton Carter said it is necessary to ensure the Department of Defense is prepared for the future.

The secretary told students at the United States Naval Academy that one of his core commitments is to ensure the Department of Defense is prepared in many ways as possible.

Carter emphasized his start in the military. "George Washington, launched the United States military," he said. "He fought for freedom, against fascism, fought for freedom on 9/11."

But it was more than a fighting force that he talked about. He talked about positioning system, and eradicating disease.

Mastering Change With Excellence

"Throughout all this, the one thing that we need to focus on is excellence -- continuing to do it in the 21st century."

America's advantage is tied to our ability to adapt and change.

"In the face of generational change, we need to open our five-sided box and try to do it for Americans," he said.

Spreading the word that DoD is open to learning from corporations to academia.

Learning From Corporations

Carter announced the idea of the Force of the Future in one of his first speeches after taking office in February. The secretary visited many corporations and learned from leaders in academia and elsewhere.

"Throughout this process, we've always been mindful that the military is a profession of arms," he said. "It's not just about the hardware, it's about the people."

Veterans

11/05/2015



DEPARTMENT OF DEFENSE TALENT MANAGEMENT

"What we've always known is that the way we manage our people is critical to our success. To fight, we need a pool of talent that is healthy, fit, and motivated. We need to attract and retain the best talent. We need to ensure that our personnel management, we must evolve to meet the needs of our people. Today we shift from 'what we have' to 'what we need.'"

Secret

UNITED STATES NAVAL ACADEMY INITIATIVES

- Optimized Service-Assignment for USNA (2016) - USNA will continue to evolve our service assignment process by moving further away from a class-rank selection model to a more market-based system that identifies and nurtures the natural talents and interest of USNA graduates with the focused skills needed in our warfare communities.

CULTURE OF FITNESS

Navy fitness initiatives (2016-2017) - The Navy and Marine Corps' fitness culture should focus on producing warfighters capable of accomplishing any mission any time and supporting healthy lifestyles to reduce overall medical costs. To do so, we will make the following changes:

- When measuring body fat, we will evaluate health, not shape.

UNIFORMS

- One Uniform - Navy and Marine Corps will have a common uniform for both males and females.

166-13
e 2013

Simplify

Develop technology and systems

Prepare personnel to ~~cope with~~ VUCA !!

^
thrive in

~~☐~~ Simplify

~~☐~~ Develop technology and systems



More Skills



Higher Order



More Agile



Learner-centric, technology-enabled: Flexibly, efficiently, and seamlessly (truly blended)



Data-driven learning tailored is to what, where, when, and how learners need it

Learning Science



Learning system is guided by evidence-based best practices and continuously improved



Technology enables action from self, commanders/instructors, and peers (social learning)



Organizations learn lessons and disseminate them effectively



Learner-Centric
Technology-
Enabled



Data-Driven
Learning



Learning
Science



Social Learning



Learning
Organizations



Learner-Centric
Technology-
Enabled



Data-Driven
Learning



Learning
Science



Social Learning



Learning
Organizations

** TOTAL LEARNING ARCHITECTURE*

end.



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