

Edtech Security: Building Trust Through Shared Responsibility

2026+ Security Posture



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1EdTech



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THIS SESSION

A Community Roadmap for Edtech Security

Products & Services are at risk

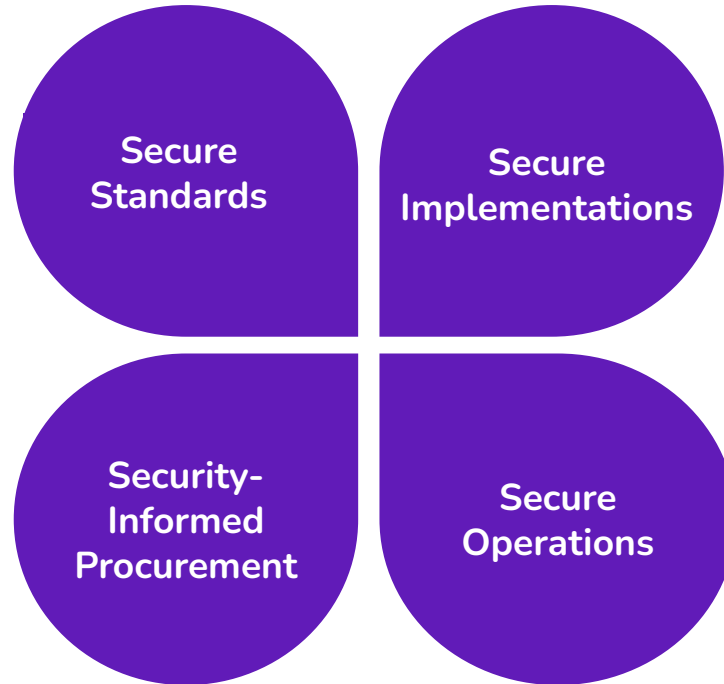
- AI models have collapsed the skill barrier - what once required real expertise is now available to anyone with a prompt.
- Market and geopolitical forces have turned ransomware and extortion into a high-reward, low-risk business model for bad actors.

AGENDA

1. How security has evolved
2. Current situation
3. How to mitigate risk
4. Look forward and Security Roadmap

How we can have an impact:

Where we have existing or potential levers



**Secure
Standards**

**Governance
&
Tooling**

**Secure
Implementations**

Certification

**Task
Forces
&
Working
Groups**

Best Practices

**Security-
Informed
Procurement**

**Rubrics
&
Status Dashboards**

**Secure
Operations**

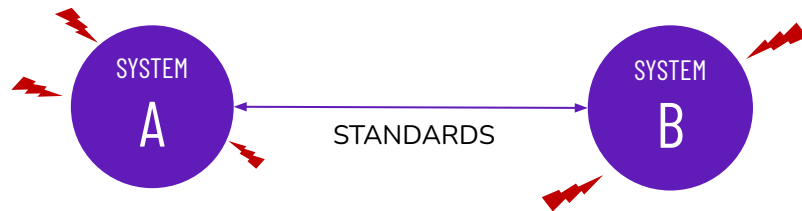


BACKGROUND

Standards are not the primary attack surface...

Integration & Risk Awareness

- A compromised product can
 - expose student data
 - open pathways to downstream systems.
- Security practices are focused on **reducing the risk and shrinking the blast radius**



1EdTech Standards have always tracked the latest best security practices and aligned with industry standards from IETF and OpenID



EVOLUTION OF SECURITY

Principles built into evolving security

T1

Shared Secret

Trust is a **secret** that both parties share. Exposure = full compromise

T2

Token-Based

Secret used to obtain **short-lived tokens**. Root of trust is still a shared secret

T3

Cryptographic

Public/private key pair. **No shared secret**

T4

Nothing Worth Stealing

No implicit grant. **Tokens never touch the browser** and are cryptographically bound to the original sender



Internet Engineering Task Force (IETF)

2007

OAuth 1.0a

2012

OAuth 2.0

2015

TODAY

OAuth 2.1

Active Internet-Draft



1EDTECH STANDARDS ALIGNMENT

1EdTech Security has always aligned with IETF



LTI®

OneRoster®

Edu-API™

T1

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Trust is a secret that both parties share. Exposure = full compromise

v1.1

v1.0

v1.1

N/A

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Next Focus



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IMPORTANT

How to mitigate risk

1. DO NOT USE DEPRECATED STANDARDS

They have a much wider blast radius IF the product or service is compromised

2. ONLY USE CURRENT STANDARDS

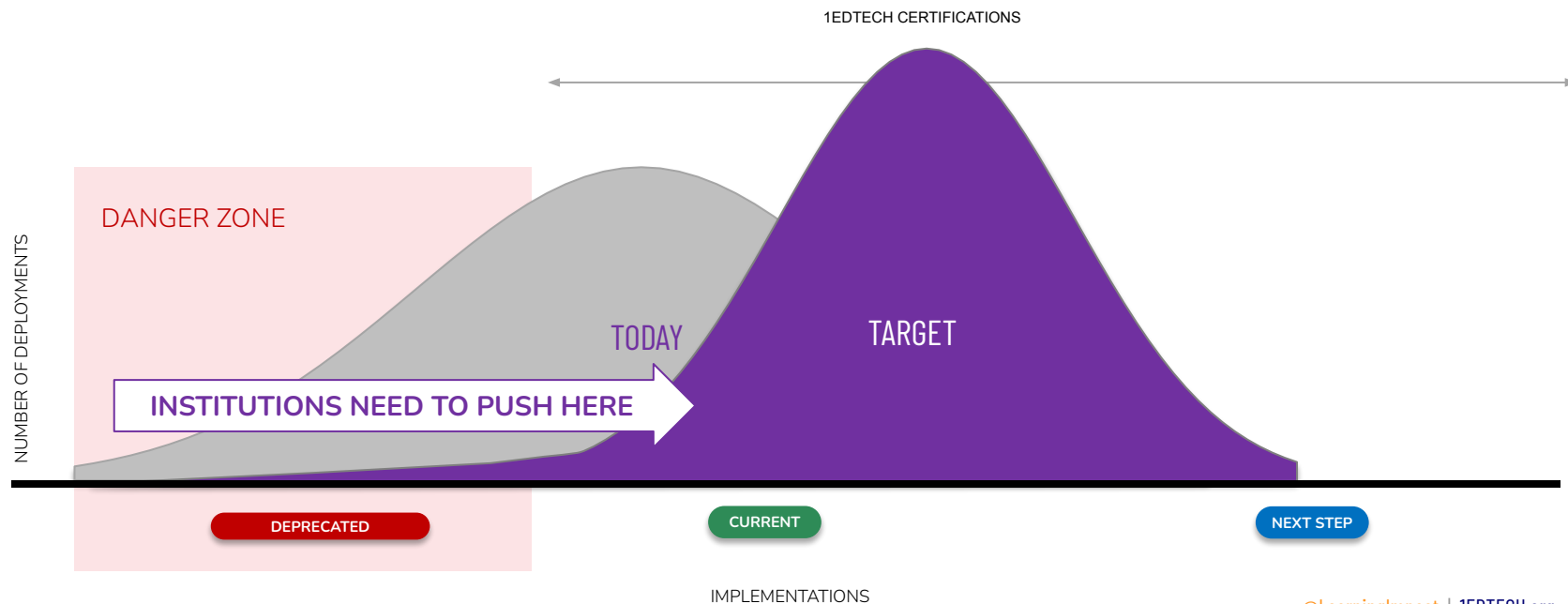


| | LTI® | OneRoster® | Edu-API™ |
|-------------------|------|------------------------------|----------|
| DEPRECATED | v1.1 | v1.0 v1.1 (shared secret) | N/A |
| CURRENT | v1.3 | v1.1 (with tokens) v1.2 | v1.0 |



A ROLE FOR EVERYONE

A large base of legacy software deployments create risk



TO SUPPORT RISK MITIGATION

Certifications provide information about which products have implemented the current standards.

CERTIFICATION IS

- Verified conformance - including security.
- Active vendor commitment to the latest 1EdTech guidance.
- Evidence-based supplier signal for procurement.
- Accountability - not a marketing claim.
- Anyone can see certified products on the Product Directory

CERTIFICATION IS NOT

- A guarantee of zero risk.
- Cover for misconfiguration or deployment choices.
- A substitute for platform-level security hygiene.

In the current environment, **uncertified integrations are an unacceptable procurement risk.**



RESOURCES TO SUPPORT

INSTITUTIONAL RESOURCES

Procurement Support

RFP language and procurement support materials available to member institutions

The Trusted Apps Directory

A public directory that allows institutions and suppliers to discover verified educational applications, integrations, certifications, and trust-related metadata.

The Trusted Apps Management Suite

a platform for registering, managing, and validating trusted educational technology applications and their compliance status.

DEVELOPERS RESOURCES

NEW!

The New Standards Portal:

- Documentation and Resources
- AI Skills
- Machine-readable assets
- Support developers and AI-assisted workflows to understand the standards.

<https://standards.1edtech.org>

The Build Portal

- Realtime Test and Diagnostics tools
- Certification tools

<https://build.1edtech.org>



LOOKING FORWARD

What's next?

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NEXT STEP

OAuth 2.1



DIRECTION THE SECURITY WORLD IS HEADING

The next evolution. OAuth 2.1 is near final.

OAuth 2.1 consolidates five RFC and best practices.
The clearest signal yet of where the global security community is heading.

| | WHAT IT MEANS |
|---|--|
| 1 | Removes legacy patterns for getting tokens through a browser |
| 2 | It makes strong security practices mandatory |
| 3 | If a token is stolen, it prevents attackers from using it. |



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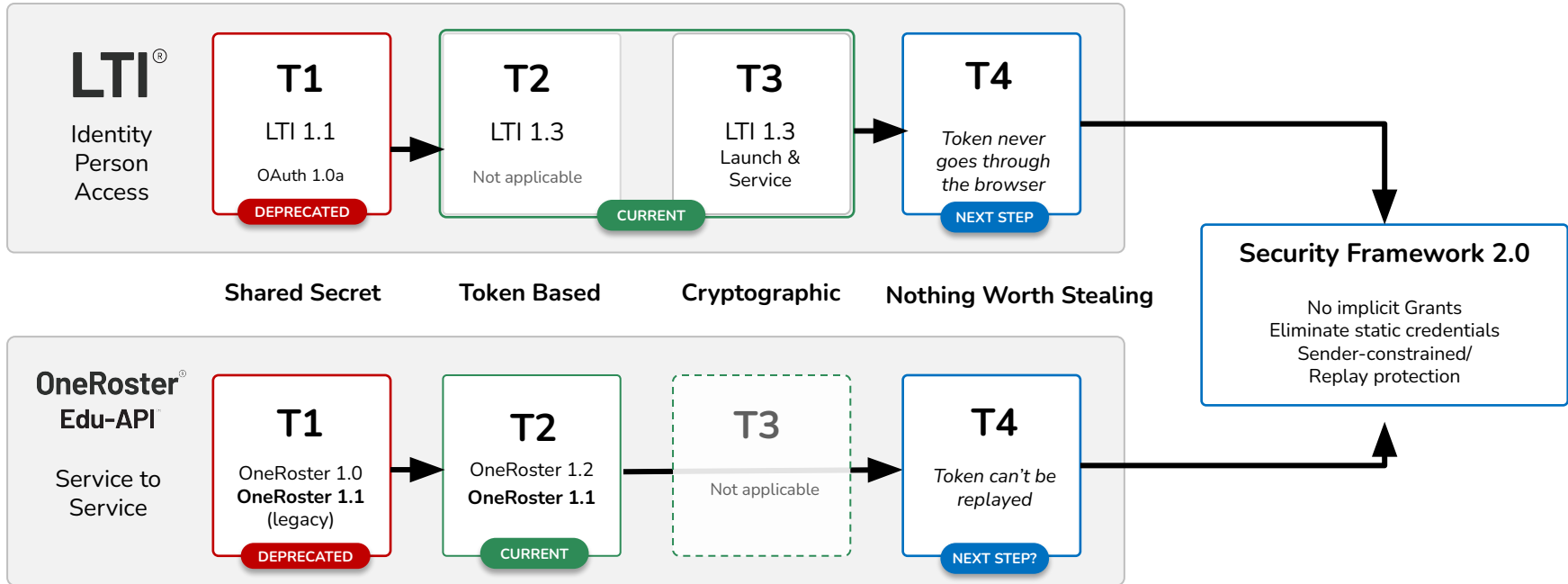
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| | | WHERE THE STANDARDS INTERSECT | | |
|---|--|-------------------------------|------------------------|----------------------|
| | | LTI [®] | OneRoster [®] | Edu-API [™] |
| 1 | Removes legacy patterns for getting tokens through a browser | ✓ | N/A | N/A |
| 2 | It makes strong security practices mandatory | ✓ | N/A | N/A |
| 3 | If a token is stolen, it prevents attackers from using it. | ✓ | ✓ | ✓ |



WHAT'S NEXT?

If we applied OAuth 2.1 recommendations across the standards



ACTIVELY TRACKING THE NEXT STEP

The work continues – Business As Usual

Potentially Good News

Early indicators are that alignment with OAuth 2.1 could be **additive** and **non-disruptive** to existing standards.

subject to working group scrutiny

Ongoing Work

- The Security Committee & 1EdTech team have been tracking the OAuth 2.1 recommendations for the last 12 months.
- **New proposal** to the LTI Working group to add support for an additional workflow to align LTI 1.3 with OAuth 2.1
- **Technical Congress Meeting** will review implications across other standards

T4

Nothing Worth Stealing

Makes sense to target support in;

LTI[®] v1.3

OneRoster[®] v1.2

Edu-API[™] v1.0

NEXT STEP



NEXT STEPS IN PRACTICE

We know where we need to go

PRINCIPLES

- Smooth migration over hard cutoffs.
- Interoperability is non-negotiable.
- Transparency through certification.
- Community ownership.

ASK OF THE ROOM

- Audit your use of deprecated standards
- Use certification - every integration.
- Engage with the proposals to keep aligned with best practices

Together we will face this. Please get involved.



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Governance & Tooling

Secure Standards

Security Framework:
Adopt oAuth 2.1 ASAP

Governance:
Accelerate deprecations

Migration support:
LTI 1.1 -> 1.3
upgrade playbook
for institutions

Client-side state:
Demonstrated
Proof of Possession

Minimize exposure:
Possible protocol to
obfuscate data not
needed by client

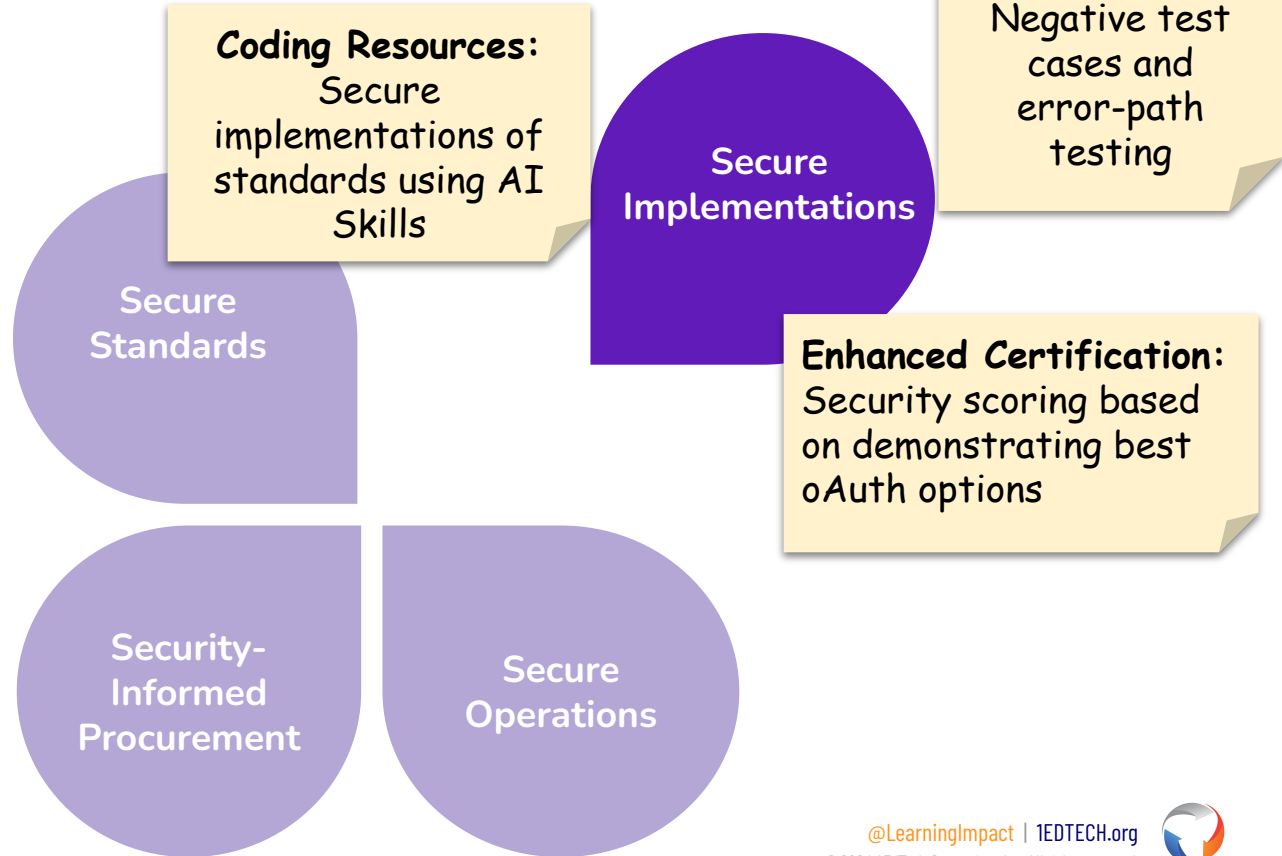
Secure Implementations

Security-Informed Procurement

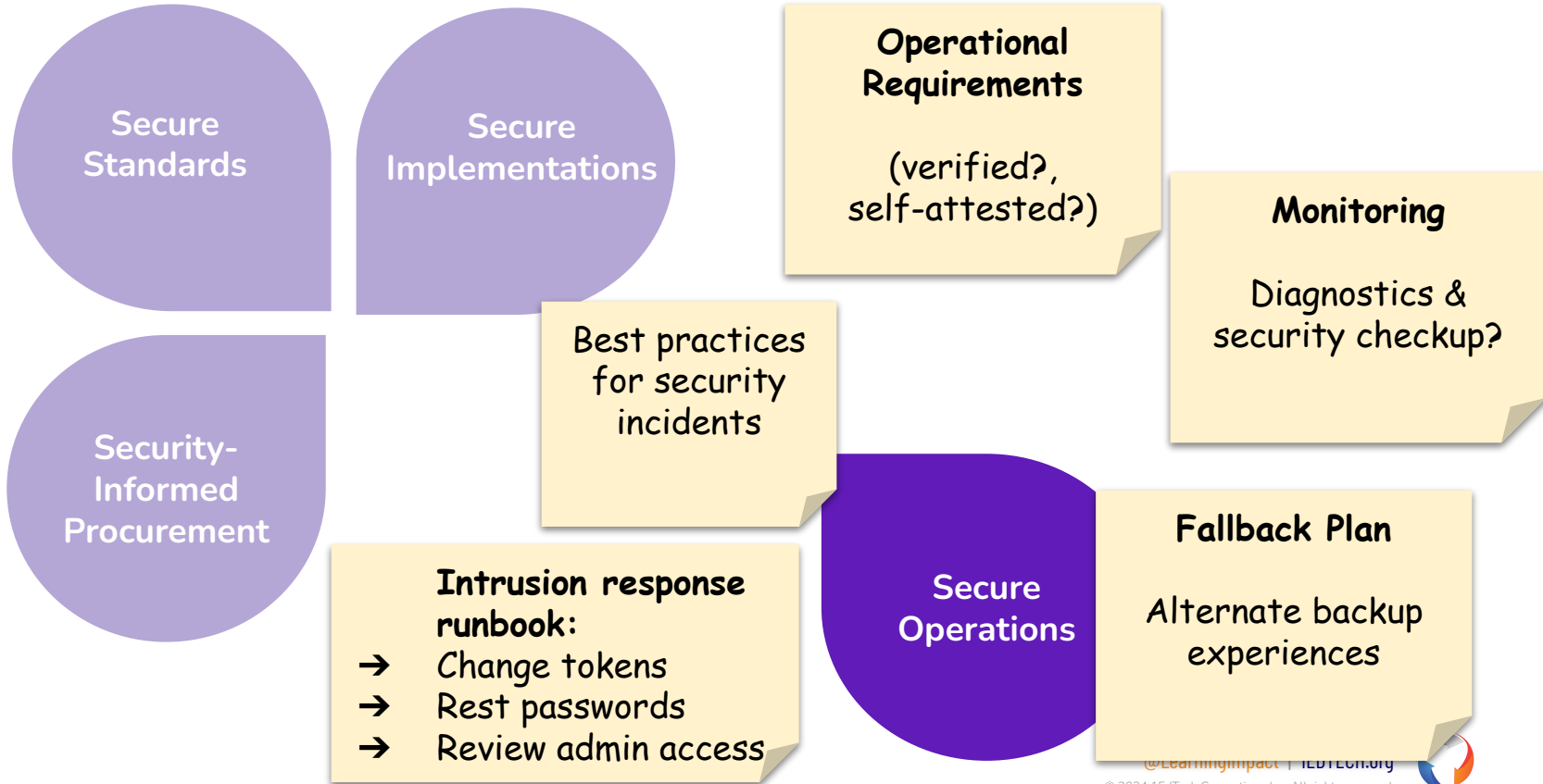
Secure Operations



Governance, Tooling, and Operational Requirements



Stronger than Guidelines



TAMS - Certification, Rubrics, Radiators

Security Rubric:
Rapid updates as threat landscape evolves

Enhanced Certification:
Security scoring

Enhanced Certification:
Security scoring based on demonstrating best oAuth options

Status Radiators:
Active incident alerts?
Status page reflector?
Prominent incident history

Security-Informed Procurement

Secure Standards

Secure Implementations

Secure Operations



Get Involved

Virtual

Student Safety Task Force: Biweekly Tuesdays, 11am EST — MWatts@1edtech.org

LTI Project Group: Weekly Tuesdays, 12pm EST — JMenasche@1edtech.org

Security Committee: Monthly (1st Tuesday), 11am EST — JMenasche@1edtech.org

Edu-API Project Group: 2nd & 4th Wednesdays, 11am EST — JMcGhee@1edtech.org

OneRoster Product Steering Committee: — JMcGhee@1edtech.org

In-Person

Technical Congress 2026

Oct 19-21st Milwaukee, WI

<https://www.1edtech.org/event/congress/2026>

Learning Impact 2027

Feb 8-10th San Antonio, TX

<https://www.1edtech.org/event/li/2027>



1EDTECH
**LEARNING
IMPACT** 
EUROPE 2026
15-17 September



Thessaloniki, Greece



ARISTOTLE
UNIVERSITY
OF THESSALONIKI

Request for Public Comment on Trusted Learning Context

1EdTech Labs Live | Thursday, July 23 | 1:30 - 2:30 PM EDT

In this webinar, we will introduce a new Request for Public Comment on a trusted, portable learning context for AI.

Participants will learn the core ideas behind the RFC, see how community input shaped the work, and understand how to provide feedback as 1EdTech moves toward practical, standards-based approaches for AI in education.



SIGN UP HERE