Learning Tools Interoperability

LTI for Educators

So Many Digital Applications, Content and Tools!

Institutions want a one stop shop for their users to access all the digital resources available, but how can an IT department manage this with limited personnel and resources?

LTI and LTI Advantage: Learning Innovation at the *Speed of Now*

- Learning Tools Interoperability® (LTI®) connects learning platforms with digital apps, tools and content seamlessly and without the need for custom integrations.

- LTI Advantage is a package of key LTI extensions that support teaching and learning activities, such as the provisioning of usernames and roles so a tool can intelligently address the learner on launch, and the sharing of assignments from a platform to an assessment tool and the subsequent scores back to a central gradebook.

What is LTI, Really?

LTI is a common technical 'language' used to navigate among systems and tools, exchanging data between them.
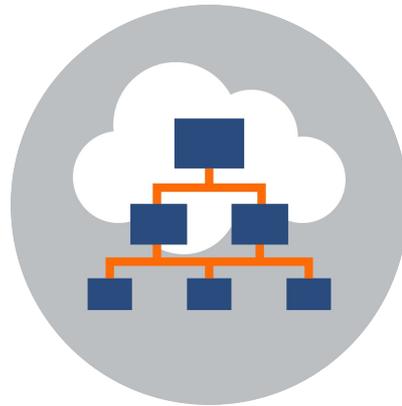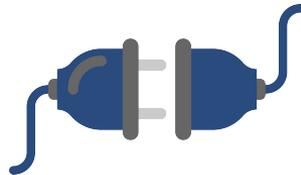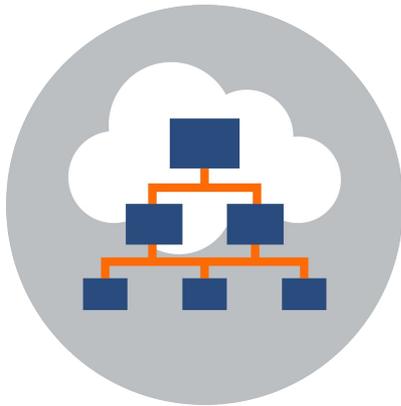
Three Key Features of LTI

Connect
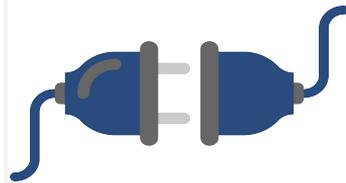
Confirm

Exchange

Securely **connect** learning platforms and tools, e.g.

- Publisher content
- Specialized "labs"
- Assessment tools
- Plagiarism detectors
- Any certified compliant teaching and learning tool
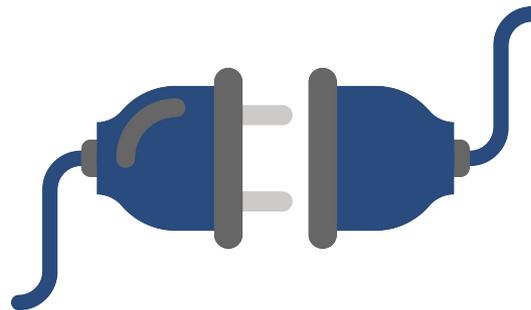
Confirm the tool, the user and context

- Tool is trusted, verifies users are allowed to access
- Uses institutional/LMS signon credentials
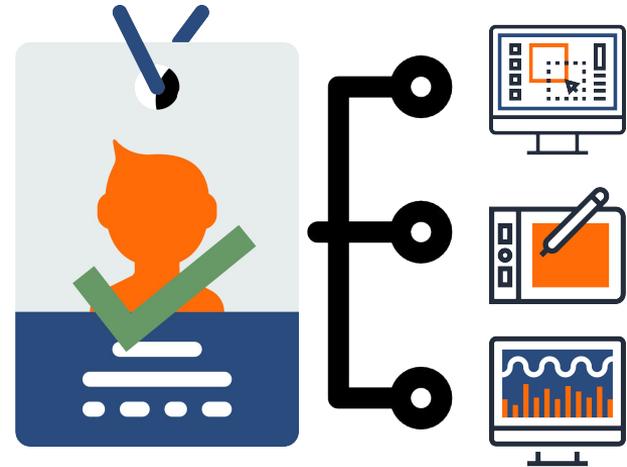
# **Exchange** information in a teaching and learning workflow

Course Content

Exchange

Assignments

Grades

Class Lists

LTI's Essential Features
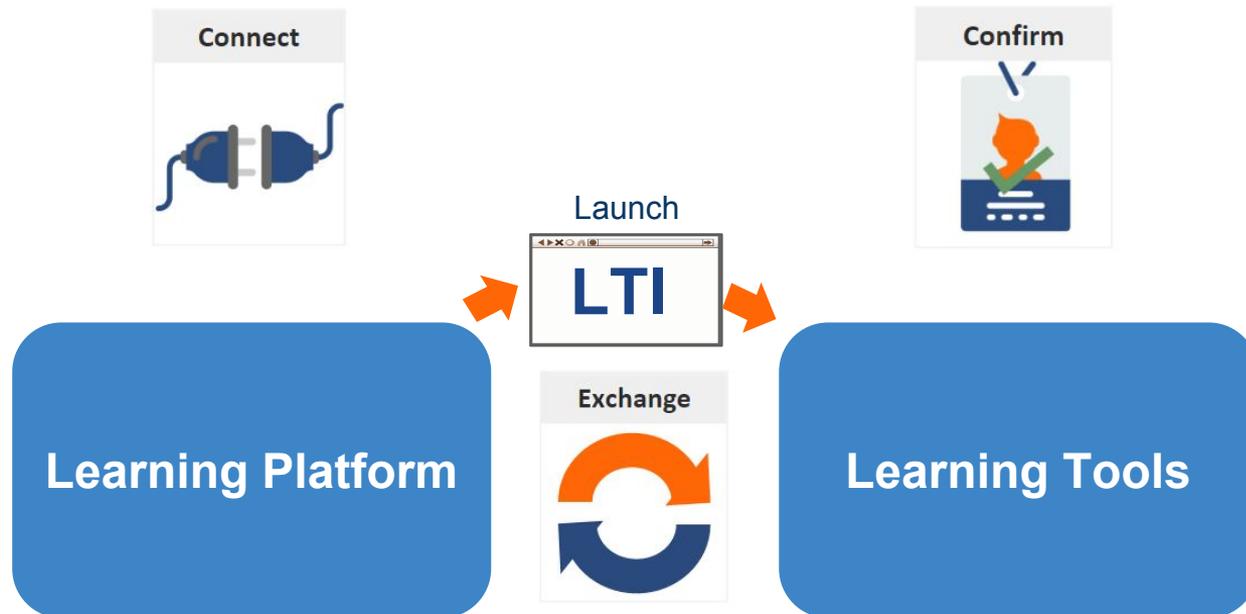
LTI Advantage Builds on LTI for the Trusted Exchange of Teaching & Learning Activities

LTI Advantage: Deep Integrations at the *Speed of Now*

- Makes it easier to innovate and meet the unique learning needs of students
- Saves time spent provisioning courses
- Dramatically reduces integration times

Assignment and Grade Services

Enables faculty to sync grades and comments in third-party tools into a single place, such as the LMS gradebook, which gives students and faculty a clearer picture of learning progress in one place.

- Gradable assignments shared with tool
- Numeric scores returned to LMS gradebook
- Assessor's comments returned if provided
- Multiple results supported in a single exchange
- Instructor override and history of attempts allowed

Deep Linking

Simplifies the arduous task of selecting and adding links to content when developing a course, including deep integration to collections of content such as playlists and a table of contents.

- Select and add course content in a few clicks
- Add playlists and tables of content
- Enable links and other HTML content
- Add pre-registered tools with a few clicks
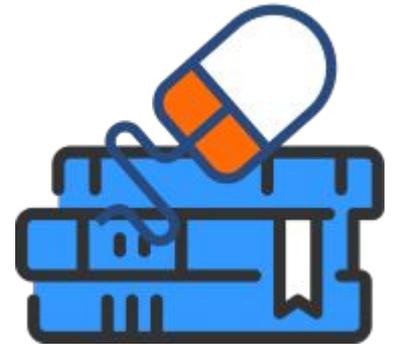
Names and Role Provisioning Services

Automates course enrollment into a third-party tool in a safe and secure manner, and allows faculty to receive reporting on student activity within the tool.

- Exchange a list of users and their roles
- Provision a learner using LTI's secure exchange
- Learn who has not yet accessed a tool

Thin Common Cartridge: Content from the Cloud

Thin Common Cartridge©

Connect

Confirm

Exchange
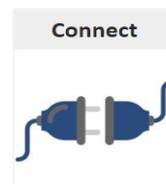
**LTI links and searchable metadata**

LTI is compatible with your sign-on systems

- IMS standards, including LTI, are 100% compatible with authentication standards including SAML, Active Directory/ADFS and the OAUTH2 framework

- IMS standards *authenticate the tool* and *pass on the already-authenticated users' information* and *role* between the platform and external tool

Recommended LTI Adoption Roadmap

- Adopts the industry standard protocol, OAuth2 for authentication services, and JSON Web Tokens (JWT) for secure message signing

- The best framework for IMS' updated security model is LTI 1.3
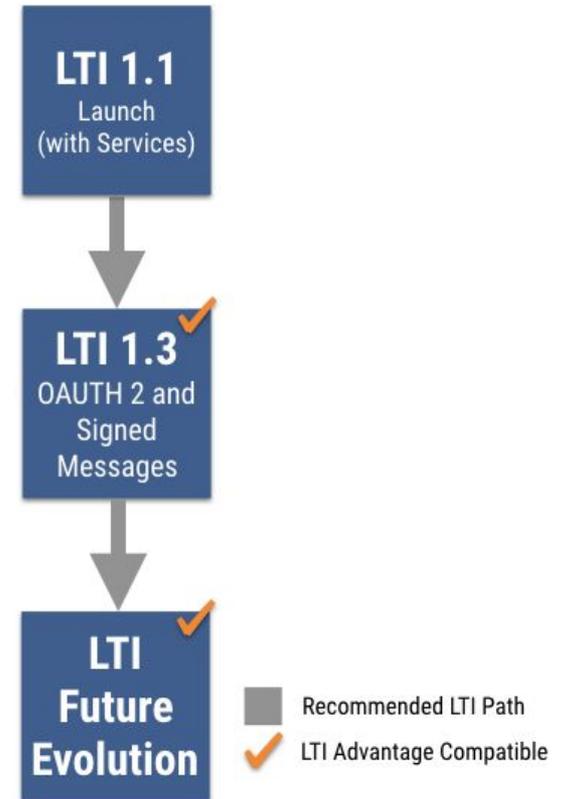
FIGURE 1. Recommended LTI Roadmap

A Connected Ecosystem: IMS Standards in Action
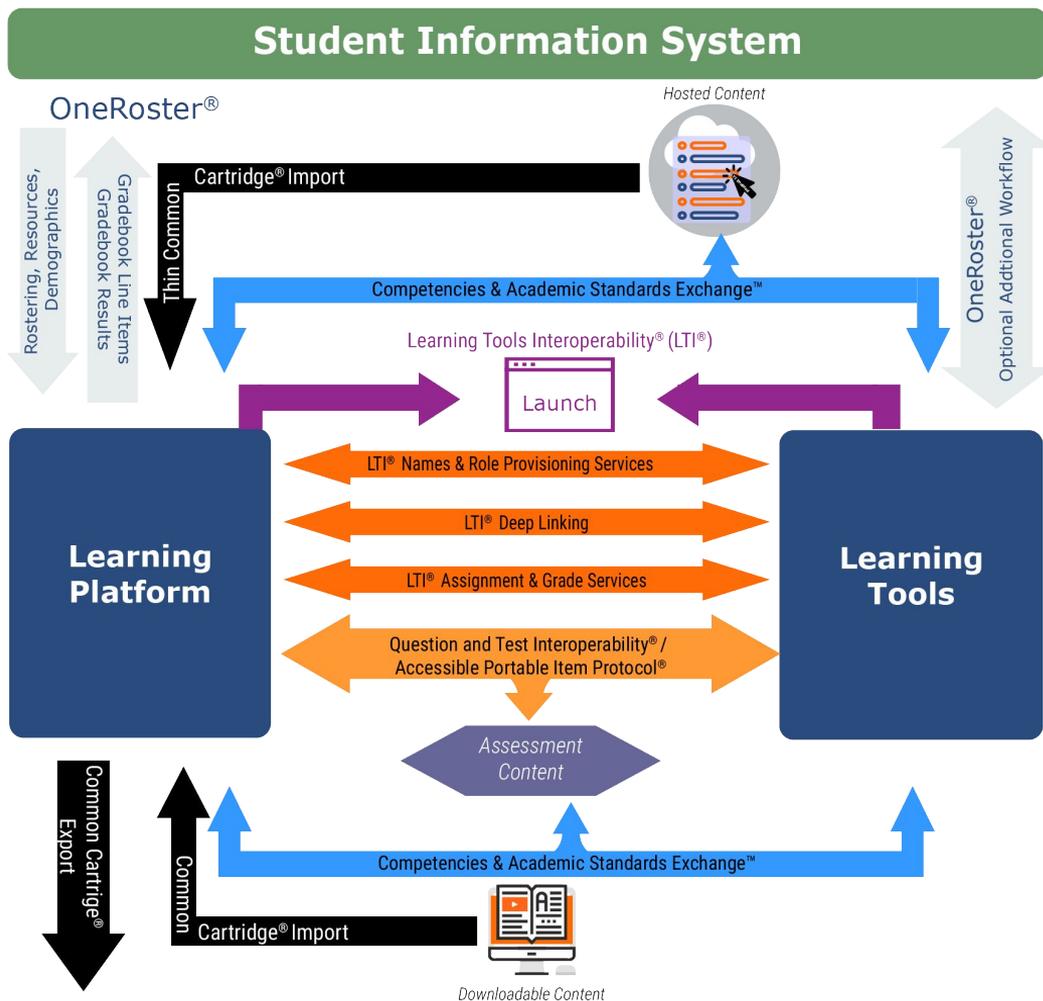
Are your suppliers IMS Certified?

# Are your suppliers IMS Certified?

"The reality is, we won't seek to be certified unless our customers require it. Then we will."

-Learning Platform Executive

Insist on Certified LTI Products

Reliability *Guaranteed backing of expert IMS technical staff*

Security and Privacy *Secure and controllable data exchange*

Usability *Tool integrations that meet the highest industry standards*

Choice *Virtual catalog of certified-compatible teaching and learning tools and digital curriculum*

Additional Resources

- [LTI & LTI Advantage Technical Activity](#)

- [LTI 1.3 Implementation Reference Tool](#)

- [5 Ways LTI Advantage Enables Better User Experiences](#)

- [Sample RFP Language and Checklists](#)

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