

# Tools to Enhance and Extend Canvas



**Respondus**<sup>®</sup>  
Assessment Tools for Learning Systems

 **kaltura**



**zoom**

**LinkedIn**

 **packback**  
Fearlessly curious.

 **turnitin**<sup>™</sup>



 **iClicker**

**piazza**

  
**TOP HAT**

 **Equatio**



Twitter  
Social network company



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MATLAB Grader



Bringing textbook prices  
back down to earth



# What is LTI?



Learning Tools Interoperability (LTI) is an education technology specification developed by the [IMS Global Learning Consortium](#). It specifies a method for a learning system to invoke and to communicate with external systems.

LTI provides a framework through which an LMS can send some verifiable information about a user to a third party. For LTI to work, the third party needs to provide a consumer key and shared secret (1.1) or development key (1.3) that Canvas can use to generate a signature to verify the authenticity of the data sent.

Example: a Learning Management System (LMS) may use LTI to host course content and tools provided by external, third-party systems on a web site, without requiring a learner to log in separately on the external systems, with information about the learner and the learning context shared by the LMS with the external systems.

# Upgrade to LTI Advantage

LTI Advantage is a package of LTI services that are vetted, supported, and certified by IMS Global Learning Consortium.

Three LTI Advantage feature services:

- **Names and Role Provisioning Services**
  - Automate course enrollment into third-party tools
  - Provide faculty with reports on student activity within the tool.
- **Deep Linking**
  - Simplify course building with the easy addition of deep links to content, including content playlists and tables of content.
- **Assignment and Grade Services**
  - Dynamically update scores and comments from third-party tools into a single place, such as the LMS gradebook.

<http://www.imsglobal.org/ltiadvantage>



# LTI Advantage Conformance Certification

There are two classifications of LTI Advantage conformance certification:

## 1. LTI Advantage Complete

- Any Learning Platform or Tool that completes certification testing for LTI 1.3 Core and all three LTI Advantage services
- Certification is required for all Learning Platforms.

## 2. LTI Advantage Certified

- Any Tool that completes certification for LTI 1.3 Core and either one or two services

All certified products are issued a certification number and are listed in the [IMS Certified Product Directory](#).

# LTI Tool Sources

- External: Third-party vendors
  - Majority of LTI tools
  - Must go through software approval process
- Instructure Canvas
  - New Quizzes
  - Canvas Data
  - Canvas Commons
  - New Analytics
  - Attendance
- VT
  - Guests Tool
  - CyberRange



# What are External Apps (LTI Tools)?

- Add functionality to a Canvas course. For example, an instructor may want to include a study aid (flashcards, mini-quizzes, etc.) to help students better understand the concepts being taught.
- Can be configured on the account or course level.
- Can be added to Modules, Course Navigation, the Rich Content Editor, and Assignments.



# VT Approved LTI Tools

1. ServiceNow Knowledge Base: Search [4help.vt.edu](https://4help.vt.edu) for “LTI Tools”  
[https://vt4help.service-now.com/sp?id=kb\\_article&sysparm\\_article=KB0010778](https://vt4help.service-now.com/sp?id=kb_article&sysparm_article=KB0010778)
2. In [Canvas](#):
  - a. Navigate to a course.
  - b. In the list of tools, choose **Settings**.
  - c. In the tabs across the top, choose **Apps**.
  - d. Click the **View App Configurations** button.



# LTI Tool Request Process

1. **Initial request:** User/faculty requests LTI via ServiceNow request form.
  - [https://4help.vt.edu/sp?id=sc\\_cat\\_item&sys\\_id=9264f100db29ab0ccd2c56594b9619ee](https://4help.vt.edu/sp?id=sc_cat_item&sys_id=9264f100db29ab0ccd2c56594b9619ee)
2. **Information gathering:** Work with vendor to get forms signed and information about LTI tool.
  - HECVAT, IT Security form, FERPA agreement, Terms and Conditions, Privacy Policy
3. **Submit for approval:** Submit paperwork and form for software approval process via ServiceNow request form.
  - Must be reviewed by IT security, the registrar, IT procurement, and the University legal team.
4. **Installation:** Once approved, tool is added to Canvas by Learning Services Team.
5. **Documentation and Testing**
6. **Roll out:** User/Faculty is contacted.

# Additional LTI Tool Information

Most LTI tools are seamlessly integrated, but...

- Some LTI tools require users to log in with their credentials the first time accessing the tool.
  - Ex: Microsoft, Google
- Some LTI tools require users to have an account with the third party company.
  - Ex: Publisher tools
- Some LTI tools require cookies to load.
  - Ex: Packback, Piazza
- Some LTI tools require students to purchase a subscription and/or equipment to use.
  - Ex: iClicker, TopHat, Publisher tools

# Accessing LTI Tools In Canvas

How to access and use a tool depends on where it's integrated in Canvas:

- [Add the Course Navigation Menu](#) - Control which tools display in the Course Navigation Menu.
- [Add to an Assignment](#) - Set up a Canvas Assignment that uses the tool.
- [Add to a Module](#) - Link the tool's content or an Assignment to a Module.
- [Add to a Rich Content Editor](#) - Link the tool to a Page or to the Syllabus.
- [Add to Collaborations](#) - Use the tool inside of Canvas Collaborations.

[https://vt4help.service-now.com/sp?id=kb\\_article&sys\\_id=45571cb10f378240d3254b9ce1050e28](https://vt4help.service-now.com/sp?id=kb_article&sys_id=45571cb10f378240d3254b9ce1050e28)

# LTI Tool Support - Getting Help

Check Canvas LTI ServiceNow Knowledge Base page for help with LTI tools

- Search [4help.vt.edu](https://4help.vt.edu) for “LTI Tools”  
[https://vt4help.service-now.com/sp?id=kb\\_article&sys\\_id=45571cb10f378240d3254b9ce1050e28](https://vt4help.service-now.com/sp?id=kb_article&sys_id=45571cb10f378240d3254b9ce1050e28)
  - Use ctrl+F to search for tool in question
  - If unsure, open an incident at 4help.vt.edu and will be directed to correct place for help
- Most third party tools, especially textbook LTI apps, are supported by third party company.

# Questions?

