These questions will help you in your conversations with publishers or other online content providers. This guide can serve as a starting point in determining integration capabilities of various vendors.

Do you have the ability to integrate within an LMS?

When asking this question, keep in mind that not all integrations are created equal. Even if two companies say they are LTI compliant, how students get accounts, where the content lives, and the level of integration can look very different. Integrations will vary from product to product.

Bonus Question: Are you IMS Global Certified?

This is the best case scenario. At any rate, it's nice for us to ask this explicitly so that publishers begin to hear how important this type of interoperability is. If they are IMS Global Certified, ask the supplier to provide the IMS Global Conformance Certification number. Take a look at the IMS website and look up the product for detailed information about the integration.

itslearning IMS Certifications:

CC V1.2	Thin CC V1.3	OneRoster V1	LTI V1.0
			LTI V1.1

Ask the "content supplier to provide IMS Common Cartridge [or Thin CC] conformant content in the same version that [itslearning] supports" (IMS Global Learning Consortium, Inc., 2015).

How do students and staff get their accounts?

This question determines the amount of work on our end. If you check out the flow chart following this guide, you will see that manually creating accounts can add a lot of preparation time. When the online content tool automatically creates accounts for users in the Learning Hub, this is called provisioning. Some guiding questions that will help you find this answer:

- Are accounts necessary once an integration has been created with itslearning?
- Are accounts manually created in the online content platform?
- Will the IT department need to create a nightly CSV file to upload to the publisher's system?
- Does the vendor provide provisioning where accounts are created when a user logs into itslearning?
- Pro Tip: A tool that does not require accounts or provides automatic provisioning will be the least amount of work for us to set up.

Where do students and staff find the resources once the integration is complete?

This question needs to cover log in information and where in itslearning the content can be found. Here are some additional questions to ask regarding this topic:

- Do you have common cartridge or thin common cartridge (TCC preferred), LTI, or a combination of both?
- Does the content require a login or access code or will it be single sign on (SSO) once the user is in itslearning?
- Is the content provided via common cartridge and loaded into the library?
- Is the content added as an SSO/LTI link to login to the content on the vendor's platform?
- Is the content provided as a resource or activity that can be added directly inside the course using LTI and not loaded into the library?
- When added to a course, how is it viewed? Is the material provided through a link to an outside page? Does it load as an embedded iFrame of content?
- Are there special requirements for accessing content? Is the content available for all users or only a specific subset of users?

Specific question about common cartridges: How are common cartridge files tagged?

The metadata that is used to tag common cartridges are extremely important when considering how content will be searched and located in the library. Metadata to ask about:

- Indiana standards
- Keywords
- Grade level
- Resource type

There are plenty of other ways to tag cartridges. Let the vendor know how important it is for the content to be tagged in multiple ways to create ease of use for both staff and students.

Specific question about common cartridges: What is included in the cartridge(s)?

The following resource types could be included in a common cartridge:

- Web links
- Files
- Associated Content (a resource type that contains a collection of files)
- QTI Assessment Items
- Discussion Forums
- Embedded Files APIP, Interactive Whiteboard, EPub NOT compatible with itslearning unless it is in a Thin CC format

Is there data collected when this content is used? If so, how do teachers access that information?

If any information is collected or data is saved using the integrated tool, it is important to know how that information is stored.

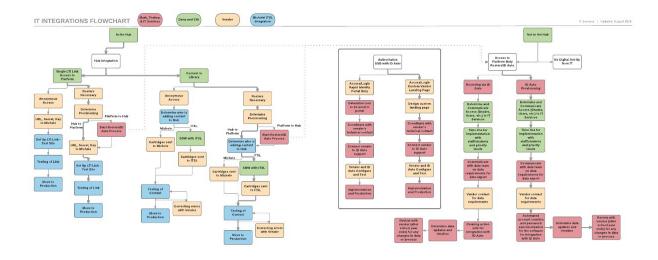
- Is the data stored within the LMS and accessible for the teacher? In the gradebook, for example?
- Do the teachers need to access assessment data and usage reports by logging into a separate platform?
- Are some data collection features lost during an integration?

Can I see a demo of an existing integration?

This is a critical question because of all of the diverse ways that a company can integrate with an LMS. If they have done an integration before, even if it is in a different platform than itslearning, ask to see how it works in action. This will help you better understand what the integration will look like for us and also hold the vendors accountable to their promises.

IT Integrations Flowchart

Clicking on this image will provide you a link to see an enlarged version. The flowchart is color-coordinated to demonstrate responsibilities across departments.



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