

Learning Tools Interoperability (LTI)

Integration for Lt

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Prerequisites

1. Your Lt instance will need LMS integration enabled. If LMS integration has not yet been enabled or you're unsure, contact your ADInstruments Customer Success Manager.
 2. The integration setup requires an administrator account in both your Lt instance (Instance Administrator) and your LMS. See the [appendix](#) for more information.
 3. A lesson must first be published in Lt before you can link it to your LMS.
 4. If you have used a pre-existing LMS integration with your Lt instance, you will need to disable this first. This will not affect student access or data in Lt or your LMS.
-

How the Integration Works

First, a link between your Lt instance and your LMS site must be created; this link uses the [Learning Tools Interoperability \(LTI\)](#) standard. The steps for creating these links for [Blackboard](#), [Brightspace D2L](#), [Canvas](#), and [Moodle](#) are detailed below.

When your Lt Instance and LMS site are integrated, Lt lessons can be linked and student accounts and student grades can be synced. Student accounts are provisioned when they access a Lt link. Staff must have an active Lt account.

The link to the **Lt lesson** is key because of the following:

- The Lt course that the linked Lt lesson is in, is the Lt course student accounts will be added to when they follow the link or are synced. This means in order to manually sync Lt student accounts to Lt, there must be at least one Lt lesson linked to an LMS course.
- The grades associated with the linked Lt lesson are those that will be synced to your LMS gradebook.

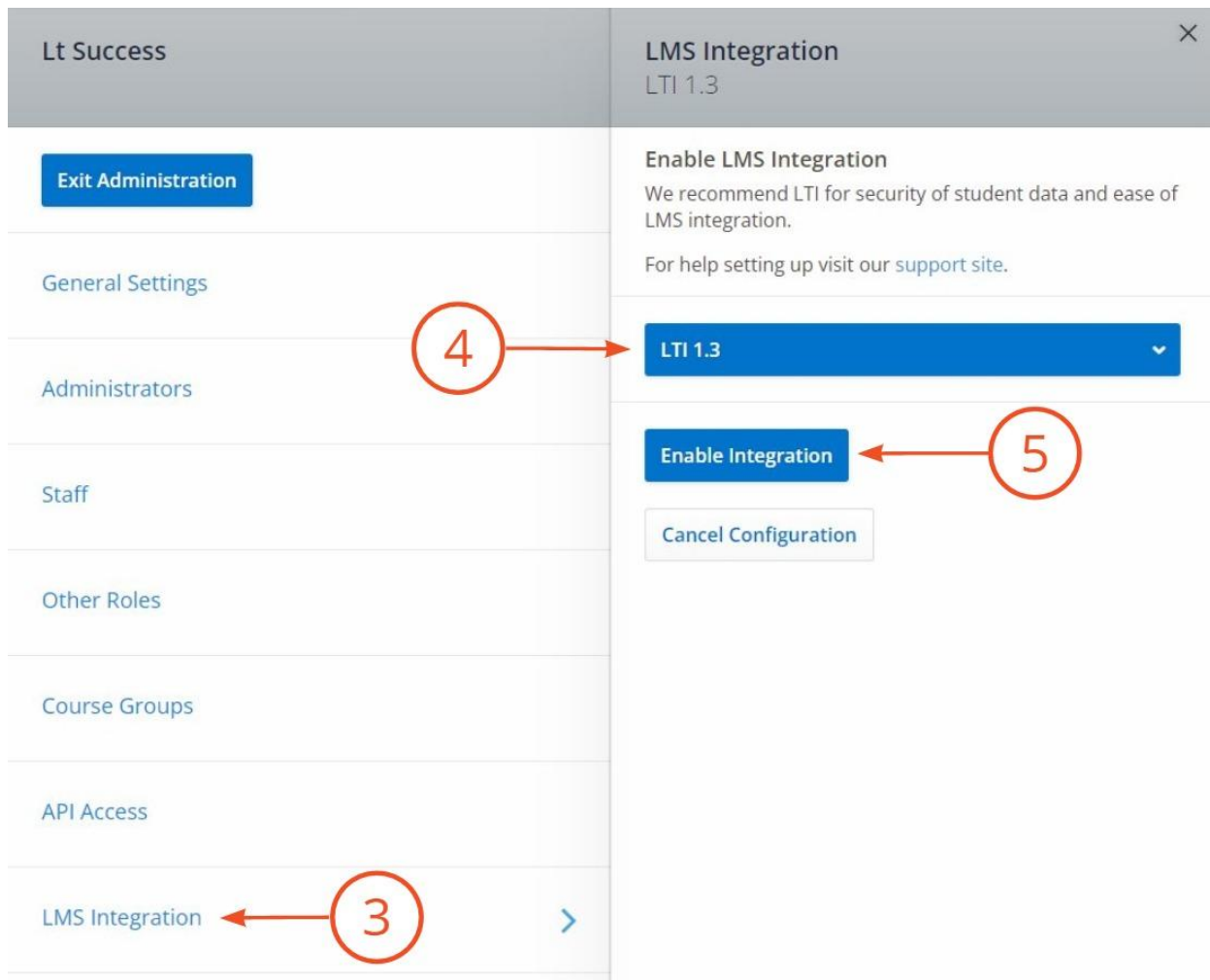
When selecting a link to an Lt lesson from an LMS course:

- **Students** will access the Lt lesson in a new browser tab.

- **Staff** will access the area in which students and grades can be synced.

Enabling LTI integration in your Lt instance

1. As Instance Administrator, log into your Lt instance at ltlogin.com
2. Select **Instance Administration**
3. Select **LMS Integration**
4. Select **LTI 1.3** from the list
5. Select **Enable Integration**



The screenshot shows the 'Lt Success' interface with a sidebar on the left and a main content area on the right. The sidebar contains the following menu items: 'Exit Administration' (a blue button), 'General Settings', 'Administrators', 'Staff', 'Other Roles', 'Course Groups', 'API Access', and 'LMS Integration'. The 'LMS Integration' item is highlighted with a blue background and a right-pointing chevron, and is pointed to by a red arrow labeled with a circled '3'. The main content area is titled 'LMS Integration LTI 1.3' and contains the following elements: 'Enable LMS Integration' section with explanatory text and a support link; a dropdown menu currently showing 'LTI 1.3' (pointed to by a red arrow labeled with a circled '4'); an 'Enable Integration' button (pointed to by a red arrow labeled with a circled '5'); and a 'Cancel Configuration' button.


Choose your LMS

- [Blackboard](#)
 - [Brightspace D2L](#)
 - [Canvas](#)
 - [Moodle](#)
-

Blackboard Integration

Setting Up Your Blackboard Site

1. As a Blackboard admin, select **Admin**
2. Under **Integrations**, select **LTI Tool Providers**
3. Select **Register LTI 1.3/Advantage Tool**
4. Enter the Application/Client ID for your region, found [here](#)

 **Note:** Your region can be identified at the start of your Lt instance URL; [region].kuracloud.com, e.g. syd1.kuracloud.com

5. Select **Submit**
6. Copy the **Tool Name** and **Deployment ID**, you will need these later
7. Set the **Tool Status** to **Approved** now, or you can set it later if you prefer

TOOL STATUS


The following fields are read-only, but you can toggle the status of this tool


Client ID	
Name	[Tool Name]
Description	
Deployment ID	[Deployment ID]
Initiate Login URL	https://.kuracloud.com/lti/login
Tool Redirect URLs	https://.kuracloud.com/lti/launch
JWKS URL	https://.kuracloud.com/lti/jwks
Domains	syd1.kuracloud.com syd1-lti.kuracloud.com accounts.kuracloud.com
Tool Status	<input checked="" type="radio"/> Approved <input type="radio"/> Excluded

- Under Institution Policies
 - All **User Fields to Send** (Role in Course, Name, and Email Address) should remain enabled.
 - **Allow grade service access** remain **Yes**.
 - a. **Allow Membership Service Access** remain **Yes**

8. Select **Submit**

9. Find your newly added tool in the list of tools

 **Note:** You can find the tool name for your region [here](#). If there are many tools listed, select **Show All** and search for your tool name using your browser's search function.

10. Hover over your tool's name, select the options button (), and select **Manage Placements**

11. Select **Create Placement**

12. Enter an appropriate **Label**, this is the name staff will use to find this tool

13. Enter an appropriate **Handle**, a name for this placement

14. Leave **Availability** set to **Yes**

15. Under **Type**

a. **Deep Linking content tool** enabled

b. **Allow Student access** disabled

16. Enable **Launch in New Window**

17. Copy the **Target Link URI** for your region from [here](#) and insert into **Target Link URI**

18. In the **Tool Provider Custom Parameters** enter *instanceid=XXXXXX*. Replacing 'XXXXXX' with your Lt instance Id, found in your instance URL; 'kuracloud.com/i/XXXXXX/'

☐ Proctoring tool
☐ Base navigation tool
☐ Course navigation tool

Launch in New Window ☒ 17

Icon Upload a custom icon that will be shown in the course. The size of the icon should be 50 by 50 pixels.

TOOL PROVIDER INFORMATION


Enter the Tool Provider Information. The Tool Provider URL must be located on one of the configured host names.

* Target Link URI 18

Tool Provider Custom Parameters

instanceid=[Instance URL] 19

19. Select **Submit**

 **Note:** If you are connecting more than one Lt instance to Blackboard, repeat the Create Placement steps for each Lt instance. Ensure you have the correct instance ID for each placement.

Adding a Registration to Lt

1. Navigate to your **Lt Instance Administration** page
2. Select **New Registration**

LMS Integration LTI 1.3	LTI Registrations
<div>Tool Settings</div>	<div>New Registration 2</div>
<div>LTI Registrations ></div>	
<div>Disable LTI Integration</div> <p>Disabling this integration will delete your LTI registrations. Students can still access Lt courses directly through our login page.</p>	

3. Fill out the following fields, most of which are found in [the Region Details table](#)
 - a. **Display Name:** A name of your choice, this is only used to identify the registration in this interface
 - b. **Issuer / Platform ID:** <https://blackboard.com>
 - c. **Client ID:** the Client Id for your region from [the Region Details table](#) below
 - d. **Deployment IDs:** the Deployment Id from the blackboard tool setup you recorded above
 - e. **Public Keyset URL (JWKS):** Public Keyset URL for your region from [the Region Details table](#) below
 - f. **Access Token URL:** Access token URL for your region from [the Region Details table](#) below
 - g. **Authentication Request URL:** Authentication Request URL for your region from [the Region Details table](#) below
 - h. **OAuth2 Audience (Optional):** Leave this field blank.

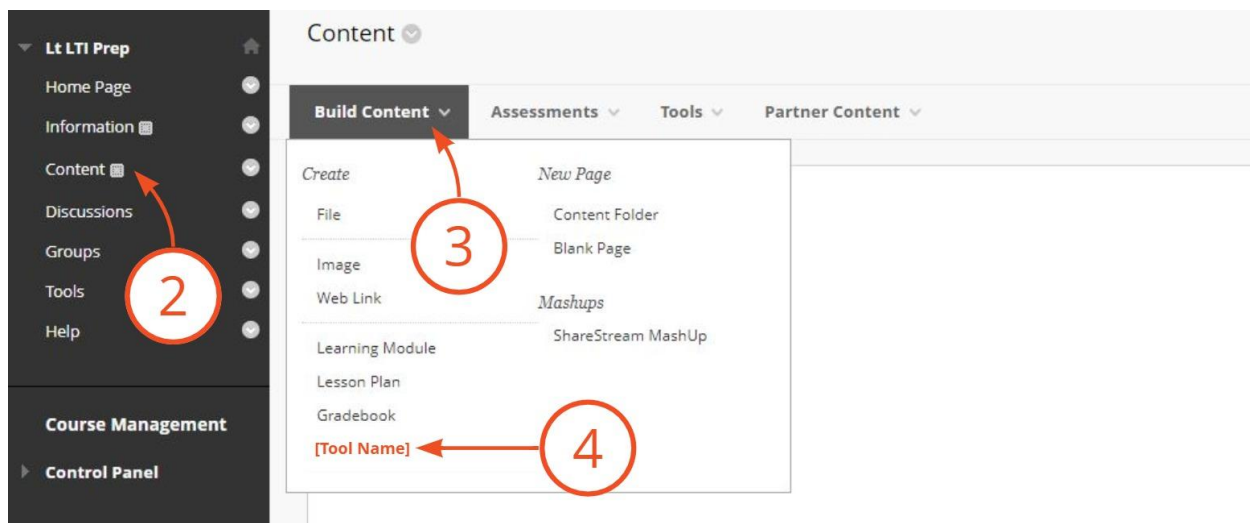
Region Details


[Return to Setting up your Blackboard Site](#) | [Return to Adding a Registration to Lt](#)

Eu1	
Tool Name:	Lt - LTI 1.3 Europe
Target Link URI:	https://eu1-lti.kuracloud.com/lti/launch
Issuer:	https://blackboard.com
Application/Client ID:	4cae9f0d-2618-46c2-944d-e9f0fe4765cc
Public keyset URL:	https://developer.blackboard.com/api/v1/management/applications/4cae9f0d-2618-46c2-944d-e9f0fe4765cc/jwks.json
Access token URL:	https://developer.blackboard.com/api/v1/gateway/oauth2/jwttoken
Authentication request URL:	https://developer.blackboard.com/api/v1/gateway/oidcauth
Saeast1	
Tool Name:	Lt - LTI 1.3 South America
Target Link URI:	https://saeast1-lti.kuracloud.com/lti/launch
Issuer:	https://blackboard.com
Application/Client ID:	4bb41ce1-7ce4-4a2f-b45d-cb4ec61a7ac7
Public keyset URL:	https://developer.blackboard.com/api/v1/management/applications/4bb41ce1-7ce4-4a2f-b45d-cb4ec61a7ac7/jwks.json
Access token URL:	https://developer.blackboard.com/api/v1/gateway/oauth2/jwttoken
Authentication request URL:	https://developer.blackboard.com/api/v1/gateway/oidcauth
Syd1	
Tool Name:	Lt - LTI 1.3 Australia
Target Link URI:	https://syd1-lti.kuracloud.com/lti/launch
Issuer:	https://blackboard.com
Application/Client ID:	6aa850fc-6887-4772-9493-6bc3a15c3ece
Public keyset URL:	https://developer.blackboard.com/api/v1/management/applications/6aa850fc-6887-4772-9493-6bc3a15c3ece/jwks.json
Access token URL:	https://developer.blackboard.com/api/v1/gateway/oauth2/jwttoken
Authentication request URL:	https://developer.blackboard.com/api/v1/gateway/oidcauth
Useast1	
Tool Name:	Lt - LTI 1.3 USA
Target Link URI:	https://useast1-lti.kuracloud.com/lti/launch
Issuer:	https://blackboard.com
Application/Client ID:	ddcb1645-94ff-40c3-932d-3e59c3550fbc
Public keyset URL:	https://developer.blackboard.com/api/v1/management/applications/ddcb1645-94ff-40c3-932d-3e59c3550fbc/jwks.json
Access token URL:	https://developer.blackboard.com/api/v1/gateway/oauth2/jwttoken
Authentication request URL:	https://developer.blackboard.com/api/v1/gateway/oidcauth

Adding Content to Your Course

1. Navigate to the course you wish to link Lt content to
2. Select **Content**
3. Select **Build Content**
4. Select the **Lt tool** as named during the Blackboard setup. The content selection interface will open in a new tab

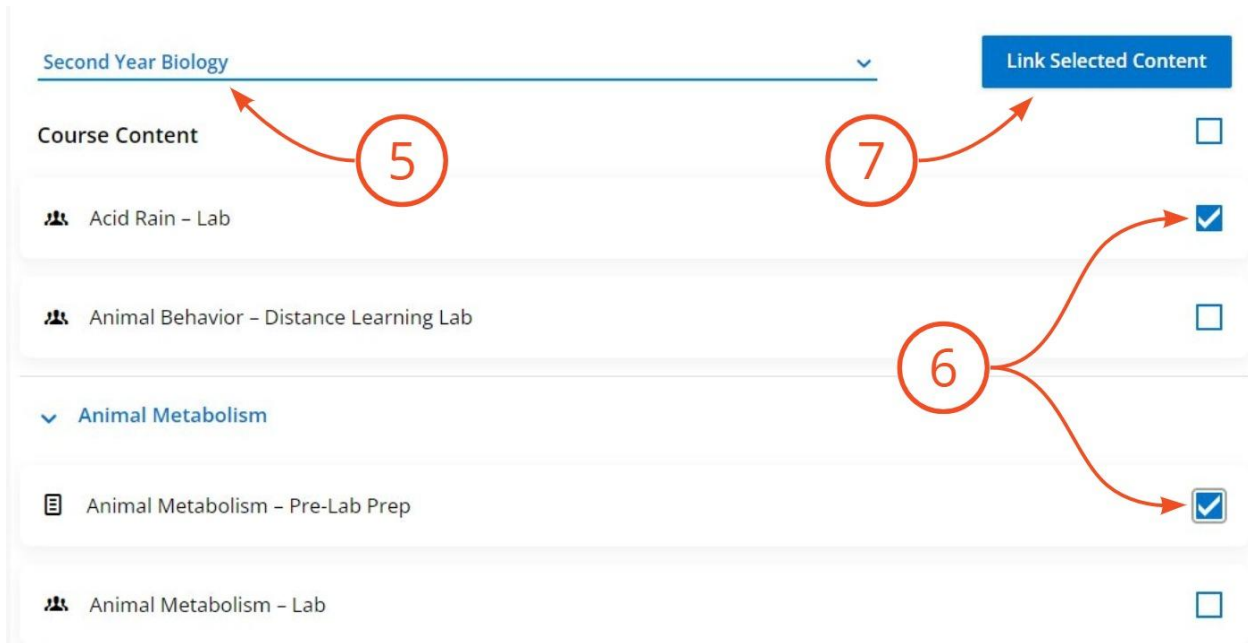


 **Note:** When you first open the Lt tool you will be asked to log in with your Lt account. This will link your LMS and Lt accounts to determine what content is visible to you and what permissions you have. If you don't yet have an Lt account, talk to an Instance Administrator for your Lt instance or your ADInstruments representative.

5. Select the **[Lt course name]** to see a dropdown menu of all Lt courses you have access to
6. Select the **Lt lesson(s)** you wish to link to from within the selected Lt course

 **Note:** Only those lessons that have been published in the Lt course will appear

7. Select **Link Selected Content**



The screenshot shows the Blackboard interface for a course titled "Second Year Biology". The "Course Content" area is visible, containing several items. Annotations are as follows:

- 5**: Points to the "Course Content" header.
- 6**: Points to the checkboxes for "Acid Rain - Lab", "Animal Behavior - Distance Learning Lab", and "Animal Metabolism - Pre-Lab Prep".
- 7**: Points to the "Link Selected Content" button.

The items listed in the Course Content area are:

- Acid Rain - Lab
- Animal Behavior - Distance Learning Lab
- Animal Metabolism (expanded)
 - Animal Metabolism - Pre-Lab Prep
 - Animal Metabolism - Lab

8. If successful, a **Success** notification will display. Close this tab and return to the **Content** area of your Blackboard course


Continue to [Syncing Students and Grades](#).

Brightspace D2L

Setting Up Your D2L Site

Register a Tool

1. As an administrator select the Admin Tools cog in your Brightspace D2L site
2. Select **Manage Extensibility**
3. Choose the **LTI Advantage** tab
4. Select the **Register Tool** button
5. Complete the following fields:
 - a. **Name:** A name to identify this tool
 - b. **Description:** A description of the tool
 - c. **Domain:** The Tool URL from the Lt Tool Settings
 - d. **Redirect URLs:** The Launch URL from the Lt Tool Settings
 - e. **OpenID Connect Login URL:** The Login URL from the Lt Tool Settings
 - f. **Target Link URI:** The Launch URL from the Lt Tool Settings
 - g. **Keyset URL:** The Public Keyset URL (JWKS) from the Lt Tool Settings
 - h. **Extensions:** Enable the Assignment and Grade Service, Deep Linking, and Names and Role Provisioning Services extensions
 - i. **Roles:** This is optional.


 **Note:** Enabling *Send Institution Roles* can cause issues for some users but it is necessary for your administrators to interact with the tool without being added to courses. [See below for more information.](#)





- j. **Substitution Parameters** and **Custom Parameters** should be left blank
6. Ensure the tool is **Enabled**
7. Select **Save**


 **Note:** You will be presented with Brightspace Registration Details for your newly


registered tool, you should record these as you will need them later.


8. Select **View Deployments** to move to the next step, [Adding a Deployment](#)










D2L Support







External Learni...




Remote Plugins




ePortfolio



Insights Portal



Data Hub



Dashboard Cou...

Edit IMS Reference Implementation

Enabled

☒

Name *

Description

Domain *

Redirect URLs *

https://[region]-lti.kuracloud.com/i/example/lti/launch

×

+ Add Redirect URL


OpenID Connect Login URL *

Keyset URL

Extensions

☒ Assignment and Grade Services
☒ Deep Linking
☒ Names and Role Provisioning Services

Roles

☒ Send Institution Role 

Roles, Org Units and Mappings

D2L Brightspace allows for custom Roles and Org Units, if you are utilizing these you must ensure they are mapped correctly to LTI standard types. These can be checked and changed in the **Admin Tools > IMS Configuration** menus.

Any place that the integration is to be used must be mapped to at least one of the LTI types or adding content will fail.

Roles Should be mapped to appropriate staff, admin or student LTI roles. Any user with the Student or Learner roles will be treated as a student when using the tool and be unable to add content or access the admin interface for mapped content.

Enabling *Send Institution Role* while registering the tool will cause all associated roles to be sent to Lt to determine behaviour, Admins that are not actually added to a course will require this enable to interact with the tool so some role is sent through. However, this may cause Staff that are students in other courses to be identified incorrectly.

Disabling *Send Institution Role* will only send the Context Roles the user has in the active course. However, administrators will not be able to use the tool unless they are explicitly added to the course.

Adding a deployment

 **Note:** If you have not come from [Register a Tool](#) then select the **Admin Tools** cog and then **External Learning Tools**

9. From the **LTI Advantage Deployments** tab select **New Deployment**

10. Complete the following fields:

- a. **Tool:** Select the tool as named during registration
- b. **Name:** name to identify this deployment
- c. **Description:** description for the deployment
- d. **Extensions:** Enable the Assignment and Grade Service, Deep Linking, and Names and Role Provisioning Services extensions
- e. **Security Settings:** Enable
 - i. Org Unit Information
 - ii. User Information
 1. Email
 2. User ID
 - iii. Link Information

1. Title

2. Description

iv. Classlist including users not known to tool

v. Open as External Resource


vi. Grades create by LTI will be included in Final Grade

11. Select **Add Org Units** button









12. Select any appropriate Courses or organizational units







13. Select **Add**

14. Select **Save**

 **Note:** You will be presented with a Deployment ID, you should record this as you will need it later.

15. Select **View Links** to move to the next step, [Adding a Link](#)

External Learn... Remote Plugins ePortfolio Insights Portal Data Hub Dashboard Cou...

Deploy Tool

Enabled

Tool *

Tool as named during Registration

Name *

A name for your deployment

Description

A description for your deployment

Extensions

☒ Assignment and Grade Services

☒ Deep Linking

☒ Names and Role Provisioning Services

Security Settings

Select the information to share with the tool:

☐ Anonymous

☒ Org Unit Information

☒ User Information

☐ Name

☐ First Name

☐ Middle Name

☐ Last Name

☒ Email

☒ User ID

☐ Username

☐ Org Defined Id

☒ Link Information

☒ Title

☒ Description

☒ Classlist including users not known to tool

Substitution Parameters

What are Substitution Parameters used for?

No items found.

+ Add Substitution Parameter

Custom Parameters

What are Custom Parameters used for?

No items found.

+ Add Custom Parameter

Make tool available to:

Add Org Units

Relevant Org Units

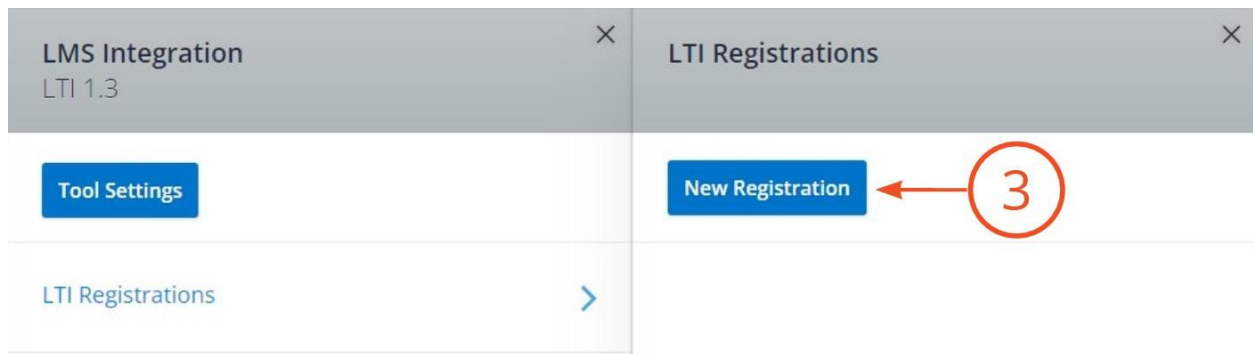
Create Deployment Cancel

Adding a Link

1. Fill out the following fields:
 - a. **Name:** A name to identify the links, this is what your staff will be using to identify the tool
 - b. **URL:** The Launch URL from the Lt Tool Settings
 - c. **Description:** A description for your staff to identify the tool
 - d. **Type:** Select DeepLink Quick Link or DeepLink Insert Stuff depending on how your staff would prefer to use the tool
2. Select the Save and Close button

Adding a Registration to Lt

1. Navigate to your **Lt Instance Administration** page and select OK to exit Tool Settings
2. Select **LTI Registrations**
3. Select **New Registration**



4. Fill out the following fields:
 - a. **Display Name:** A name of your choice, this is only used to identify the registration in this interface
 - b. **Issuer / Platform ID:** your D2L website as shown under Issuer in the Brightspace Registration Details in D2L

- c. **Client ID:** the Client ID from the tool Brightspace Registration Details in D2L
- d. **Deployment IDs:** the Deployment Id copied from the Brightspace Deployment Details in D2L
- e. **Public Keyset URL (JWKS):** the Brightspace Keyset URL from the Brightspace Registration Details in D2L
- f. **Access Token URL:** <https://auth.brightspace.com/core/connect/token>
- g. **Authentication Request URL:** the OpenID Connect Authentication Endpoint from the Brightspace Registration Details in D2L
- h. **OAuth2 Audience (Optional)*:** <https://api.brightspace.com/auth/token>
*This is required for BrightspaceD2L.

5. Select **Done**

Registration details

Enter the configuration details from your LMS to complete the registration of our tool:

Display Name (name of your choice)

Issuer / Platform ID

Client ID

Deployment IDs (separate IDs with a comma - if more than one)

Public Keyset URL (JWKS)

Access Token URL

Authentication Request URL

OAuth2 Audience (Optional)


[Cancel](#)

[Done](#)

Adding Content to Your Course

1. Navigate to the Course that you want to add a link to
2. Select **Content**
3. Navigate to or create the **module** you want to add the link within
4. Select **Existing Activities**

5. Choose the link as [named above](#)

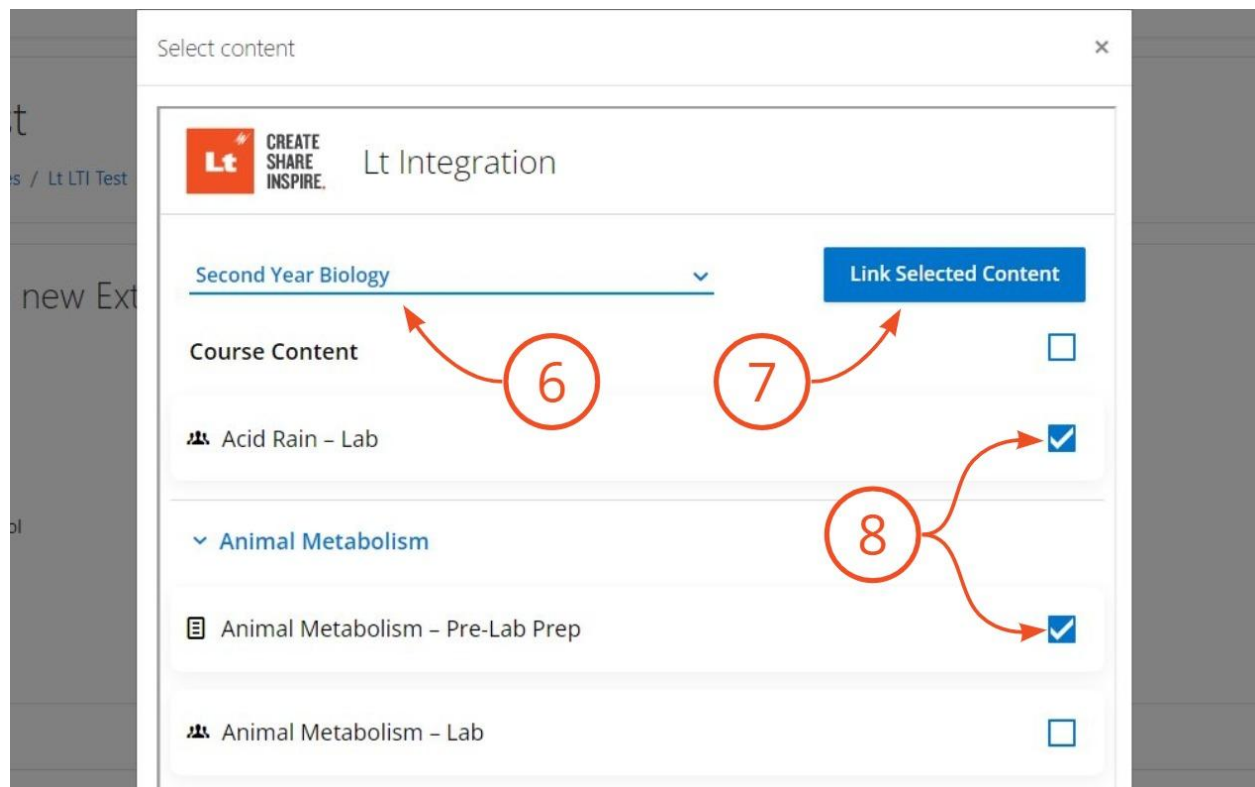
 **Note:** When you first open the Lt tool you will be asked to login with your Lt account. This will link your LMS and Lt accounts to determine what content is visible to you and what permissions you have. If you don't yet have an Lt account, talk to an Instance Administrator for your Lt instance or your ADInstruments representative.

6. Select the **[Lt course name]** to see a dropdown menu of all Lt courses you have access to

7. Select the **Lt lesson(s)** you wish to link to from within the selected Lt course

 **Note:** Only those lessons that have been published in the Lt course will appear

8. Select **Link Selected Content**

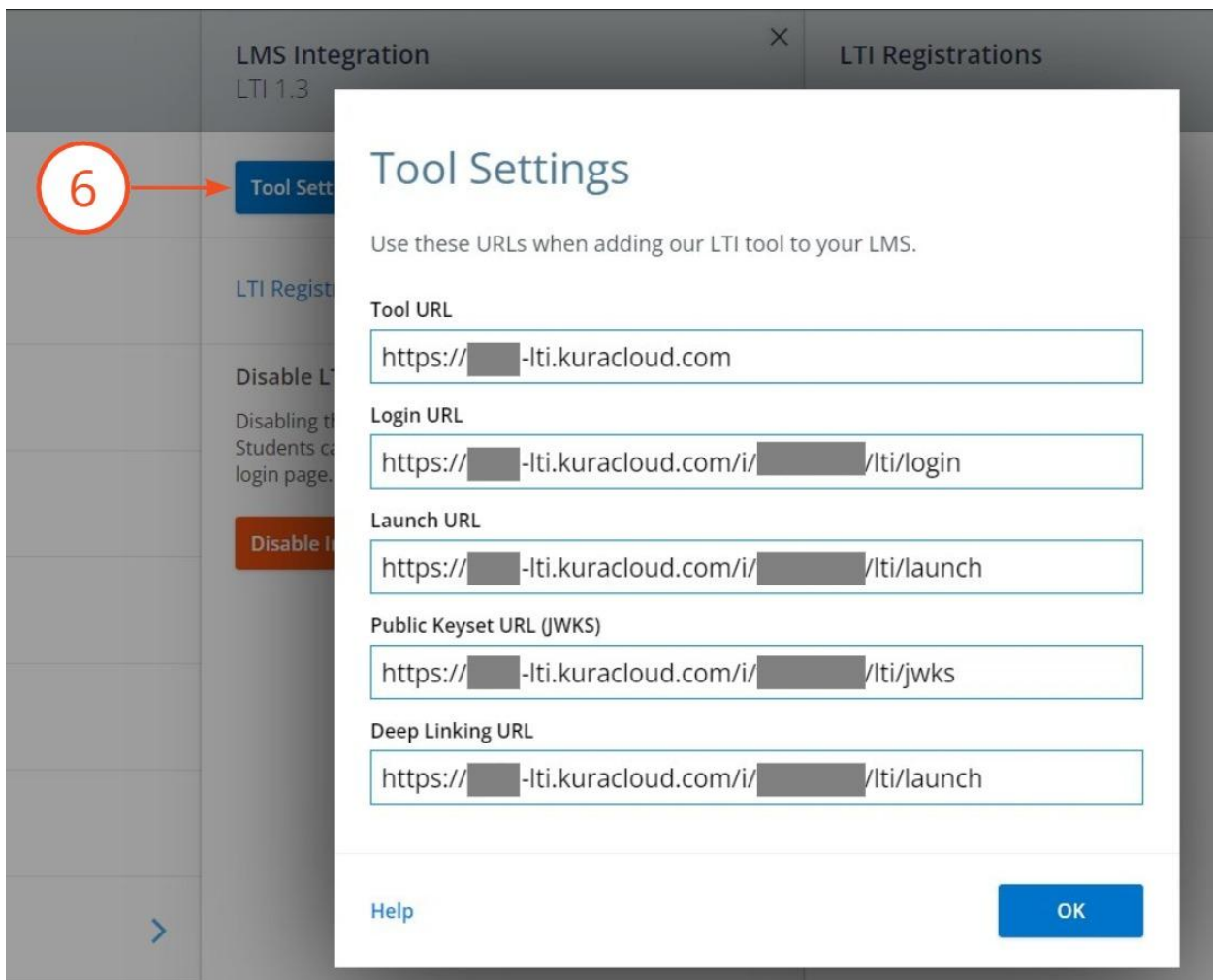


Continue to [Syncing Students and Grades](#).

Canvas Integration

Setting Up Your Canvas Site

1. As an administrator, sign in to your Canvas site
2. Select **Admin**
3. Select your account name
4. Select **Developer Keys**
5. Select **+ Developer Key**
6. Navigate to your **Lt Instance Administration** page and select **Tool Settings**



6 → Tool Settings

Tool Settings

Use these URLs when adding our LTI tool to your LMS.

Tool URL

Login URL

Launch URL


Public Keyset URL (JWKS)

Deep Linking URL

[Help](#) OK

7. Fill out the required fields, many of which are in the Lt Tool Settings
 - a. **Key Name:** A name to identify this key
 - b. **Redirect URIs:** Enter the **Launch URL** from your Lt Tool Settings
 - c. **Method:** Manual Entry
 - d. **Title:** This is the name the integration will appear as when educators use the LTI app to add Lt content to their Canvas courses
 - e. **Description:** Enter an appropriate description
 - f. **Target Link URI:** Enter the **Launch URL** from your Lt Tool Settings
 - g. **OpenID Connect Initiation Url:** Enter the **Login URL** from your Lt Tool Settings
 - h. **JWK Method:** Set to **Public JWK URL**
 - i. **Public JWK URL:** Enter the **Public Keyset URL (JWKS)** from your Lt Tool Settings
 - j. Toggle on the following **LTI Advantage Services:**
 - i. Can create and view assignment data in the gradebook associated with the tool
 - ii. Can view assignment data in the gradebook associated with the tool
 - iii. Can retrieve user data associated with the context the tool is installed in.
 - iv. Can view submission data for assignments associated with the tool.
 - v. Can create and update submission results for assignments associated with the tool
 - vi. Can look up Account information

▼ LTI Advantage Services

 Services must be supported by the tool in order to work. Check with your Tool Vendor to ensure service capabilities.


- ☒ Can create and view assignment data in the gradebook associated with the tool.
- ☒ Can view assignment data in the gradebook associated with the tool.
- ☒ Can view submission data for assignments associated with the tool.
- ☒ Can create and update submission results for assignments associated with the tool.
- ☒ Can retrieve user data associated with the context the tool is installed in.
- ☐ Can update public jwk for LTI services.
- ☒ Can lookup Account information
- ☐ Can create subscription to data service data.
- ☐ Can show subscription to data service data.

k. Under Additional Settings


i. Set **Privacy Level** to **Public**

l. Remove existing placements and add either **Assignment Selection, Editor Button** or **Link Selection** placements.

m. If using Assignment Selection set **Select Message Type** to **LtiDeepLinkingRequest**

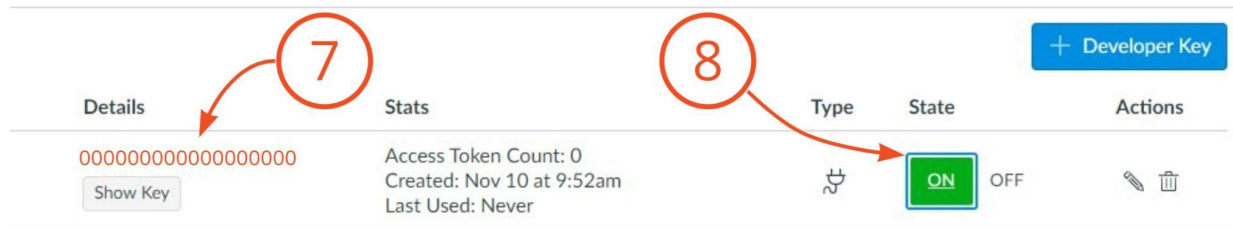
 **Note:** Use Editor Button or Link Selection placements with **caution** as syncing grades with these placements will create an assignment and a column in the gradebook; regardless of where the placements are placed. It is recommended to only use these placements for *non-graded lessons* and avoid syncing grades. If using the **Editor Button**, you will need to include the Icon URL: <https://staticfiles.kuracloud.com/lti/lt-logo-50px.png>

▼ Editor Button

 This placement requires Deep Link support by the vendor. Check with your tool vendor to ensure they support this functionality

<p>Target Link URI</p> <input style="width: 90%;" type="text"/>	<p>Select Message Type</p> <p><input checked="" type="radio"/> LtiDeepLinkingRequest</p> <p><input type="radio"/> LtiResourceLinkRequest</p>
<p>Icon Url</p> <div style="border: 1px solid #f00; padding: 2px;"> <input style="width: 95%;" type="text" value="https://staticfiles.kuracloud.com/v/1/client/img/favicon.v1.ico"/> </div>	<p>Text</p> <input style="width: 90%;" type="text"/>
<p>Selection Height</p>	<p>Selection Width</p>

- n. Select **Save**
8. Copy the 18 digit Client ID number for the newly created developer key
9. Turn the developer key **State** to *On*

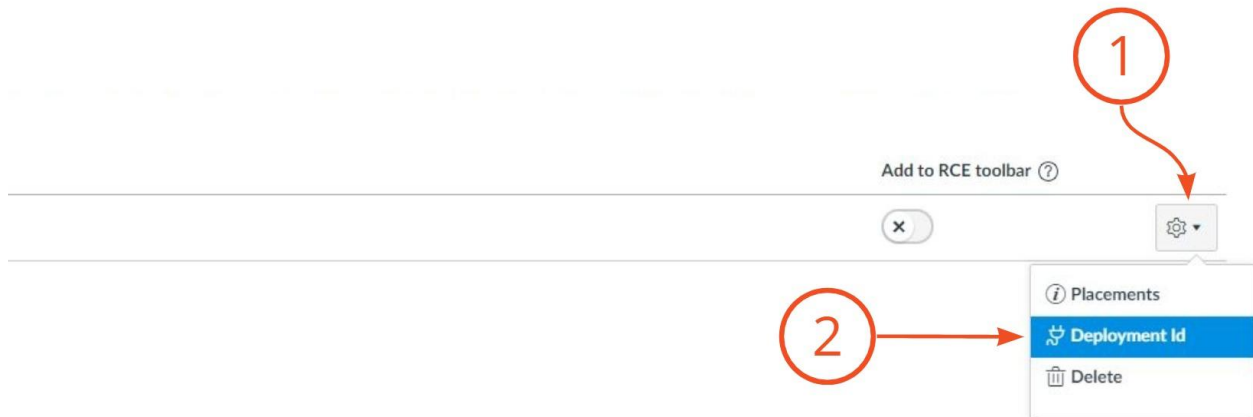


App Configuration

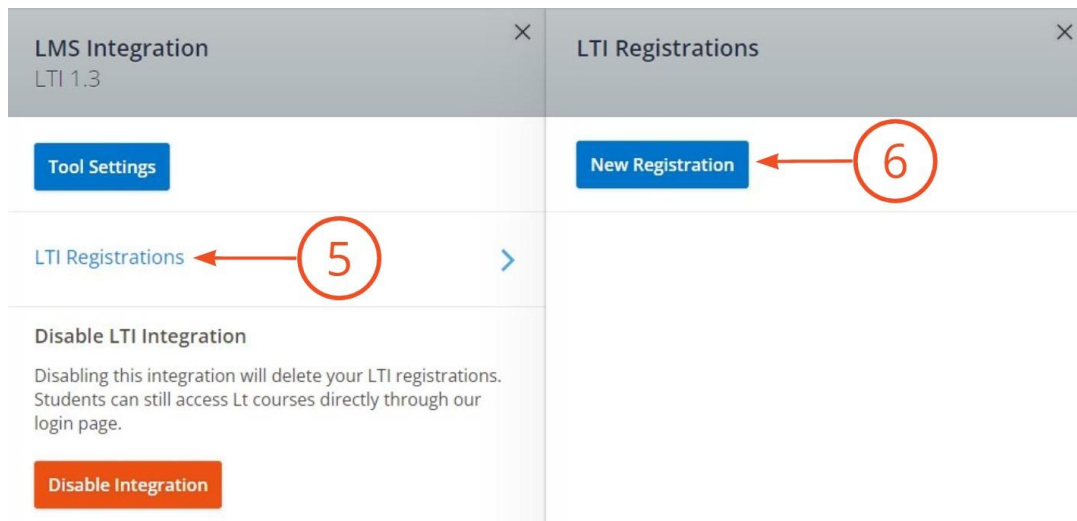
1. Enter the **Sub-Account** you wish to install the Lt app in (the app cannot be installed at the course level)
2. Select **Settings**
3. Select **Apps**
4. Select **View App Configurations**
5. Select **+App**
6. Set the Configuration Type to **By Client ID**
7. Cut and Paste in the 18 digit Client ID number into the **Client ID**
8. Select **Submit**
9. Select **Install**

Adding a Registration to Lt


1. Select the cog (gear) icon for the newly installed app
2. Select **Deployment Id** from the dropdown




3. Copy the **Deployment Id** shown
4. Navigate to your **Lt Instance Administration** page and select OK to exit Tool Settings
5. Select **LTI Registrations**
6. Select **New Registration**



7. Fill out the following fields, replacing [\[Canvas_name\]](#) with the name from your Canvas instance URL

 **Note:** If you use a vanity URL for Canvas you may need to use that in your URLs for your registration.

- a. **Display Name:** A name of your choice, this is only used to identify the registration in this interface
- b. **Issuer / Platform ID:** <https://canvas.instructure.com>

 **Note:** If you are using a Canvas Beta instance set the **Issuer/Platform ID** to:
<https://canvas.beta.instructure.com>

- c. **Client ID:** the 18 digit Client Id number generated in Canvas
- d. **Deployment IDs:** the Deployment Id copied from the app in Canvas
- e. **Public Keyset URL (JWKS):**
[https://\[Canvas_name\].instructure.com/api/lti/security/jwks](https://[Canvas_name].instructure.com/api/lti/security/jwks)
- f. **Access Token URL:** [https://\[Canvas_name\].instructure.com/login/oauth2/token](https://[Canvas_name].instructure.com/login/oauth2/token)
- g. **Authentication Request URL:**
[https://\[Canvas_name\].instructure.com/api/lti/authorize_redirect](https://[Canvas_name].instructure.com/api/lti/authorize_redirect)
- h. **OAuth2 Audience (Optional):** Leave this field blank.

Registration details

Enter the configuration details from your LMS to complete the registration of our tool:

Display Name (name of your choice)

Issuer / Platform ID

Client ID

Deployment IDs (separate IDs with a comma - if more than one)

Public Keyset URL (JWKS)

Access Token URL

Authentication Request URL

OAuth2 Audience (Optional)

[Cancel](#)

[Done](#)

8. Select **Done**

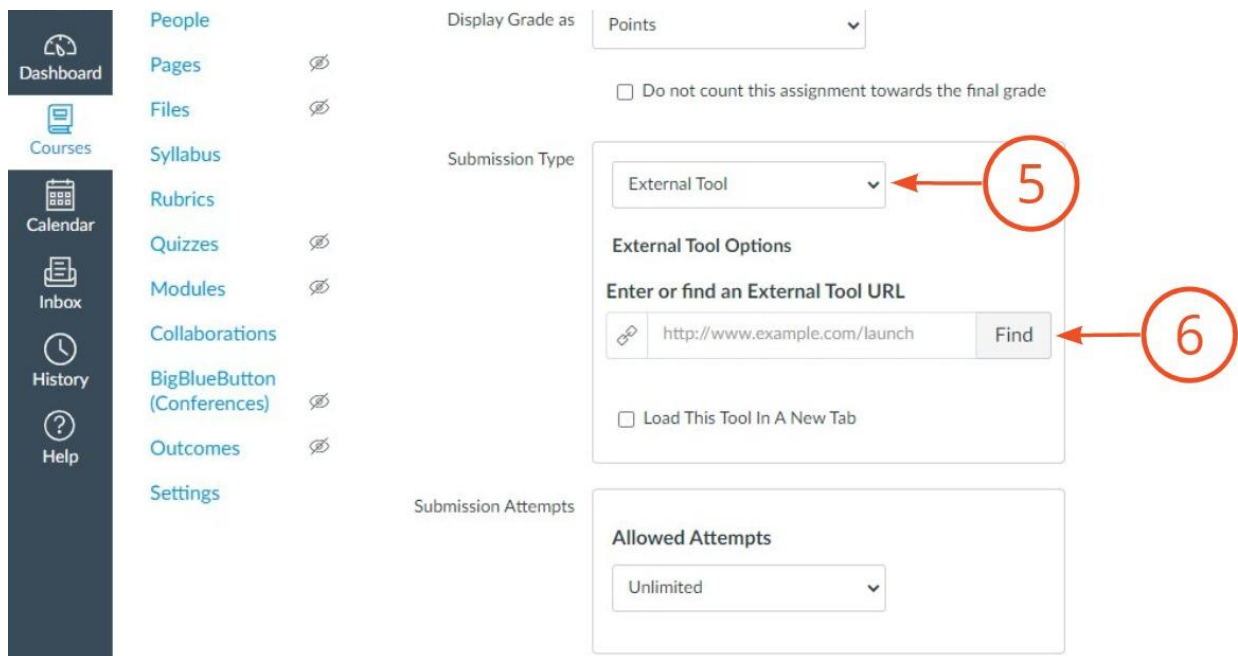
Adding Content to Your Course

Once your Lt instance and Canvas site are integrated, you can utilize Canvas' external tool function to create deep links to available Lt lessons. These links can be placed either:

- As an **Assignment**
- As an item in a **Module**
- As a link in the **Rich Content Editor**, for example, text in a page

Linking from an **Assignment**

1. Navigate to the course you want Lt content linked from
2. Select **Assignments**
3. Select **+Assignments**
4. Fill in the name and description details, including the points for the assignment
5. For the **Submission Type** select **External Tool**
6. Select **Find**



The screenshot shows the 'New Assignment' form in Canvas LMS. On the left is a sidebar with navigation links: Dashboard, Courses, Calendar, Inbox, History, and Help. The main content area has a left-hand menu with links: People, Pages, Files, Syllabus, Rubrics, Quizzes, Modules, Collaborations, BigBlueButton (Conferences), Outcomes, and Settings. The 'Submission Type' dropdown is set to 'External Tool' (indicated by a red circle with the number 5). Below this, the 'External Tool Options' section includes a text input field for the URL, which contains 'http://www.example.com/launch', and a 'Find' button (indicated by a red circle with the number 6). There is also an unchecked checkbox for 'Load This Tool In A New Tab'. The 'Display Grade as' dropdown is set to 'Points'. The 'Do not count this assignment towards the final grade' checkbox is unchecked. The 'Submission Attempts' section shows 'Allowed Attempts' set to 'Unlimited'.

7. Select the **Lt integration app** from the list of applications in the Configure External Tool modal

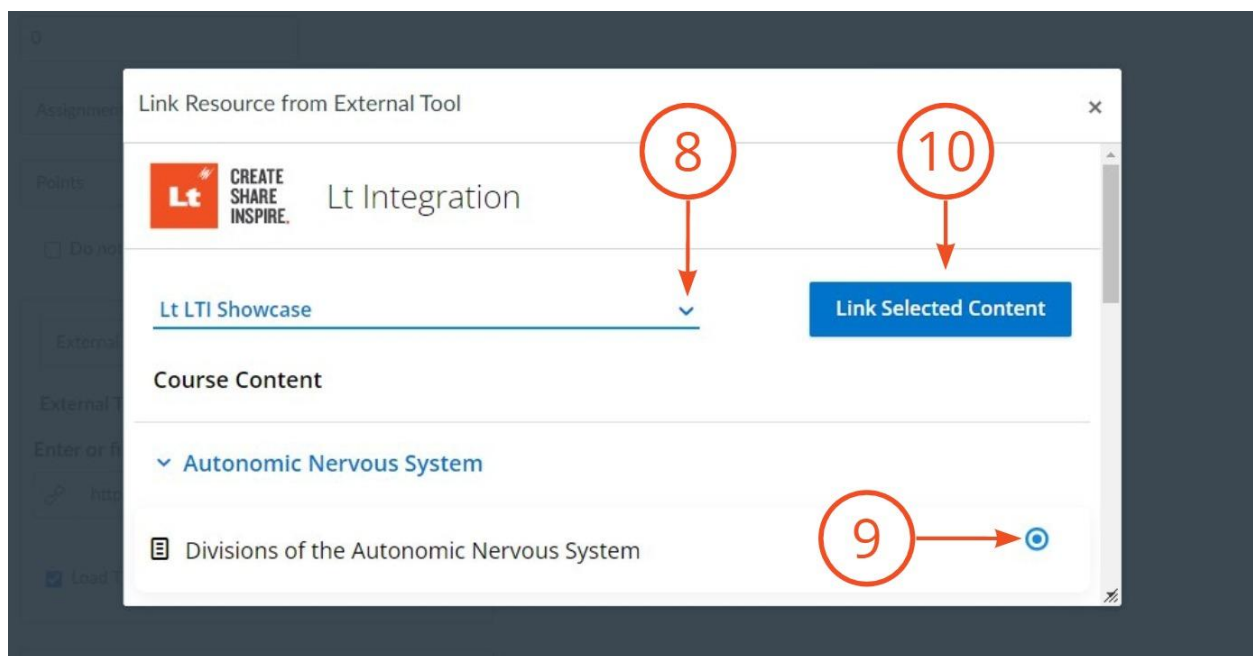
Note: When you first open the Lt tool you will be asked to login with your Lt account. This will link your LMS and Lt accounts to determine what content is visible to you and what permissions you have. If you don't yet have an Lt account, talk to an Instance Administrator for your Lt instance or your ADInstruments representative.

8. Select the **[Lt course name]** to see all Lt courses you have access to

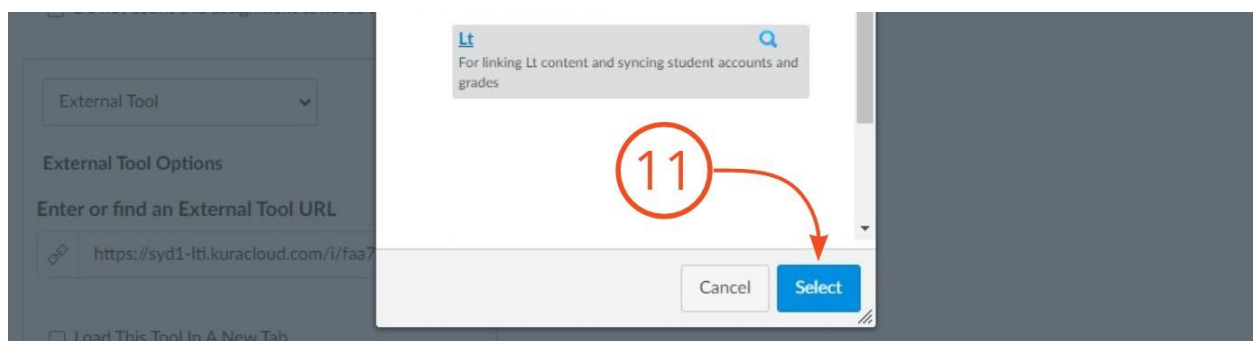
9. Select the **Lt lesson** you wish to link to from within the selected Lt course

Note: Only those lessons that have been published in the Lt course will appear

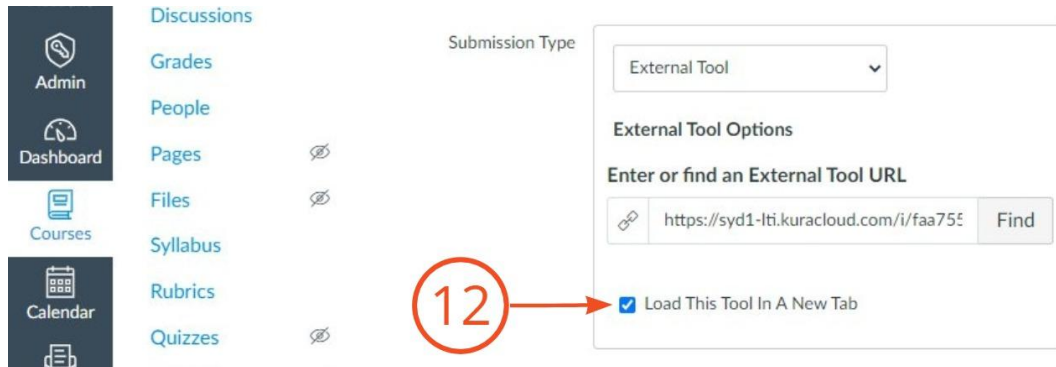
10. Select **Link Selected Content**



11. Select **Select**



12. Check the checkbox for **Load This Tool In A New Tab**



Discussions

Grades

People

Pages

Files

Syllabus

Rubrics

Quizzes

Admin

Dashboard

Courses

Calendar

Submission Type

External Tool

External Tool Options

Enter or find an External Tool URL

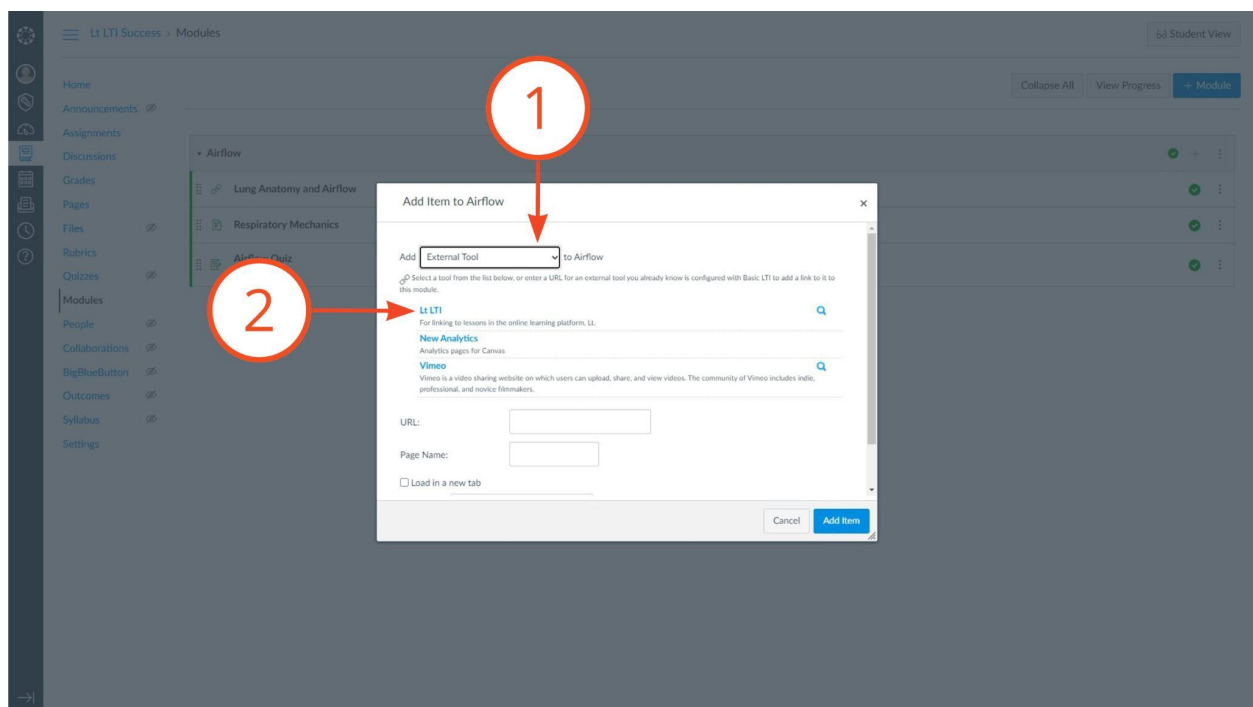
<https://syd1-lti.kuracloud.com/i/faa755> Find

☒ Load This Tool In A New Tab

13. Once all assignment details have been assigned, select **Save & Publish** or **Save** as appropriate

Linking from a **Module**

1. Add an **External Tool** item to the module of interest
2. Choose the **Lt tool** from the available list of External Tools



Home

Announcements

Assignments

Discussions

Grades

Pages

Files

Rubrics

Quizzes

Modules

People

Collaborations

BigBlueButton

Outcomes

Syllabus

Settings

Student View

Collapse All

View Progress

Module

• Airflow

Lung Anatomy and Airflow

Respiratory Mechanics

• Add Item to Airflow

Add External Tool to Airflow

Select a tool from the list below, or enter a URL for an external tool you already know is configured with Basic LTI to add a link to it to this module.

Lt LTI

For linking to lessons in the online learning platform, LT.

New Analytics

Analytics pages for Canvas

Vimeo

Vimeo is a video sharing website on which users can upload, share, and view videos. The community of Vimeo includes indie, professional, and novice filmmakers.

URL:

Page Name:

☐ Load in a new tab

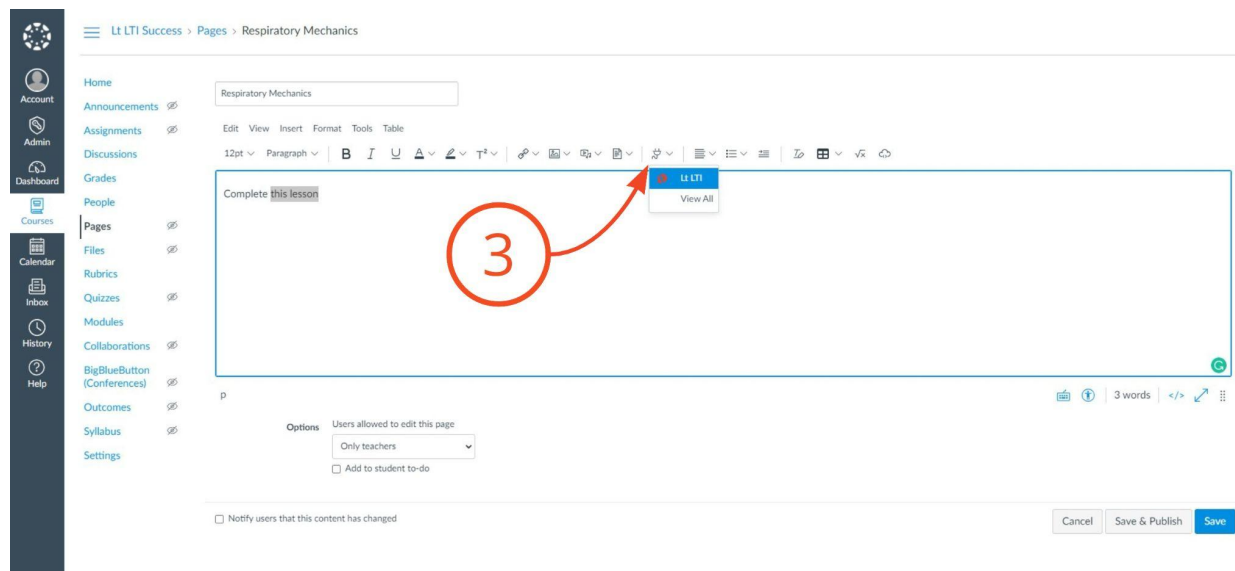
Cancel Add Item

3. Select the **[Lt course name]** to see all Lt courses you have access to
4. Select the **Lt lesson** you wish to link to from within the selected Lt course
5. Select **Link Selected Content**

6. Select **Add item**

Linking from the **Rich Content Editor**

1. Navigate to an item in your course that utilizes the rich content editor, such as a page
2. While in the rich content editor, select the image or highlight the text you want to link to the Lt lesson
3. Select the **apps button**



4. Choose the **Lt app** from the list of apps
5. Select the **[Lt course name]** to see all Lt courses you have access to
6. Select the **Lt lesson** you wish to link to from within the selected Lt course

Note: Only those lessons that have been published in the Lt course will appear

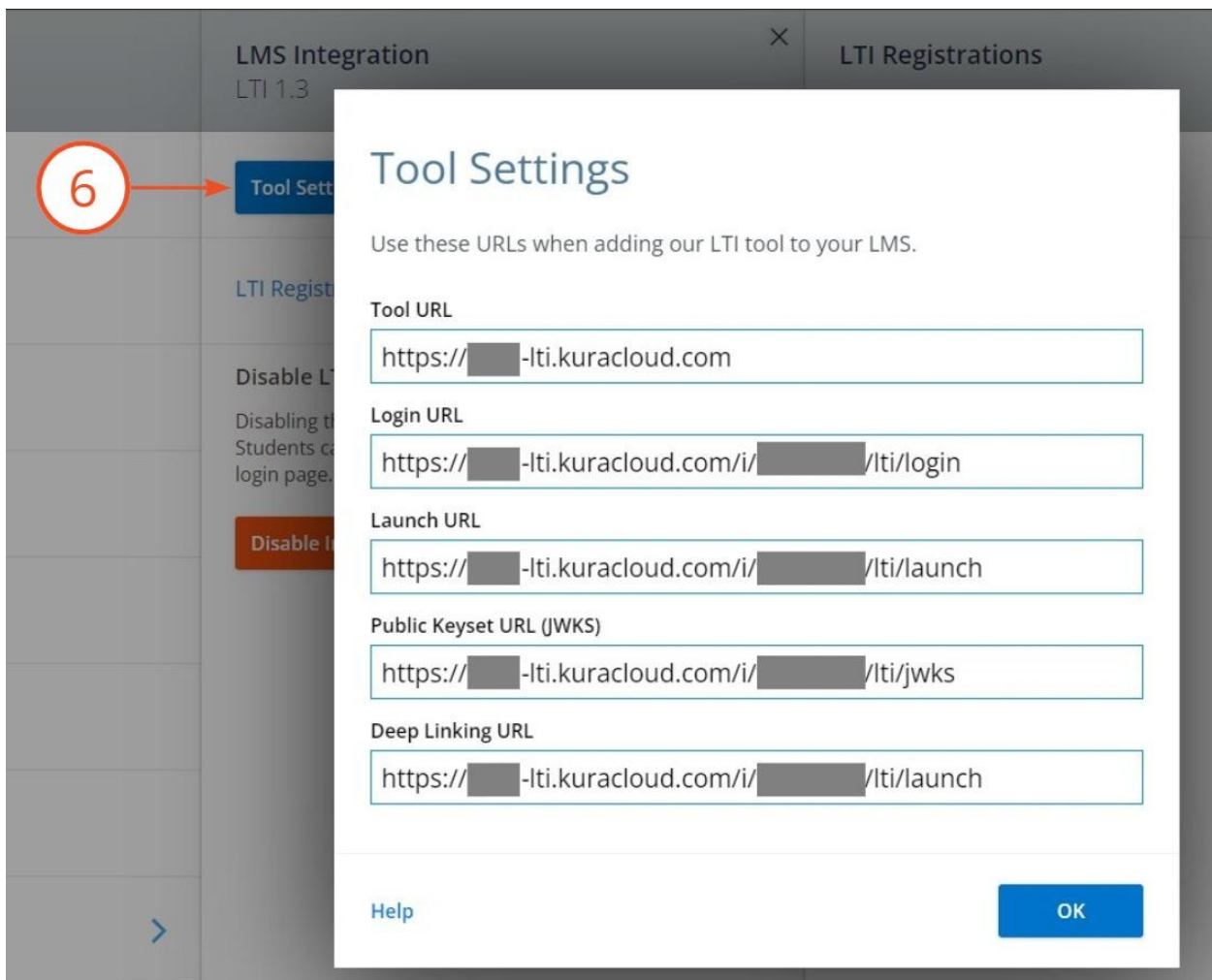
7. Select **Link Selected Content**
8. Select **Save & Publish** or **Save**, as appropriate

Continue to [Syncing Students and Grades](#).

Moodle Integration

Setting Up Your Moodle Site

1. As a Moodle administrator select **Site Administration**
2. Select **Plugins**
3. Select **Manage Tools**
4. Select **configure a tool manually**
5. Navigate to your **Lt Instance Administration page**
6. Select **Tool Settings**, you will be copying information from this into Moodle



Tool Settings

Use these URLs when adding our LTI tool to your LMS.

Tool URL

Login URL

Launch URL

Public Keyset URL (JWKS)

Deep Linking URL


[Help](#) OK

7. Fill out the following required fields under Moodle's **Tool settings**:
 - a. **Tool name**: a name of your choosing to identify the tool
 - b. **Tool URL**: the **Tool URL** from the Lt Tool Settings
 - c. **LTI version**: LTI 1.3
 - d. **Public key type**: Keyset URL
 - e. **Public Keyset**: the **Public Keyset URL (JWKS)** from the Lt Tool Settings
 - f. **Initiate login URL**: the **Login URL** from the Lt Tool Settings
 - g. **Redirection URI(s)**: the **Launch URL** from the Lt Tool Settings
 - h. **Custom Parameters**: leave this field blank
 - i. **Tool Configuration usage**: Show as preconfigured tool when adding an external tool
 - j. **Default launch container**: New Window
 - k. Enable **Supports Deep Linking (Content-Item Message)**
 - l. **Content Selection URL**: the **Launch URL** from the Lt Tool Settings
 - m. **Icon URL (Optional)**:
`https://staticfiles.kuracloud.com/v/1/client/img/favicon.v1.ico`
 - n. **Secure URL**: remain blank
8. Fill out the following required fields under **Services**:
 - a. **IMS LTI Assignment and Grade Services**: Use this service for grade sync and column management
 - b. **IMS LTI Names and Role Provisioning**: Use this service to retrieve members' information as per privacy settings
 - c. **Tool Settings**: Do not use this service
9. Fill out the following required fields under **Privacy**:
 - a. **Share Launcher's name with tool**: Always

- b. **Share launcher's email with tool:** Always
- c. **Accept grades from the tool:** As specified in Deep Linking definition or Delegate to Teacher
- d. **Force SSL:** Disabled (unchecked)

10. Select **Save changes**

11. Select the **Configuration details** icon for the newly added tool 

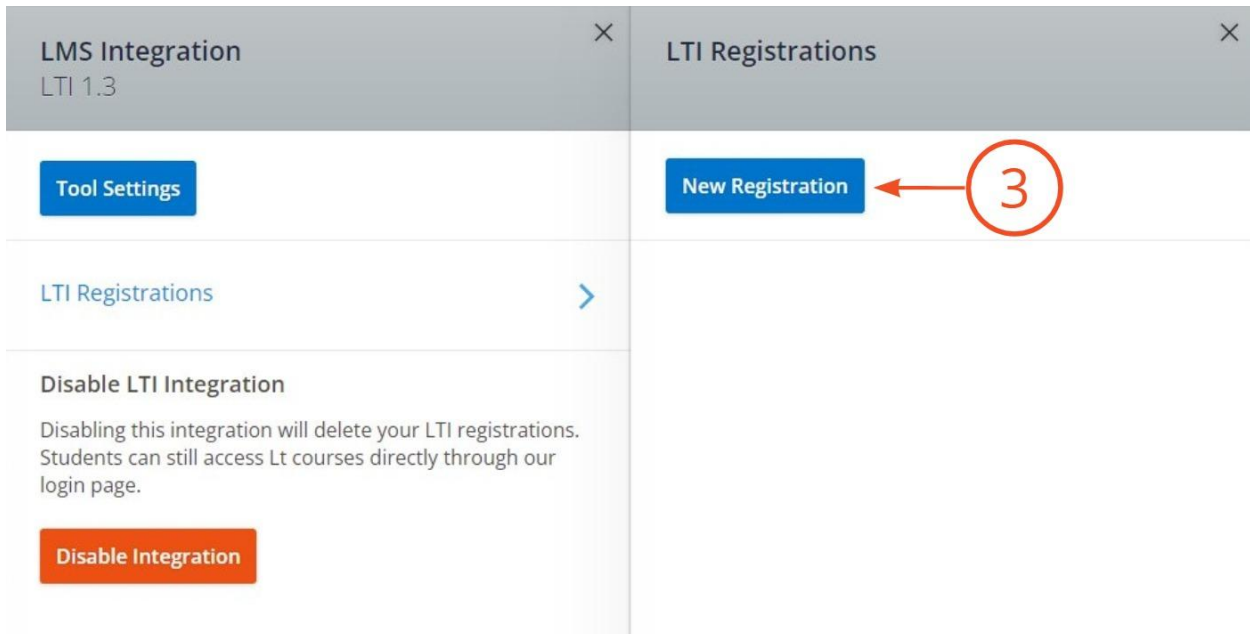
 **Note:** This integration requires both outgoing and incoming external communication to be available to your Moodle instance. If you are self-hosting Moodle please make sure to enable external communication.

Adding a Registration to Lt

12. Navigate to your **Lt Instance Administration** page and select OK to exit Tool Settings

13. Select **LTI Registrations**

14. Select **New Registration**



LMS Integration LTI 1.3	LTI Registrations
Tool Settings	New Registration
LTI Registrations	
Disable LTI Integration Disabling this integration will delete your LTI registrations. Students can still access Lt courses directly through our login page. Disable Integration	

15. Fill out the following fields:

- a. **Display Name:** A name of your choice, this is only used to identify the registration in this interface
- b. **Issuer / Platform ID:** your moodle website as shown in the Platform ID from the configuration details in Moodle
- c. **Client ID:** the Client Id from the configuration details in Moodle
- d. **Deployment IDs:** the Deployment Id copied from the configuration details in Moodle
- e. **Public Keyset URL (JWKS):** the Public Keyset URL from the configuration details in Moodle
- f. **Access Token URL:** the Access token URL from the configuration details in Moodle
- g. **Authentication Request URL:** the Authentication URL from the configuration details in Moodle
- h. **OAuth2 Audience (Optional):** Leave this field blank.

16. Select **Done**

17. Ensure that the newly created registration is **Enabled**

LTI Registrations

Registration details

Enter the configuration details from your LMS to complete the registration of our tool:

Display Name (name of your choice)

Issuer / Platform ID

Client ID

Deployment IDs (separate IDs with a comma - if more than one)

Public Keyset URL (JWKS)

Access Token URL

Authentication Request URL

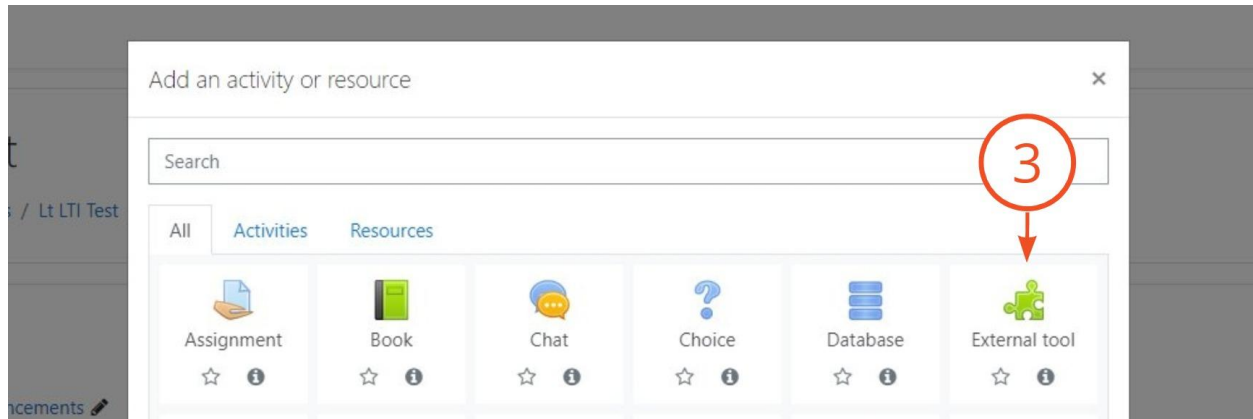
OAuth2 Audience (Optional)

[Cancel](#)
[Done](#)


Adding Content to Your Course

18. In the course that you want to add content to, select **Turn editing on**
19. In the Topic section you want to add the content to select **+ Add an activity or resource**

20. Select **External tool** from the options that appear

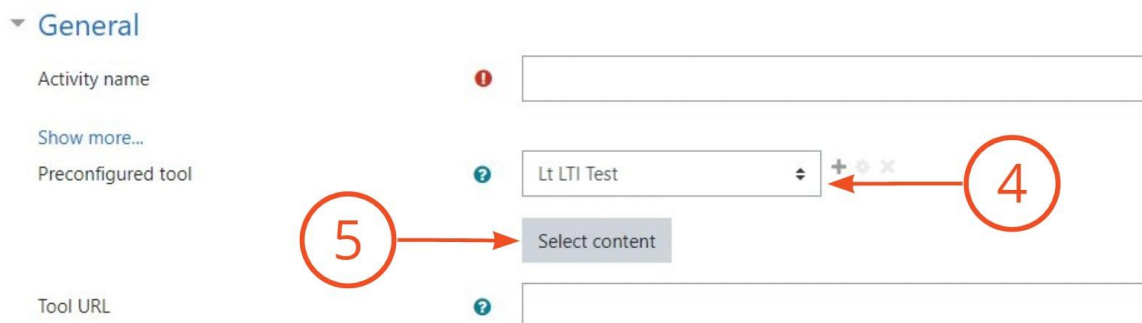


21. Choose the LTI tool (as you named it above) from the list for **Preconfigured tool**

 **Note:** When you first open the Lt tool you will be asked to login with your Lt account. This will link your LMS and Lt accounts to determine what content is visible to you and what permissions you have. If you don't yet have an Lt account, talk to an Instance Administrator for your Lt instance or your ADInstruments representative.


22. Select **Select Content**

 Adding a new External tool to Topic 1 

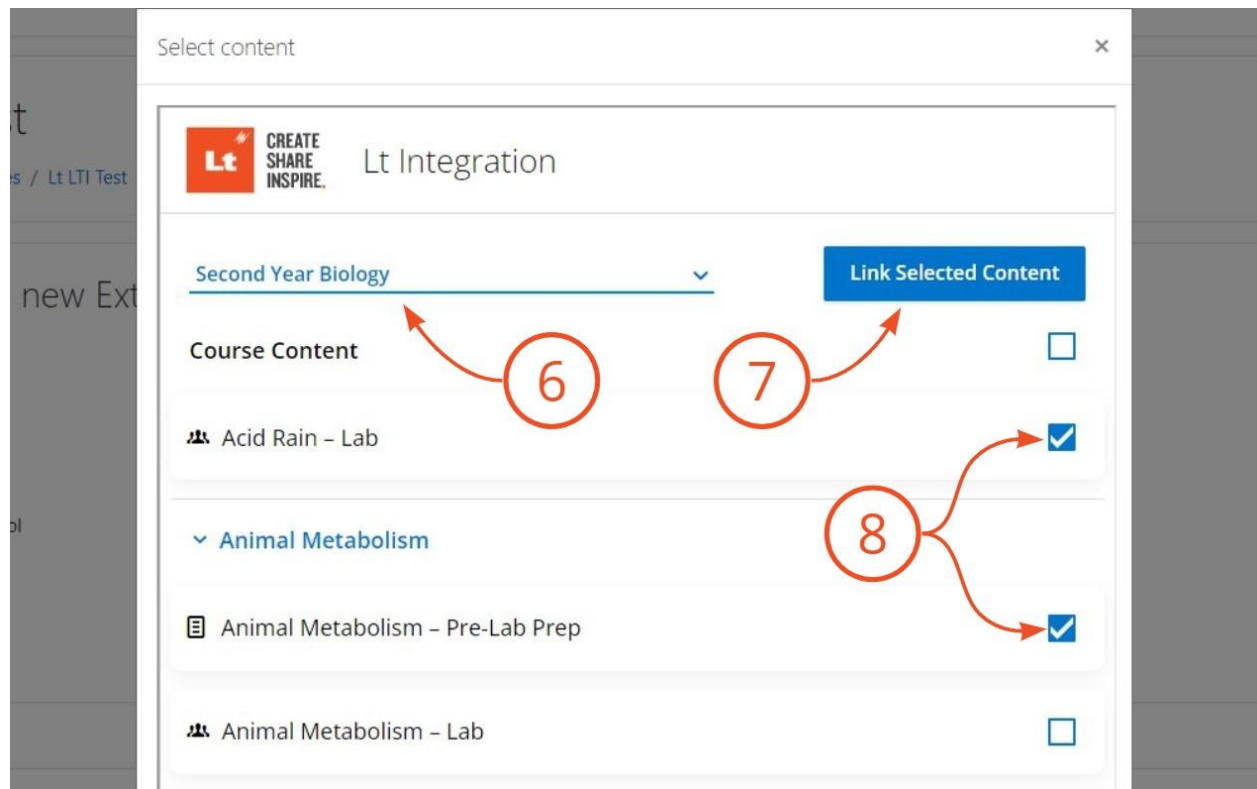


23. Select the **[Lt course name]** to see a dropdown menu of all Lt courses you have access to

24. Select the **Lt lesson(s)** you wish to link to from within the selected Lt course

 **Note:** Only those lessons that have been published in the Lt course will appear

25. Select **Link Selected Content**



26. Select **Save and return to course**

Continue to [Syncing Students and Grades](#).

Syncing Students and Grades


Permissions

The permissions your LMS and Lt accounts have will determine if you can access the Lt integration tool to sync students and grades. See the [appendix](#) for more details. Your Lt and LMS permissions are checked each time you attempt to sync students or grades. Staff members can gain access to the tool without being added to Lt manually, however they will not be able to use the functions until manually added to the course in Lt to decide their permissions. If a student or staff accesses Lt for the first time via an LTI link they will be required to accept the Terms of Service before gaining access.

Syncing Students

Students clicking the Lt lesson link are automatically provisioned in the Lt course. Syncing students is optional, but useful, if you want to add or update your entire roster of students in the Lt course.

When syncing students you will have the option to send invite emails to all newly added students, giving your students the opportunity to setup up an Lt account and be able to log in to www.kuracloud.com. An Lt account and logging in directly is required for students to do group lessons. If you do not send invite emails when initially syncing students, you can send invite emails from the student management interface in Lt.

 **Note:** Keep in mind that the student list for your LMS course can be synced with multiple Lt courses. It's important to check that the linked Lt lesson you use to sync students is contained within the Lt course you wish your students to be synced to. The Lt course is displayed in the LTI tool after *Connect to*, e.g. the Lt course CSM101 is displayed as Connected to CSM101.


1. Select the link in your LMS course to the Lt lesson students are to access
2. Select **Sync Students**

Sync Students

Individual login

- When a student selects the deep link the lesson opens in Lt. They will be automatically enrolled in *CSM101* if not already enrolled, and have immediate access. An email invite is not required.
- To ensure all students are enrolled in *CSM101*, select **Sync Students**.


Group login

- Some lessons are designed for group work on a single device, such as to sample live data in a lab. Group login requires that students have already accepted an email invite, and setup a login to Lt. 
- You can choose to send email invites for new students in the **Sync Students** confirmation dialog.
- To send invites later, select the cog icon shown in [Student Accounts](#) and then **Send Invites**.

Manage sections

- To add sections, select the cog icon shown in [Student Accounts](#) and then **Manage Sections**.

Synced
September 15 at 2:42 PM



2

Sync Students

3. Read and confirm that the changes presented in the Sync Students modal reflect what you wish to occur.
 - a. Decide if you want to send invite emails to new students.
 - b. If the changes are as intended, select **Sync Accounts Now**
 - c. If the changes are not as intended, select **Cancel** and take action as necessary

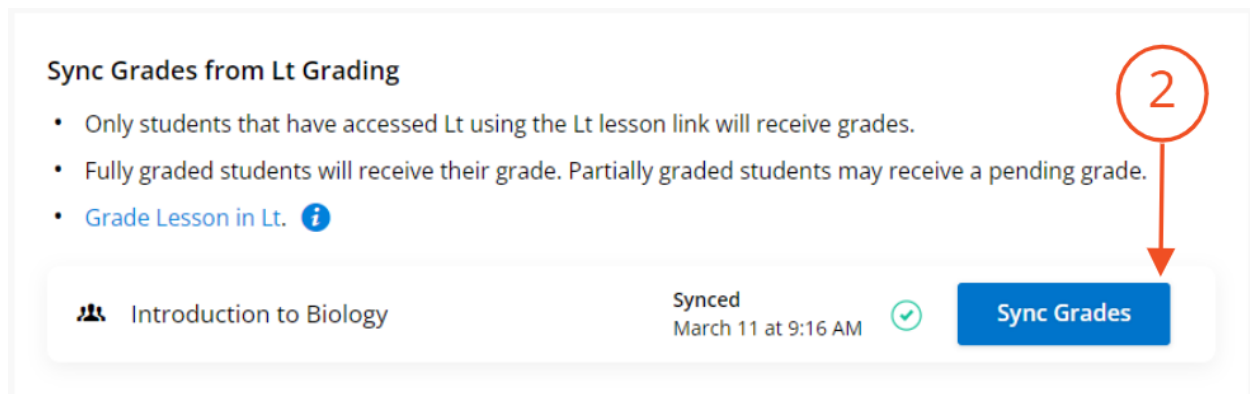
If Send Invite Emails has been selected, newly added students will be sent an email invite to the Lt course the linked Lt lesson is within.

- Some lessons are designed for group work on a single device, such as to sample live data in a lab. Group login requires that students have already accepted an email invite, and setup a login to Lt.
- If this is the first time a student has been invited to Lt, they must accept their email invite and follow the steps to create an Lt account to participate in group work. If a student already has an Lt account they can ignore the invitation email. They will already have a password to login for group work.

- If a student has already been synced they will not be sent an invite email. If you want to send them invite so they can participate in a group lesson you will need to resend invitations from the Student Accounts menu in Lt.

Syncing Grades

1. Select a link in your LMS course to the Lt lesson that contains the grades you wish to sync to your LMS gradebook.
2. Select **Sync** next to the Lt lesson in the Sync Grades section.



Any student who has followed a Lt lesson link and has a grade for an Lt lesson will have that grade entered into the LMS gradebook. If no grade currently exists for that Lt lesson, a blank line in the LMS gradebook will still be added. This can be updated by syncing grades once the grade exists.

Appendix

Staff can successful follow a link in an LMS course to sync students and grades if they have one of the following LTI roles:

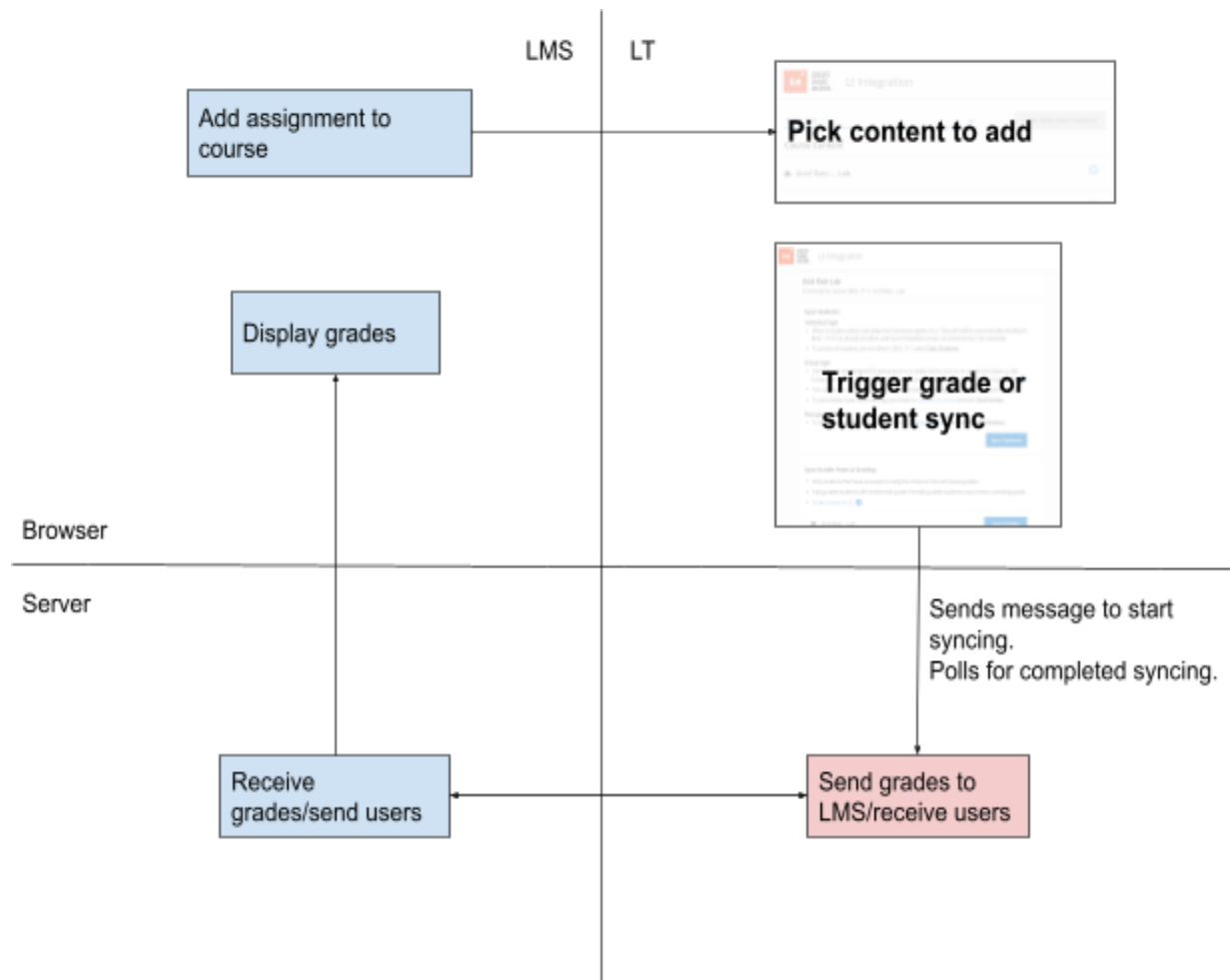
- <http://purl.imsglobal.org/vocab/lis/v2/institution/person#Administrator>
- <http://purl.imsglobal.org/vocab/lis/v2/institution/person#Staff>
- <http://purl.imsglobal.org/vocab/lis/v2/institution/person#Instructor>

- <http://purl.imsglobal.org/vocab/lis/v2/institution/person#Faculty>
- <http://purl.imsglobal.org/vocab/lis/v2/system/person#AccountAdmin>
- <http://purl.imsglobal.org/vocab/lis/v2/system/person#Administrator>
- <http://purl.imsglobal.org/vocab/lis/v2/system/person#SysAdmin>
- <http://purl.imsglobal.org/vocab/lis/v2/membership#Administrator>
- <http://purl.imsglobal.org/vocab/lis/v2/membership#ContentDeveloper>
- <http://purl.imsglobal.org/vocab/lis/v2/membership#Instructor>
- <http://purl.imsglobal.org/vocab/lis/v2/membership#Manager>
- <http://purl.imsglobal.org/vocab/lis/v2/membership#Officer>

However, their role in Lt will determine if they can sync students, sync grades, or both.

- To sync students requires **Manage student accounts** permissions, e.g. an Instance Administrator, or a Course or Deputy Course Administrator role within the linked course.
- To sync grades requires **Grade lessons** permissions, e.g. an Instance Administrator, or a Course or Deputy Course Administrator or Grader role within the linked course.

Structure of LTI



FAQ

I get an error when I try to use the tool on Safari?

- Check you have "Website tracking: Prevent cross-site tracking" disabled in your privacy settings.

Can I use the integration in private/incognito mode?

- The LTI integration does work with incognito as long as it does not block cross-site tracking cookies as mentioned above.
- Educators do not have a path to Lt using the tool so they can use private/incognito mode without concern.

It says I havent enabled a registration in Lt but I have?

- Double check all the fields in your registration.
 - Is there any trailing whitespaces or "/"?
 - Have you got the right Issuer/Platform ID? If you have a vanity URL for you LMS it may affect what you need to enter.

Im having trouble connecting to my testing environment.

- Try opening the JWKS URL from your Lt registration in your browser, it should display a "Key" with a long string of characters. If it doesn't then your LMS may not be accessible to the internet. Lt needs to both incoming and outgoing traffic to communicate.

I need help! Where do I go? What do you need to know?

- If you need any help then reach out to your CSM or support team.
 - <https://www.adinstruments.com/contact/technical-support>
- Providing a screenshot will always help out the support team.
 - Try to include the webpage URL that you are on and the time so our team can provide the best support.
 - If you can make the problem happen repeatedly then try opening your browser developer console first ([F12] in Chrome). The "Console" and "Network" tabs provide useful information for our team.