DEEP LINK LTI INTEGRATION GUIDE FOR D2L

Fairchild Books Digital Coursebook - Deep Link LTI Integration Guide

Contents

Before Configuring Your Deep Link LTI Course in D2L

Important!

Step 1, 2 and 3 must be completed by a D2L Site Administrator. These first three steps will only need to be completed once, prior to the set-up of your school's first Fairchild Books Digital Coursebook using deep link integration.

The remaining steps will need to be completed by the course instructor and/or instructional design team and must be completed for each course shell each semester.

For any questions or concerns about this process, please contact the Connect For Education Technical Support Team for additional guidance.

REMINDER: You can proceed directly to Step 4 (skipping Steps 1 through 3), if your school has previously implemented a Fairchild Books Digital Coursebook using deep link integration.

Step 1: Create OAuth 2.0 Connection

This step must be completed by a D2L Site Administrator. This step will only need to be performed once. If your school has previously used deep link integration for Fairchild Books Digital Coursebooks, this step can be skipped.

1. Access '**Manage Extensibility**' from the '**Admin Tools**' menu.
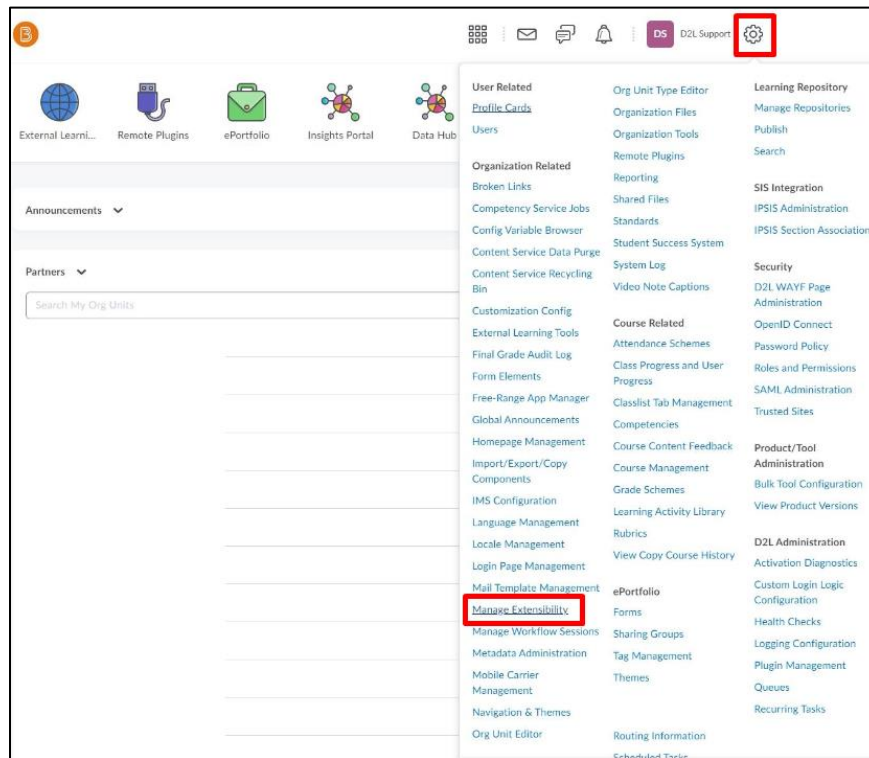
2. Select '**OAuth 2.0**.'
3. Select '**Register an app**.'
4. Complete the following fields:

    A. **Application Name**: Fairchild Books Digital Coursebook
    B. **Redirect URI**: https://bloomsburyapp.c4elink.org/d2loauth2/callback
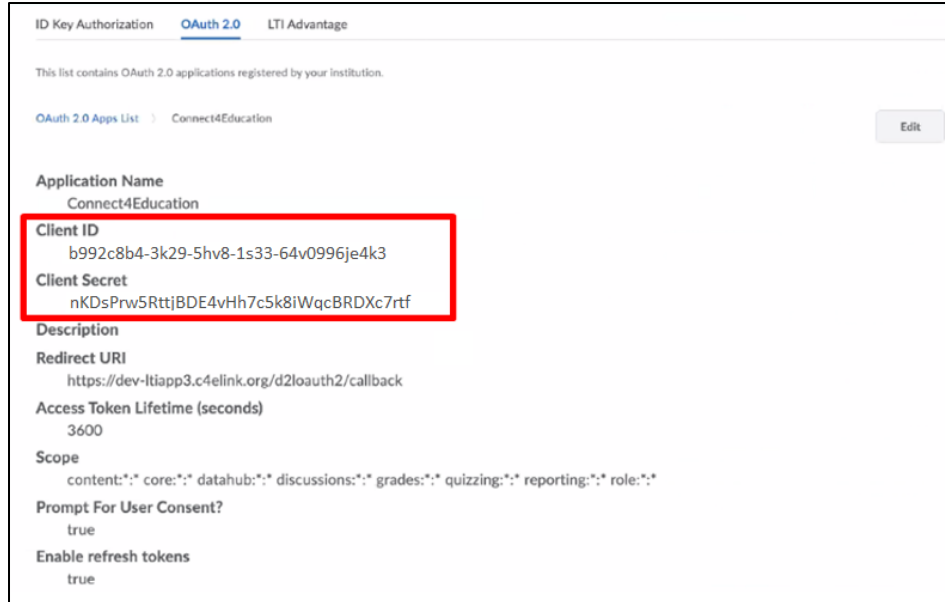   C. **Scope**: content:*:* core:*:* grades:*:* quizzing:*:*

5. Click '**Save**' to save your settings for the integration.

Step 2: Notify C4E

*This step will only need to be performed once. If your school has previously used deep link integration for Fairchild Books Digital Coursebooks, this step can be skipped.

Once the OAuth 2.0 Connection has been created in your D2L system (Step 1), please provide the Connect For Education Support Team with the following:

- **Root Domain URL**
- **Client ID**
- **Client Secret**

Connect For Education will need this information to add your college/university as a 'New D2L Client' to facilitate the remaining integration.

Please Note: Once we have added your college/university, the Connect For Education Support Team will send you an email containing your **Client ID, Client Secret, and Launch Point URL,** which will be needed for the next step (Step 3: Create Remote Plugin for Deep Linking Tool).
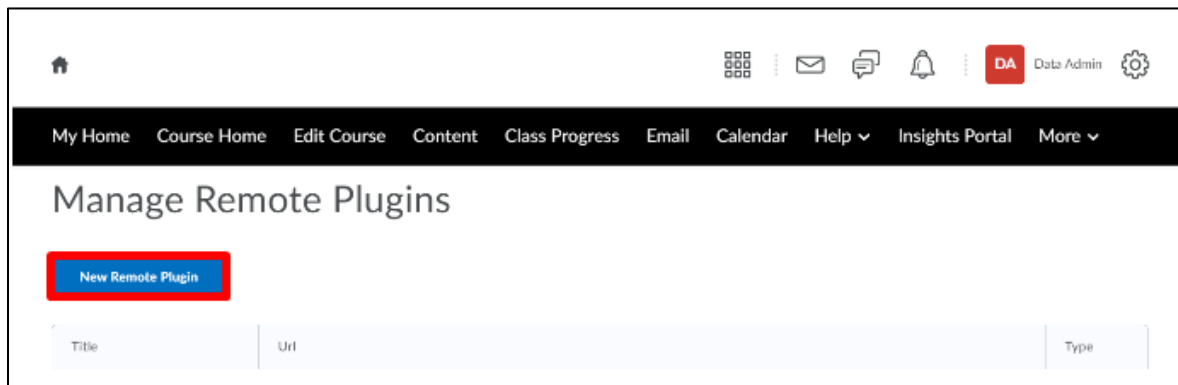
Step 3: Create Remote Plugin for Deep Linking Tool
This step must be completed by a D2L Site Administrator.

This step will only need to be performed once. If your school has previously used deep link integration for Fairchild Books Digital Coursebooks, this step can be skipped.

1. Access the **Admin Tools** menu.
2. Select '**Remote Plugins**':
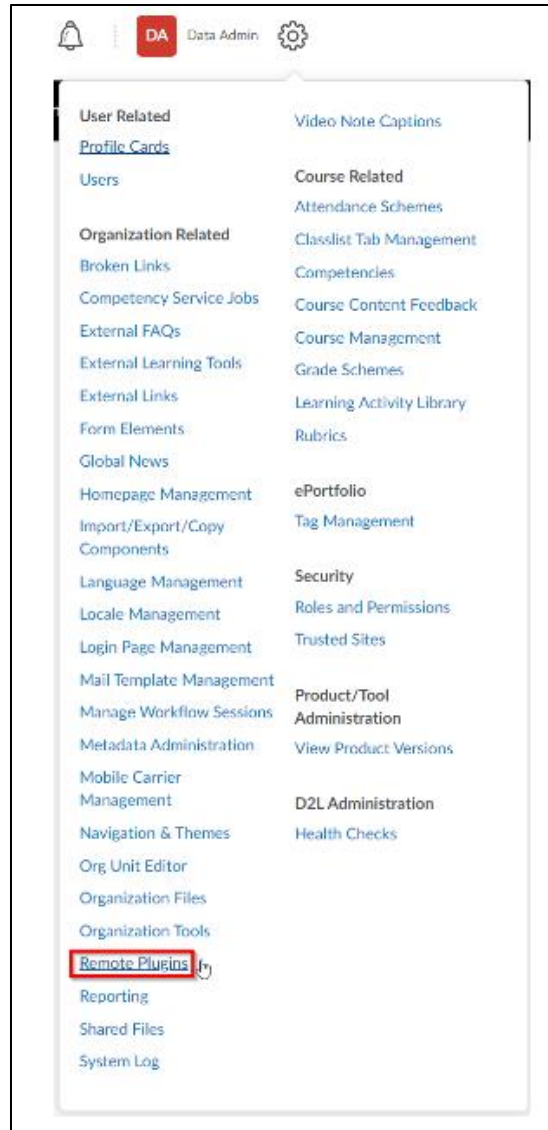
3. Select '**New Remote Plugin**':

4. Update the following fields on the '**Create a new Remote Plugin**' screen:

a. **Plugin Type**: Select 'Quicklink (CIM)' (Note, be sure to select CIM, or Content-Item Message, for this field)
b. **Name:** We suggest using 'Fairchild Books Digital Coursebook'
c. **Launch Point URL**: Enter the URL provided by the Connect For Education Support Team
d. **LTI Key and LTI Secret:** Enter the Key and Secret provided by the Connect For Education Support Team
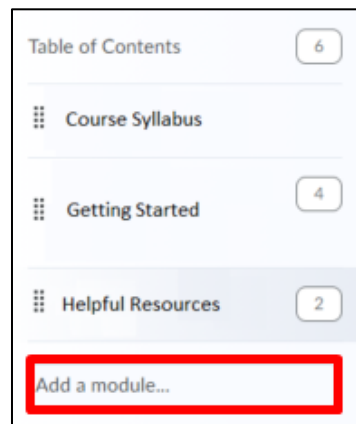e. **OAuth Signature Method**: Select HMAC-SHA1

Step 4: Perform Deep Linking in D2L Course Shell

1. Access your D2L course shell.
2. On the navbar, click '**Content.**'

3. From the **Table of Contents** on the left, click into the '**Add a module...**' field.
4. Title your new module 'C4E App Launch' and press **Enter**.

5. Access the new module you created in the previous step. From the '**Existing Activities**' dropdown, select the previously created '**Fairchild Books Digital Coursebook**' tool.
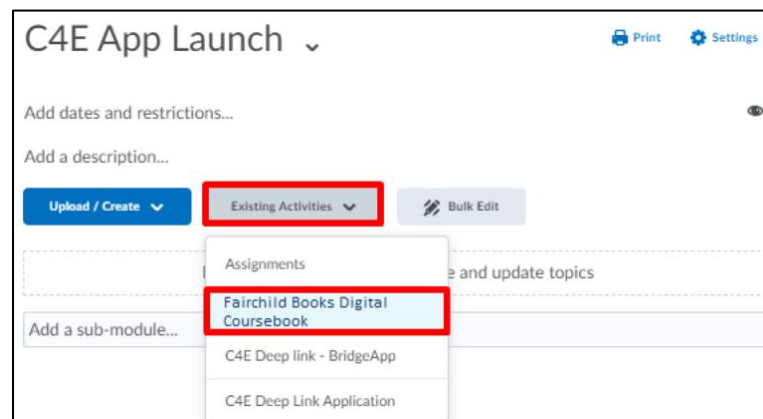
6. When the tool is launched, you will be prompted to enter the 'Secret Key' for this specific course. This key will be provided to you by the Connect For Education Technical Support Team. Enter the '**Secret Key**' for the course and click the '**Load the course**' button.
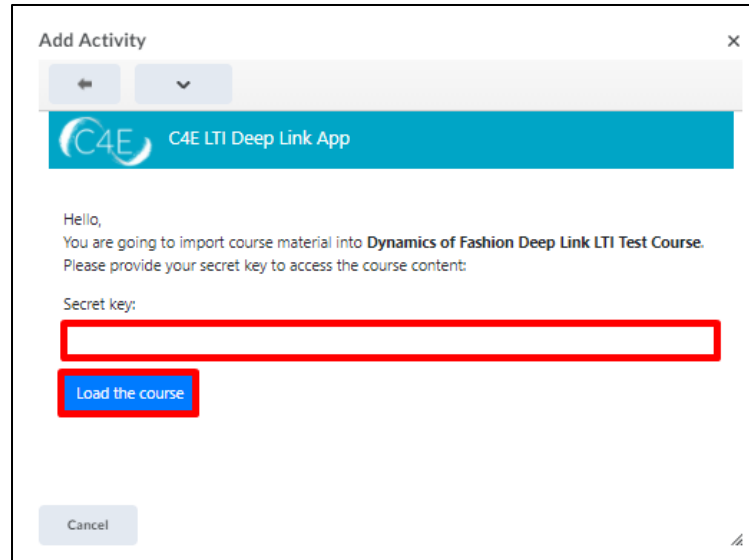
Note: If you are running multiple courses and you have been provided with multiple 'Secret keys,' please be sure to enter the 'Secret key' associated with the specific course shell you have accessed in D2L.

7. On the '**Add Activity**' screen, check the '**Select/Unselect all**' checkbox to select all items and import all course modules.
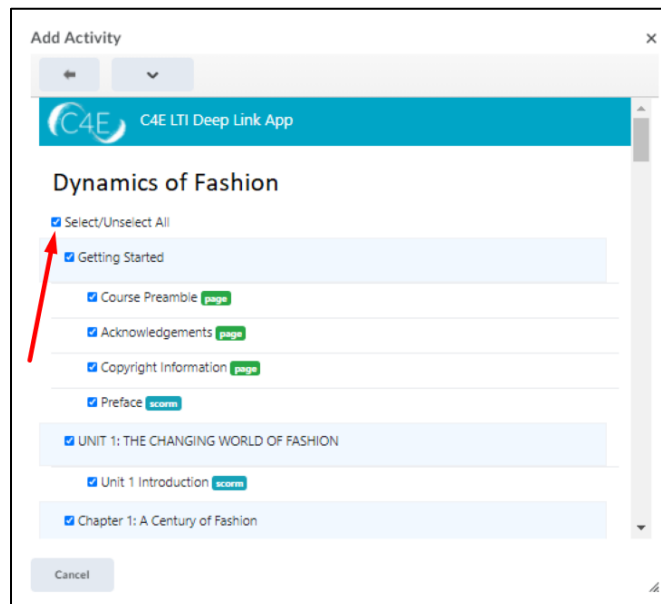
Alternately, you may select individual modules by clicking the checkboxes to the left of each desired module/item.
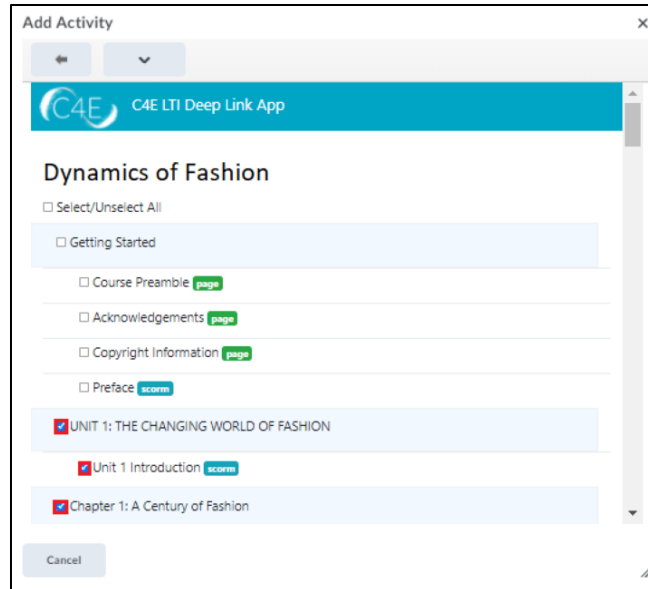
Please also note, once all content has been pulled in the first time, this process should only be repeated for newly created items (i.e., new discussion forums created after the initial content pull). Importing content that has already been pulled will result in duplication.

8. Once you have selected the content you wish to import, click the '**Continue**' button (bottom-left).
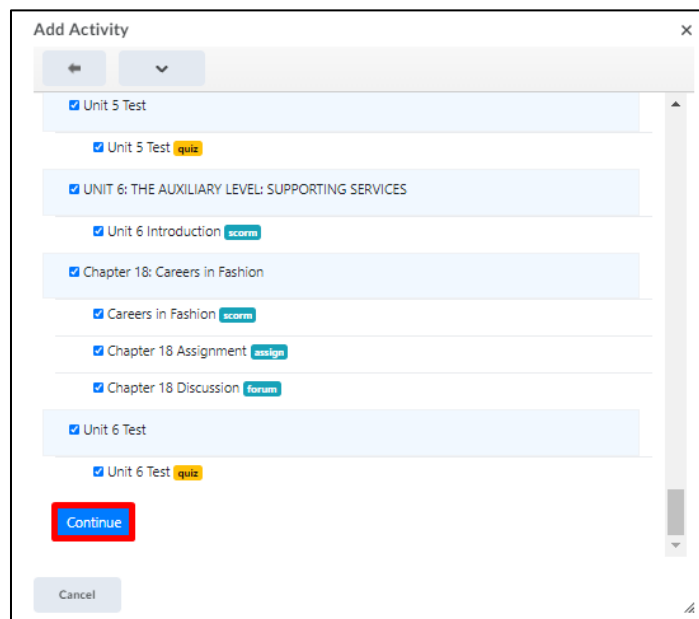
This will bring you to a confirmation screen, allowing you to review the selected content.
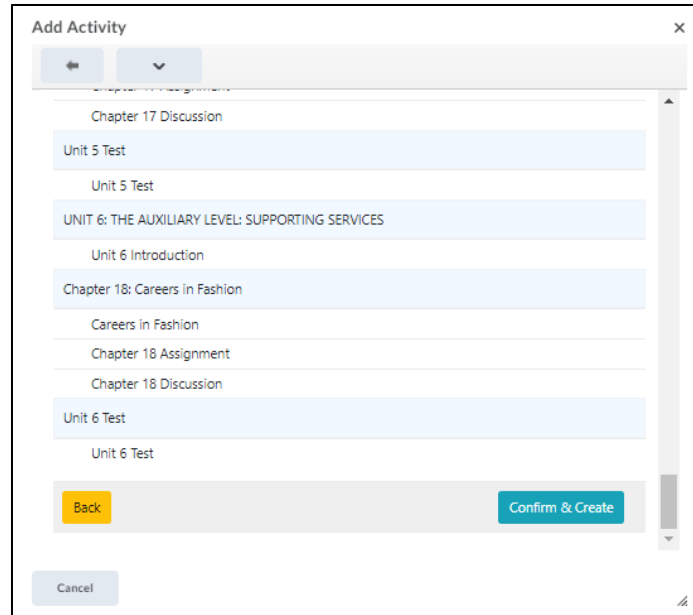
9. If any adjustments are necessary to the content being imported, simply click the '**Back'** button to return to the content selection screen. Otherwise, click '**Confirm & Create**' to start the content creation process. *As a reminder, depending on the amount of content selected, this process may take some time.*

A status bar will display the progress of the import:
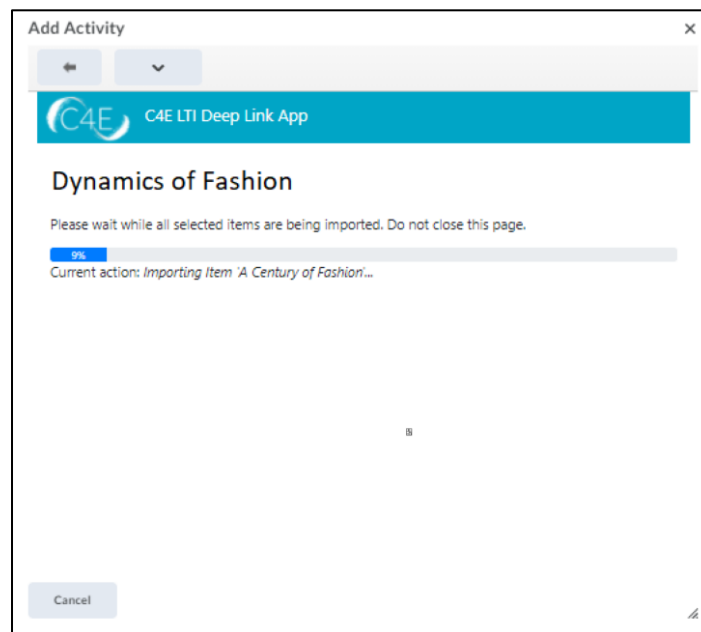
10. Once complete, a confirmation message will be displayed. Click '**Cancel**' to return to the course to view the imported content.
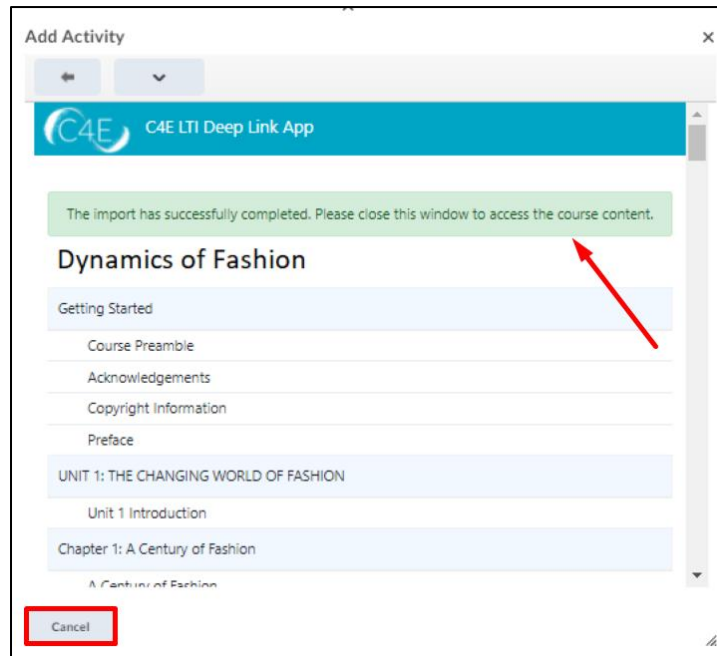
Course content will look similar to the following (Note: You may need to refresh your browser to view the imported content):
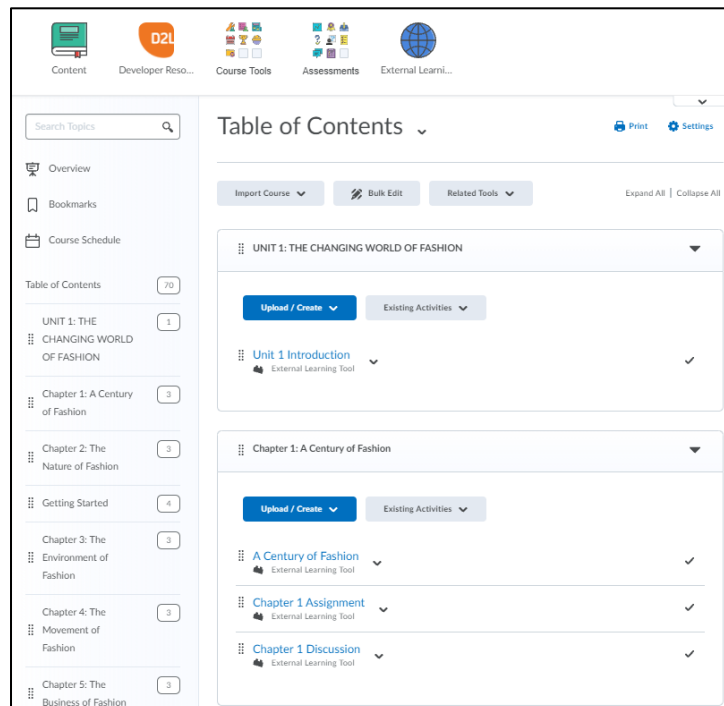
11. Once the content has populated, the 'C4E App Launch' module will need to be removed. Click the downward arrow within the 'C4E App Launch' module and select '**Delete Module**.'
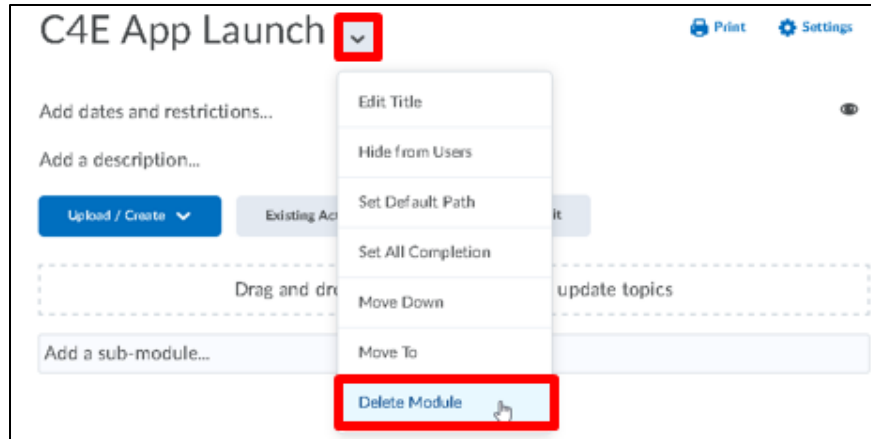
12. Select the option to '**Permanently delete and remove all nested modules, topics, and all associated files and activities from the course**' and click the '**Delete**' button.

Step 5: Setting Up Your Gradebook

Once your course content has been pulled into your D2L course shell, you will need to setup your gradebook to mirror the weights/values of the Fairchild Books Digital Cour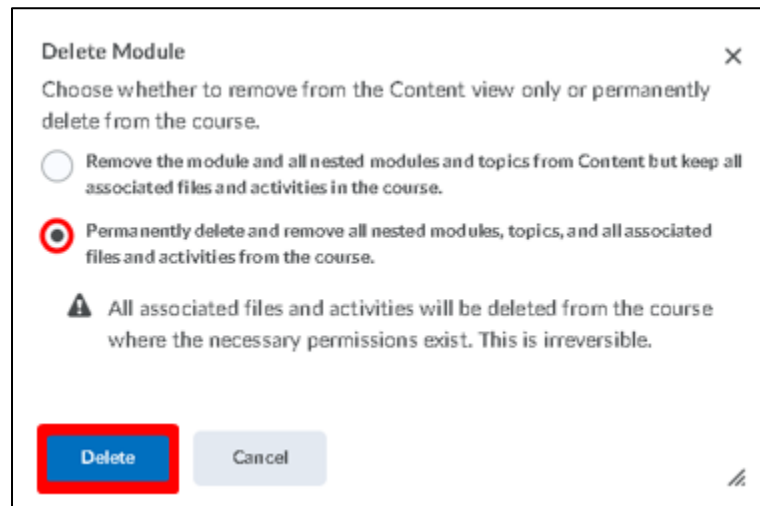sebook gradebook. This will ensure the accuracy of all grades being passed back and ensure that the final grade reflects the expected grading structure. *Please note that this process may vary, if your Fairchild Books Digital Coursebook gradebook is set to a flat gradebook and does not feature any weighted categories.*

1. Select the '**Assessments**' menu from the course navigation bar and then select the '**Grades**' option.
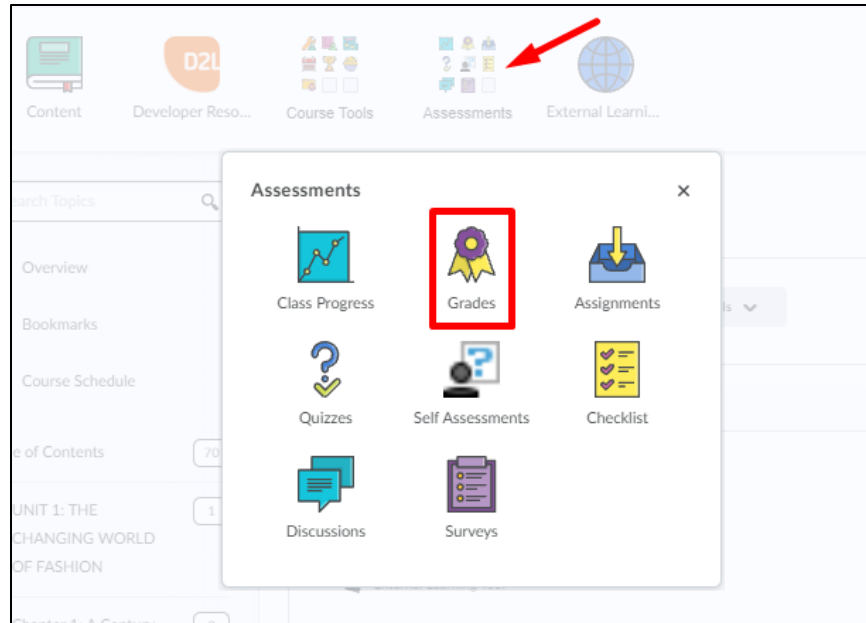
2. Select the '**Settings**' option.
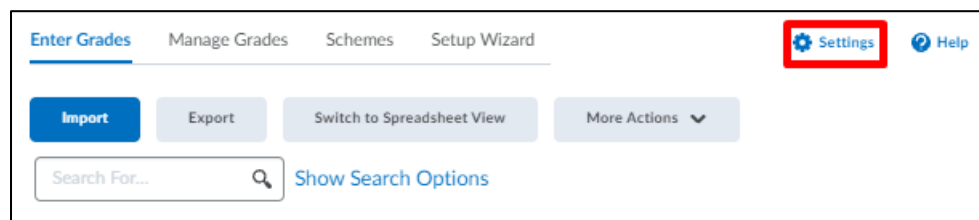
3. Select the '**Calculation Options**' tab.

4. From the '**Calculation Options**' tab, select the '**Weighted**' option for the course Grading System and click the '**Save**' button.

5. Click '**Yes**' at the confirmation prompt to save your changes.

6. Click the '**Close**' button to return to the gradebook.

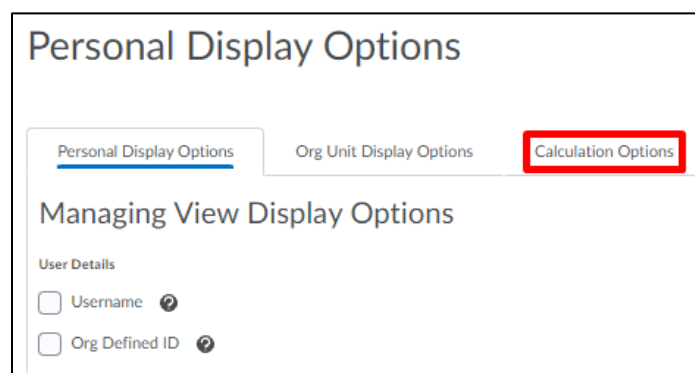7. When the course items are imported from your Fairchild Books Digital Coursebook course, they are initially imported with no grade category. In order for the Grade Center to calculate grades using weighted categories, you will need to assign each item an appropriate 'Category.' In order to do so, you will need to first create the appropriate categories for your coursework items (these categories will vary depending on the coursework items in your course).

    From the '**Manage Grades**' area of the course gradebook, click the '**New**' button and select '**Category**' from the drop-down menu.

8. Add the name of your first category (i.e., 'Unit Tests' or 'Assignments') in the '**Name**' field and enter a value for the weight of the category at the '**Weight**' field. Select the '**Distribute weights by points across all items in the category**' prompt to ensure that D2L automatically weights the items based on their relative point values. Click the '**Save and New**' button to save your changes and proceed with creating your next category.

   Note: In the example below, the Unit Tests category will be worth 42% of the student's final grade.

9. Repeat Step 8 to create any additional categories needed for your course gradebook. Click '**Save and Close**' when all categories have been created.

10. From the '**Manage Grades**' area, use the '**Select All**' checkbox at the top of the checkbox column to select all graded coursework items in the course, then click the '**Bulk Edit**' option.

11. From the '**Bulk Edit**' function, select the appropriate category for each graded item in the '**Category**' column. The category drop-down menu should reflect the grade categories and associated grade percentages that you created in the previous steps.

12. Click the '**Save**' button to save your changes once each item has been assigned a category.

Once each item is a member of a category, it will appear indented below the category name:

	Grade Item	Type	Association	Max. Points	Weight
☐	Unit Tests ﹀			600	42
☐	Unit 1 Test ﹀	Numeric	External Learning Tool ⊘	100	16.666666667
☐	Unit 2 Test ﹀	Numeric	External Learning Tool ⊘	100	16.666666667
☐	Unit 3 Test ﹀	Numeric	External Learning Tool ⊘	100	16.666666667
☐	Unit 4 Test ﹀	Numeric	External Learning Tool ⊘	100	16.666666667
☐	Unit 5 Test ﹀	Numeric	External Learning Tool ⊘	100	16.666666667
☐	Unit 6 Test ﹀	Numeric	External Learning Tool ⊘	100	16.666666667
☐	Assignments ﹀			1,800	38
☐	Chapter 1 Assignment ﹀	Numeric	External Learning Tool ⊘	100	5.555555556
☐	Chapter 2 Assignment ﹀	Numeric	External Learning Tool ⊘	100	5.555555556
☐	Chapter 3 Assignment ﹀	Numeric	External Learning Tool ⊘	100	5.555555556
☐	Chapter 4 Assignment ﹀	Numeric	External Learning Tool ⊘	100	5.555555556
☐	Chapter 5 Assignment ﹀	Numeric	External Learning Tool ⊘	100	5.555555556
☐	Chapter 6 Assignment ﹀	Numeric	External Learning Tool ⊘	100	5.555555556

Note: Once your coursework items have been imported and appear in your D2L Gradebook, the Max. Points for each item will be displayed as 100 points, with the values synced as percentages out of 100%.

Making Changes in Your Course

☐ Prior to importing content into your D2L course shell, we encourage you to complete any customizations to your course on the Fairchild Books course site (https://lti-bloomsbury.c4elink.org).

☐ Please note, once all content has been imported the first time, this process should only be repeated for newly created items (i.e., new discussion forums created after the initial content pull). Importing content that has already been pulled will result in duplication.

☐ With LTI integration, please be aware that you essentially have two course shells (one on D2L and one on the Fairchild Books course site). Once the Fairchild Books Digital Coursebook content has been imported into your D2L course shell, you must be cautious to maintain consistency between the course shells when making any changes. To prevent confusion, we strongly recommend mirroring your D2L course structure with the course structure on the Fairchild Books course site.

☐ As grades are synced regularly, there may be a very short amount of time where grades will be blank.

□ The table below provides guidance on some common changes. As you will see, some changes can be made exclusively on the D2L side, while others will require you to complete the changes on **BOTH** platforms (D2L and the Fairchild Books course site).

Types of Changes	Location of Change
Grading written assignments	When grading written assignments, you may do so directly from the course site grading tool, which can be accessed from the D2L assignment. This will record the grade on the Fairchild Books course site, which will then be passed back to the D2L Gradebook during the grade sync.
Calculating final grades/Entering zeros for unsubmitted items	To calculate final grades, zeros will need to be manually entered for all unsubmitted course work. You will need to enter zeros directly in the D2L Gradebook. This cannot be done on the Fairchild Books course site. We recommend performing this step very soon after an assignment deadline has closed, and once you are certain students can no longer submit this item. If assignments remain open after zeros have been entered, students will be able to complete the assignments and the grade they receive will override the zero with an updated score.
Adjustments to student grades	We recommend making all grade changes directly on the Fairchild Books course site. Doing so will ensure that the correct grade remains in the D2L Gradebook. Please be aware that any grade changes made in D2L may be overwritten if there is an update to the grade in our course site.
Setting or adjusting class deadlines	We advise that all deadlines be implemented on the Fairchild Books course site to prevent any unnecessary confusion.
Modifying exam times or number of attempts for specific students	This will need to be done using the 'User overrides' feature on the Fairchild Books course site.
Modifications to *existing* assignment or discussion forum text*	This can only be completed on the Fairchild Books course site. *Forums implemented directly in the D2L LMS are an exception and can be modified from D2L.*
Course/lesson ordering	While the course/lesson ordering can technically be different in D2L, we suggest making changes on both platforms for the sake of consistency.
Adding announcements	As the Fairchild Books Digital Coursebook does not offer an 'Announcements' block, course announcements should be implemented in D2L.
Creating new discussion forums	While new discussion forums can be created on either platform, forums created on the Fairchild Books course site

	after course content has been pulled will need to be added in individually using the steps outlined earlier in this document.
Moving or deleting items	We suggest making changes on both platforms for the sake of consistency. Exercise caution when removing graded items from the course. You may need to review the impact on your course Gradebook. If a quiz is being moved or removed, consider that the quiz questions may also be included on the Midterm/Final and may need to be adjusted.
Adding files/documents	While this can be done in either platform, files and documents added in D2L may be more easily accessed by students. Files/documents added on the Fairchild Books course site *after* course content has been pulled will need to be added in individually using the steps outlined earlier in this document.
Modifying point values for quizzes, assignments, and/or forums	To ensure accuracy of synced grades, this will need to be done on both platforms.
Modifying Gradebook structure/course grading scheme	As the Gradebook is facilitated in D2L, all adjustments must be maintained in D2L. If you choose to reference the Fairchild Books course site for student grades, changes should be made there as well.

If you are interested in making a modification to your course and are unsure where a change should be made, please contact Connect For Education Technical Support and we would be happy to provide guidance.

Calculating Final Grades in D2L

As a reminder, when calculating final grades for students, zeros will need to be entered for any empty grades. With deep link LTI integration, the process of entering zeros must be performed in the D2L Gradebook, and not the gradebook on the Fairchild Books course site. Please refer to your D2L procedures for entering zeros for any items that students did not complete.

Typically, when coursework items have deadlines, we recommend entering zeros very soon after an assignment deadline has closed, and once you are certain students can no longer submit this item. For coursework items without deadlines, this process should really occur at the end of the semester once no more work will be done. Keep in mind, if assignments remain open (no end/close date) after zeros have been entered in the D2L Gradebook, students could complete the assignments in the Fairchild Books course site and the grade they receive will override the zero with an updated score.

Note: The D2L gradebook provides a setting which allows you to 'Treat ungraded items as 0.' Please refer to your D2L procedures to utilize this setting if desired.

Please also note, the grade sync process is unable to transmit grade values that exceed 100%. As a result, any course totals that exceed 100% (as a result of extra credit) will be transmitted to your D2L Gradebook as 100%.