

Critical Links

C3 MICRO-CLOUD TEACHER MANUAL VERSION 5.1

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1. Introduction

The Critical Links **C3 Micro-Cloud** is a self-contained, cloud-enabled e-Learning platform that can dramatically simplify the delivery of digitized content to schools. Everywhere. Irrespective of the constraints on internet connectivity and power, availability of technically skilled personnel, school location (urban or rural), or the specific student devices.

This document will help you fully utilize your **C3 Micro-Cloud** device. It includes detailed instructions on how to do the initial setup, create content and users, create Lessons and Classes and configure all the network components of your **C3 Micro-Cloud**.

The **C3 Micro-Cloud** might have reached you in one of several models. You need to check the [Quick Start Guide](#) that comes with each **C3 Micro-Cloud** to see how to quickly get it up to speed and ready to be used.

2. C3 Micro-Cloud Profiles

In the **C3 Micro-Cloud**, there are four types of profiles, each with different levels of access:

1. **Administrator:** Has full control over the **C3 Micro-Cloud**, except for Applications, which can only be viewed;
2. **Teacher:** Has partial control over the **C3 Micro-Cloud** configuration, including: Dashboard, LMS Settings, Content, Learning Path, Classes, Apps (view only), and Analytics;
3. **Student:** Can only view Content, Learning Path, Classes, and Apps assigned to them;
4. **Guest:** If a person accesses the **C3 Micro-Cloud** without logging in, they will only be able to view public content and applications.

3. C3 Micro-Cloud Dashboard

The **C3 Micro-Cloud** dashboard provides a comprehensive overview of the device's configuration and operating mode. The details are displayed in individual cards, using a clear and non-technical format. This page is accessible to users with a teacher or administrator profile. The data displayed is static at the moment the page is opened and requires a refresh to show the latest updates.

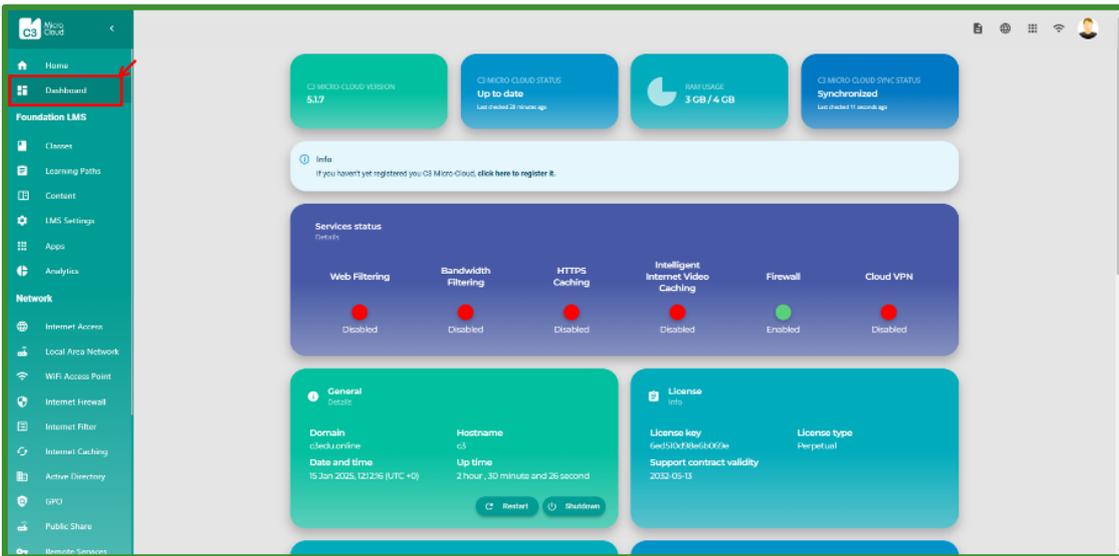


Figure 1: Dashboard Page

3.1. Top Row



Figure 2: Dashboard Top Row

At the top of the dashboard page, the following information regarding the **C3 Micro-Cloud** is available:

- Software version: Starts at version {{ C3_VERSION }};
- Status: Indicates if the **C3 Micro-Cloud** software is up to date;
- RAM usage: Displays how much RAM is currently being used;
- Sync status: Shows the synchronization status with **C3 Cloud Control**.

Information: If you haven't registered your **C3 Micro-Cloud** yet, you can do so by simply clicking as indicated in the following sequence.

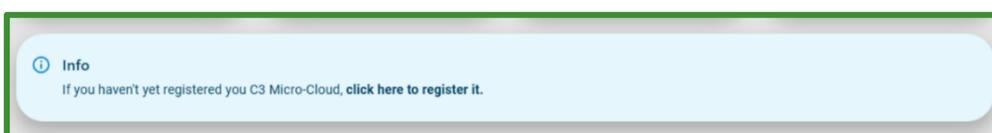


Figure 3: Dashboard Register Information

3.2. Service Status

The service status card provides information about the multiple services running on the **C3 Micro-Cloud**:

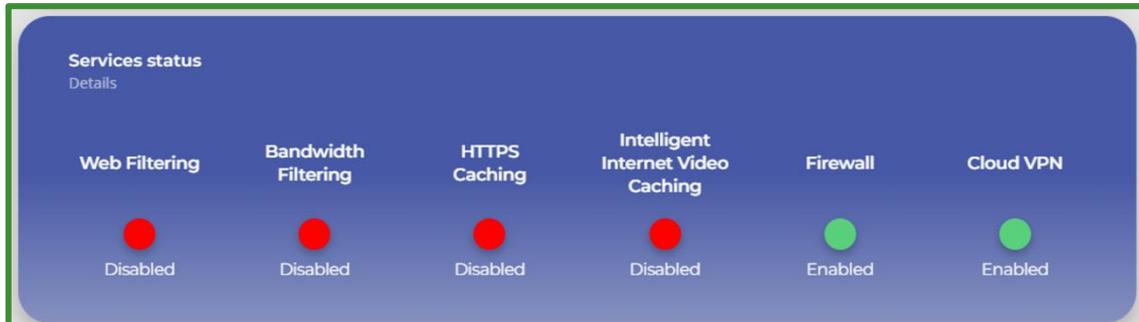


Figure 4: Dashboard Service Status

A red ball indicates that the service is not running, while a green ball indicates that the service is currently running.

- **Web filtering:** The status of the white or black list;
- **Bandwidth filtering:** The status of the bandwidth limitation service;
- **HTTPS Caching:** The status of the HTTPS cache service (requires the Critical Links certificate to be installed);
- **Intelligent Video Caching:** The status of the video cache service (requires the Critical Links certificate to be installed);
- **Firewall:** The status of the firewall service;
- **CloudVPN:** The status of the CloudVPN service, used for remote access to the **C3 Micro-Cloud** (requires activation on the Critical Links servers side).

3.3. General and License

The service status card provides information about the multiple services running on the **C3 Micro-Cloud**:

3.3.1. General

Provides information about the **C3 Micro-Cloud** domain, date and time, hostname and uptime.

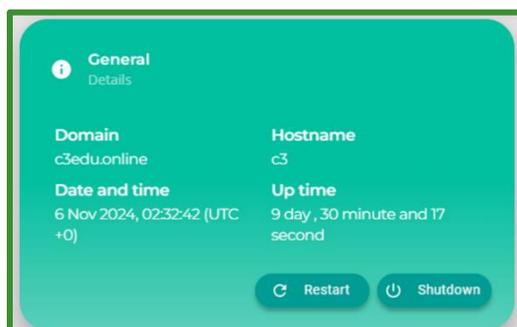


Figure 5: Dashboard General

Two buttons are provided to Restart or Shutdown the device. If you click on either of them, a message will appear asking if you are sure you want to proceed.



Figure 6: Dashboard General Restart and Shutdown Button

3.3.2. License

Provides Information about the **C3 Micro-Cloud** License, Type of License (perpetual or time limited), as well as the support contract end date.



Figure 7: Dashboard License

3.4. C3 Cloud Control and Network Information

3.4.1. C3 Cloud Control

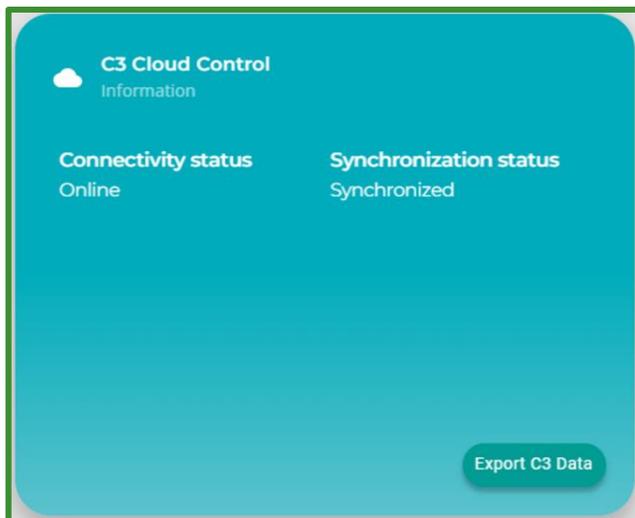


Figure 8: Dashboard - C3 Cloud Control Information

It reports information about the **C3 Cloud Control** connectivity and synchronization status. Additionally, from this card, you can export data to be uploaded to the **C3 Cloud Control** for devices that have never connected to the internet.



Figure 9: Dashboard Export C3 Data Button

If you press the button **Export C3 Data** you will be presented with two options:

- Download file: the **C3 Micro-Cloud** offline information will be downloaded to your computer. You can then take your computer to a location with Internet Access and upload this file to the **C3 Cloud Control**.
- Export to USB drive: if you have a USB pen directly attached to the **C3 Micro-Cloud**, you can export the offline information directly to the attached USB pen. The information is stored in a file with the name c3licenseid.txt.

3.4.2. Network Interfaces

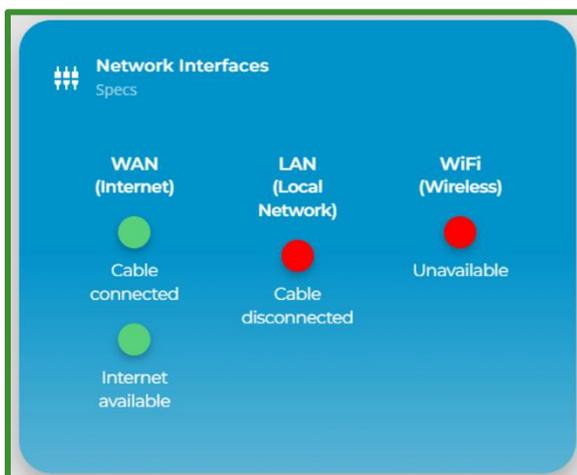


Figure 10: Dashboard Network Interfaces

It reports the status of the **C3 Micro-Cloud** network interfaces and internet availability. A red ball indicates that the service is not running, while a green ball indicates that the service is currently running.

Important Note: For **C3 Micro-Cloud** devices that do not have a physical wired LAN interface, the LAN status will always be shown as red (cable disconnected). This is NOT a malfunction.

3.5. Local Area Network and Internet Access

3.5.1. Local Area Network (LAN)

Provides information about the **C3 Micro-Cloud** Hostname, Netmask and Ip Address.



Figure 11: Dashboard LAN

3.5.2. Internet Access (WAN)

Provides information about the **C3 Micro-Cloud**: IP Configuration Method; Netmask; DNS Server; IP Address and Gateway.

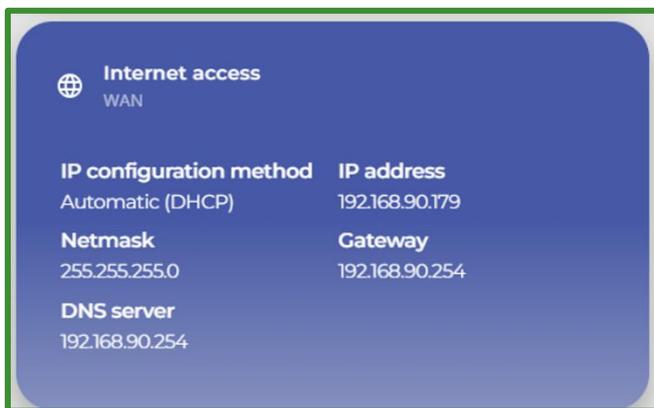


Figure 12: Dashboard WAN

3.3. Hardware

The hardware card in the dashboard details basic information about the **C3 Micro-Cloud** hardware:

- Number of CPU Cores;
- RAM usage;
- Size and usage of the System and Data disk partitions.

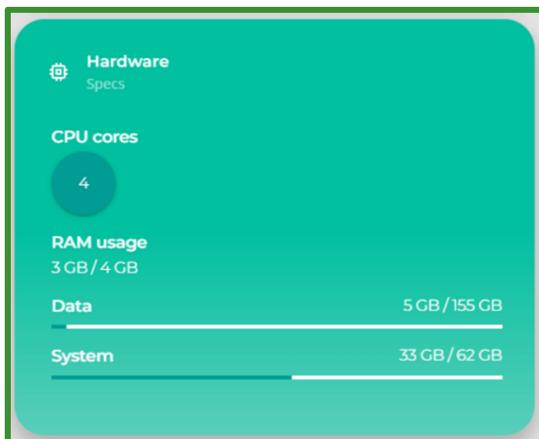


Figure 13: Dashboard Hardware

3.3.1. Wireless

This card shows information about the **C3 Micro-Cloud** WiFi configuration:

- **WiFi AP Name:** The WiFi access point SSID name;
- **WiFi band:** 2.4Ghz or 5Ghz WiFi band;
- **Channel:** WiFi channel selected (available channels depend on the regulatory domain);
- **WiFi AP Password:** The password to connect to the device Access Point;
- **Regulatory Domain:** Country where the **C3 Micro-Cloud** is installed;
- **Connected stations:** How many user devices are currently connected to the **C3 Micro-Cloud**.

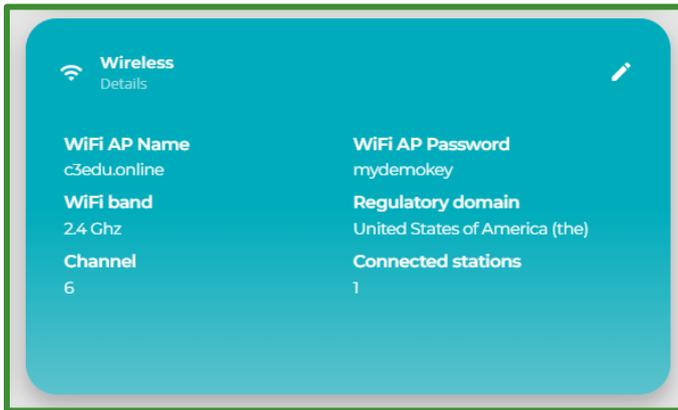


Figure 14: Dashboard WIFI

Important Note: Devices without the WiFi interface do not show this card.

For more information about the **dashboard**, refer to the offline video titled "**dashboard**" located in the "**C3 Micro-Cloud Training Videos - English Version**" folder on the **C3 Micro-Cloud** or watch the video on the YouTube platform through the provided link:

<https://youtu.be/QVuCvCYStik?si=6FZ3I7bPn6j3tc2S>

4. C3 Micro-Cloud Foundation LMS

The **C3 Micro-Cloud Foundation LMS** offers students an innovative way to access content, while providing teachers with a method to organize the available content into Classes, where students can directly access what is most relevant to their learning curriculum.

4.1. LMS Settings

In this page, settings that apply across all **Foundation LMS** features are configured.

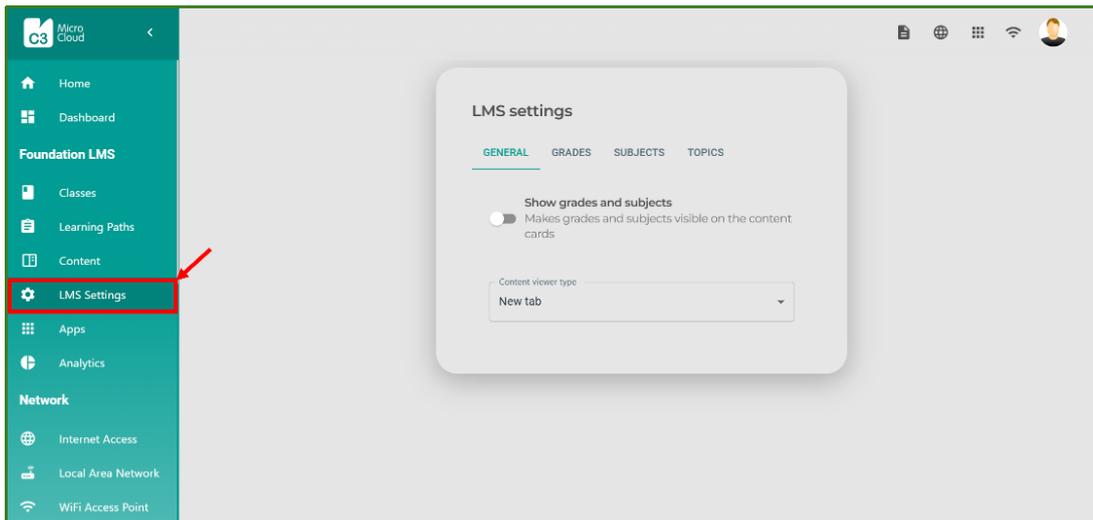


Figure 15: Foundation LMS

4.2. General

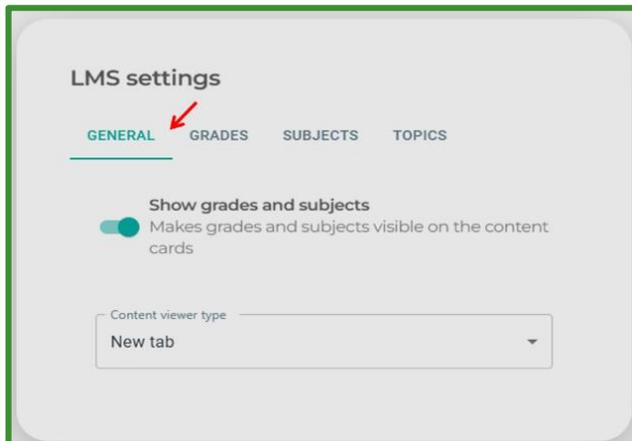


Figure 16: General LMS

In the **General Tab**, two settings are available:

- **Show grades and subjects:** enables/disables showing grade and subject information in the content card of each content;

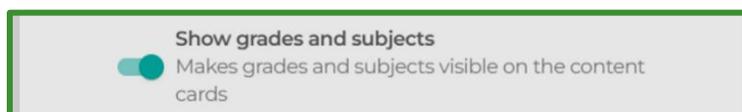


Figure 17: LMS Show Grades and Subjects

- Content viewer type:** defines how content is displayed to the user. If 'New Tab' (default) is selected, clicking on a content card will open its content in a new browser tab. If 'Internal Viewer' is selected, the content will be displayed in the current tab. Clicking the back button on the browser will return the user to the **C3 Micro-Cloud** main menu.

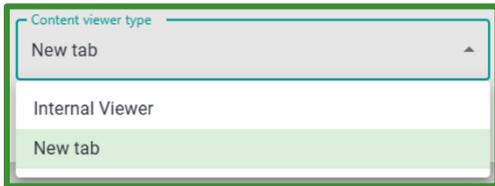


Figure 18: LMS content viewer type

4.3. Grades

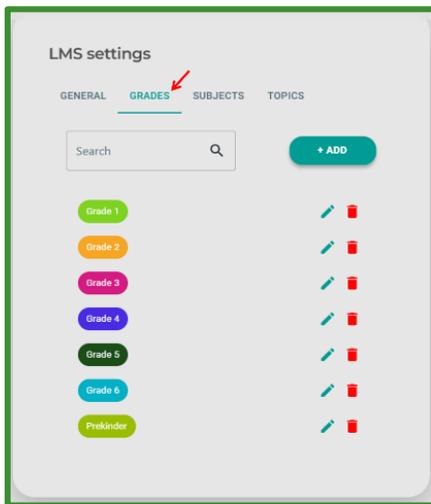


Figure 19: LMS Adding Grades

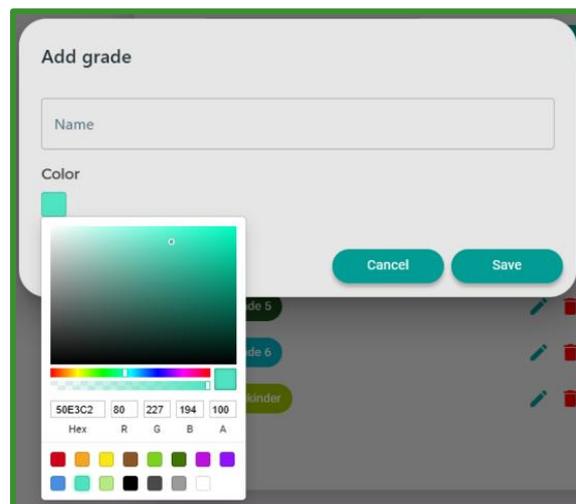


Figure 20: LMS Grade Color Customization

In the **Grades Tab**, you can create the required grades to be subsequently applied to specific content. Simply click the '**Add**' button. This tab also allows you to search for previously added grades using the search filter. When adding or editing a grade, you can assign a color to the grade label. The grade information will be displayed in the content cards

4.4. Subjects

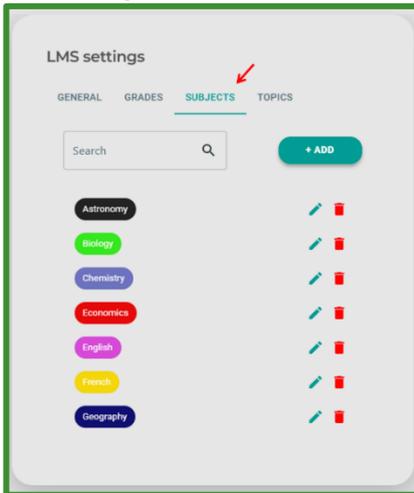


Figure 21: Adding Subjects

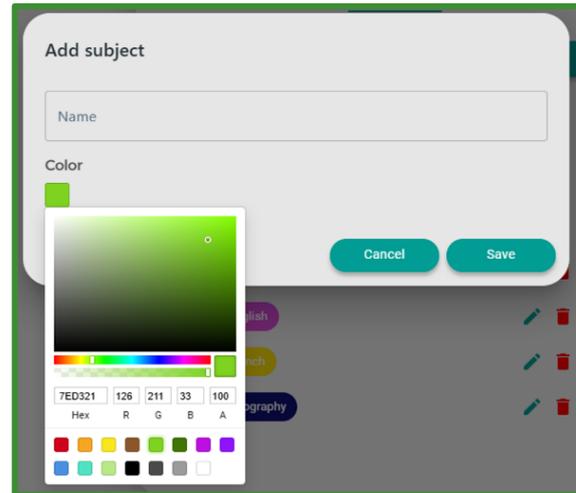


Figure 22: Subjects Color Customization

In the **Subjects** tab, you can create the required subjects to be subsequently applied to specific content. Simply click the '**Add**' button. This tab also allows you to search for subjects already added using the search filter. When adding or editing a subject, you can assign a color to the subject label. The subject information will be displayed in the content cards.

4.5. Topics

In the **Topics** tab, additional content-related information can be added and subsequently applied to content cards. This will provide users with an extra level of filtering when searching for specific content. Simply click the '**Add**' button.

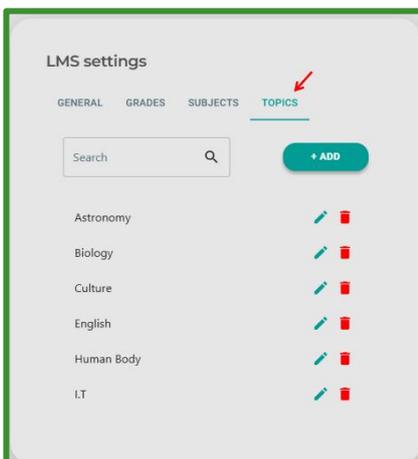


Figure 23: Topics tab

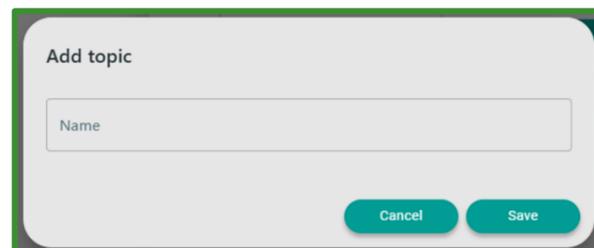


Figure 24: Adding Topics

In this tab, you can also search for topics already added using the search filter.

For more information about **LMS Settings**, refer to the offline video titled '**LMS Settings**' located in the folder '**C3 Micro-Cloud Training Videos - English Version**' on the **C3 Micro-Cloud**, or watch the video on the YouTube platform through the provided link:

https://youtu.be/-oS7IS_gW-U?si=cEjli3XaPr1qazU6

5. Content

Content stored on the **C3 Micro-Cloud** is either pushed to the device by **C3 Cloud Control** or locally uploaded.

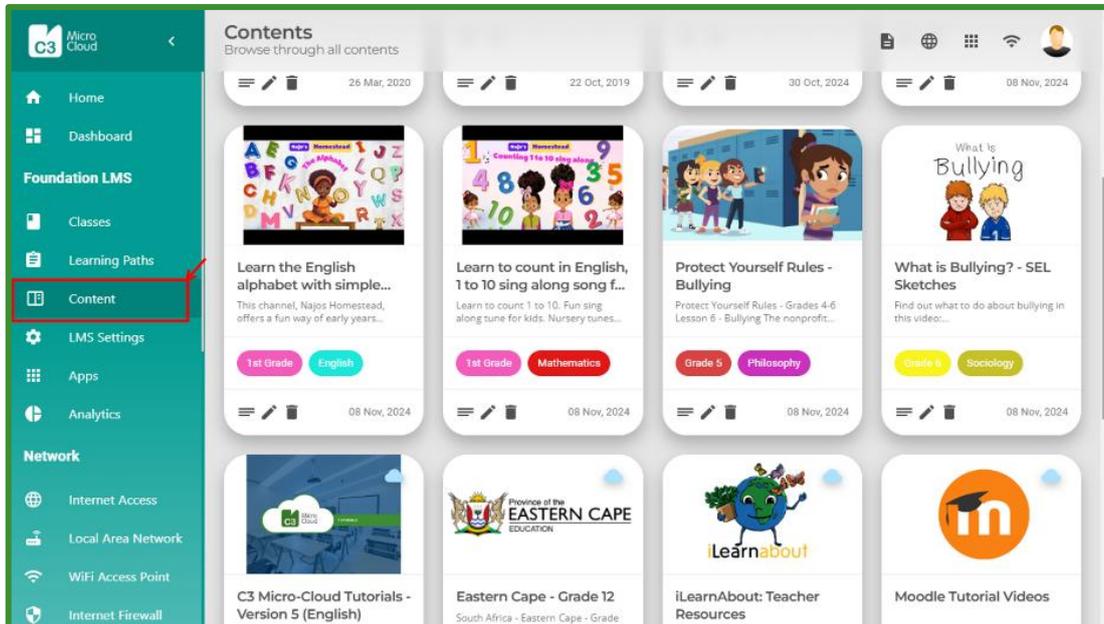


Figure 25: Content View

Content originating from **C3 Cloud Control** displays a small cloud icon in the upper right corner of the content card.



Figure 26: C3 Cloud Control Originated Content View

For content originating from **C3 Cloud Control**, only certain information associated with the content can be edited. Deletion of content can only be performed for locally uploaded content. This means that removal of cloud-based content from the **C3 Micro-Cloud** must be done through the **C3 Cloud Control** platform.

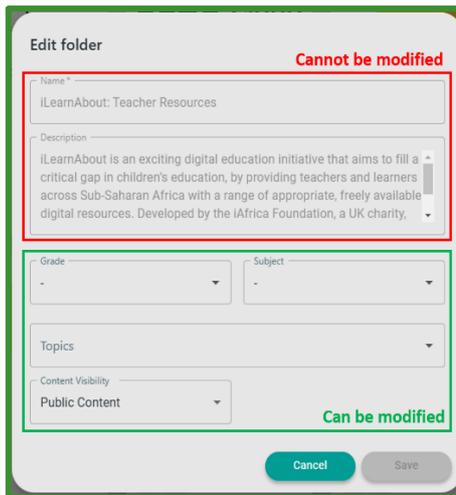


Figure 27: Fields that Can and Cannot be Modified from the C3 Cloud Control

On the other hand, users with an administrator or teacher profile can upload various types of content to the device, which can then be used by all users. This content will only be available on the specific **C3 Micro-Cloud** device to which it was uploaded. Content is added using the **+ ADD** button at the top right of the content page. The different types of content will be described later.

5.1. Content Search

Content search is performed using the search field located in the top left corner of the content page. This feature helps users locate content by name more easily.

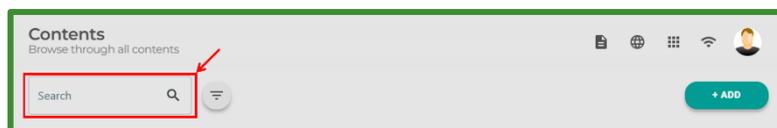


Figure 28: Content Search View

5.2. Content Filtering

Content filtering is performed by clicking the inverted triangle next to the search field in the top left corner of the content page. The content filter helps users search for content in a more specific and detailed way.



Figure 29: Content Filtering View

Filtering can be performed by:

- **Sort:** name, date created, date updated;
- **File type:** All, **C3 Micro-Cloud** archive, **C3 Micro-Cloud** content, Content package, Folder, Image, PDF, PPT, Unknown, URL, Video, Wiki;

- **Origin:** All, Local, **C3 Cloud Control**;
- **Grade:** all those previously registered in **C3 Micro-Cloud**;
- **Subject:** all those previously registered in **C3 Micro-Cloud**;
- **Topics:** all those previously registered in **C3 Micro-Cloud**.

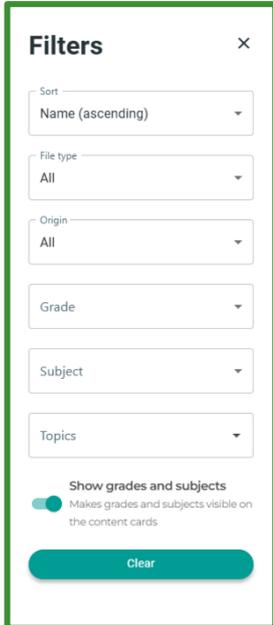


Figure 30: Content Filter Options

When the content page has a filtered applied the filter icon will be marked.

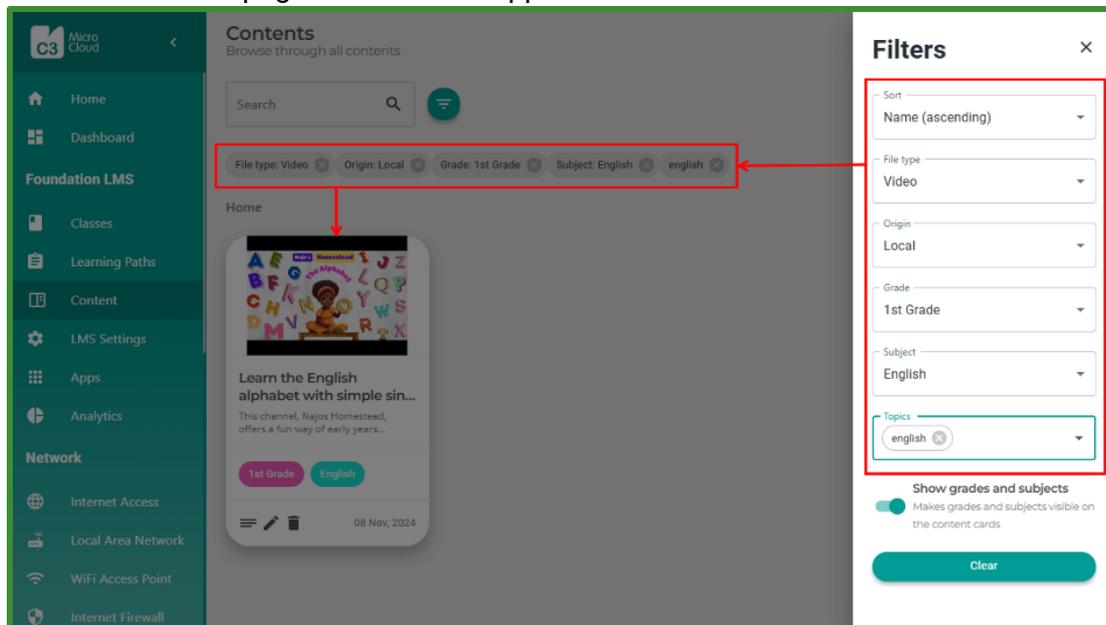


Figure 31: Content Filter Applied

Within the filter, there is an option to enable or disable the display of grades and subjects on content cards. If this option is disabled, the grade and subject search filter will still work, but this information will not be shown on the cards.

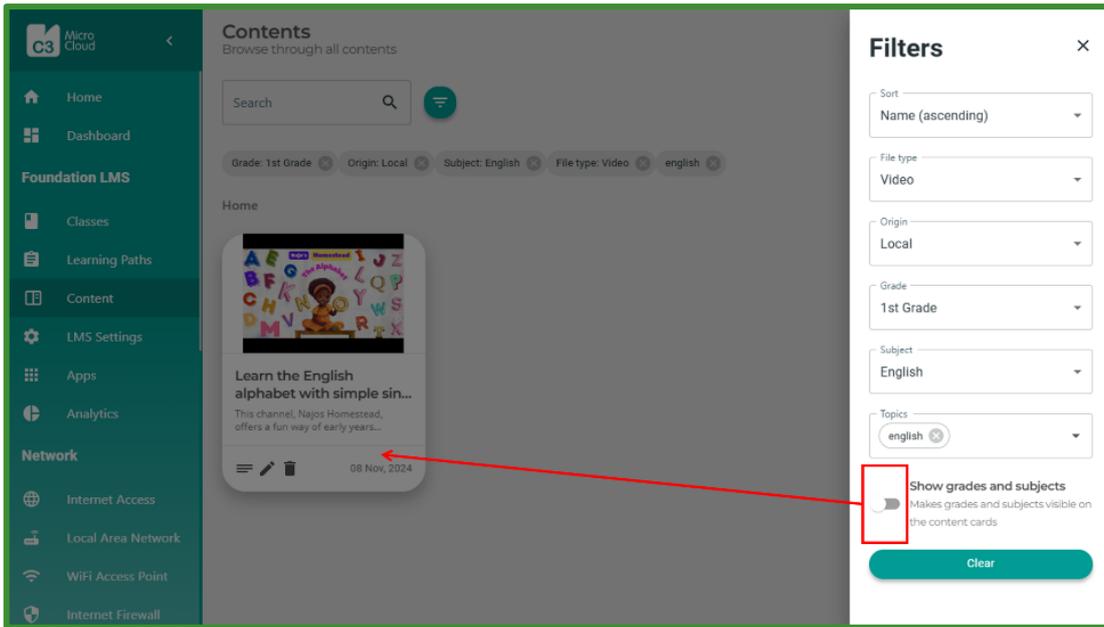


Figure 32: Disable Content Cards Grades and Subjects

5.3. Add Content Button

Add Content button is located on the top right corner of the content page.

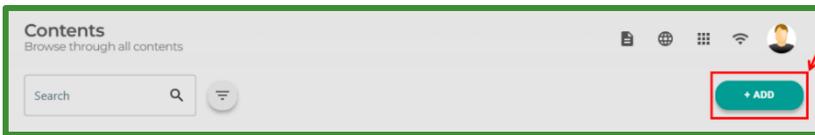


Figure 33: Add Content Button

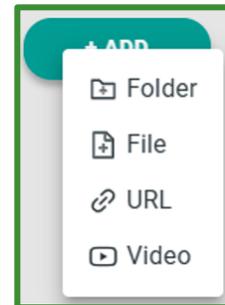


Figure 34: Add Content Button Options

Clicking on this button will display four options for inserting content:

- **Folder;**
- **File;**
- **URL;**
- **Video.**

5.3.1 Add Folder

The folder content type creates a hierarchical folder structure where content can be stored in an organized way. Organizing content into folders is a good practice, but it is not mandatory.

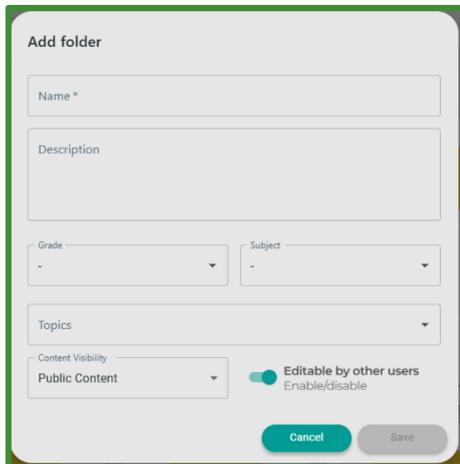


Figure 35: Folder Form

The folder form, to be filled out, consists of:

- **Name field:** Here user should put a name for his folder;
- **Description field:** If necessary, user can insert a description to clarify or give more details about his folder;
- **Grade:** Here the user will select which grade, previously registered in **C3 Micro-Cloud**, this folder will belong to;
- **Subject:** Here the user will select which subject, previously registered in **C3 Micro-Cloud**, this folder will belong to;
- **Topics:** Here the user will select which topics, previously registered in **C3 Micro-Cloud**, this folder will belong to. But, in this specific case, if the user wants to insert topics that do not exist into the **C3 Micro Cloud** yet, it's possible to write it in this field and then, it will be automatically inserted. Besides, it will become part of the **C3 Micro-Cloud** topic's database;
- **Content visibility:** Here the user can determine the visibility of his folder. There are four options:
 - **Public content:** Visible to anyone (no matter if they have signed in to the **C3 Micro-Cloud** or not);
 - **Teacher's content:** Only signed in to the **C3 Micro-Cloud** users with a teacher profile will be able to view the folder;
 - **Authenticated users:** Only users that have signed in to the **C3 Micro-Cloud** have access;

→ **Private content:** Only the content creator and the **C3 Micro-Cloud** Administrator will have access to it.

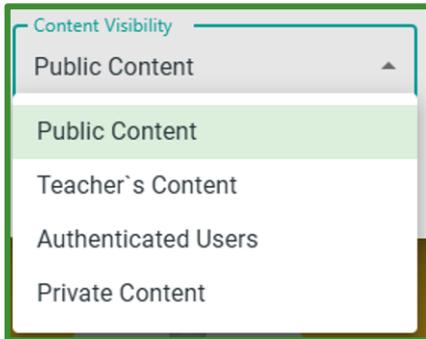


Figure 36: Content Visibility Types

Important: All content inserted into a folder will have the grade, subject, and visibility level set for that folder.

- **Editable by other users:** If this option is enabled, other users with a teacher profile will be able to make changes to this folder. If disabled, only the user who created the folder will be able to modify it. It's important to note that, in both cases, users with an administrator profile can make any changes.

5.3.2. Add File

The 'Add File' option allows users to upload any type of file from their workstation to the content page or folder.

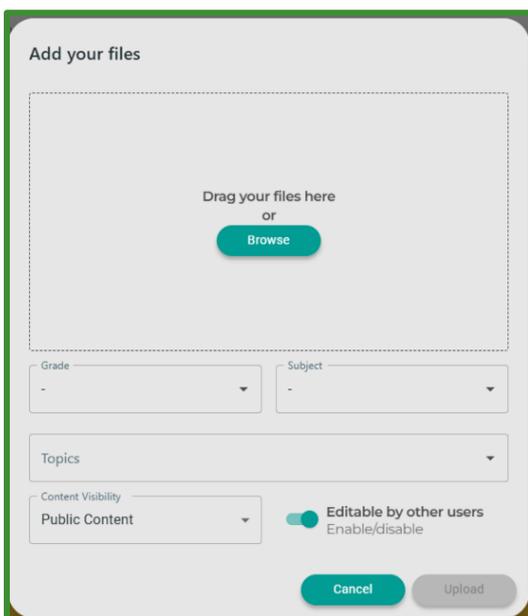


Figure 37: File Form

The file form, to be filled out, consists of:

- **Drag your files here or browse:** here the users could just drag and drop any type of files or indicate the location on his device where the file to be uploaded is saved. Here, the users have two step process:
 - The first part, as shown on figure 69, you are asked to select the file or files to be uploaded;
 - After the files are selected, they will be shown, with available and required disk space, as shown below.

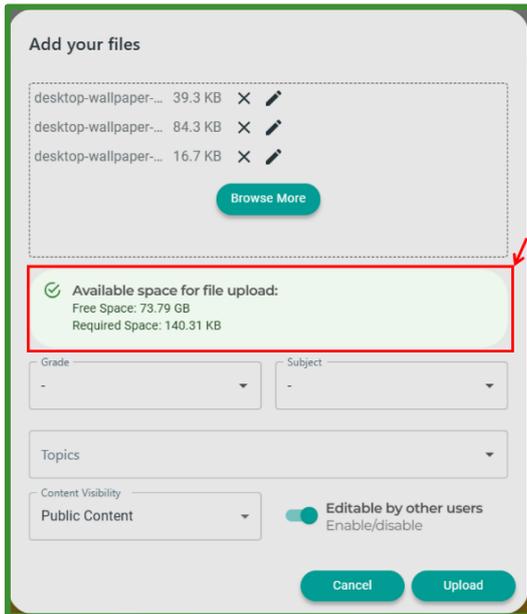


Figure 38: File Form

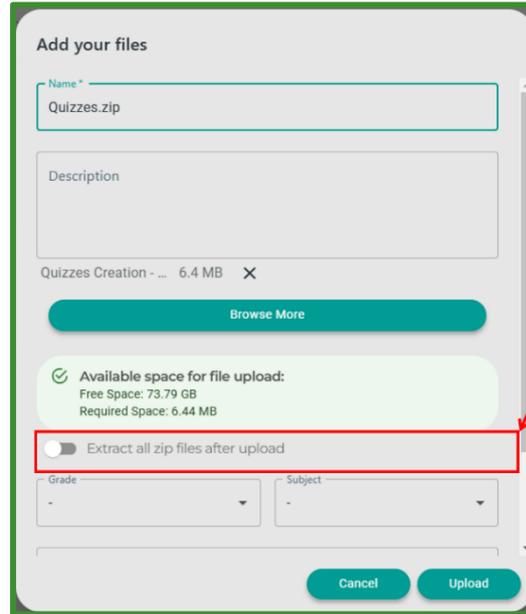


Figure 39: Enable the Decompressing zip File After Upload

Important Note: The file option also supports the upload of static websites. In this case, Websites need to be compressed in **.zip** format for upload and at the root of the zip file an **index.html** file needs to exist.

The file form, to be filled out, consists of:

- **Grade:** Here the user will select which grade, previously registered in **C3 Micro-Cloud**, this file will belong to;
- **Subject:** Here the user will select which subject, previously registered in **C3 Micro-Cloud**, this file will belong to;
- **Topics:** Here the user will select which topics, previously registered in **C3 Micro-Cloud**, this file will belong to. But, in this specific case, if the user wants to insert topics that do not exist into the **C3 Micro Cloud** yet, it's possible to write it in this field and then, it will be automatically inserted. Besides, it will become part of the **C3 Micro-Cloud** topic's database;

- **Content visibility:** Here the user can determine the visibility of his file. There are four options:
- **Public content:** Visible to anyone (no matter if they have signed in to the **C3 Micro-Cloud** or not);
 - **Teacher's content:** Only signed in to the **C3 Micro-Cloud** users with a teacher profile will be able to view the file;
 - **Authenticated users:** Only users that have signed in to the **C3 Micro-Cloud** have access; or
 - **Private content:** Only the content creator and the **C3 Micro-Cloud** Administrator will have access to it.

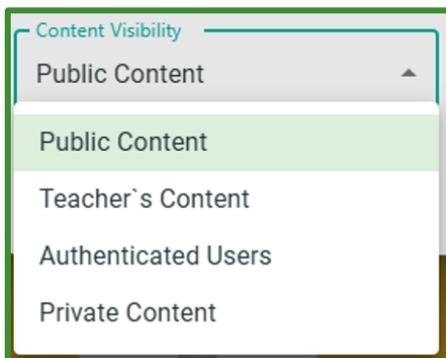


Figure 40: Content Visibility Types

- **Editable by other users:** if this option is enabled, other users (with a teacher profile) will be able to make changes to this file. If disabled, only the user who created the file will be able to modify it. It's important to remember that in both cases, users with an administrator profile can make any changes.

After adding the file, the user will be able to locate it, among the content inserted in **C3 Micro-Cloud**, and choose the **Edit** option.

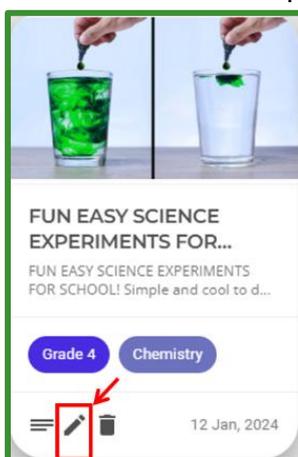


Figure 41: Content Card Edit Option

The file form will open again, but this time the user can configure a thumbnail.

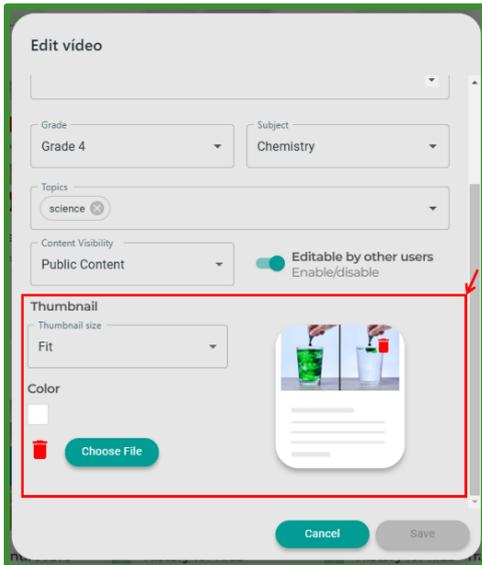


Figure 42: Thumbnail Editing

Important Note: If you are trying to insert a website into your **C3 Micro-Cloud**, we recommend watching the video 'How to Insert a Website into **C3 Micro-Cloud**'.

For more information on how to insert a website, watch the video offline in the '**C3 Micro-Cloud Training Videos - English Version**' folder on the **C3 Cloud Control** or watch it on the YouTube platform through the provided link: <https://youtu.be/t9qPb9-ft-Y?si=w2mrdkMNKml9NQ-k>

5.3.3. Add URL

Adding content as a URL will redirect the user's browser to the defined URL, which can be either an external or internal address.

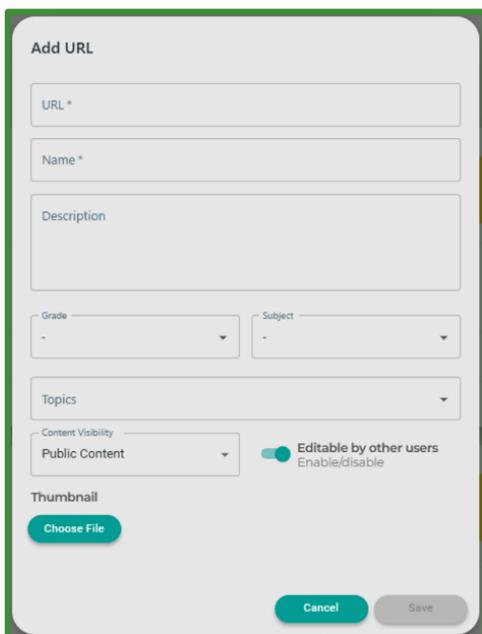


Figure 43: URL Form

The URL form, to be filled out, consists of:

- **Name field:** Here user should put a name for his URL. It's important to remember that URL name must be inserted beginning with <http://> or <https://>;
- **Important Note:** Some URLs, when added, can automatically fill in the **Name** and **Description** fields. But both fields can be edited;
- **Description field:** If necessary, user can insert a description to clarify or give more details about the URL;
- **Grade:** Here the user will select which grade, previously registered in **C3 Micro-Cloud**, this URL will belong to;
- **Subject:** Here the user will select which subject, previously registered in **C3 Micro-Cloud**, this URL will belong to;
- **Topics:** Here the user will select which topics, previously registered in **C3 Micro-Cloud**, this URL will belong to. But, in this specific case, if the user wants to insert topics that do not exist into the **C3 Micro-Cloud** yet, it's possible to write it in this field and then, it will be automatically inserted. Besides, it will become part of the **C3 Micro-Cloud** topic's database;
- **Content visibility:** Here the user can determine the visibility of his URL. There are four options:
 - **Public content:** Visible to anyone (no matter if they have signed in to the **C3 Micro-Cloud** or not);
 - **Teacher's content:** Only signed in to the **C3 Micro-Cloud** users with a teacher profile will be able to view the URL;
 - **Authenticated users:** Only users that have signed in to the **C3 Micro-Cloud** have access; or
 - **Private content:** Only the content creator and the **C3 Micro-Cloud** Administrator will have access to it.

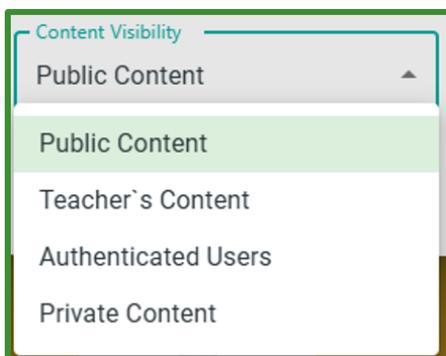


Figure 44: Content Visibility Types

- **Editable by other users:** if this option is enabled, other users (with a teacher profile) will be able to make changes to this URL. If it is disabled, only the user who created the URL will be able to make changes to it. It is important to note that, in both cases, users with an administrator profile have full access;
- **Thumbnail:** through this option, you can add or replace the URL thumbnail file. Simply click on the '**Choose File**' button and select the location on your device where the thumbnail file is stored. Additionally, you can adjust the size of the thumbnail within the card by clicking on the '**Thumbnail Size**' field

5.3.3.1. Add Video

The option to add video content to the **C3 Micro-Cloud** allows these videos to be viewed later and played directly from the device, without the need for an internet connection. In other words, this video option enables the uploading of internet videos into the **C3 Micro-Cloud**. The process begins with a content disclaimer from Critical Links, informing the user that they are solely responsible for any copyright issues related to the video.

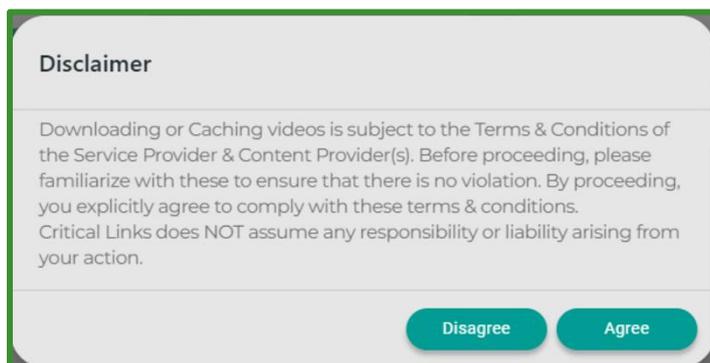


Figure 45: Video Disclaimer Warning

To cancel this process, the user just needs to click on the '**Disagree**' button. However, to proceed with the process, the user must click on the '**Agree**' button. Then, three steps will follow:

1. A box will open, and the user will paste the URL(s) of the video(s) to be downloaded to the **C3 Micro-Cloud**. Multiple URLs can be inserted at once; simply type them correctly, one per line, and then click on the '**Next**' button.

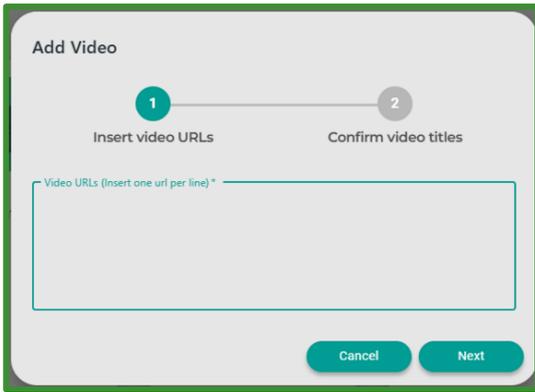


Figure 46: Adding Video Box

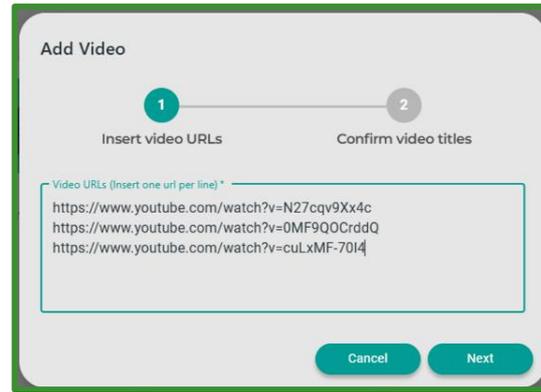


Figure 47: Inserting URL on Video

- The **C3 Micro-Cloud** uses the URLs to check the video compatibility with the system. Additionally, it checks whether the **C3 Micro-Cloud** has enough disk space to store the video(s). In this step, it is also possible to edit the video title.

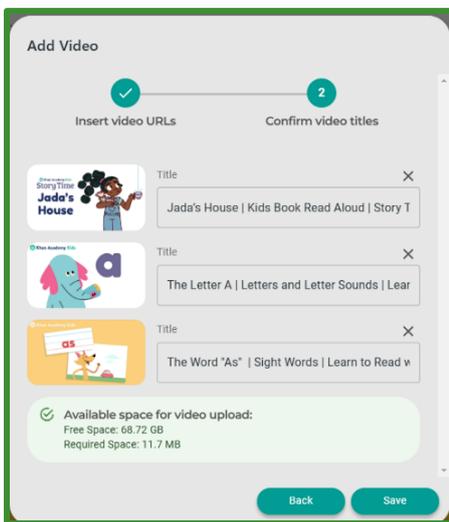


Figure 48: Check Video URLs

- If everything is OK, click the **Save** button to start the download process. After the download is completed, the video(s) will be available for viewing on the Content main page, without the need for an internet connection

If the user needs to change any information in the video, simply click on the **Edit** icon located in the bottom left corner of the video card to open the form with the information to be changed. At the end, just click the **Save** button.

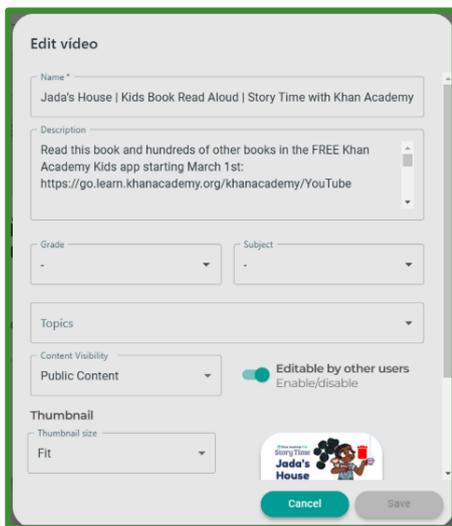


Figure 49: Editing Video Form

For more information about **Content**, refer to the offline video titled '**Content**' located in the folder '**C3 Micro-Cloud Training Videos - English Version**' on the **C3 Micro-Cloud**. Or watch the video on the YouTube platform through the provided link:

https://youtu.be/mrUmDwJM2M0?si=oy6_5YEPWHxoDljH

6. Learning Path

A Learning Path is a sequence of content that a teacher or an administrator can assemble, which will then be made available in a class.

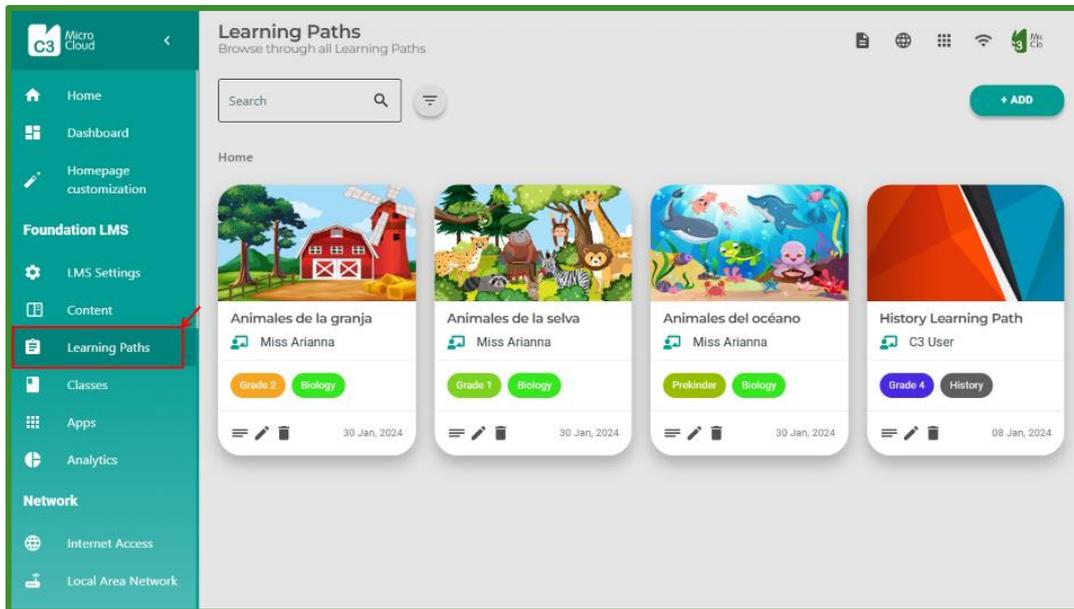


Figure 50: Learning Path View

To streamline and simplify the work of teachers, who are responsible for curating content for the students' learning process, the **C3 Micro-Cloud** supports the creation of Learning Paths, which can then be used as the foundation for class creation. Learning Paths can be added using the **+ ADD** button, located in the top right corner of the Learning Path page. Additionally, Learning Paths can also be organized into folders to help Learning Path creators keep their paths organized.

The Learning Path card shows **Title, Identity of the creator, Subjects, Grades** and **Creation date**.



Figure 51: Learning Path Card

Learning Paths are also searchable. Furthermore, you can apply filters to the displayed Learning Paths based on assigned Grade, Subject, or Topic.

6.1. Learning Path Search

"The Learning Path search is conducted through the search field located in the top left corner of the Learning Path page. This search helps users easily locate a Learning Path by its name.

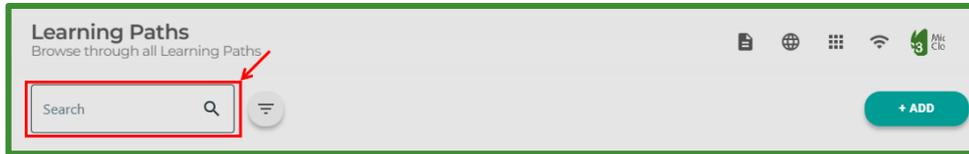


Figure 52: Learning Path Search View

6.2. Learning Path Filtering

Learning Path filtering is done by clicking the inverted triangle next to the search field in the top left corner of the Learning Path page. The filter helps users search for Learning Paths in a more specific and detailed manner.

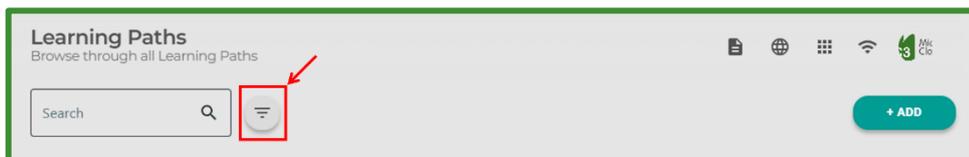


Figure 53: Learning Path Filtering View

Filtering can be performed by:

- **Grade:** All those previously registered in **C3 Micro-Cloud**;
- **Subject:** All those previously registered in **C3 Micro-Cloud**;
- **Topics:** All those previously registered in **C3 Micro-Cloud**.

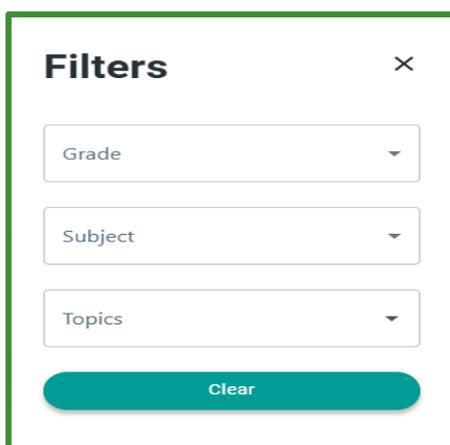


Figure 54: Learning Path Filter Options

When the Learning Path page has a filtered applied the filter icon will be marked.

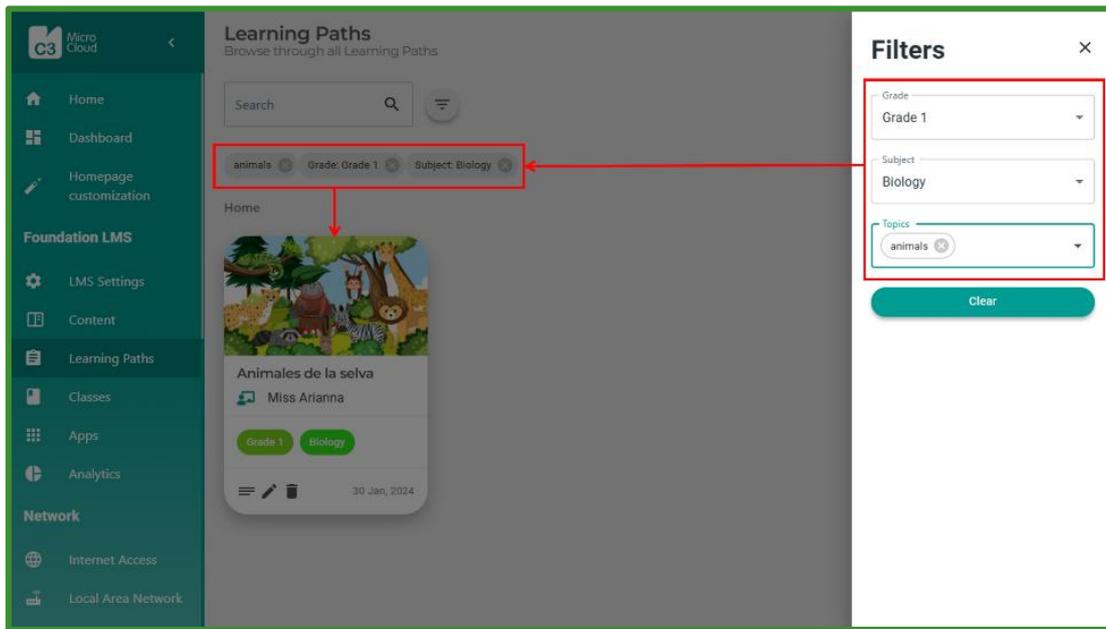


Figure 55: Learning Path Filter Applied

6.3. Add Learning Path Button

Add Learning Path button is located on the top right corner of the Learning Path page.

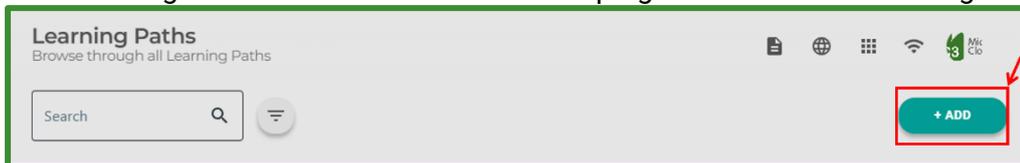


Figure 56: Add Learning Path Button

Clicking on this **button** will display two options for inserting Learning Path:

- Folder;
- Learning Path.

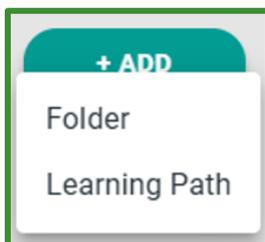


Figure 57: Add Learning Path Button

6.3.1. Add Learning Path Folder

Clicking on **+ ADD** button and choosing the Folder option, will open a form to be filled out.

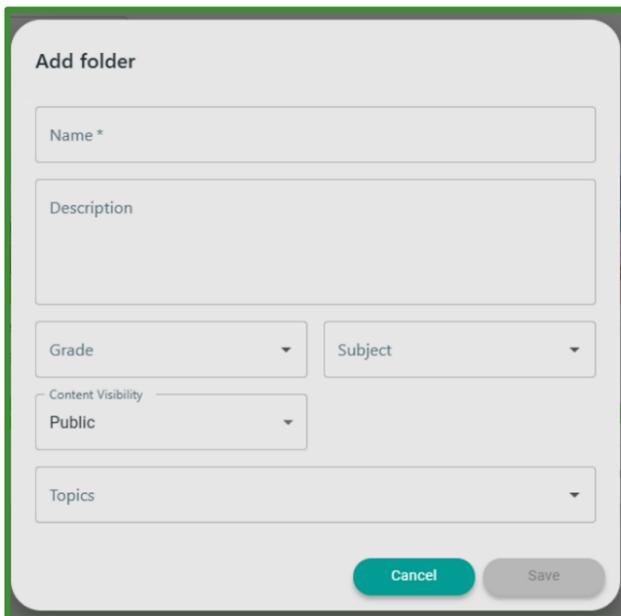


Figure 58: Learning Path Folder Form

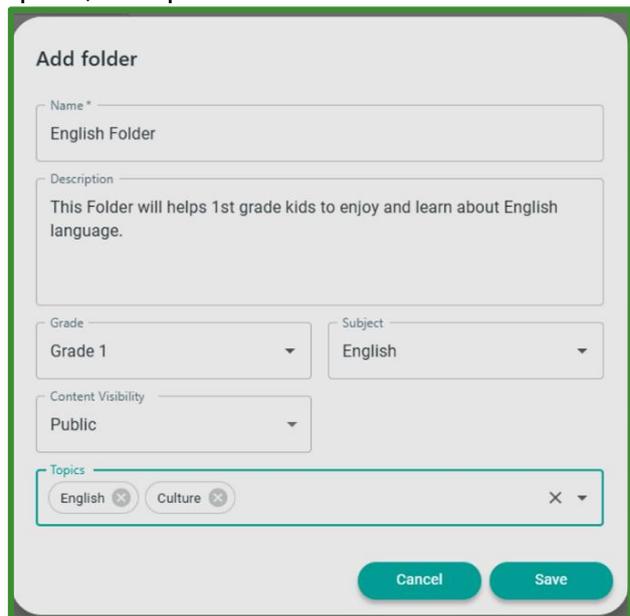


Figure 59: Learning Path Folder Form Example

The Learning Path Folder form has the following fields:

- **Name field:** Here user should put a name for his folder;
- **Description field:** If necessary, user can insert a description to clarify or give more details about his folder;
- **Grade:** Here the user will select which grade, previously registered in **C3 Micro-Cloud**, this folder will belong to;
- **Subject:** Here the user will select which subject, previously registered in **C3 Micro-Cloud**, this folder will belong to;
- **Topics:** Here the user will select which topics, previously registered in **C3 Micro-Cloud**, this folder will belong to. But, in this specific case, if the user wants to insert topics that do not exist into the **C3 Micro-Cloud** yet, it's possible to write it in this field and then, it will be automatically inserted. Besides, it will become part of the **C3 Micro-Cloud** topic's database;
- **Content visibility:** Here the user can determine the visibility of his folder. There are two options:
 - **Public content:** Only users that have signed in to the **C3 Micro-Cloud** have access; or
 - **Private content:** Only the Learning Path creator and the **C3 Micro-Cloud** Administrator will have access to it.

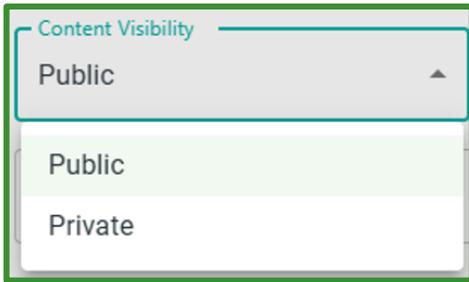


Figure 60: Learning Path Visibility Types

Important Note: All Learning Paths inserted within a folder will inherit the grade, subject, and visibility level set for that folder.

On the main page of a Learning Path folder, there is also an **+ ADD** button in the top right corner. Clicking this button allows you to add more folders or Learning Paths.



Figure 61: Learning Path Folder Main Page

In our example, two subfolders were created within the root folder, but this is not mandatory. Learning Paths can also be created without the need for subfolders or even a folder. This depends on the needs of the teacher and/or administrator.

The folder card displays information about the number of Learning Paths it contains.

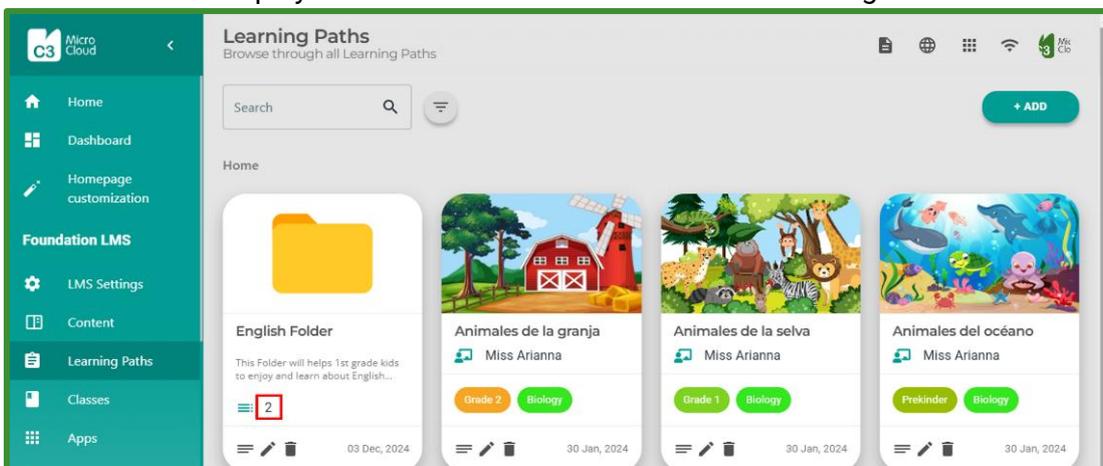


Figure 62: Learning Path Folder Card

As we can see, the folder card displays the number of Learning Paths and/or subfolders it contains. By clicking on the folder, we can view its contents.

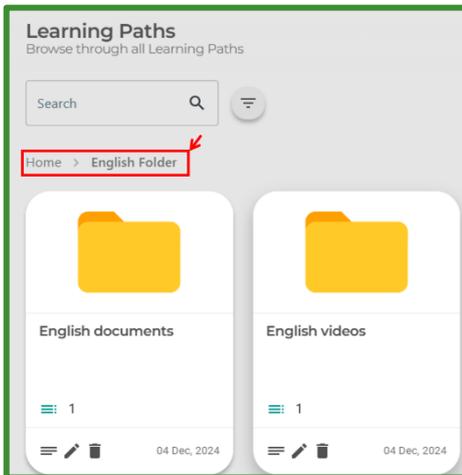
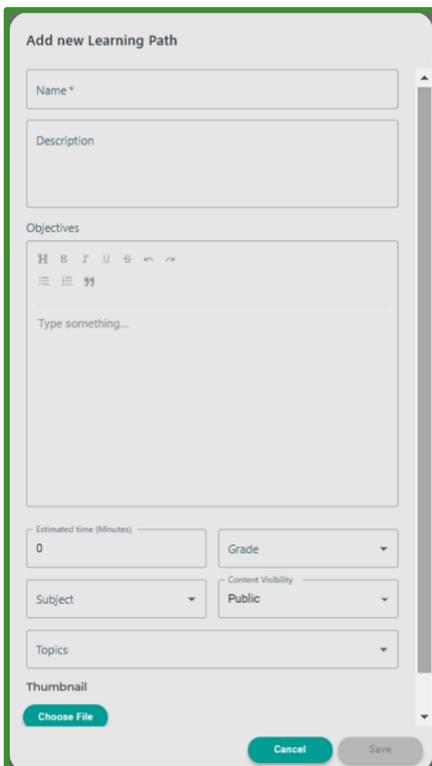


Figure 63: Learning Path Folder Main Page with its Subfolders

Important Note: If the user decides to create a folder, it is mandatory to create at least one Learning Path inside the folder in order to add content.

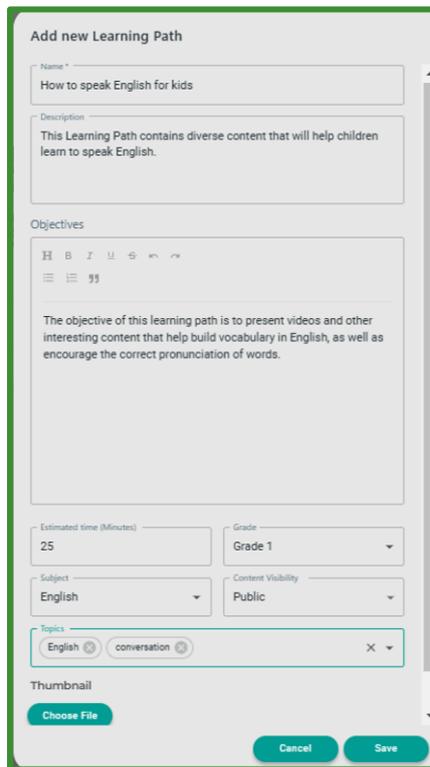
6.3.2. Add Learning Path

Clicking on **+ ADD** button and choosing the Learning Path option, will open a form to be filled out.



The screenshot shows the 'Add new Learning Path' form. It has the following fields: 'Name *' (empty), 'Description' (empty), 'Objectives' (a rich text editor with a toolbar and the text 'Type something...'), 'Estimated time (Minutes)' (input field with '0'), 'Grade' (dropdown menu), 'Subject' (dropdown menu), 'Content Visibility' (dropdown menu with 'Public' selected), and 'Topics' (dropdown menu). At the bottom, there is a 'Thumbnail' section with a 'Choose File' button, and 'Cancel' and 'Save' buttons.

Figure 64: Learning Path Form



The screenshot shows the 'Add new Learning Path' form with example data filled in. The fields are: 'Name *' (filled with 'How to speak English for kids'), 'Description' (filled with 'This Learning Path contains diverse content that will help children learn to speak English.'), 'Objectives' (filled with 'The objective of this learning path is to present videos and other interesting content that help build vocabulary in English, as well as encourage the correct pronunciation of words.'), 'Estimated time (Minutes)' (input field with '25'), 'Grade' (dropdown menu with 'Grade 1' selected), 'Subject' (dropdown menu with 'English' selected), 'Content Visibility' (dropdown menu with 'Public' selected), and 'Topics' (dropdown menu with 'English' and 'conversation' selected). At the bottom, there is a 'Thumbnail' section with a 'Choose File' button, and 'Cancel' and 'Save' buttons.

Figure 65: Learning Path Form Example

The Learning Path form has the following fields:

- **Name field:** Here user should put a name for his folder;
- **Description field:** If necessary, user can insert a description to clarify or give more details about his folder;
- **Objectives field:** If necessary, the user can detail which objectives the Learning Path aims to achieve;
- **Estimated time:** Here the user can enter the estimated time (minutes) that all Learning Path will require from the student;
- **Grade:** Here the user will select which grade, previously registered in **C3 Micro-Cloud**, this folder will belong to;
- **Subject:** Here the user will select which subject, previously registered in **C3 Micro-Cloud**, this folder will belong to;
- **Topics:** Here the user will select which topics, previously registered in **C3 Micro-Cloud**, this folder will belong to. But, in this specific case, if the user wants to insert topics that do not exist into the **C3 Micro-Cloud** yet, it's possible to write it in this field and then, it will be automatically inserted. Besides, it will become part of the **C3 Micro-Cloud** topic's database;
- **Content visibility:** Here the user can determine the visibility of his folder. There are two options:
 - **Public content:** Only users that have signed in to the **C3 Micro-Cloud** have access; or
 - **Private content:** Only the Learning Path creator and the **C3 Micro-Cloud** Administrator will have access to it.

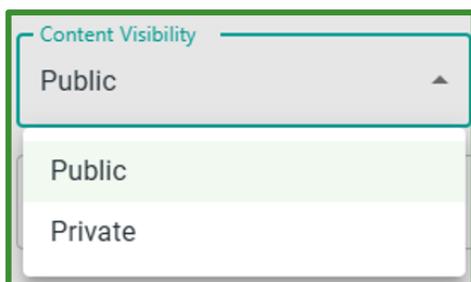


Figure 66: Learning Path Visibility Types

Important Note: All Learning Path inserted within a folder will inherit the grade, subject, and visibility level determined by it.

- **Thumbnail:** For each Learning Path it's possible to add a new thumbnail, just by clicking on **Choose File** button. Besides it's also possible to adjust its size within the card, just by clicking

on **Thumbnail Size** options. Finally, the user also can change thumbnail's color, just by clicking on **Color** option.

The next step is to open the Learning Path card by clicking anywhere on it to access the Learning Path editor.

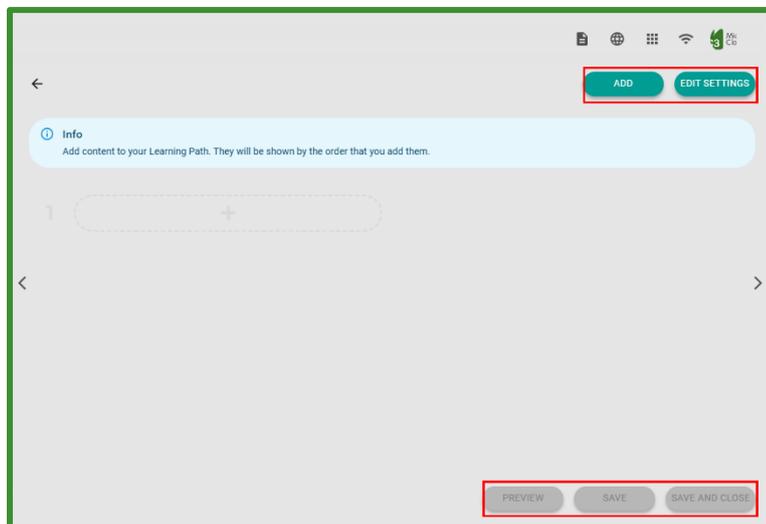


Figure 67: Learning Path Editor

When you access the Learning Path, you will be greeted with a page that displays the existing content (if any) that you have added to the Learning Path, along with options to rearrange the content, delete it, and add new content. We will now go through some examples.

First, it's important to note that the content that can be added to the Learning Path is content already available in your **C3 Micro-Cloud**.

Important Note: If you want to add content to your Learning Path that is not yet available in your **C3 Micro-Cloud**, you must first upload it to the 'Content' section of your **C3 Micro-Cloud**. If you're not sure how to do this, we recommend reading the 'Content' chapter of this document.

Now, let's see how to add content to the Learning Path. To do so, click the **ADD** button located in the top right corner of the screen. When you click this button, a box will open, displaying all the content currently in your **C3 Micro-Cloud**.

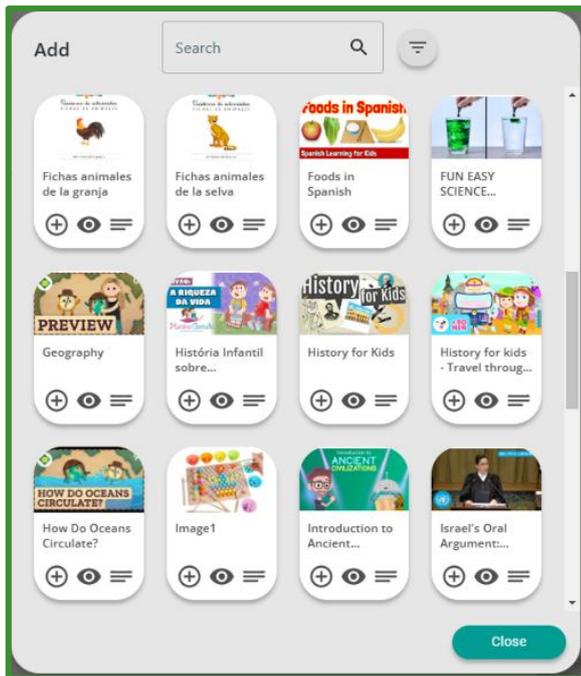


Figure 68: Learning Path Select Content to Add

Adding content to a Learning Path is very easy. Simply click on the + button located on each content card, and it will be automatically added. You can add as much content as necessary.

Content inside folders can also be added. To do this, just click on the desired folder, find the content you want to include in the Learning Path, and click on the + button.

Before adding content, you can preview it. Just click on the eye-shaped button to see a preview.

Important Note: If you want to add a specific Wikipedia article as part of your Learning Path, you must first select the Wikipedia content, click on the eye-shaped button (preview button), and navigate through it until you find the desired article. Then, click the + button to add it.

Finally, on the content card, you will notice the **Details** button. If you click on it, detailed information about the selected content will be shown.



Figure 69: Learning Path Content Cards to Add

Returning to the Learning Path main page, now with added content, you will notice that each content card has buttons allowing you to: edit the content's name and notes, delete the content, and change the order in which it appears.

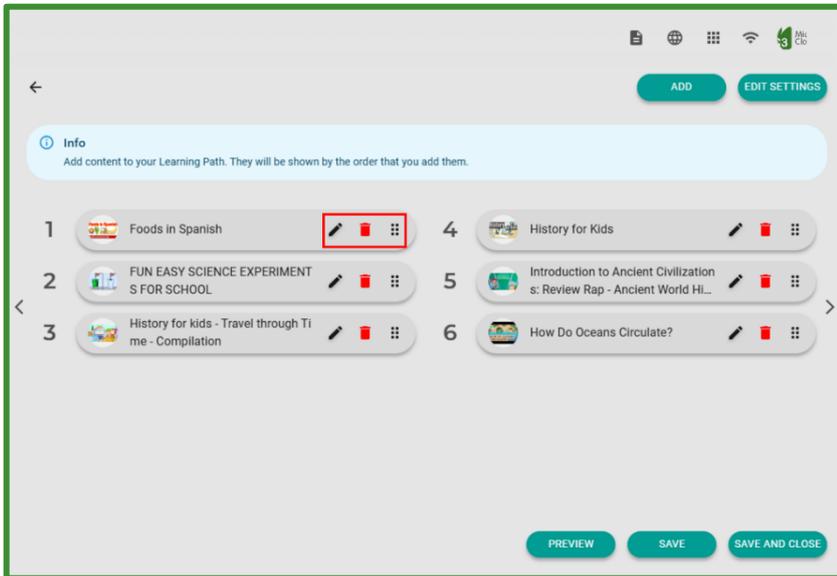


Figure 70: Learning Path with Content Added

If you click on the **Edit** button (pencil icon) of a specific content, a form will appear allowing you to change the content's name and notes.

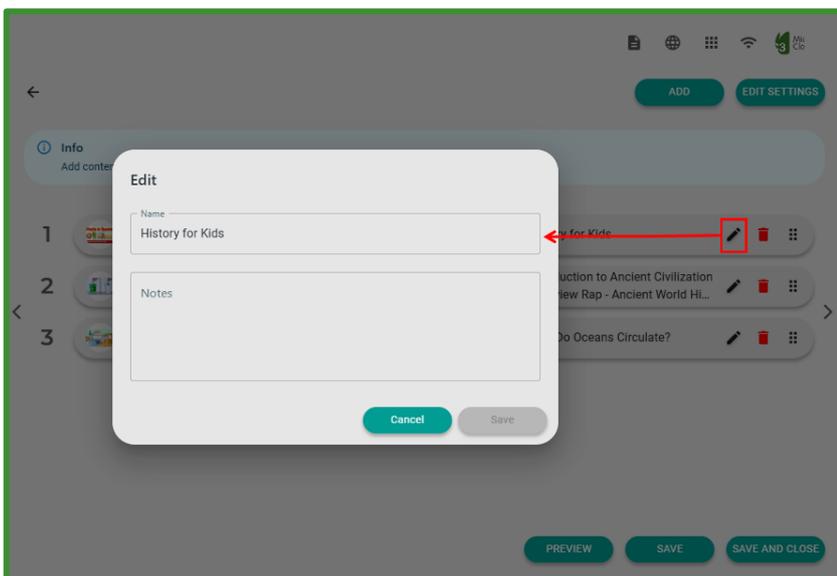


Figure 71: Learning Path Edit Content Button

However, if you click on the **Delete** button (trash icon) of a specific content, a warning will appear to confirm that you want to proceed with the action.

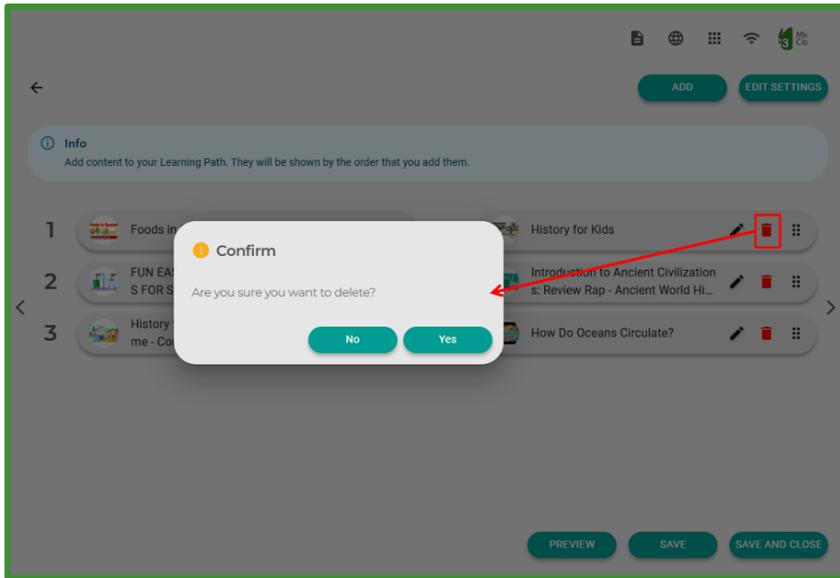


Figure 72: Learning Path Delete Warning

Additionally, you can also change the order (position) of the content. To do this, simply click on the **dots** next to the content you want to move and drag it to the desired position

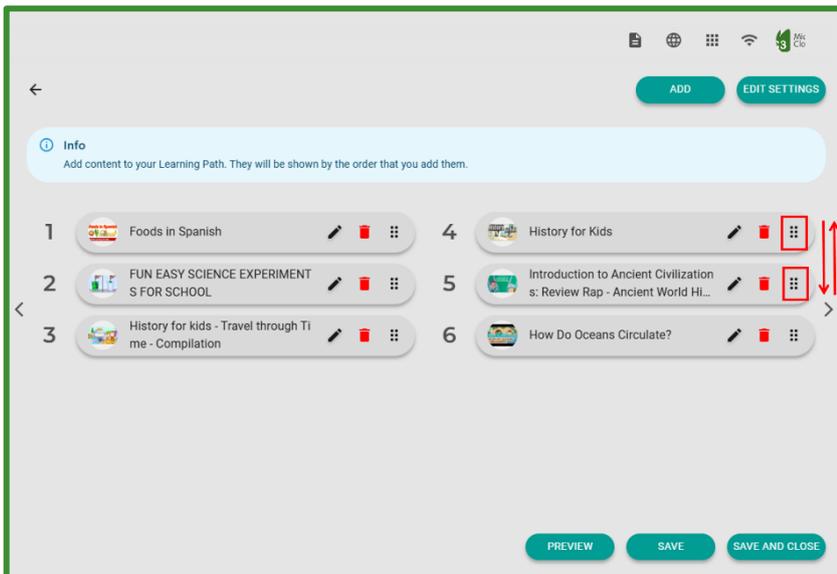
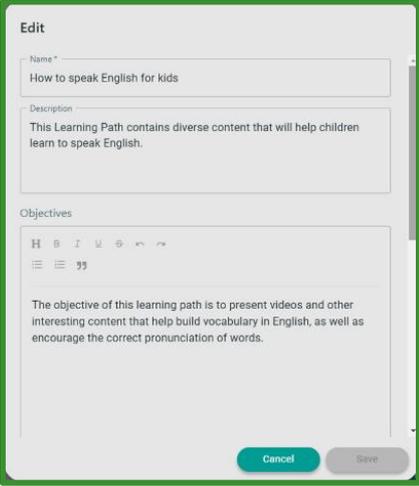


Figure 73: Learning Path Changing Page Position of Contents

However, if you click on the **Delete** button (trash icon) of a specific content, a warning will appear to confirm the action you are about to take.

6.3.3. Edit Settings Learning Path

Clicking on the **Edit Settings** button will open a form that allows the user to edit all the information of the Learning Path. This is the same form that was filled out during the Learning Path registration.



Edit

Name *
How to speak English for kids

Description
This Learning Path contains diverse content that will help children learn to speak English.

Objectives

H B I U G L R
≡ ≡ 99

The objective of this learning path is to present videos and other interesting content that help build vocabulary in English, as well as encourage the correct pronunciation of words.

Cancel Save

Figure 74: Learning Path Edit Settings

For more information about Learning Paths, refer to the offline video titled '**Learning Path**' located in the '**C3 Micro-Cloud Training Videos - English Version**' folder on the **C3 Micro-Cloud**. Alternatively, you can watch the video on the YouTube platform through the provided link:

https://youtu.be/n74SpEmvwOc?si=Sc-_dQDqRfJQ3tjw

7. Classes

Classes are used by teachers to interact with their students within a proposed theme, in addition to offering them Learning Path content. In this chapter, we will explore this important resource in detail.

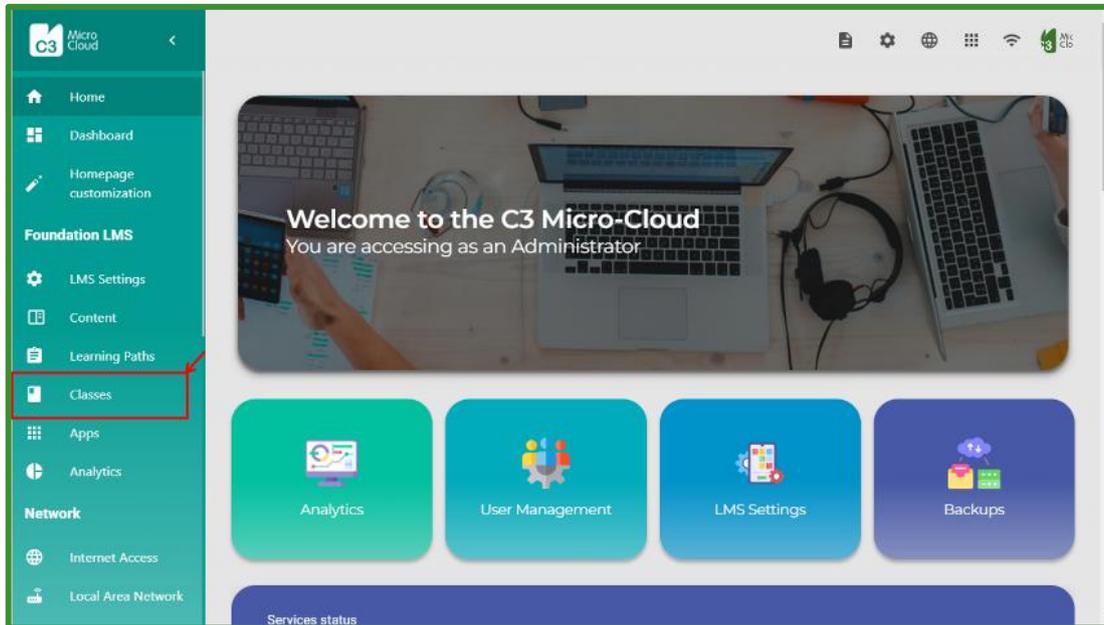


Figure 75: Class View

When we click on the 'Classes' option in the menu, the main Classes screen will be displayed.

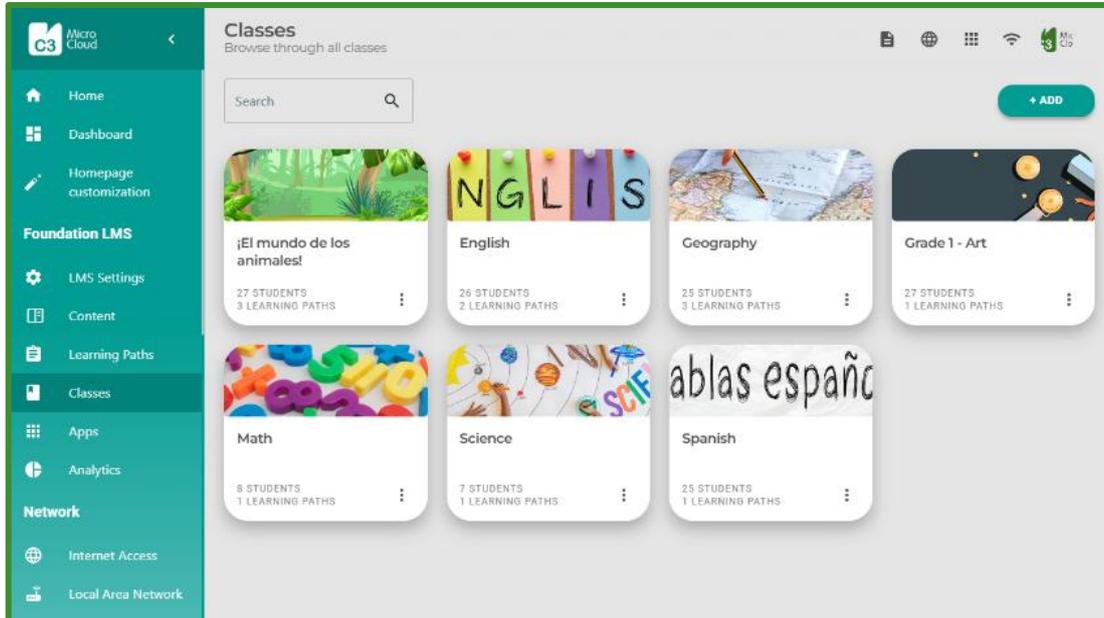


Figure 76: Class Main Page

A new class is created by clicking the **+ ADD** button in the upper right corner of the Classes page. Additionally, it is possible to search for specific classes. We will go over these procedures later in this chapter.

7.1. Class Search

Class search is performed using the search field located in the top left corner of the Classes page. This search feature helps users easily locate classes by name.

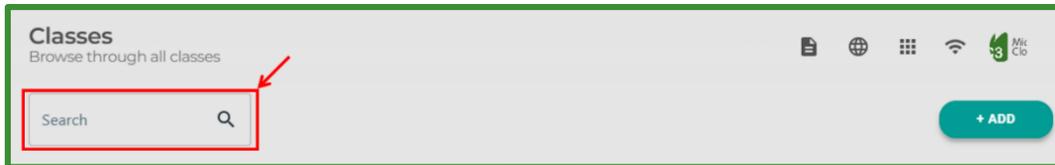


Figure 77: Class Search View

7.2. Add Class Button

Add Class button is located on the top right corner of the Class main page.



Figure 78: Add Class Button

Clicking on this button will open a box with a **Name** field, where the teacher (or administrator) can enter a title for the class.



Figure 79: Adding Class Box

After give a title to his class, user must click on **Save** button.



Figure 80: Adding Class Box Example

After clicking the **Save** button, the screen for the newly created class will automatically open. You can now populate it with Learning Paths.

Important Note: If you're not yet familiar with the Learning Path feature, we highly recommend viewing its dedicated chapter.

First, by clicking on the three dots on the right side of the banner, you will be presented with several options, such as:

- Upload banner;
- Select theme;
- Settings.

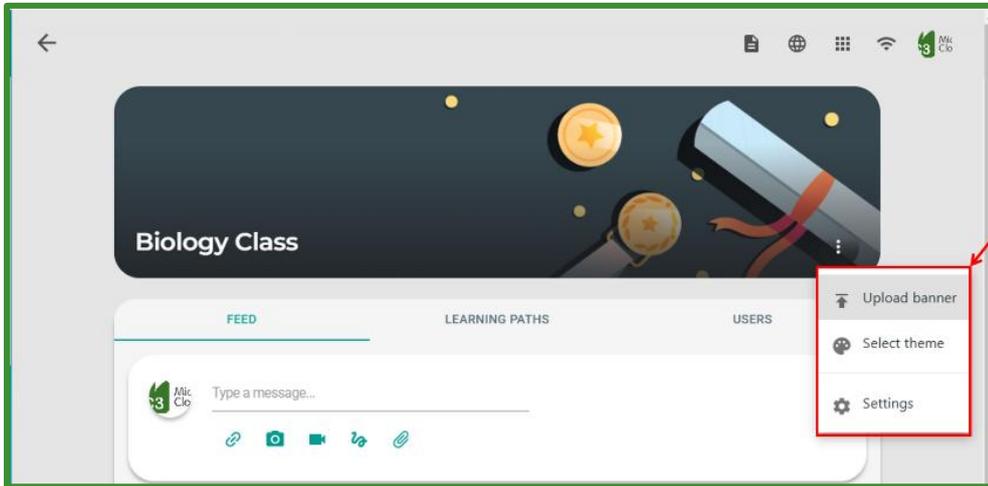


Figure 81: New Class Configuration

7.2.1. Add Class Banner

After clicking on the three dots on the right side of the banner and choosing the 'Upload Banner' option, you will be able to insert a banner of your choice. To do this, simply specify the location of the banner file on your device, or you can also drag and drop the file into the indicated area.

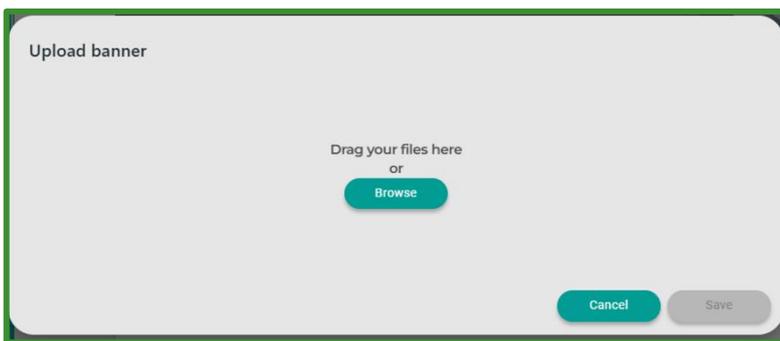


Figure 82: Add Class Banner

Banners are a way to personalize the appearance of your class.

7.2.2. Add Class Theme

After clicking on the three dots on the right side of the banner and selecting the 'Select theme' option, you will be able to choose one of the predefined themes available on your **C3 Micro-Cloud**.



Figure 83: Add Class Theme

After selecting the theme, click on the **Save** button, and the theme will automatically be applied as your class image.

7.2.3. Settings

After clicking on the three dots on the right side of the banner and selecting the 'Settings' option, a form will appear with the following configuration options for the user:

- **Name field;**
- **Description field;**
- **Feed:** this is where students can interact with the teacher and other classmates. Here teacher (or administrator) will have three options:
 - Students can post and comment;
 - Students can only comment;
 - Only teachers can post and comment.
- **Users:** this setting will determine the level of visibility among students in a class. Here we have three options:
 - Students can see no one;
 - Students can see other students;
 - Students can see everyone in the class.

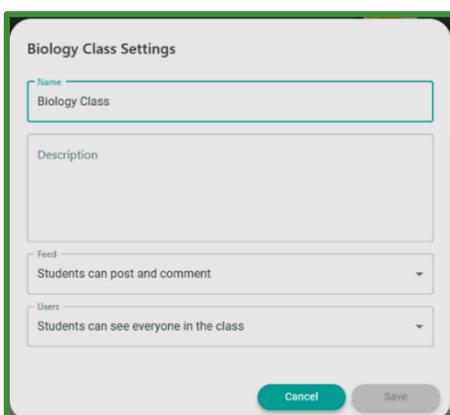


Figure 84: Settings Class

7.3. Feed

The Class feed is a great messaging tool for communication between students and teachers in a specific class. If students have been authorized (via the settings panel) to post on the feed, they will have access to the following resources:

- Add a link;
- Post a photo;
- Record a video;
- Draw something; or
- Attach a file.

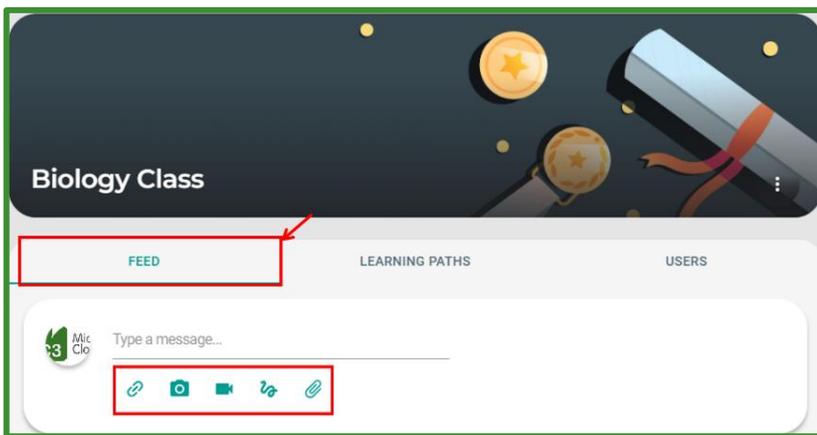


Figure 85: Settings Class

7.4. Learning Path

Content for classes is added through Learning Paths.

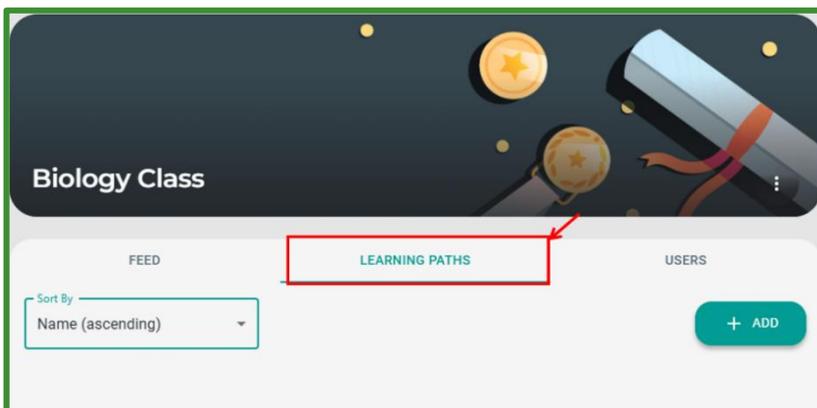


Figure 86: Class Learning Path

In the Learning Path tab, located in the upper left corner, there is an option to sort the Learning Paths in ascending or descending order based on the following options:

- Name;
- Created date; and
- Updated date.

To add Content (Learning Path) to class, simply click on the **ADD** button located in the top right corner of the screen.

When clicking on it, we will have two options:

- Add an existing Learning Path;
- Create a Learning Path from scratch.

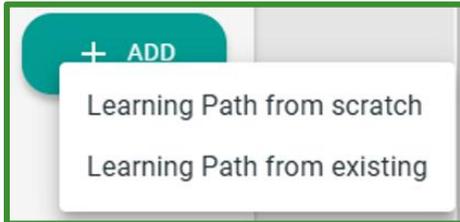


Figure 87: Add Learning Path Button Options

7.4.1. Create a Learning Path from Scratch

If we click on the **Create a Learning Path from scratch** option, a box will open to fill in the name of the Learning Path.

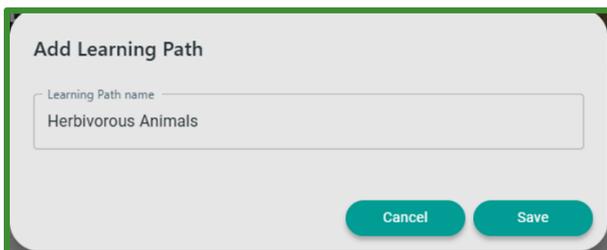


Figure 88: Create Learning Path from Scratch

After filling out the information, click on the **Save** button. You will be automatically redirected to the Learning Path tab, where you can find the item you just created. Click on the three dots located in the upper right corner of it.

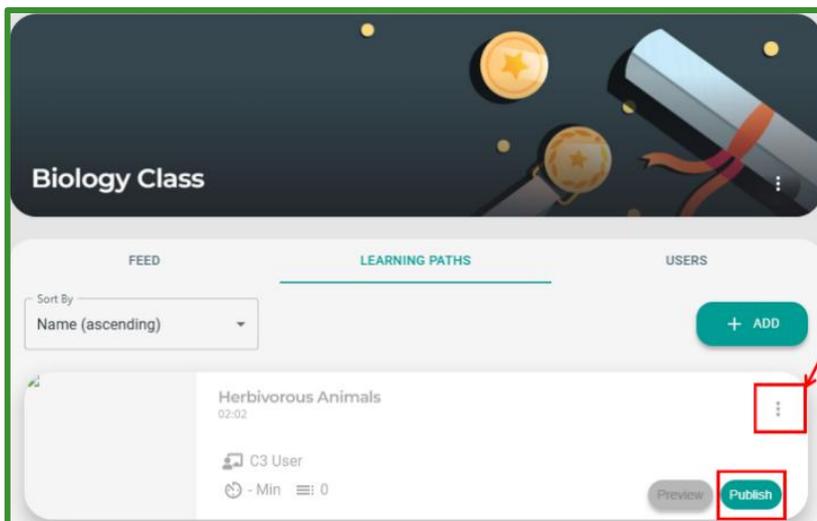


Figure 89: Class Learning Path Settings

The following options will be shown:

- **Publish:** To publish/activate the Learning Path, you can use the Publish button located on the Learning Path itself. Once the class content is configured with the Learning Paths, you can define whether each Learning Path will be available to the students. Learning Paths become visible to students only when they are published using the Publish button associated with each one. Until a Learning Path is published, it will not be visible when students access the class;
- **Preview:** Allows preview and will only be active after the Learning Path is published;
- **Export as a Learning Path:** Enables the Learning Path to become part of your **C3 Micro-Cloud** Learning Paths. In other words, when you access Learning Path menu, those that you created and exported, will be there;
- **Edit:** By clicking on this option, a new screen will be shown so that we can add existing content within your **C3 Micro-Cloud** to become part of your Learning Path, and it will also be possible to edit the information on your Learning Path form. **As this option requires greater detail, this will be done subsequently;**
- **Duplicate:** If the user clicks on this option, the learning path will be duplicated;
- **Delete:** If the user clicks on this option, the learning path will be deleted.

Now, let's learn how to add content to the Learning Path using the **Edit** option we discussed earlier. To do this, click on the **ADD** button located in the top right corner of the screen.

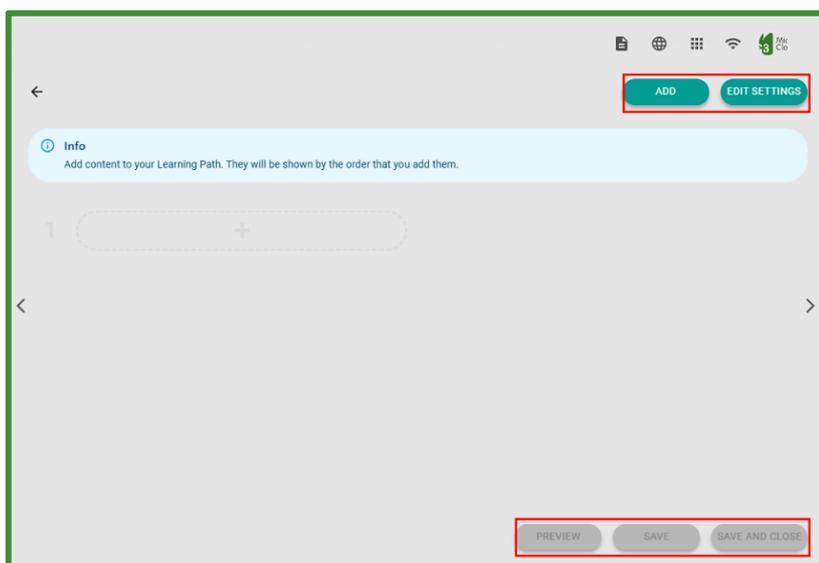


Figure 90: Learning Path Editor

When you click on the button, a box will open displaying all the content available in your **C3 Micro-Cloud**.

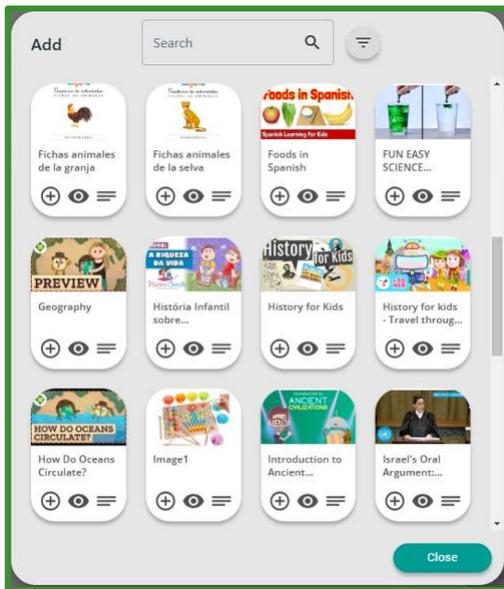


Figure 91: Learning Path Select Content to Add

Adding content to a Learning Path is simple. Just click the + button located on each content card, and it will be added automatically. You can add as much content as needed.

It is also possible to insert content stored inside folders. To do so, click on the desired folder, find the content you wish to add to the Learning Path, and click the + button.

Before adding content, you can preview it by clicking the eye-shaped button.

Important Note: If you want to add a specific Wikipedia article to your Learning Path, first select 'Wikipedia,' then click the eye-shaped button (preview button). Navigate through the article until you find the one you want, then press the + button to add it.

Additionally, on the content card, you'll find the 'Details' button. Clicking on it will display information about the selected content.



Figure 92: Learning Path Content Cards to Add

Returning to the main page of the Learning Path, now with added content, you'll notice that each piece of content has buttons that allow you to: edit the content's name and notes, delete the content, and change the order in which it appears.

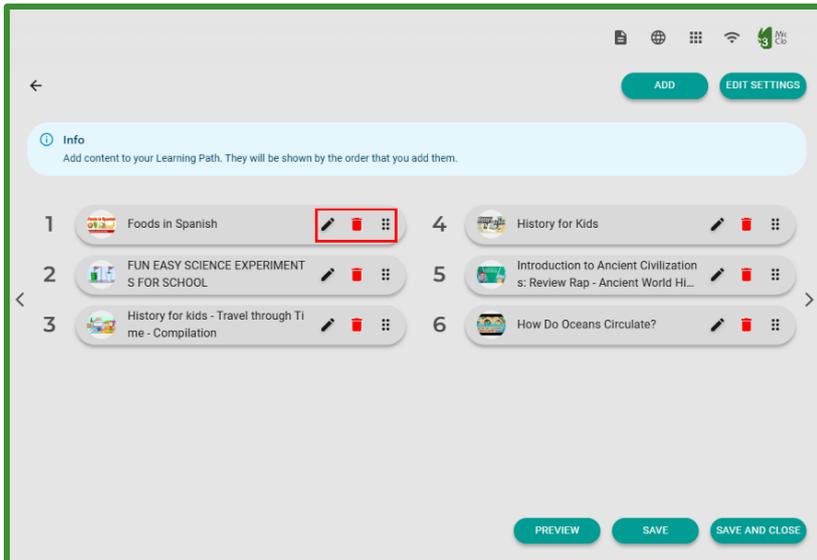


Figure 93: Learning Path with Content Added

If you click on the **Edit** button (represented by a pencil icon) for a specific piece of content, a form will appear, allowing you to modify the content's name and notes.

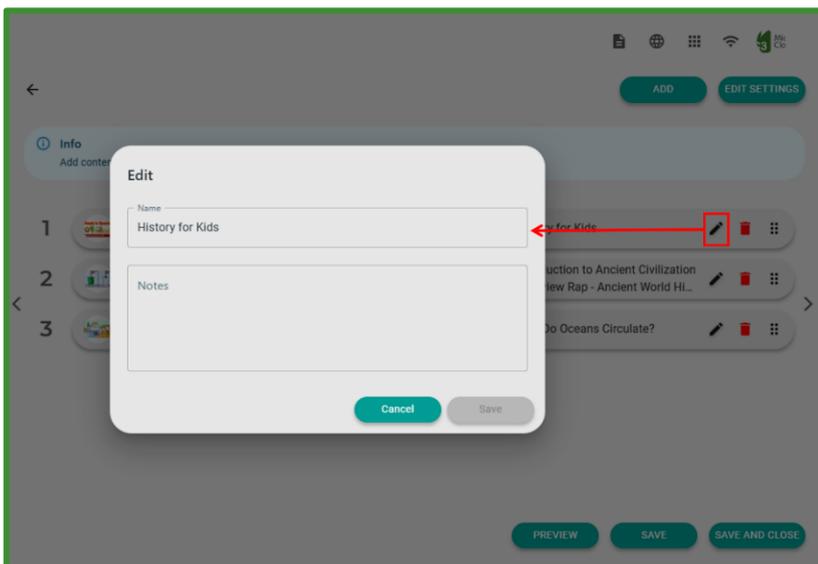


Figure 94: Learning Path with Content Added

However, if you click on the **Delete** button (represented by a trash icon) for a specific piece of content, a warning will appear, confirming that you want to proceed with the deletion.

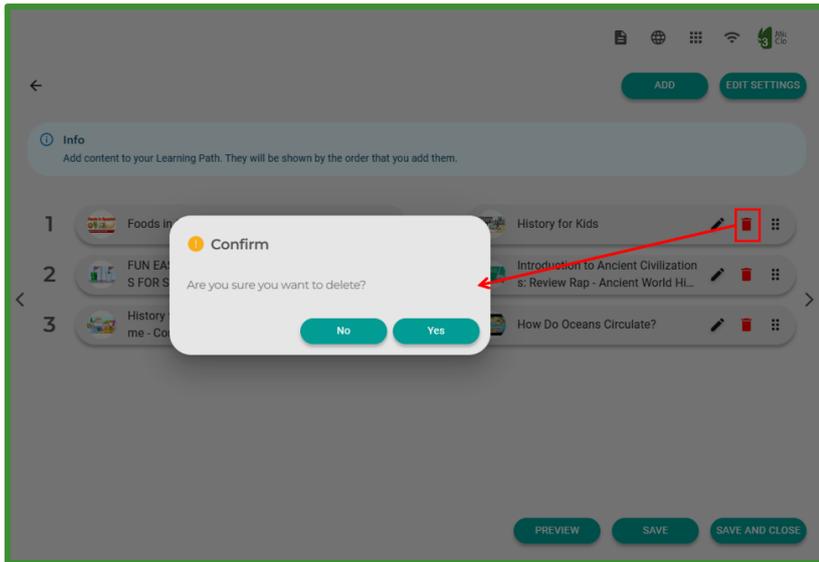


Figure 95: Learning Path Delete Warning

Additionally, you can change the order in which content appears. To do this, click on the **dots** next to the content you wish to move, and then drag it to the desired position.

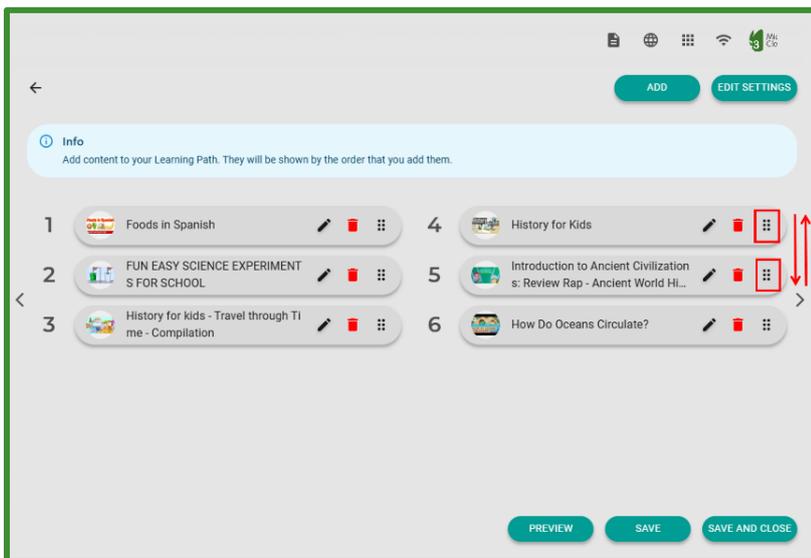


Figure 96: Learning Path Changing Page Position of Contents

Another button on the Learning Path page is **Edit Settings**. When clicked, a form will appear, allowing the user to edit all the information related to the Learning Path. This form is the same one used when initially registering the Learning Path.

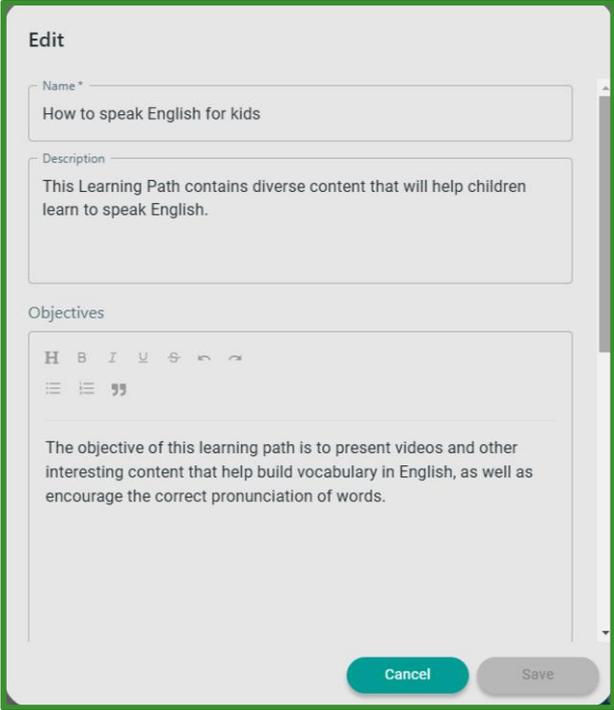


Figure 97: Learning Path Edit Settings

- **Name field:** Here user should put a name for his folder;
- **Description field:** If necessary, user can insert a description to clarify or give more details about his folder;
- **Grade:** Here the user will select which grade, previously registered in **C3 Micro-Cloud**, this folder will belong to;
- **Subject:** Here the user will select which subject, previously registered in **C3 Micro-Cloud**, this folder will belong to;
- **Topics:** Here the user will select which topics, previously registered in **C3 Micro-Cloud**, this folder will belong to. But, in this specific case, if the user wants to insert topics that do not exist into the **C3 Micro-Cloud** yet, it's possible to write it in this field and then, it will be automatically inserted. Besides, it will become part of the **C3 Micro-Cloud** topic's database;
- **Content visibility:** Here the user can determine the visibility of his folder. There are two options:
 - **Public content:** Only users that have signed in to the **C3 Micro-Cloud** have access; or
 - **Private content:** Only the Learning Path creator and the **C3 Micro-Cloud** Administrator will have access to it.

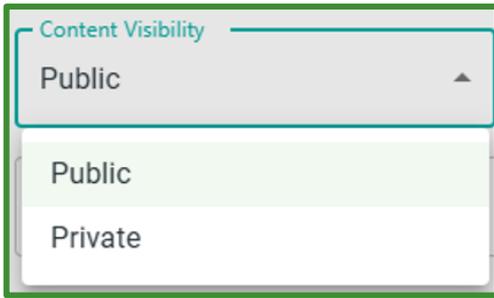


Figure 98: Learning Path Visibility Types

Important Note: All Learning Path inserted within a folder will inherit the grade, subject, and visibility level determined by it.

- **Thumbnail:** For each Learning Path it's possible to add a new thumbnail, just by clicking on **Choose File** button. Besides it's also possible to adjust its size within the card, just by clicking on **Thumbnail Size** options. Finally, the user also can change thumbnail's color, just by clicking on **Color** option.

7.4.2. Add a Learning Path from Existing

If we click on the **Existing Learning Path** option, all Learning Paths already available in your **C3 Micro-Cloud** will be displayed. Adding them to your class is easy—simply select the ones you want to include and click the **Confirm** button.

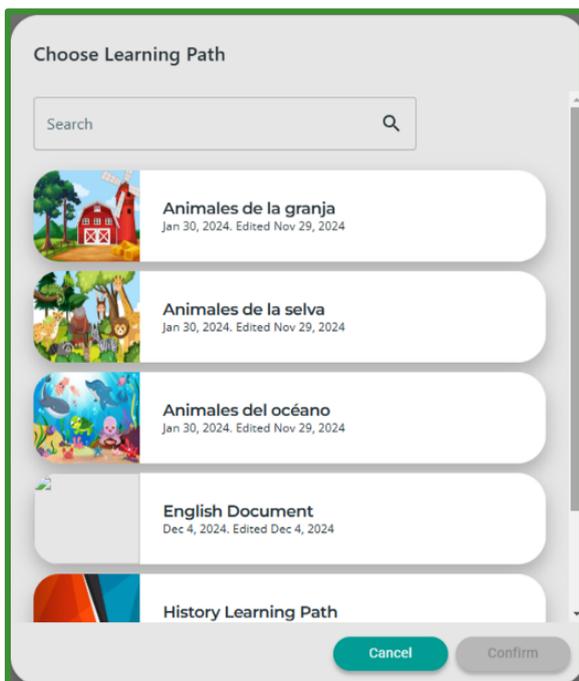


Figure 99: Adding Learning Path from Existing

7.5. Users

The third tab on the class page is for selecting the students and teachers to be assigned to the class. At the top of the page, you will find the **+ ADD STUDENTS** button. By scrolling down, you will also see the **+ ADD TEACHERS** button.

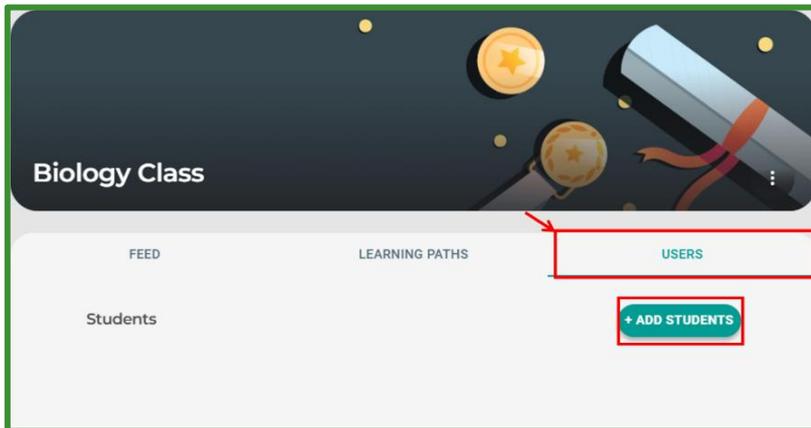


Figure 100: Add Class Students

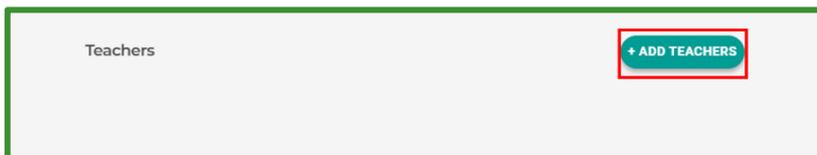


Figure 101: Add Class Teachers

7.5.1. Add Students

When the user clicks on the **+ ADD STUDENTS** button, a box will appear showing all students registered on the **C3 Micro-Cloud**. You can add all students at once by selecting the box next to **'All Students'**.

Additionally, individual students can be selected by ticking the box next to their name. After making your selection, click the right-facing arrow between the two boxes to add the students to the class. To remove students from the class, simply select them in the right box and click the left-facing arrow.

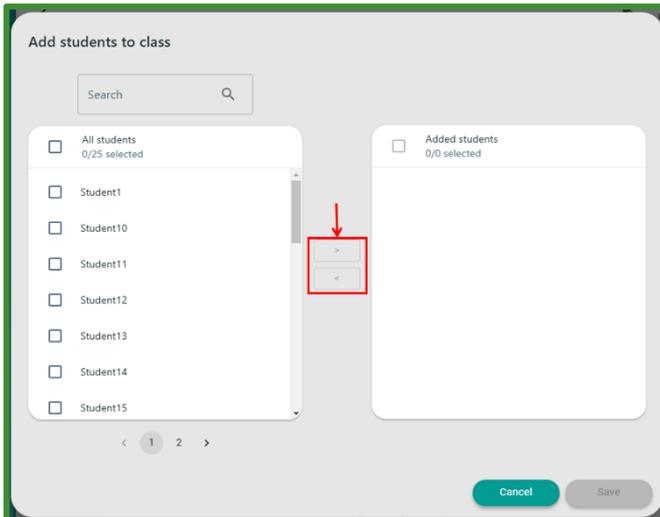


Figure 102: Add Class Students Box

7.5.2. Add Teachers

"When the user clicks on the **+ ADD TEACHERS** button, a box will appear showing all teachers registered on the **C3 Micro-Cloud**. You can add all teachers at once by selecting the box next to 'All Teachers'.

Alternatively, individual teachers can be selected by ticking the box next to their name. After making your selection, click the right-facing arrow between the two boxes to add them to the class. To remove teachers from the class, select them in the right box and click the left-facing arrow.

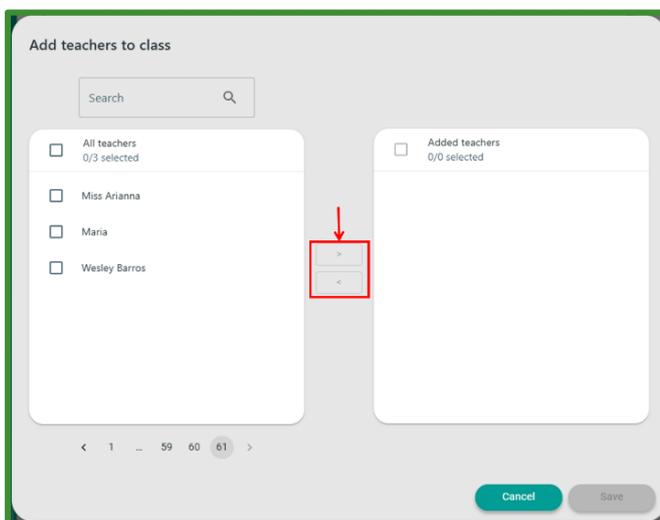


Figure 103: Add Class Teachers Box

For more information about **Classes**, refer to the offline video titled "**Classes**" located in the folder "**C3 Micro-Cloud Training Videos - English Version**" on the **C3 Micro-Cloud**.

Or watch the video on the YouTube platform through the provided link:

https://youtu.be/Q_b0G4Ku0kc?si=Bpjo9reLCzmNAQ4B

8. Apps

Apps are applications that the **C3 Micro-Cloud** receives from **C3 Cloud Control** and can be loaded locally. They appear in the Apps menu, similar to content cards. Clicking on an App, it will be loaded and started.

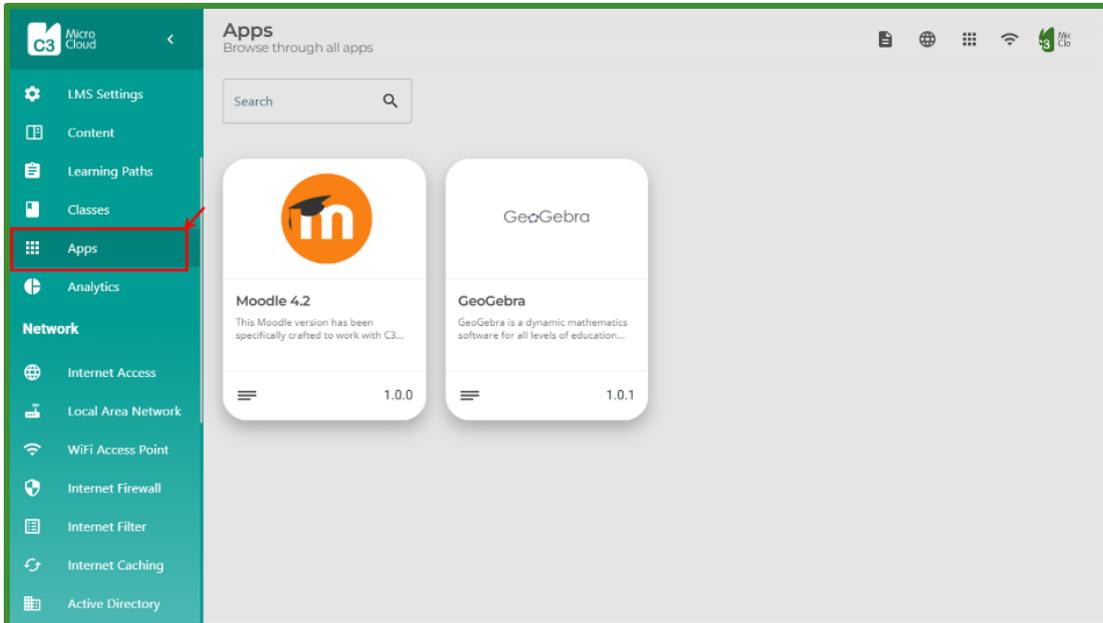


Figure 104: Apps view

Clicking on the 'Details' button in the lower left corner of the app card will open a side page..

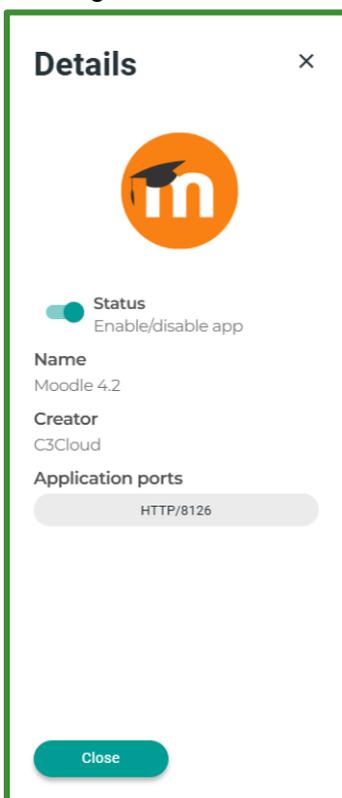


Figure 105: Apps Details

9. Analytics

The Analytics page provides a general overview of **C3 Micro-Cloud** usage, including content, learning path, user, and internet activity.

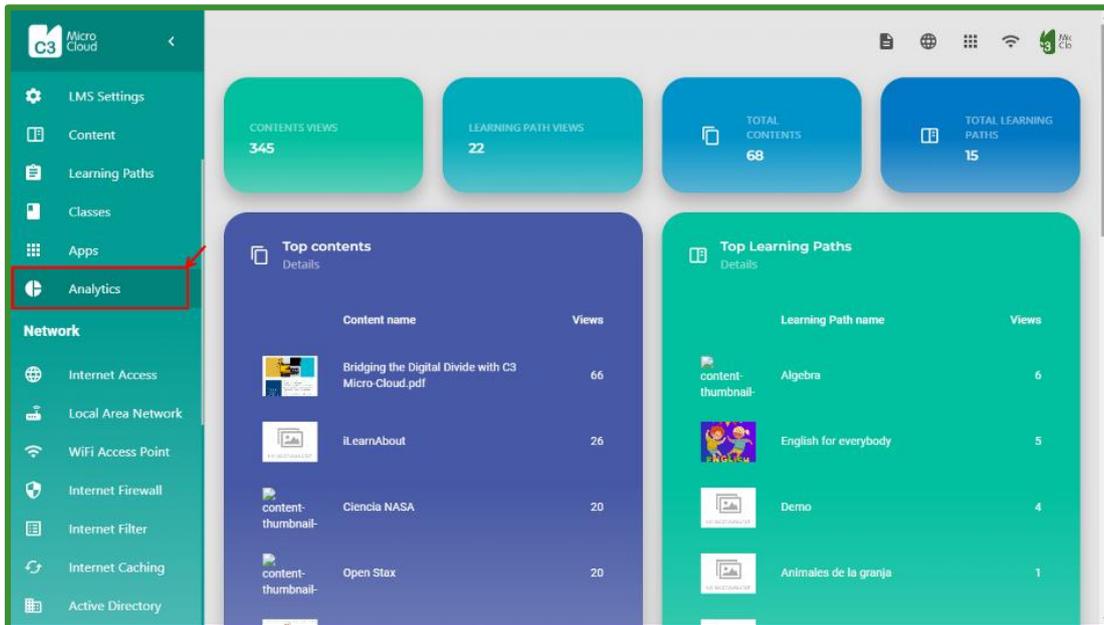


Figure 106: Analytics View

The top part of the page displays information about the total views and the number of views for both content and learning contents.

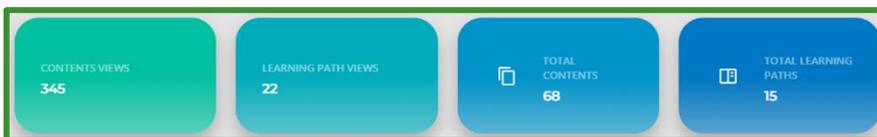


Figure 107: Analytics View

The next section provides details about which content and learning paths are viewed the most frequently.

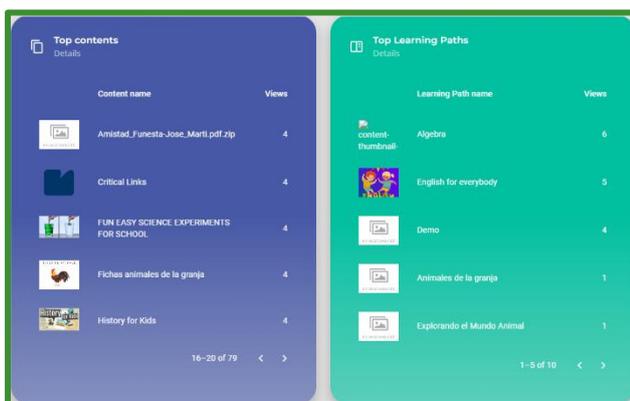


Figure 108: Analytics – Most Frequently Viewed Content and Learning Paths

The middle section of the Analytics page displays data regarding users in the **C3 Micro-Cloud**.

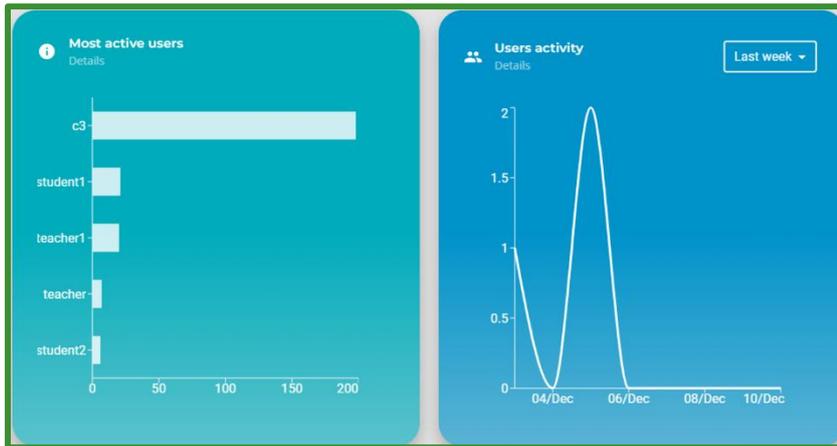


Figure 109: Analytics Users

It highlights the most active users in the **C3 Micro-Cloud**, along with the times they accessed the system. You can view this date-related information for either the past week or the past month.

The final section of the Analytics page presents data on the **C3 Micro-Cloud** Proxy Statistics.

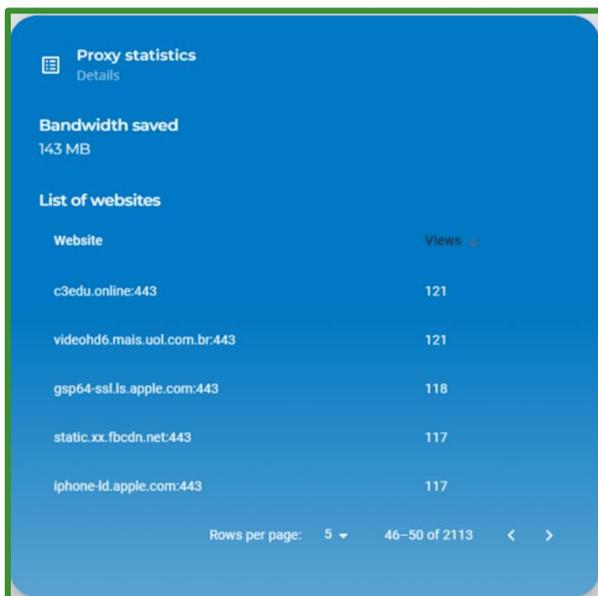


Figure 110: Analytics Proxy Statistics

The cache analysis provides a measure of how much internet data has been saved through the proxy action, as well as a list of the most frequently accessed websites. You can select a specific time interval to gather this data.

For more information about Analytics, refer to the offline video titled '**Analytics**,' located in the folder '**C3 Micro-Cloud Training Videos - English Version**' on the **C3 Micro-Cloud**.

Alternatively, watch the video on the YouTube platform through the provided link:

<https://youtu.be/bwbDwcCG9xc?si=0FOY0qt3af1liKh9>