The official Pro guide

Go to the next level and become a Pro
Ready to become a Pro?

We’re so excited that you’ve decided to join our growing community of educators!

Each page of this guide will take you one step closer to becoming a Pro in using CoSpaces Edu and being fully prepared to implement it in your school.

Once you’ve covered all you need to know, we’d like to invite you to go deeper into the world of CoSpaces Edu and introduce you to its community of educators and the various resources available online.

So sit comfortably, get your computer or tablet and let’s get started!

FREE CoSpaces Edu Pro trial!

Enter the trial code: 

COSPRO20

to test CoSpaces Edu Pro for 30 days with 100 seats (1 teacher + 99 students) including all Pro features and add-ons!
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Chapter 1. Getting started with Pro

Tech check
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Tech check

To start with, let’s get techy! Here’s what’s needed technically to use CoSpaces Edu. Make sure that you have the correct infrastructure before going further.

How does CoSpaces Edu work?

The CoSpaces Edu web app simply works in the browser on any computer (including Google Chromebooks).

The CoSpaces Edu mobile app works on iOS and Android and lets you create and explore CoSpaces on a smartphone or tablet.

CoSpaces Edu in the browser

In order to use CoSpaces Edu, you’ll need a web browser that supports WebGL. We recommend using the most recent versions of Google Chrome or Mozilla Firefox.

CoSpaces Edu on iOS and Android

The CoSpaces Edu app runs on iOS 8 or Android 4.4 and higher. In order to experience CoSpaces scenes in Virtual Reality, Augmented Reality or gyro mode, your device must have a built-in gyroscope sensor.

Network access requirements

Some schools have firewalls that may block certain domains and prevent you from accessing CoSpaces Edu. In order to resolve this, it’s necessary to allow all of the domains needed to access the CoSpases Edu website and mobile app.

To learn more, view the tech check page at cospaces.io/edu/tech-check
Key concepts & lingo

Time to learn some CoSpaces vocabulary! Let's go through some of the key concepts in CoSpaces Edu and related lingo.


Every CoSpaces Edu Pro license plan has a unique 24-character alphanumeric key, letting educators join their license plan and unlock Pro.

**Seats**

Every license plan has a certain number of seats. Each user in a license plan (either teacher or student) uses a seat. Seats can be reassigned to new users anytime.

**Class code** (A1A1A)

Every class in CoSpaces Edu has a unique 5-character alphanumeric code, letting students join it.

**Login code** (000 - 001)

A login code is an instant 6-character numeric code that can be generated to simultaneously log in to the same CoSpaces Edu account from another device.

**CoBlocks**

CoSpaces Edu's visual block-based coding language is named CoBlocks.
**CoSpace**

A creation or a project in CoSpaces is named a CoSpace. In CoSpaces Edu Basic, the number of CoSpaces is limited to two. In Pro, it's unlimited.

**Scene**

A CoSpace contains one or more scenes. The number of scenes is always unlimited.

**Share code** *(TBS - SAG)*

Every shared CoSpace has a unique 6-character alphabetical code to easily access it.

**Share link** *(edu.cospaces.io/TBS-SAG)*

Every shared CoSpace can be opened using its direct share link.

**QR code**

Every shared CoSpace has a unique QR code, which can be scanned to access it.
Setting up your account

1. Go to cospaces.io and click Register to create your CoSpaces Edu account.

2. Create an account as a **teacher**.

3. Define your login details or sign in with **Apple**, **Google** or **Microsoft**.
Upgrading to CoSpaces Edu Pro

From your CoSpaces Edu account, click Upgrade to Pro.

If you have a key to a CoSpaces Edu Pro license plan, click Join license plan and enter your key.

If you haven’t used your Pro trial yet, click Activate trial.

To buy a license plan online and pay by credit card, click Buy license plan and select the Pro plan that fits your needs.

Pro plans are paid annually and have a certain number of seats. Each user in a plan (either teacher or student) uses a seat. Seats can be reassigned to new users anytime.

You can also request a quote to sales@cospaces.io to get a PO (purchase order) and pay by wire transfer or your preferred payment method.

CoSpaces Edu Pro is also available in a Custom plan for schools and districts. Learn more on cospaces.io/edu/pricing.
Chapter 2. Creating like a Pro

Creating a first CoSpace
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Creating a first CoSpace

To start creating, go to CoSpaces.

This is where all of your creations will be stored!

You can start by exploring the Welcome CoSpace to get familiar with the basics. When you’re ready to create your first CoSpace, click Create CoSpace.

Your first step is to choose a scene to build in. You’ll be able to add all the scenes you want later!

You can build in a 3D environment of your choice. These scenes can be viewed in VR and AR.

You can also build upon a 360° image that you choose. These scenes can be viewed in VR.

If you have the MERGE Cube add-on, you can also build for the MERGE Cube and project your creations onto the MERGE Cube!
Setting up a first scene

To create your first scene, start by selecting the 3D environment or the 360° image you would like to use as the background.

To choose an environment, click Environment at the bottom-left.

If you’re creating inside of a 3D environment, click Edit and choose one of the predefined environments.

If you’re building upon a 360° image, click Edit and upload any 360° image you like from your device.

You can then customize your scene further using Filters.
The 3D camera

The 3D camera at the center of your scene lets you define the perspective from which your scene can be explored.

If needed, you can find the 3D camera object in the Library’s Special category.

You can also choose from several camera movements to change the way in which you experience your creation. To change the camera movement, click Camera.

Fixed

The camera is fixed to a certain position and you look around your scene using your mouse or keyboard arrows.

Walk

You walk in the scene using your keyboard arrows or WASD keys. You use your mouse to look around.

Fly

You fly above the scene using your keyboard arrows or WASD and QE keys to change height. You use your mouse to look around.

Orbit

You move in a circle on a zone that you define around the center of your scene using your mouse, keyboard arrows or WASD keys.
Creating for the MERGE Cube

The CoSpaces Edu Pro MERGE Cube add-on is needed to create for the MERGE Cube.

When creating for the MERGE Cube, you’ll find a virtual MERGE Cube at the center of the stage.

Build your hologram on, in, and around the 3D cube, however you want it to look once projected.

You can unlock the cube to move it around and place content anywhere you like. To create inside of the cube, click View inside.

You can change the cube’s material and opacity under Material.
The CoSpaces Edu Library

Time to start creating! In the Library, you’ll find many 3D objects, which you can simply drag and drop onto the stage.

Objects from the Library can be moved, rotated or resized, coded, and edited to change their colors.

Characters can also be animated under Animation.

Building blocks are available in the Building category.

These primitive shapes let you create anything you want in 3D!
Uploading external files

You can upload various external files to use in your creations. To upload an external file, click **Upload**. You can upload:

- images including GIFs and 360° images
- videos
- 3D models (in .obj, .stl, .fbx)
- sound files

CoSpaces Edu Basic is limited to 10 uploads.

You can also directly search for 3D objects from **Google Poly**.

Enter the type of object you’re looking for in the **Search** bar.

Browse through the 3D models and drag and drop any object into your scene!
Chapter 3.
Coding like a Pro

CoBlocks
Scripting language
The Physics engine
CoBlocks

CoBlocks is a **visual coding language** that lets you simply drag and drop **CoBlocks** (blocks of code) to program your CoSpace.

A CoBlock represents a snippet of code, or **statement**, which tells CoSpaces Edu to do something like starting a specific action in your scene.

You can find the **Code** icon in the top-right toolbar.

To open the CoBlocks coding editor, click the **CoBlocks** icon.

The empty space on the right side is the **CoBlocks workspace**.

The list of CoBlocks on the left side is the **CoBlocks toolbox**.

To program an item with CoBlocks, enable its use in CoBlocks.

To do this, select the object you would like to use in your code, click **Code**, and enable **Use in CoBlocks**.
There are 2 main types of CoBlocks: **Expression** and **Statement** CoBlocks:

**Statement CoBlocks**

Statement CoBlocks often perform a specific **action**. For example, you can make an item talk, using the **say** CoBlock.

![Man say "Hi"

**Expression CoBlocks**

Expression CoBlocks contain **values**. These values can be:

- Colors (red, green, blue)
- Numbers like 5 and 0.25
- Strings like "Hi there!"
- Other items in the scene

![Set color of Man to color of Tiger]

Expression CoBlocks can be recognized by their round shape and are always placed into other CoBlocks:

Check out the [CoBlocks reference guide](#) to learn more about coding with CoBlocks.
Scripting languages

CoSpaces Edu Pro also lets you use scripting languages for more advanced coding. All of your CoSpaces can be coded with **scripting languages**.

To open the **Script** coding editor, select the **Script** icon.

![Choose a coding language](image)

Each method contains a code sample and a demo project.

The API documentation can be found on [cospaces.io/api](https://cospaces.io/api)
The Physics engine

CoSpaces Edu Pro has a built-in physics engine, letting you use real world physics in your CoSpaces.

To use the physics feature, right click on an object and then click **Physics**.

Enable real world physics for your objects by turning on the **Physics** switch.

You can define the **physics properties** of any 3D object in your scene.

These include object **Mass**, **Friction** and **Bounciness**.

You can also play with more advanced physics properties like objects’ **Collision precision** and define whether an object should be **Set static**.

To go further with Physics, use the CoBlocks from the **Physics** category.
Chapter 4. Mastering VR, AR and more

Exploring CoSpaces
Switching between devices
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The Augmented Reality mode
The MERGE Cube mode
Exploring CoSpaces

The magic with CoSpaces Edu is that you can explore your creations in many impressive ways, including VR, AR and even projecting onto the MERGE Cube!

Play mode

The Play mode lets you easily explore a CoSpace and move around it on any device. Simply open a CoSpace and click Play.

To move on a computer, use your mouse and the arrows or WASD on your keyboard, like you would in a video game.

To move on a tablet, use touch with one finger on the arrow.

Gyro mode

You can explore a CoSpace with the Gyro mode using a tablet or a smartphone and the CoSpaces Edu app. This lets you move your device to look around your CoSpace through the screen.

Open a CoSpace in Play mode and click the Gyro icon.
Switching between devices

Instant login codes enable seamlessly logging into the same account from multiple devices, without the need to enter your complete login details again.

In your CoSpaces Edu user menu, click Get a login code to generate an instant login code.

Your instant login code will let you easily log into your account from another device during a minute.

You can generate instant login codes and use this option as often as needed.

From the other device you want to log into, click Sign in with a login code.

You'll then be able to type in your instant login code to join your account.
The Virtual Reality mode

3D creations are even more fun when you explore them in VR! You’ll quickly realize the power of VR and the dimension it adds to student learning.

CoSpaces can be experienced in VR with ClassVR headsets or with any mobile VR headset such as the Samsung Gear VR, plastic viewers and cardboard viewers like the Google cardboard.

Mobile VR

To explore CoSpaces with mobile VR, open the CoSpaces Edu app on your Apple or Android smartphone, open a CoSpace and click Play.

Click the VR goggles icon at the bottom of your screen:

CoSpaces are ready to be viewed in VR when it shows 2 screens, one for each eye.

Place your phone in your mobile VR headset and dive in!
The Augmented Reality mode

CoSpaces Edu creations can be projected onto the real world with AR!

To explore CoSpaces in AR, open the CoSpaces Edu app on an AR-compatible device, open a CoSpace and click Play.

Click the AR icon:

Scan your surroundings with your device to detect a surface to project your scene on.

Use a flat surface and avoid plain colors and shiny surfaces!

Then, tap to place your scene!

You can then resize the scene or rotate it and move around it with your device.
The MERGE Cube mode

You can project onto the MERGE Cube in AR (Augmented Reality) using the **MERGE Cube mode**.

**MERGE Cubes** in the CoSpaces Edu Gallery are indicated by this icon:

![MERGE Cube icon](image)

To view a CoSpace on the MERGE Cube, open it with the **CoSpaces Edu mobile app**, using your **smartphone or tablet**.

Open a CoSpace and click **Play**.

You'll automatically be in the **MERGE Cube mode**.

Holding the MERGE Cube in one hand, place it in front of your device’s camera.

You may have to move the MERGE Cube around before it gets detected by your device.
Chapter 5. Pro sharing features

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Sharing a CoSpace

Pro CoSpacers can easily share their CoSpaces with others, whether they have CoSpaces Edu or not!

To share your CoSpace, open it and click Share.

Choose how you want to share your CoSpace with others.

Click Share unlisted to share your CoSpace with specific people.

Click Publish to Gallery to let everybody view it in the public CoSpaces Edu Gallery.

Type in a name for your CoSpace and a description introducing it.

Then, enable remixing if you want to allow others to be able to copy your CoSpace and edit it into their own version.
Every CoSpace can be shared and accessed using a simple **share code** or a **share link**.

Each shared CoSpace also has a unique **QR code**, which can be scanned with a smartphone or a tablet to easily access it.

You can also easily share your CoSpace on your favorite social media channels!

Click a **social media share icon** to create a post including your CoSpace. Personalize it and share it with your friends and followers.

You can also add your CoSpace to a website using the **embed code**.

Simply copy and paste the embed code to add it wherever you like. This will place your CoSpace on your page inside a viewer, ready to be explored!
Publishing to the Gallery

Pro teachers are able to publish to the CoSpaces Edu Gallery, where CoSpacers share ideas and get inspiration!

The CoSpaces Edu Gallery features many examples of CoSpaces organized by fields of application and shared by educators who use the platform.

To publish a CoSpace to the Gallery, open the CoSpace you want to publish, click Share and Publish to Gallery.

Enter details for your CoSpace, choose the category which it should appear in and whether to allow remixing or not. When you’re ready, click Publish now.
Remixing a CoSpace

Pro teachers are able to remix shared CoSpaces into their own creations!

There are lots of CoSpaces in the Gallery that can be remixed.

You can remix CoSpaces that are shown with the Remix icon:

To remix a CoSpace, select it and click Remix.

You’ll get your own editable copy on this CoSpace under your CoSpaces.

Remixed CoSpaces can also be shared in their edited versions.

When sharing a CoSpace that was remixed, please mention the name of the CoSpacer who originally created it.

You can simply include it in your CoSpace’s description.
Updating a shared CoSpace

The CoSpaces that you’ve shared can be easily updated anytime!

You can, at any time, update the CoSpace you’ve shared.

Click **Share** to change your sharing options or to update your shared CoSpace.

After you’ve made your edits, click **Update** to update your shared CoSpace.

You can always see the **last update date** of the last version you shared.

If you no longer want to share this CoSpace, simply click **Stop sharing**.
Recording and sharing videos

Another fun way to share your creations is to make videos of your CoSpaces!

From a phone or a tablet in the CoSpaces Edu mobile app, Play the CoSpace you want to share.

Then, click the camera icon to make a video of this CoSpace.

Click the red record button to start recording your screen.

When you’re done, click the stop button to end the recording.

Your video file will be automatically saved onto your device.

You can then watch it, send it to others or share it on online platforms such as Seesaw and FlipGrid.
Exporting 360° images

Another great way to share your creations is with 360° images of your scenes!

To export a 360° image of one of your CoSpaces’ scenes, double or right click on the camera object.

Click Camera and Save 360° image. A 360° image of your scene will be automatically exported and saved to your downloads.

You can then send this image to others to let them explore your scene or even dive into it in VR!
Chapter 6.
Pro class management

Setting up a class
Creating an assignment
Managing students
Adding teachers to classes
Setting up a class

The first step to implement CoSpaces Edu in your classroom is, in all logic, to create a first class!

Go to Classes, and click Create class.

Enter a name for your class and click Create.

When you create a class, a class code is automatically generated.

Share your class code with your students to let them join your class.

To add students who are already connected to your license plan, click Add existing students.
Creating an assignment

To create an assignment, go to your class in Classes and click Create assignment.

Select the type of scene to create and enter a title and instructions.

If you have access to templates, you can also choose whether to Allow students to use templates for this assignment.

You can send the same individual assignment to every student in your class.

You can send collaborative assignments, letting each group of students work together within the same CoSpace.

You can also send assignments based on existing CoSpaces that you’ve created or remixed from the Gallery.

To do this, choose the CoSpace you want to use and click Use as assignment.
Managing students

To view the students in your class, open your class and click Students.

Click on your students to view their work once they're done or even in real time!

Here, you can help your students change their password or remove students from your class.

In the Users dashboard, you can manage your students’ sharing permissions, defining whether they can share their creations with others.
Adding teachers to classes

You can share your classes in CoSpaces Edu with other teachers. To add a co-teacher to your class, enter your class and click **Add teachers**.

Select the teachers you want to add as **co-teachers** and click **Add to class**.

Co-teachers can manage everything within a class, except deleting it. To be added to your class, teachers must be in your CoSpaces Edu Pro license plan.

You can let other teachers join your CoSpaces Edu Pro license plan by sharing your key with them.

To view your key, click **License plan** and **View key**.

Copy your **key** and give it to the teachers you want to invite to join your license plan. They'll be able to enter your key from their CoSpaces Edu account and will be added to your license plan.
Chapter 7.
Pro resources for educators

Getting started resources
Lesson plans
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Training & PD
Getting started resources

CoSpaces Edu offers several resources to help you get started!

The Getting started page on the CoSpaces Edu website [cospaces.io/edu/onboarding](https://cospaces.io/edu/onboarding) is the best place to start!

You'll find many onboarding resources to help you easily implement CoSpaces Edu in your classroom.

In the main navigation, click Resources. In the drop-down menu, click Getting started.

The Getting started page includes beginner resources like a Getting started kit, student and teacher checklists and much more.
Lesson plans

The CoSpaces Edu website also offers many lesson plans that can be easily adapted.

The Lesson plans page on [cospaces.io/edu/lesson-plans](http://cospaces.io/edu/lesson-plans) provides full lesson plan documents ready to be printed out!

Most lesson plans can easily be adapted to fit many different school subjects and grades.

In the main website menu, click Resources.

Then, in the drop-down menu, click Lesson plans.
Classroom goodies

You’ll find several resources on the CoSpaces Edu website, including material to get started and lesson plans that can easily be adapted to fit the curriculum.

The Goodies page [cospaces.io/edu/classroom-goodies](http://cospaces.io/edu/classroom-goodies) offers multiple free classroom goodies that you can print out for your class!

In the main website menu, click Resources.

In the drop-down menu, click Goodies.
Training & PD

The free educator’s Teachable course by CoSpaces Edu gives all the basic knowledge needed to use CoSpaces Edu in the classroom.

Enroll on cospaces-edu.teachable.com

The free CoSpaces Edu online course by the Virtual Reality Learning Lab will teach you how to create your own interactive 3D worlds using CoSpaces Edu.

Enroll on academy.vrlearninglab.nl/cospaceslevel1
Chapter 8. Pro community and support

The CoSpaces Edu Ambassadors
The CoSpaces Edu blog
Social media
The online forum
Support us
The CoSpaces Edu Ambassadors

The CoSpaces Edu Ambassadors are CoSpaces Edu experts and supporters of the platform who are selected to represent CoSpaces Edu around the world.

They support CoSpaces Edu in many ways and offer their help to other users.

Don’t hesitate to connect with them on Twitter and to reach out to them for support!

Learn more about them on the Ambassadors page: cospaces.io/edu/ambassadors
The CoSpaces Edu blog

The CoSpaces Edu blog at blog.cospaces.io showcases real-life stories of teachers and students who use the platform as well as guest posts by our Ambassadors.

We always welcome stories of educators and schools who have found a successful way of integrating CoSpaces Edu or AR and VR in the classroom.

Interested in getting featured on the CoSpaces Edu blog?

Send us your story idea to programs@cospaces.io
Social media

The CoSpaces Edu Community Facebook group connects many educators using CoSpaces Edu in their schools. Grow your PLN and come exchange ideas!

The CoSpaces Edu Facebook page is the official page of the platform, managed by the company and provides news and announcements.

The CoSpaces Edu Twitter channel features a mix of company news and featured posts showing how educators use CoSpaces Edu around the world. Use @cospaces_edu to connect with CoSpaces Edu and the hashtag #cospaces_edu to get featured!
The online forum

The CoSpaces Edu online forum is open to anyone looking to get support or share ideas with other educators.

To join the forum, go to: forum.edu.cospaces.io
Support us

CoSpaces Edu is all about expanding imagination and offering new ways to let kids express themselves and learn in a more fun and engaging manner.

Why does CoSpaces Edu exist?

Our goal is to provide easy-to-use educational creation tools that empower students to become creators and prepare them for the future.

We hope to help reinvent and improve the learning experience, enhance creativity and foster collaboration in the classroom, while equipping kids with the digital literacy skills that will become crucially important in the years to come.

Do you share our vision?

We’re always looking to connect with like-minded people and organizations who can help us reach our goals and improve student learning worldwide.

Don’t hesitate to connect with us through our various online channels.

Happy CoSpacing!