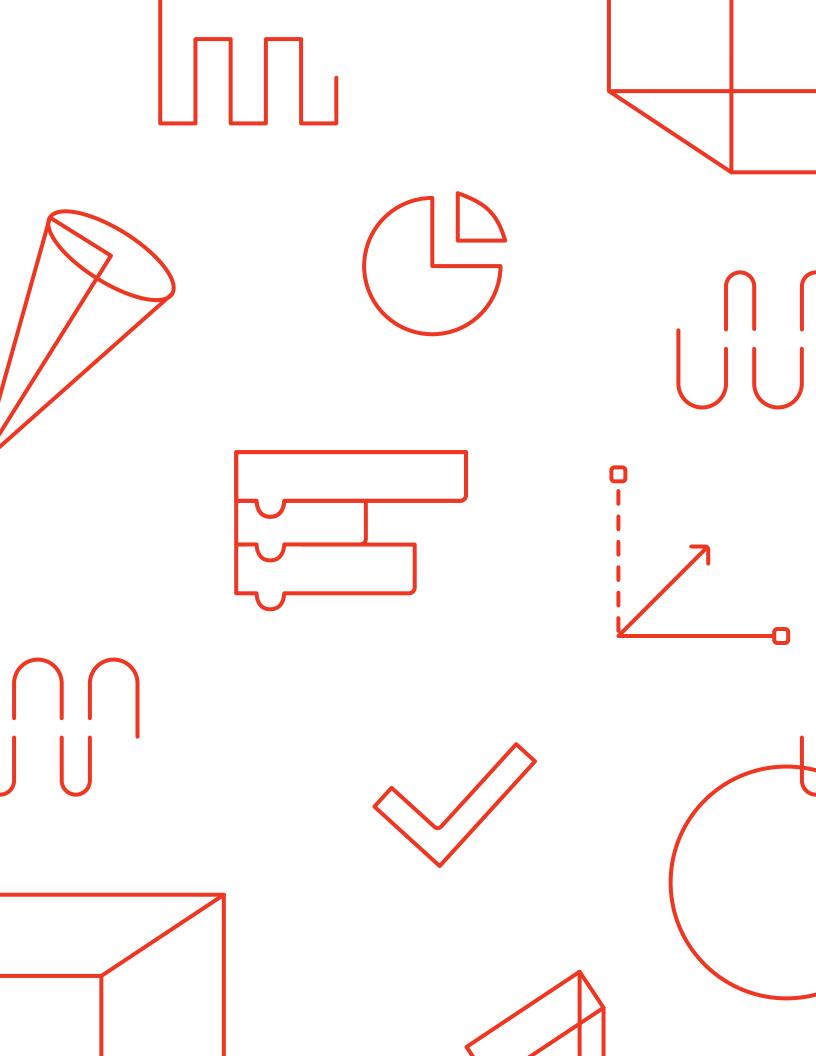


Official Guide to Tinkercad Classrooms

In this comprehensive guide, we'll cover everything you need to know to get started with Tinkercad Classrooms, a tool teachers can use to quickly get students up and running with Tinkercad. Once students sign on with a class code you provide, view and manage their progress in Tinkercad from a convenient educator dashboard.

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3.	Creating a Class	p.05
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Benefits of Tinkercad Classrooms

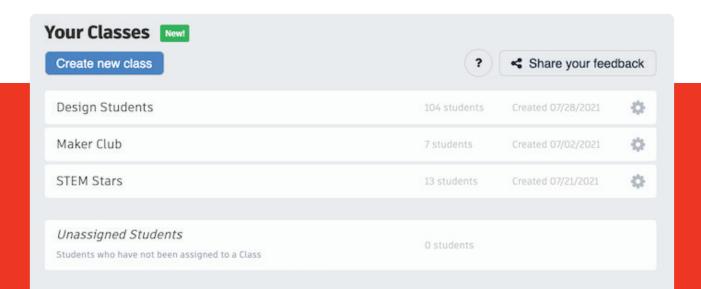
Over the years, teachers have told us that one of the biggest hurdles to using Tinkercad with their students is simply getting everyone logged in. Email verification, lost passwords, confusion over sign-in options -- all of it can lead to unproductive time and frustration.

When a teacher creates a class for their students in Tinkercad Classrooms, it creates a smoother experience for both students and teachers and reduces the amount of time it takes for everyone to get started.

As an added benefit, Tinkercad Classrooms provides you with a comprehensive view of all your students' work in Tinkercad.

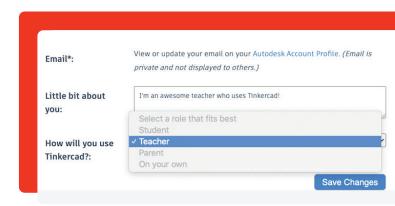
With Tinkercad Classrooms you can:

- Organize students into Classes (250max/Class)
- Review and edit students' designs and profile
- Moderate students' activities, liking (if enabled)
- Ensure students' online safety and privacy with "Safe Mode"
- Browse a class gallery for an overview of all student designs
- Invite co-teachers to view and evaluate student designs

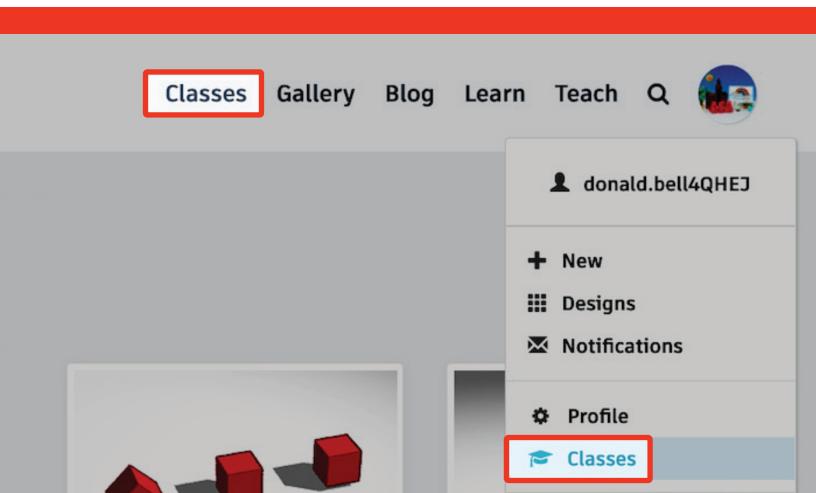


How to Access Tinkercad Classrooms

Tinkercad Classrooms is a tool that's only provided to users who've identified themselves as teachers. You're asked to make this distinction when you first sign up for Tinkercad, but you can also change your account type at any time from your profile page once you've signed in.



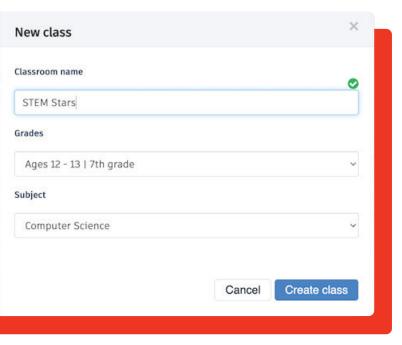
Having a teacher account gives you access to a special Classes menu found in the top navigation bar or your dropdown profile menu (both highlighted in the image below). Clicking either link will take you to a page where you can get started creating your first class. Alternatively, you can access this page at tinkercad.com/classrooms and bookmark it for quick access.



Creating a Class

Clicking the "Create new class" button prompts you to enter a class name, age/grade level, and subject. Once entered, click the "Create class" button.

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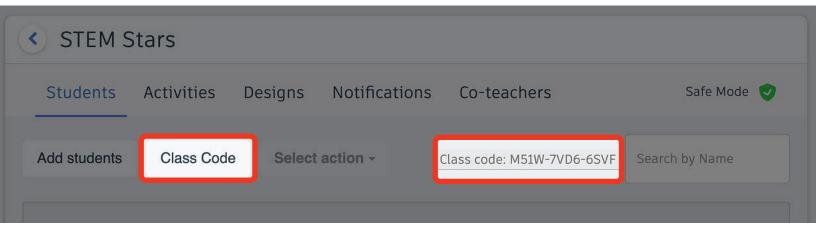


Using the gear icon to the right of the class name, you can edit the name, grade level, or subject of your class at any time. You can also use this class settings panel to delete your class.

By clicking the name of your class you'll be taken to the administrative dashboard for your class. You can learn more about the features available in the upcoming section titled Navigating the Class Dashboard.

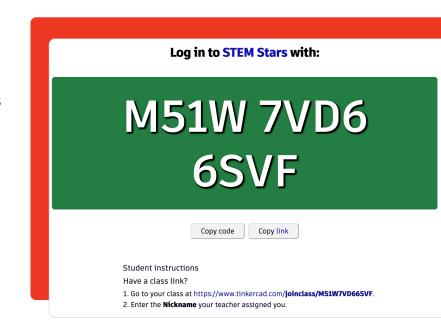
Understanding Class Codes and Links

Every class you create in Tinkercad Classrooms has its own unique code. You can find this code in the top right section of your student list, or by clicking the Class Code button (both highlighted below).



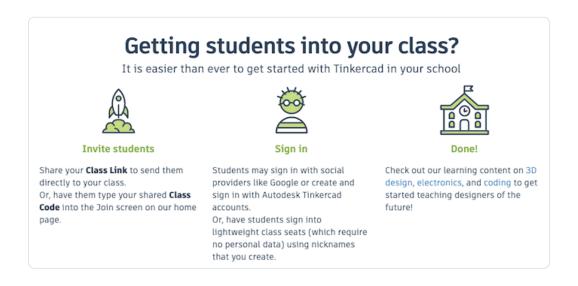
Clicking the Class Code button will take you to a page where you'll find the 12-character code for your class written in large print, suitable for sharing with you class on an overhead projector, or a shared screen during an online class.

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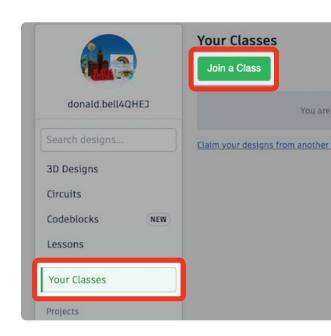
Inviting Students to Join a Class

In this section, we'll show the different options you have for inviting students to join your Tinkercad class. We understand that each teacher has their preferred way of doing things. In our effort to adapt to as many classroom scenarios as possible we'll outline several different pathways to onboard your students.



Option #1: Google Sign-On + Class Code

Either out of necessity or habit, students instinctively sign in to Tinkercad using their Google account (including Google Classroom). Once signed in with Google, a student needs to select the "Your Classes" option located in menu on the left, then click the "Join a Class" button and enter their class code.



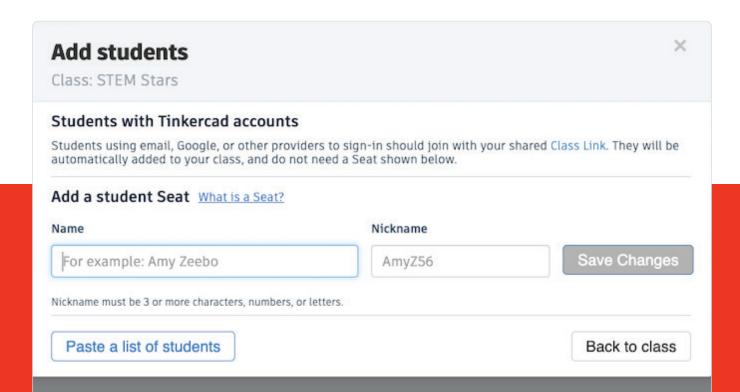
Alternatively, once signed-in with Google, a student can click on a class link you provide (via email or Google Classroom) and join your class. In either case, a class nickname is not required because a student's Google account acts as their unique identification.

A student will only need to connect their Google account to a Tinkercad class once, using either a Class code or link. After that, the work they do while signed in to their account will be associated to their class until a teacher removes them from moderation.

For more information about the compatibility between Tinkercad and Google Classroom, please see the section on Sending & Receiving Assignments with Google Classroom.

Option #2: Nickname + Class Code (no email)

Within your Tinkercad Classrooms dashboard you have the option to add a roster of students manually. Student names can be entered individually or by pasting in a list of names in one step. In either case, a nickname for each student will be generated automatically which you can customize at any time.



Using this nickname and the class code, a student can quickly sign-in to Tinkercad even if they've never created an account. We call this sign-in method a Class Seat, since it's prepared by the teacher in advance, just as you would a seat in an actual classroom.

One particular advantage to this method of sign-on is that there's no need for a student email address. Whether you're holding a drop-in class, a summer STEM program, or students simply don't have an email address, all they need to get started is a slip of paper with their nickname and class code.

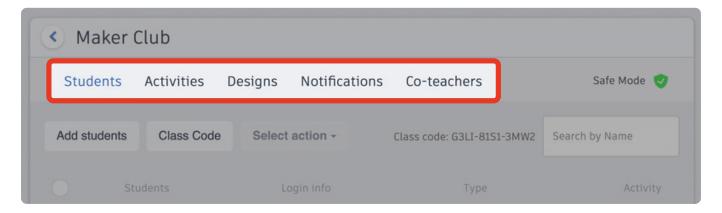
Option #3: Email + Class Code

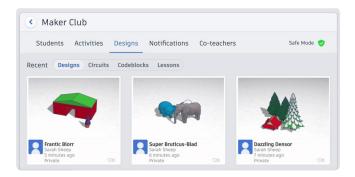
Similar to joining a class using a Google account, students who sign in to Tinkercad using their email and personalized password can also join a class. Once signed in, a student needs to select the "Your Classes" option located in menu on the left, then click the "Join a Class" button and enter their class code (both shown in the image accompanying option #1).

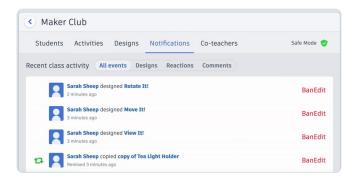
Similar to how Google accounts are handled, a student will only need to connect their email account to a Tinkercad class once. After that, the work they do while signed-in to their account will be associated to their class until a teacher removes them from moderation.

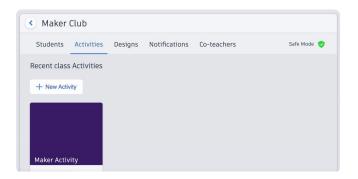
Navigating the Class Dashboard

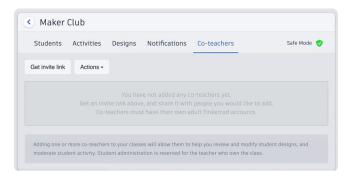
After onboarding students, the real magic of Tinkercad Classrooms happens in the class dashboard. Here, you can moderate student activity, browse recent student work using the gallery view, and edit or comment on any specific student designs.







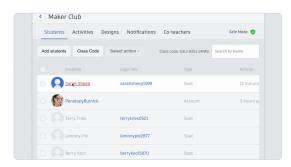


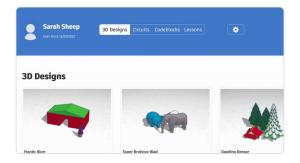


Your class dashboard includes five tabs: Students, Activities, Designs, Notifications, and Co-teachers. You can navigate to each tab by clicking on it. When a tab is open, you'll notice that its name is underlined.

Students

At this point you're already somewhat familiar with the Students tab, which is the default view you'll see whenever you open your class dashboard. From here you can add and remove students, view or change the class code, and manage Safe Mode settings for your class or individual students (see section 7. Managing Student Safety for more information on Safe Mode).





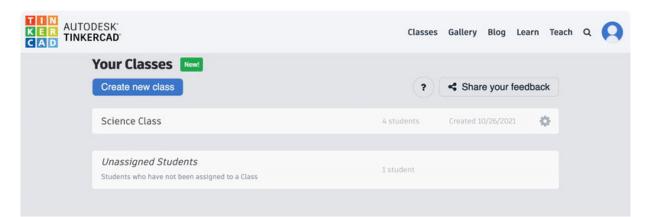
What we haven't mentioned yet is that from this Students tab you can click on any of your listed students and view and edit their work. Simply click "Tinker this" on a design card to open and edit the student's original design.

This capability is great for tracking student progress, but also comes in handy when a student asks for help on a design. Especially in a virtual classroom, being able to easily provide help on student work or annotate designs with helpful 3D notes can be an invaluable tool. Learn how to annotate Tinkercad designs with 3D notes at autode.sk/tinkercad-3d-notes.

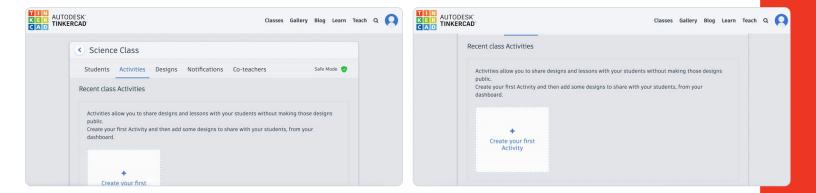
Activities

Activities make it easy to start a new project with your students in a specific class. It's really easy to create one.

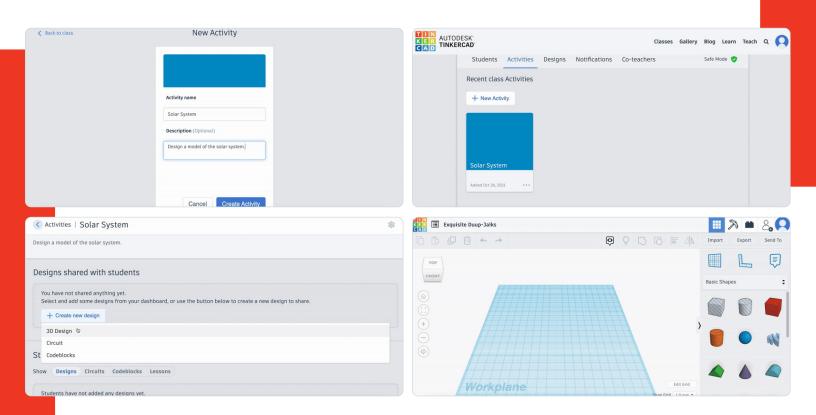
1. Open the class you want to add an Activity to.



2. Navigate to the Activity Tab, and create a new activity.



3. Give the activity a title and description that will tell your students what to do.

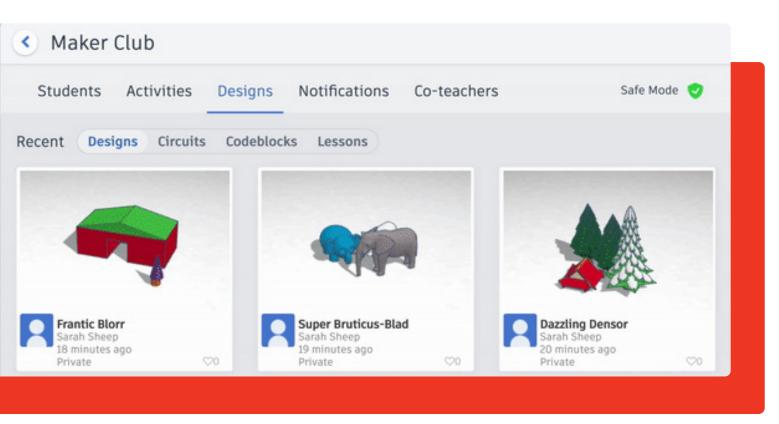


Give your students a starting Design, Circuit, or Codeblock and you can watch as your students submit their own designs to the Activity.

Read more about Activities at autode.sk/tinkercad-intro-activities.

Designs

The designs tab is meant to provide teachers with a bird's eye view of the most recent class design activity. We like to think of it as a virtual version of walking through your classroom and casually glancing at the designs your students are currently working on.

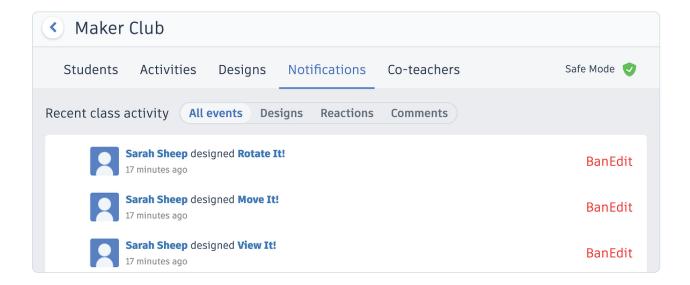


You'll also notice that this tab has a subsection of its own tabs, allowing you to switch the view from 3D designs to Circuits, Codeblocks, or Lessons.

As the admin for your class, you can open any of these designs for a closer view, allowing you to edit or annotate them.

Notifications

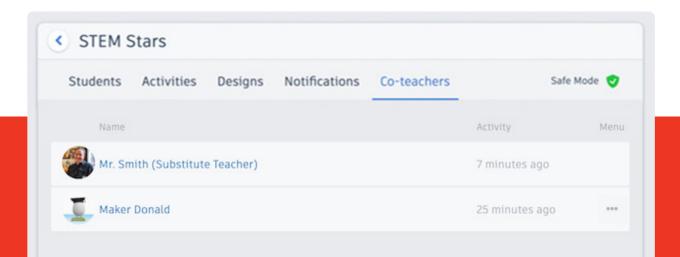
Here, you can track recent student activity on a more detailed level, including their reactions to other designs. This view also includes a subsection of tabs that allow you to filter your view to a specific type of activity.



Co-teachers

One of our most recent additions to Tinkercad Classrooms is the ability to add co-teachers to your class. This is the tab you'll use to add or remove co-teachers, granting them many of the same Tinkercad Classrooms features and capabilities you have as the administrator of your class.

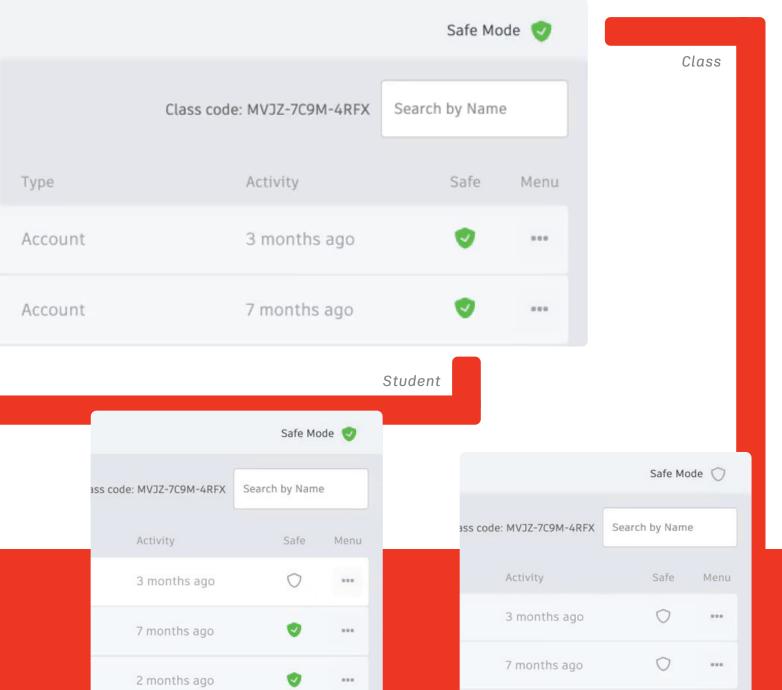
You can learn more about co-teachers in section 8. Classrooms with Multiple Teachers, or by reading our blog post on working with co-teachers in Tinkercad Classrooms at autode.sk/tinkercad-co-teaching.



Managing Student Safety

Another benefit of using Tinkercad Classrooms to onboard students is the added safety we provide for their Tinkercad experience.

By default, any student who joins your class is placed in a Safe Mode indicated by the green shield icon in the Students tab. By clicking on an icon, this safety measure can be toggled on and off for individual students, or for your entire class.



Safe Mode has the following effect:

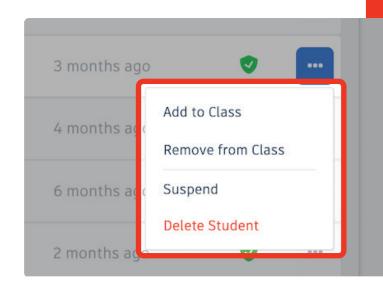
- Removes the ability for a student in a Class to make their design "Public", remaining "Private" by default.
- Removes the ability for a student in a Class to search the Gallery.
- Limits the Gallery view to the curated Staff Favorites.

We created Safe Mode at the request of teachers as a way to minimize student distractions and opportunities for online bullying. That said, as a teacher you have complete control over enabling or disabling Safe Mode for your classroom or for individual students.

Be aware that some students may be irked or surprised to find their existing Tinkercad account limited by this Safe Mode once they join a classroom where it's enabled. You may need to explain to students what Safe Mode is and why it's enabled for your class.

As a disciplinary measure, teachers also have the option to suspend a student from using their Tinkercad account. This suspension is only available on accounts for students under the age of 13. Students who have been suspended are still able to log in to their Tinkercad account, but are unable to use it.

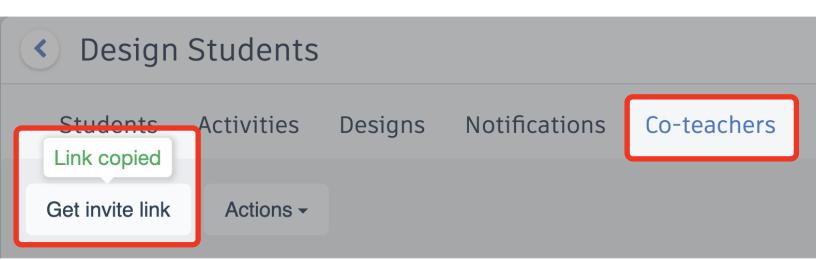
To suspend a student, navigate to the Students tab with your class and click the menu item next to a student's name. Depending on their account type, you'll find the option to add, remove, suspend, or delete the student. The length of a student suspension is at the teacher's discretion. The same menu action is used to "unsuspend" a student.



Classrooms with Multiple Teachers

You will always be the primary administrator for any classes you create in Tinkercad Classrooms. However, it is now possible to invite other educators to help manage your class.

These co-teachers can be anyone you trust to review and modify student designs in your class, and moderate student activity in Tinkercad. They could be fellow teachers within your school, substitute teachers, computer science lab administrators, or parent helpers -- anyone 13 years or older who is able to sign-in with (or create) an individual Tinkercad account.



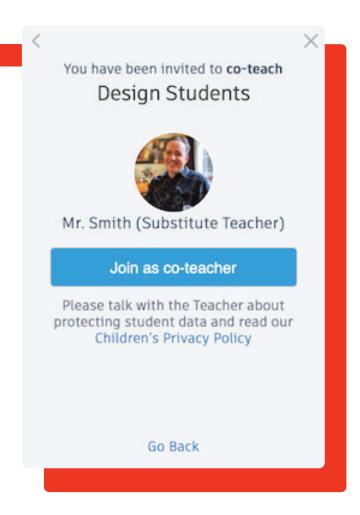
To invite a co-teacher to your class, navigate to the Co-teacher tab in your class dashboard (shown above). Click the button labeled Get invite link and a link will be copied to your clipboard that you can paste into a message to your co-teacher.

When your co-teacher follows this link, they'll be prompted to sign-in or create their Tinkercad account. Once signed-in, they'll see a co-teacher invitation.

If the invitation is accepted, your co-teacher will be able to access their Tinker-cad Classrooms dashboard using either the Classes link in the top navigation bar, or by clicking into their profile menu and selecting Classes.

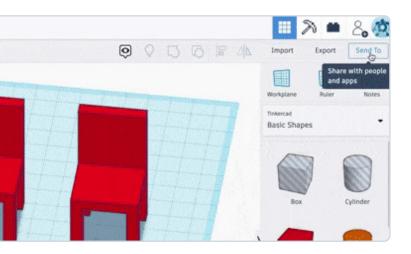
A total of 5 co-teachers can be added to a class at any given time. As the administrator of the class, you have the ability to withdraw invitations if you need to free up room for new co-teachers.

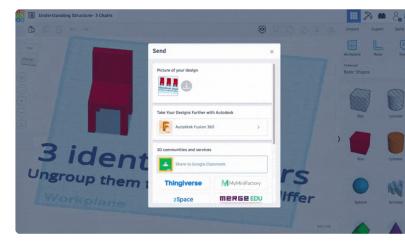
More information on the distinctions between teachers and co-teachers can be found in our blog post, titled Co-Teaching comes to Tinkercad, at autode.sk/tinkercad-co-teaching.

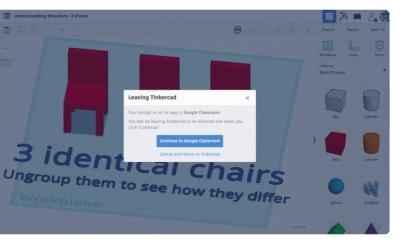


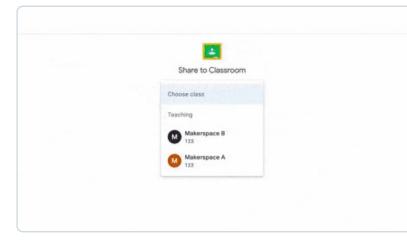
Assignments with Google Classroom

From talking with teachers, we know that many of you use Google Classroom as an essential tool for communicating and tracking assignments with your students. Used in combination with Tinkercad Classrooms, you have a great system for sending assignments to your students, and receiving completed Tinkercad designs back from them.









Whether you're interested in how to send Tinkercad designs to your students using Google Classroom, or how students can submit their designs back to you with just a few clicks, check out our blog post for full details and step-by-step instructions at autode.sk/tinkercad-google-class.

Solutions to Common Issues

My students get an error when opening my shared design!

If students are having difficulty viewing the Tinkercad designs you send to them, the most likely cause is that your design isn't public. Go through these steps and try again. Links to public designs are viewable by anyone, even people without Tinkercad accounts.

I can't make my designs public!

If you don't see a "Public" option for your design, it's likely that you've accidentally joined your own class and are experiencing the limitations of the Safe Mode students are placed in by default when they join your Class. To fix this, check to see if you are listed in your own Classroom and toggle off the safe mode next to your name.

I can't open a student's design with the link they turned in!

If you're unable to see the Tinkercad work students submit to you over Google Classroom, chances are that the student created the design with an account that's not managed by you in your Classroom.

As an alternative, you can browse through any of your students' designs at any time using the Class Gallery feature of Tinkercad Classrooms.

My class is done. How do I move students out of Tinkercad Classrooms without deleting their work?

We've created a simple process that allows students to claim the work they create in a class seat and migrate their designs to a conventional account. The process is outlined in a blog post at autode.sk/tinkercad-graduate.

Support & FAQ

Our Tinkercad Knowledgebase includes an extensive FAQ for Tinkercad Class-rooms at **autode.sk/tinkercad-faq-class** for any questions you may have that aren't covered here. From this same page, you have the option to create a ticket with our support team for additional help.

We created Tinkercad Classrooms as a way to remove as many barriers as possible for students to get started on their journey to learn how to design and make things, and shape the world around them. Educators like you make this all possible, and if there's anything we can do to improve the Tinkercad experience for your classroom, don't hesitate to send your suggestions to tinkercadlearning@autodesk.com.

-Team Tinkercad





