



DeepHub Class

User's Manual



Foreword

General

This manual introduces the installation, functions and operations of the DeepHub device (hereinafter referred to as "the Device"). Read carefully before using the device, and keep the manual safe for future reference.

Safety Instructions

The following signal words might appear in the manual.

Signal Words	Meaning
 DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
 WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
 CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, reductions in performance, or unpredictable results.
 TIPS	Provides methods to help you solve a problem or save time.
 NOTE	Provides additional information as a supplement to the text.

Revision History

Version	Revision Content	Release Time
V1.0.0	First release.	May 2023

Privacy Protection Notice

As the device user or data controller, you might collect the personal data of others such as their face, fingerprints, and license plate number. You need to be in compliance with your local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures which include but are not limited: Providing clear and visible identification to inform people of the existence of the surveillance area and provide required contact information.

About the Manual

- The manual is for reference only. Slight differences might be found between the manual and the product.

- We are not liable for losses incurred due to operating the product in ways that are not in compliance with the manual.
- The manual will be updated according to the latest laws and regulations of related jurisdictions. For detailed information, see the paper user's manual, use our CD-ROM, scan the QR code or visit our official website. The manual is for reference only. Slight differences might be found between the electronic version and the paper version.
- All designs and software are subject to change without prior written notice. Product updates might result in some differences appearing between the actual product and the manual. Please contact customer service for the latest program and supplementary documentation.
- There might be errors in the print or deviations in the description of the functions, operations and technical data. If there is any doubt or dispute, we reserve the right of final explanation.
- Upgrade the reader software or try other mainstream reader software if the manual (in PDF format) cannot be opened.
- All trademarks, registered trademarks and company names in the manual are properties of their respective owners.
- Please visit our website, contact the supplier or customer service if any problems occur while using the device.
- If there is any uncertainty or controversy, we reserve the right of final explanation.

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1 Introduction

We believe the most important thing in education is to transmit ideas. Teachers shall not waste time tossing hardware or looking for USB disks. With Dahua DeepHub Class solution, we can make it possible

- Seamless Sharing in Different Ways, connect resources you're using.
 - ◇ Screen sharing, easily connect PC and interactive panel without client.
 - ◇ File sharing, fast and stable display of your resources between devices.
 - ◇ Cloud Drive, directly open your files in Google Drive, Onedrive.
 - ◇ Support to import PPT, PDF, screenshots, images and media from.
- Instantly engage your students.
 - ◇ Whiteboard tools, help capture students' attention.
 - ◇ Subject tools, help spark students' ideas.
 - ◇ Activities, help inspire students' learning.
- All you need in one platform.
 - ◇ Interactive slides, add teaching materials, digital media, and interactive elements to the lesson.
 - ◇ Practice games, turn your materials into a practice game.
 - ◇ Classes, import your class roster to make classroom games more exciting.
- Collaborate safely and quickly, Data Protection.
 - ◇ Collaborate with other educators by sharing lesson plans and resources through the cloud. All content is encrypted by default for security.
 - ◇ Servers are deployed in multiple countries to support different schools' requests for data storage locations.

Table 1-1 Key Features

Module			Description
Teach on IFP	Account	QR Code	Log in by scanning the QR code with your mobile device.
		Google/Microsoft	Log in via Google or Microsoft account.
	Files	Screen Share from PC	Share the screen with a web link on your PC. Remember the device, and connect with ease. (Only Windows now)
		File Share from PC	Quick share your resources from PC to IFP. Stable and High-definition display. (Only Windows now)
		Upload from mobile	Collect more ideas by uploading photos from mobile to IFP. (Only Windows now)
		Sync from DeepHub	Sync interactive e-lessons and cloud resources through Dahua DeepHub Account.
		Open from USB / Storage	Present interactive e-lessons and resources on the Interactive panel: Enbx, PPT, PDF, PNG format. (Only Windows now)

	Annotate	Mark	Allows annotations regardless of what is being displayed on the screen.
	Whiteboard	Select & Pen	Write freely on the interactive panel.
		General Tools	Provide Shape, Board, Timing.
		Subject Tools	Provide Geometry, Ruler, Line, Planet, Painting, Piano, Periodic table, Function.
	Interactive	Rank	Create several groups and organize competitions and record scores for each group.
		Group	Randomly generate student groups of any size, all with one tap.
		Games	Turn your materials into a class game that gets the whole class excited and participating.
		Polls	Collect Students' ideas with student devices. (Only Android & Web now)
	Share	QR Code	Easy send to students via QR code.
		Upload	Easy save the content to the cloud. (Only Windows now)
		Export	Export to PPT, PDF, PNG format.

Table 1-2 More features

Module			Description
Prepare on PC	Basic element	Text	Provide input of Text in e-lessons.
		Shape	Provide input of Shape in e-lessons.
		Media	Support Google Drive and Onedrive access.
		Animation	Provide input of animations in e-lessons.
	Advanced element	Online Source	Add YouTube videos by pasting URL, add online pictures by entering a keyword.
		Table	Provide input of Table in e-lessons.
		Mindmap	Provide input of Mindmap in e-lessons.
	Subject element	Math	Various subject tools: Formula, Geometry, Number Line, Function.
		Language	Line: Insert the line, enter writing English letters.
		Chemistry	Insert the entire periodic table or individual elements.

	Games	Practice	Various activity templates such as: Fun Classify, Super Classify, Matching Pairs, Gap Filling, etc.
	Files	Import	Support to import PPT or PDF files in the form of pictures into slides.
		Auto-Sync	Create and sync interactive e-lessons anytime, anywhere.
		Share to Email	Easily send the Slides to email.
		Share Link	Easily share slides with students via a link.
	Classes	Students manage	Import your class roster to make classroom games more exciting.
	Devices	Devices manage	Manage your classroom devices.
		Cast screen & Files	Share the screen and files between devices.

2 Whiteboard App

We provide users with two versions of Dahua DeepHub Class, Android and Windows. On the interactive flat panel (IFP), you can choose to use according to your preference.

Figure 2-1 Android

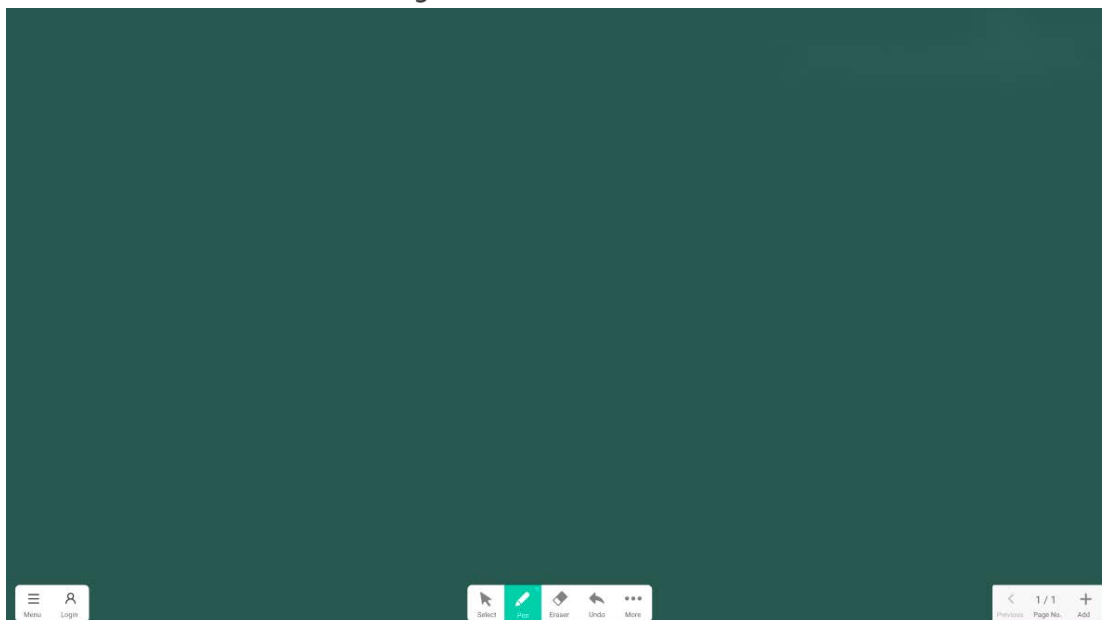
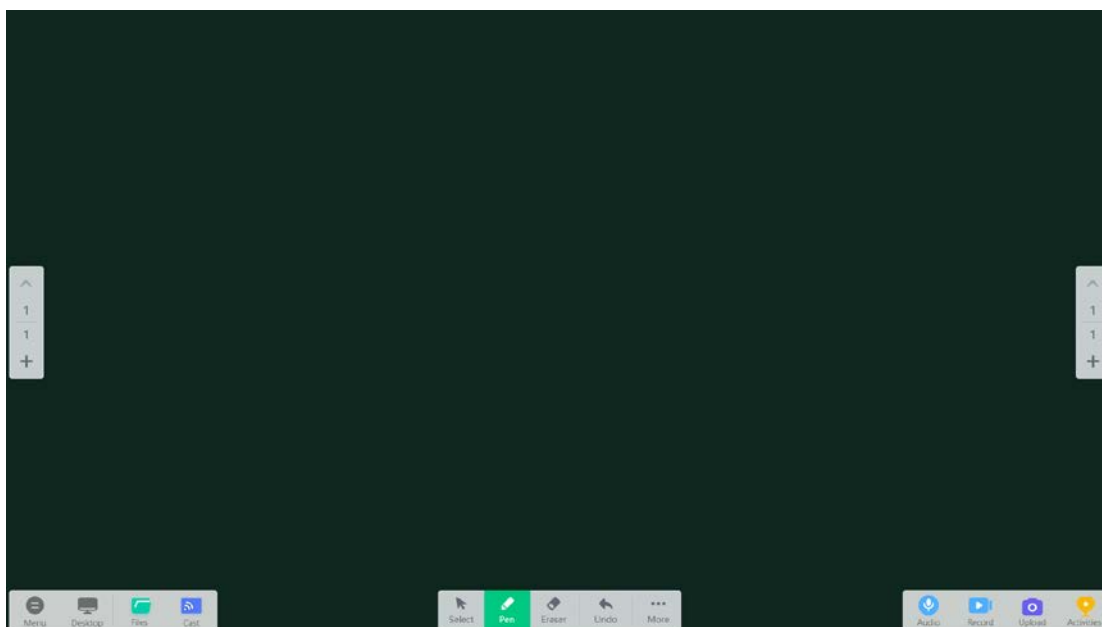


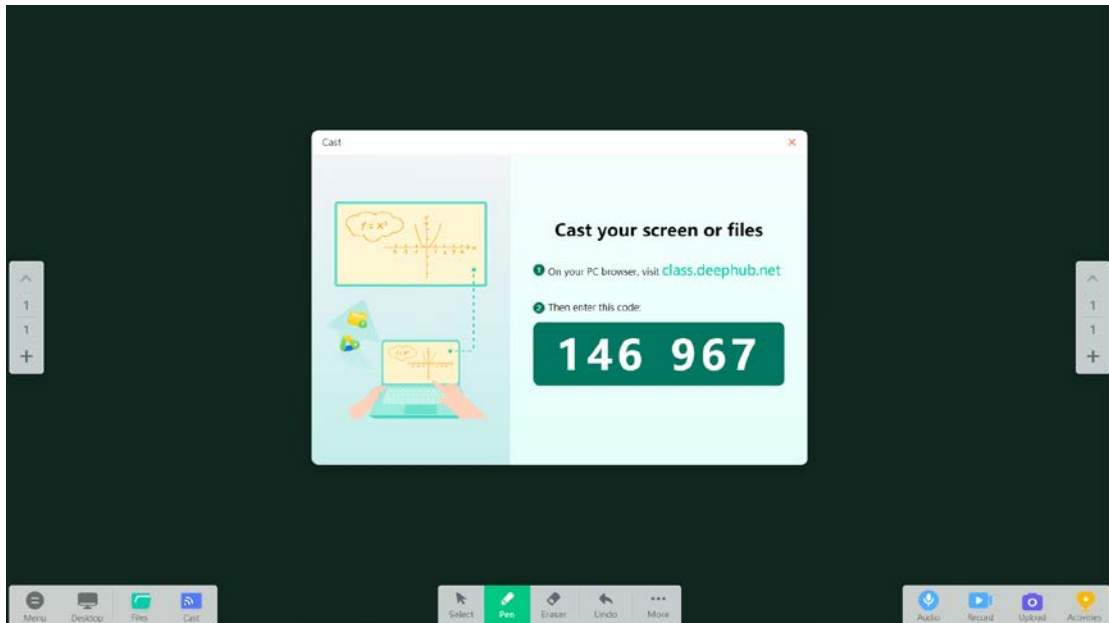
Figure 2-2 Windows



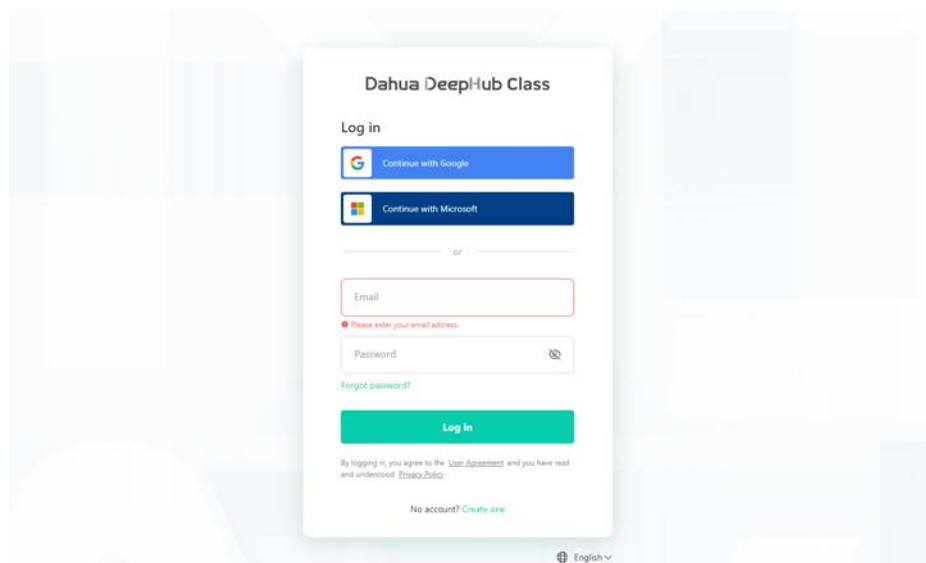
3 Presentation

3.1 Connect Device

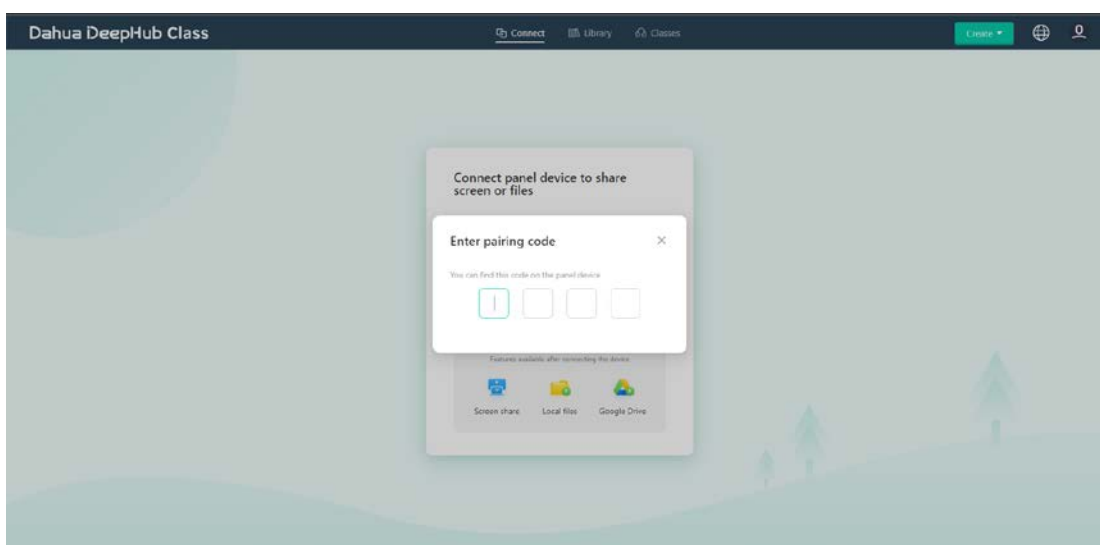
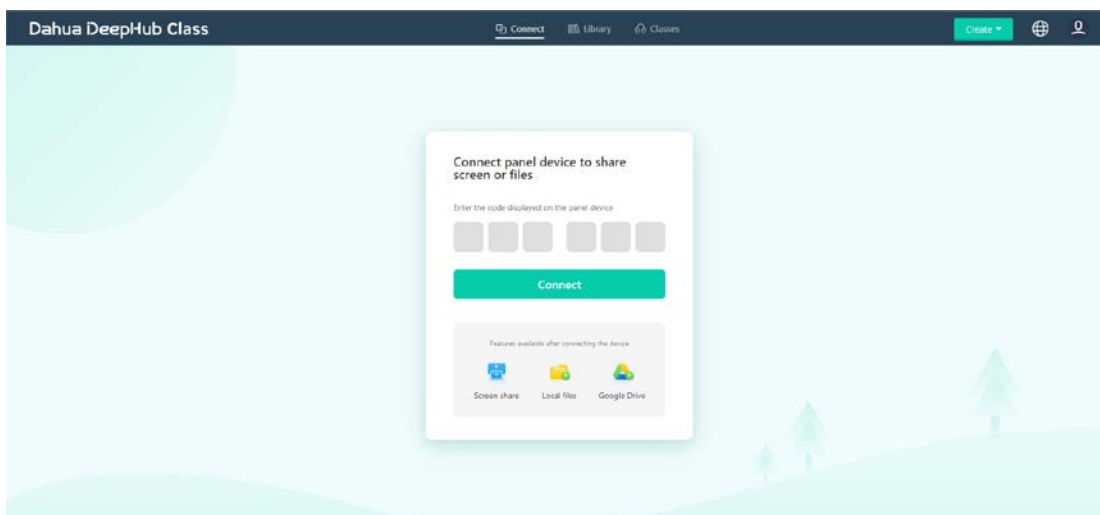
Step 1 Open Dahua DeepHub Class on the IFP, it will pop up a 6 digit code, if it does not appear, click on the cast icon  at the lower left corner.



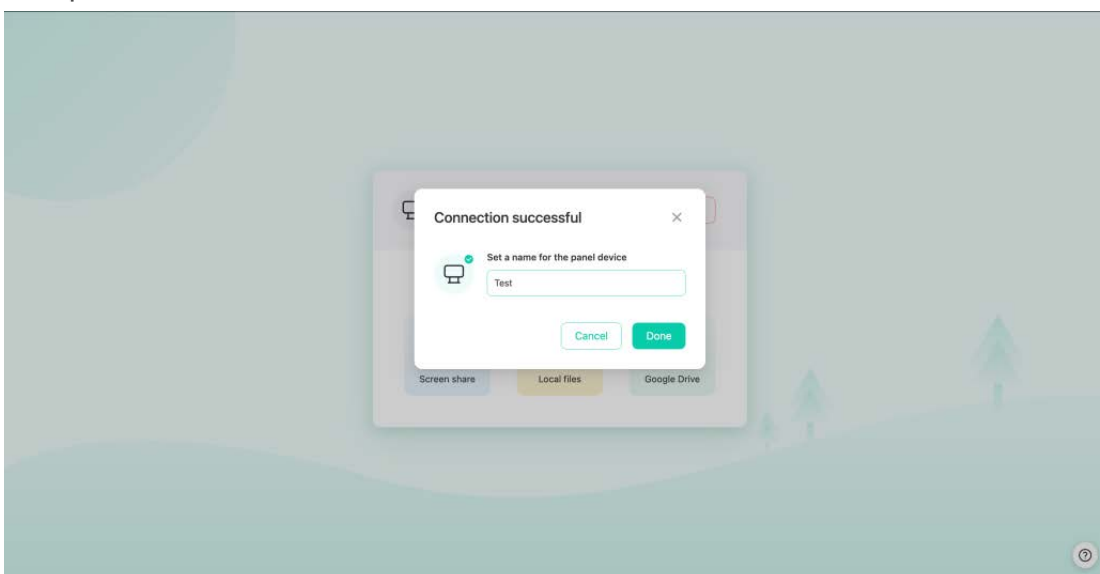
Step 2 Open the URL <https://class.deephub.net> on PC and you can easily log in to Dahua DeepHub Class with your Google/Microsoft account.



Step 3 After logging in to Dahua DeepHub Class, enter the 6-digit code displayed on the IFP. If the device you connect is new, you need to enter a new 4-digit code for verification for safety.



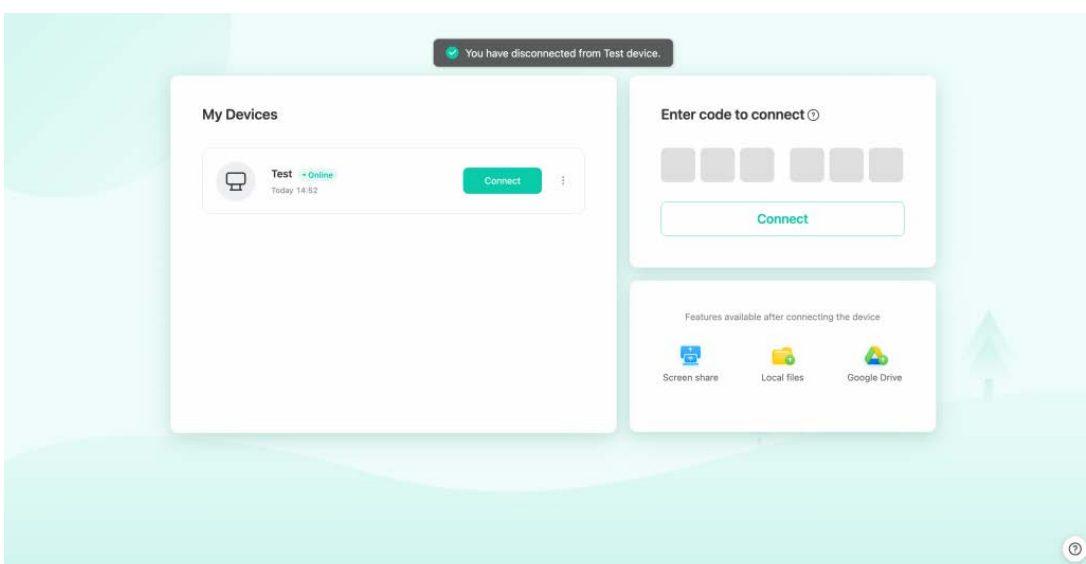
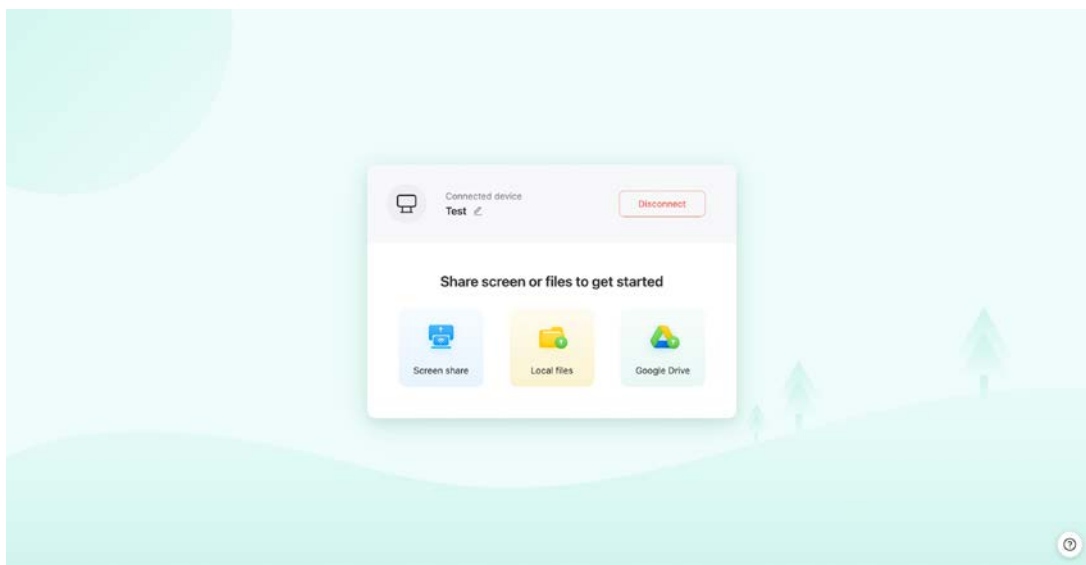
Step 4 Name the device for better identification for next time.



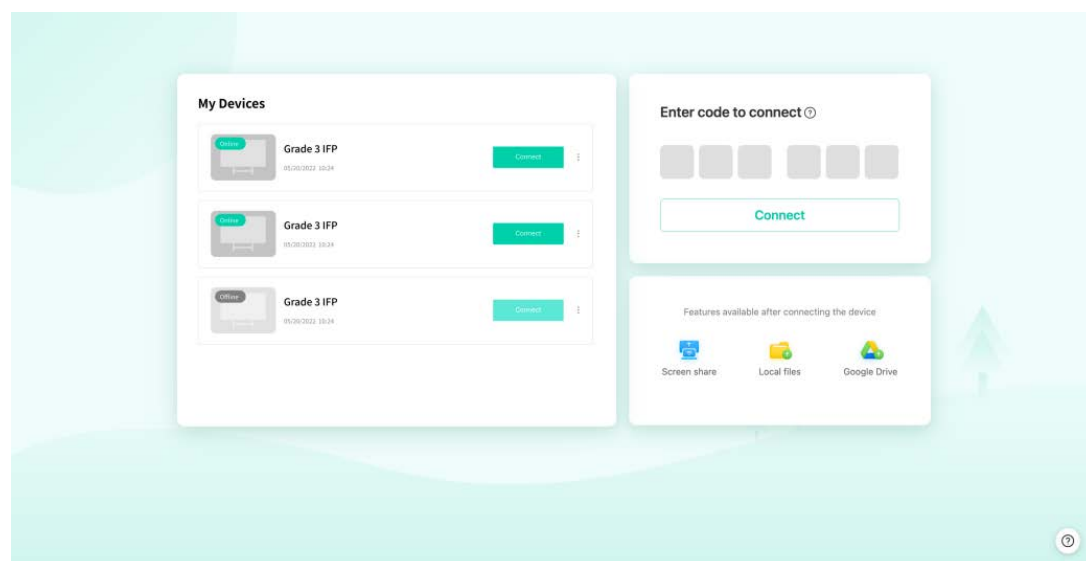
Step 5 Now you have successfully connected devices.

1. You can choose to share the screen from the PC to IFP, or you can choose to send files to IFP from local storage or cloud disk.

2. If you want to stop sharing, click the Disconnect button to finish.



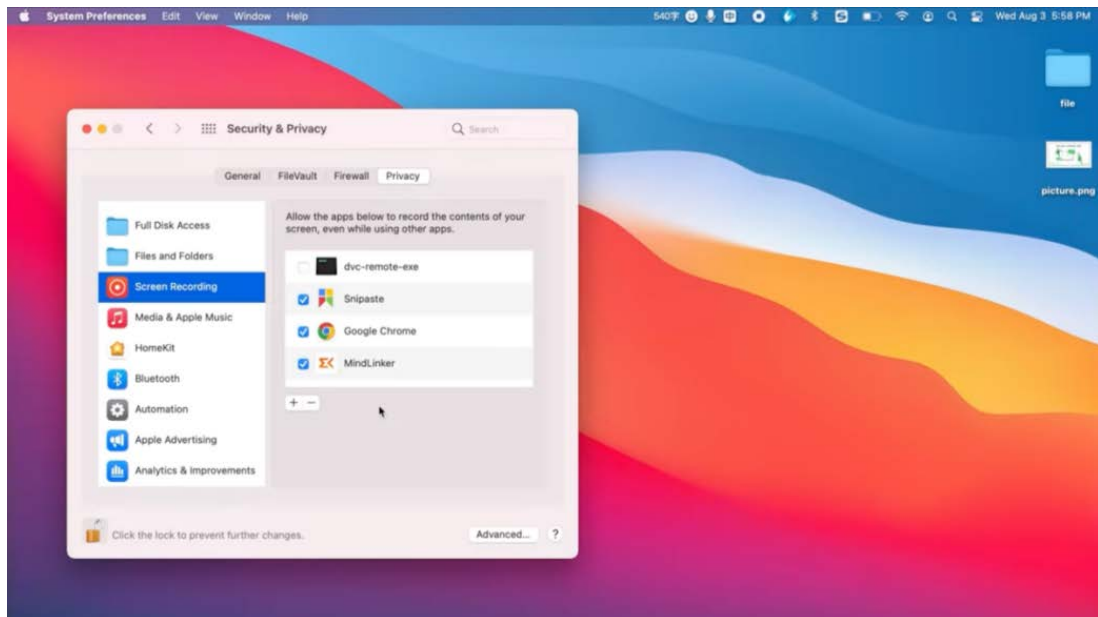
Step 6 In the next time, you only need to click connect to continue using.



3.2 Screen Share

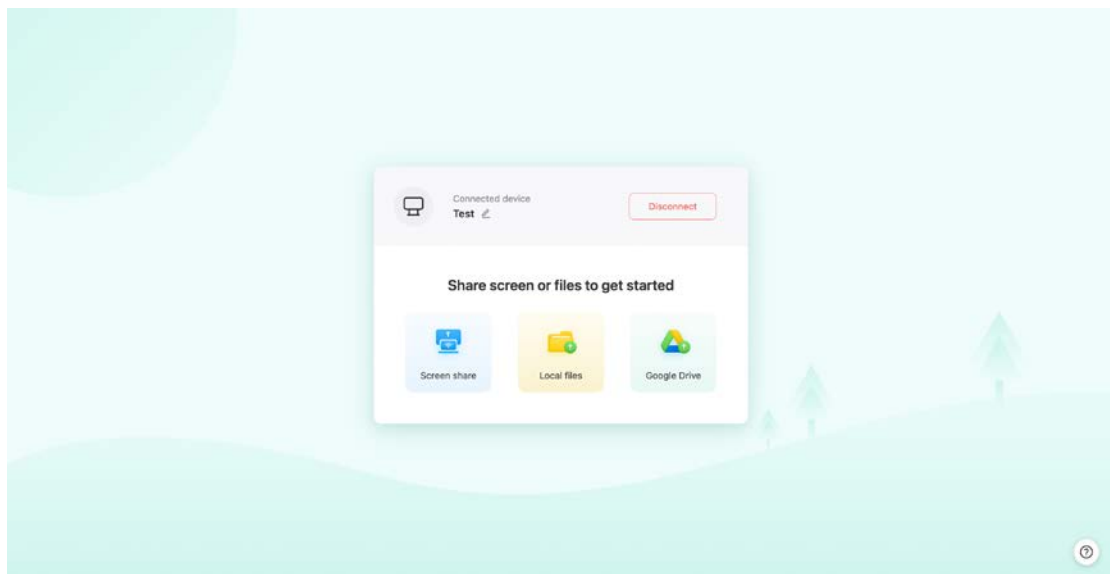
Before screen share

- Make sure your PC and IFP are connected to the same network.
- If you use a Macbook, make sure to enable screen recording permissions on your PC. Open System Preferences, click on Security & Privacy, and click on Screen Recording Options to make sure the browser you are using has permission to record the screen.



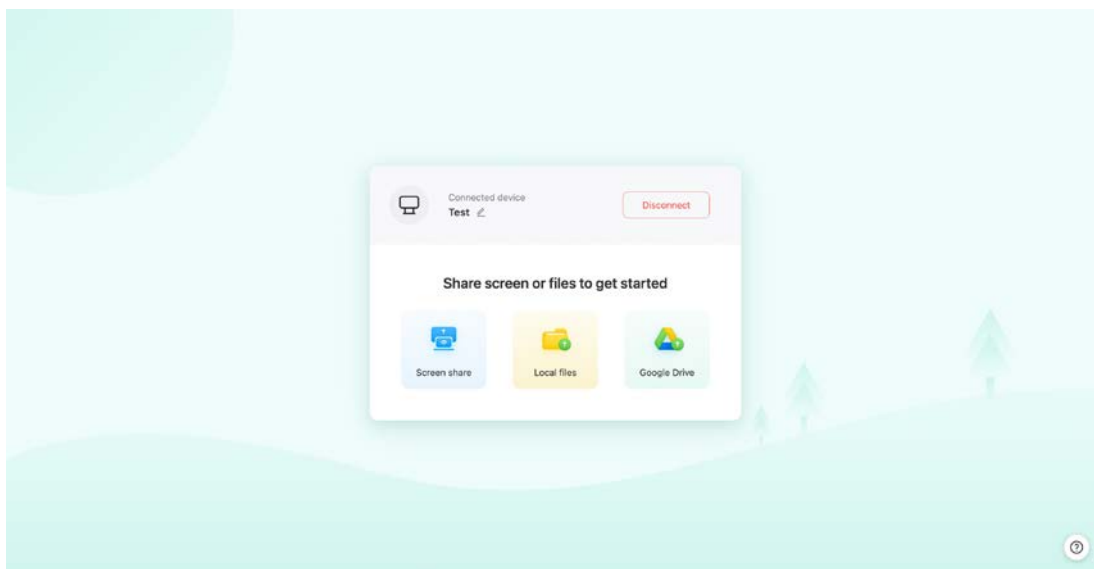
Now you have successfully connected devices

You can choose to share the screen from the PC to IFP.

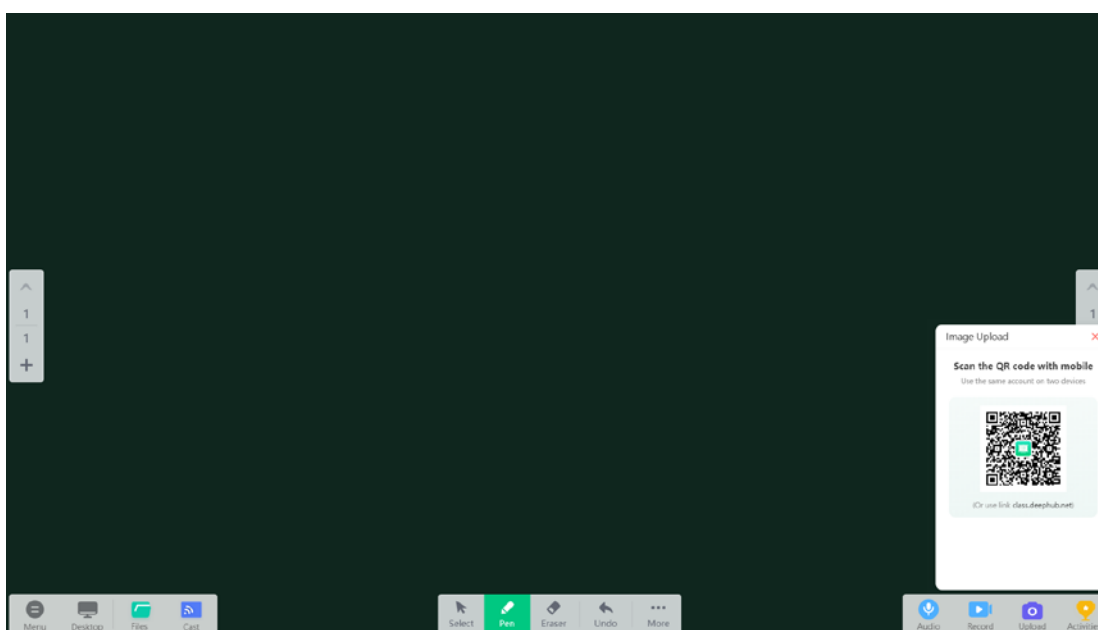


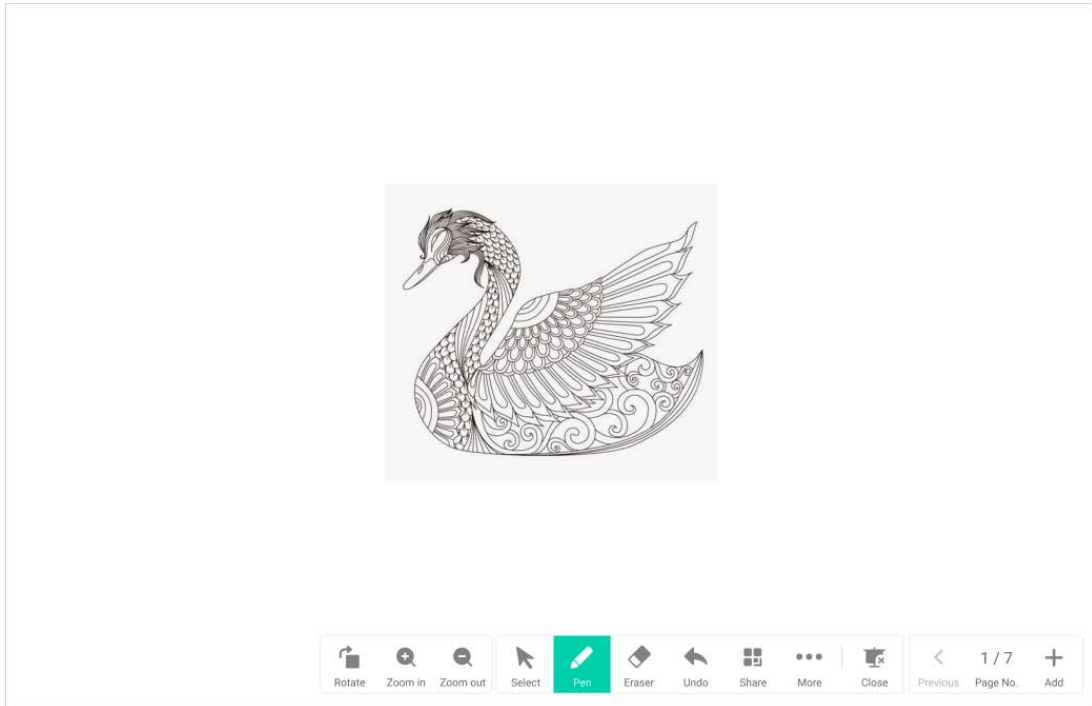
3.3 File share

Step 1 Now you have successfully connected devices. You can choose to send files to IFP from local storage or cloud disk.



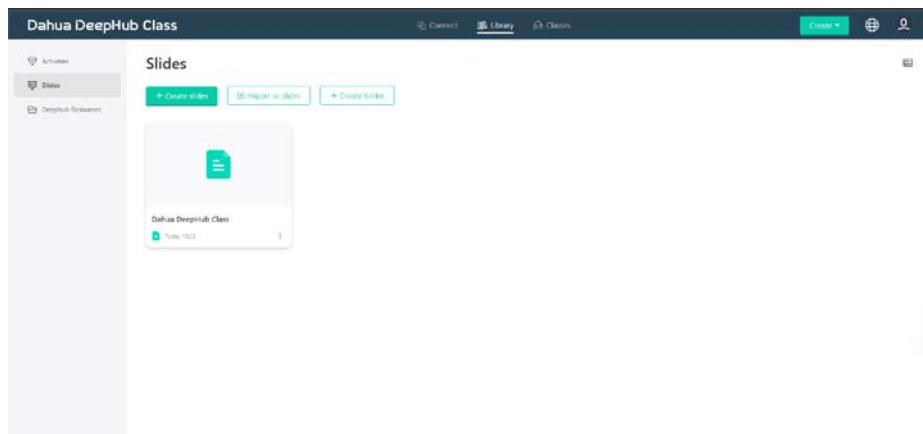
Step 2 Click the upload button  in the lower left corner to upload image through the mobile devices.

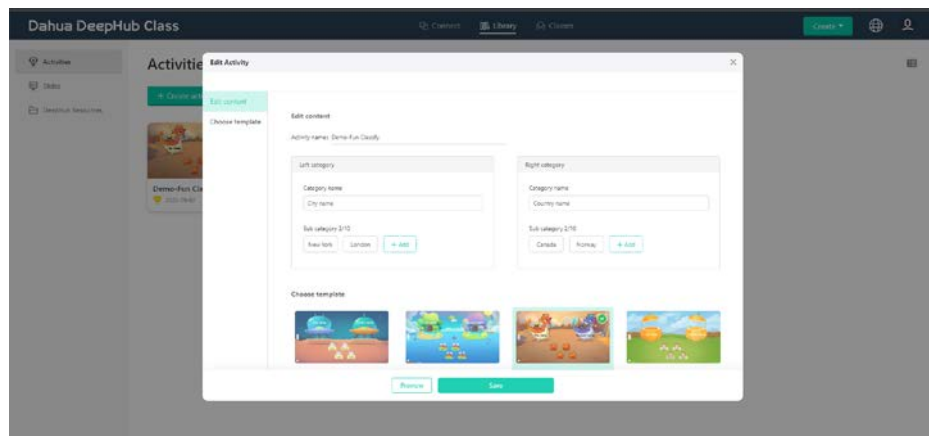
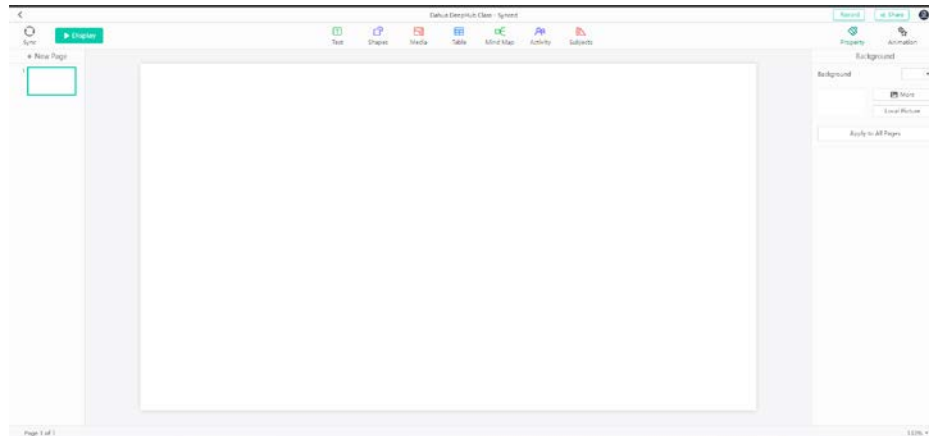




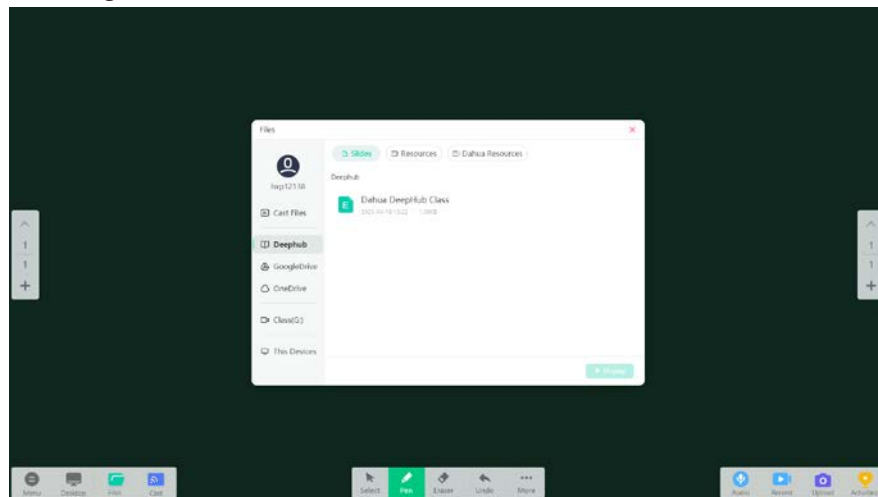
3.4 Cloud Drive

Step 1 Open the URL <https://class.deephub.net> on PC and you can create interactive slides or practice games on Dahua DeepHub Class.





Step 2 Click the file button  in the lower left corner, and it would directly sync the slides after login.



Step 3 At the same time, the Google drive and Onedrive you bound to Dahua DeepHub account will be auto sync.

3.5 USB or Storage

Dahua DeepHub Class also supports offline operation. Click the file button  in the lower left corner, select the USB or This Device to directly open the resources for teaching.

3.6 File Format

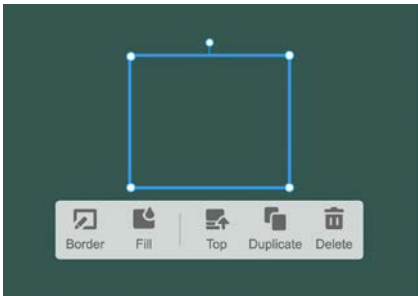
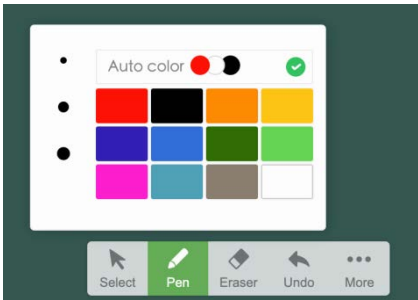
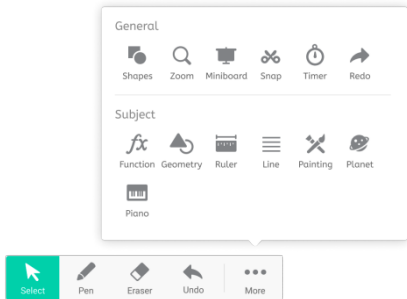
What file formats can Dahua DeepHub Class open:

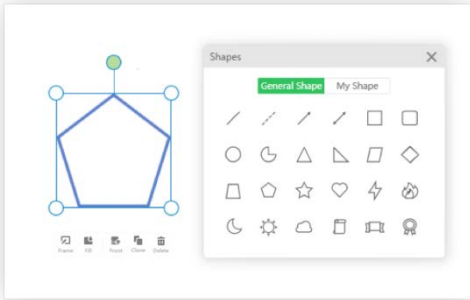
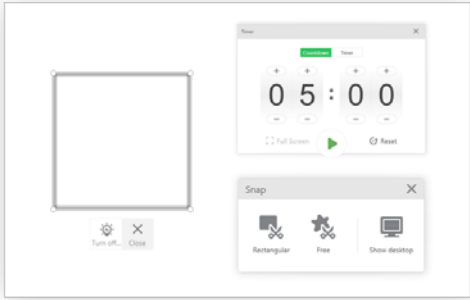
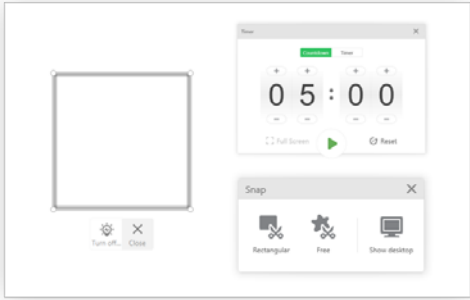
File type	File formats
Presentations	pptx, pdf, enbx
Images	png, jpg
Videos	mp4, rmvb, wmv, avi, rm, 3gp, mkv, flv, mov
Audios	mp3, wav, wma, ogg, aac

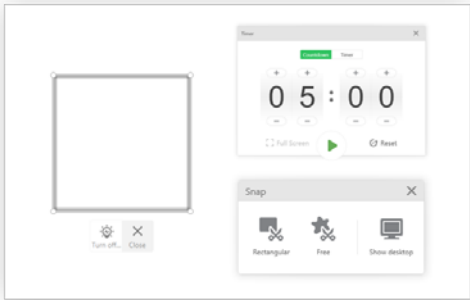
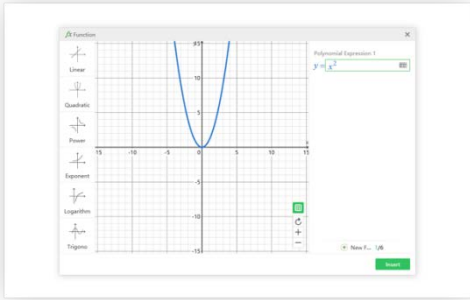
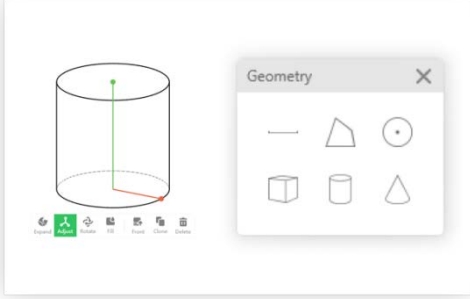
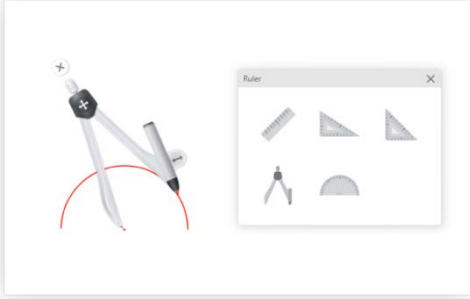
4 Whiteboard Tools

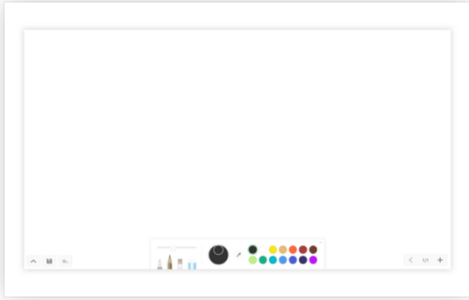
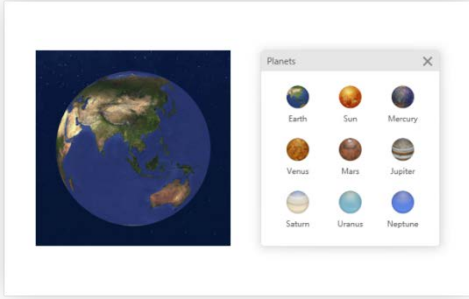
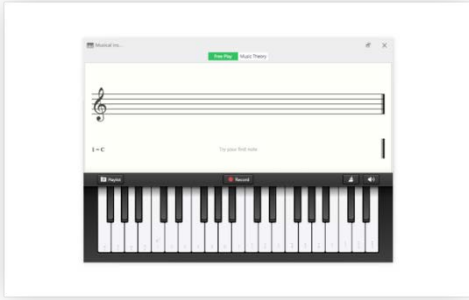
A digital whiteboard with powerful tools and Widgets makes the instructions effective and engaging:

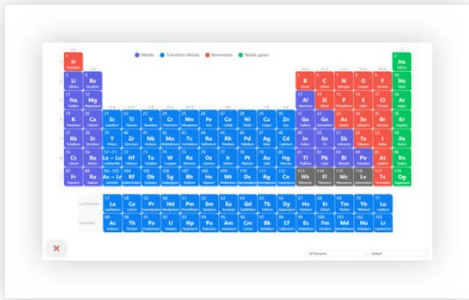
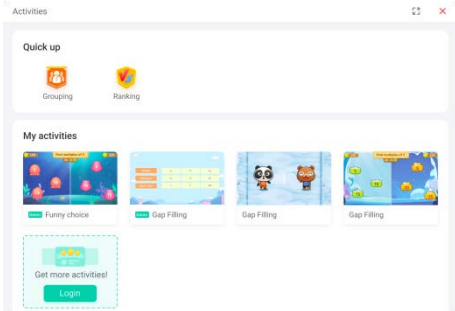
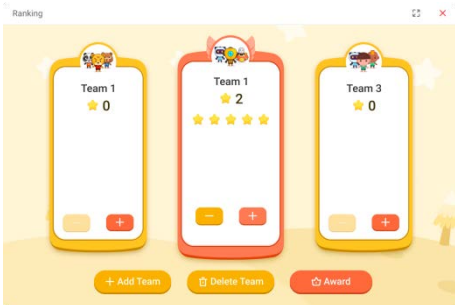
- Whiteboard tools, help capture students' attention.
- Subject tools, help spark students' ideas.
- Activities, help inspire students' learning.

Icon	Function	Description
 Select	Select	 Select to edit elements, including fill, copy, etc.
 Pen	Pen	 Choose pen size and color.
 Eraser	Eraser	Support palm recognition erase and one-key swipe to clear.
 Undo	Undo	Undo the last action.
 More	More	

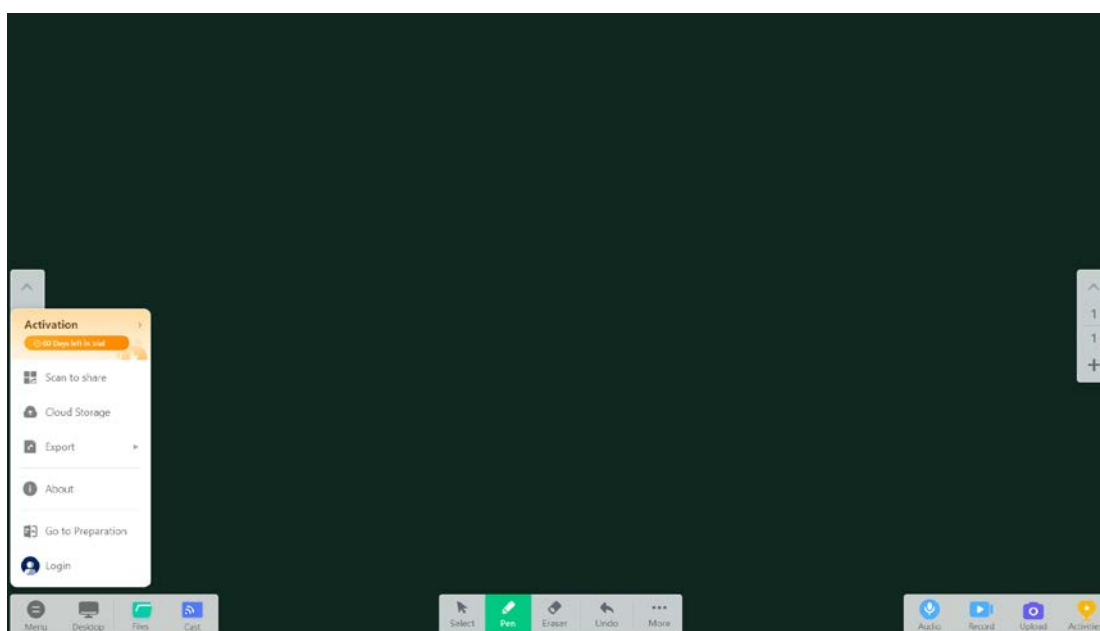
 Shapes	Shapes	 Include line and graphic elements.
 Zoom	Zoom	 Focus and zoom in.
 Miniboard	Miniboard	 Unlimited canvas for free writing floating on the slides.
 Snap	Snap	 Take a screenshot and insert it into the whiteboard.

 Timer	Timer	 Included countdown and timer.
 Redo	Redo	Redo the last action.
 Function	Function	 Plot function curve with formula.
 Geometry	Geometry	 Draw plane geometry.
 Ruler	Ruler	 Abundant rulers help teachers make Class clearer.

 Line	Line	 Enter the English letters.
 Painting	Painting	 Rich brushes and palettes.
 Planet	Planet	 The rich 3D planet makes the class more interesting.
 Piano	piano	 The teacher can directly select the score to play.

 Periodic Table	Chemistry	 A more intuitive periodic table display.
 Activities	Activities	 Turn your materials into a practice game
 Grouping	Grouping	 Randomly generate student groups of any size, all with one tap.
 Ranking	Ranking	 Make activities more realistic and give the instant feedback.

5 Menu



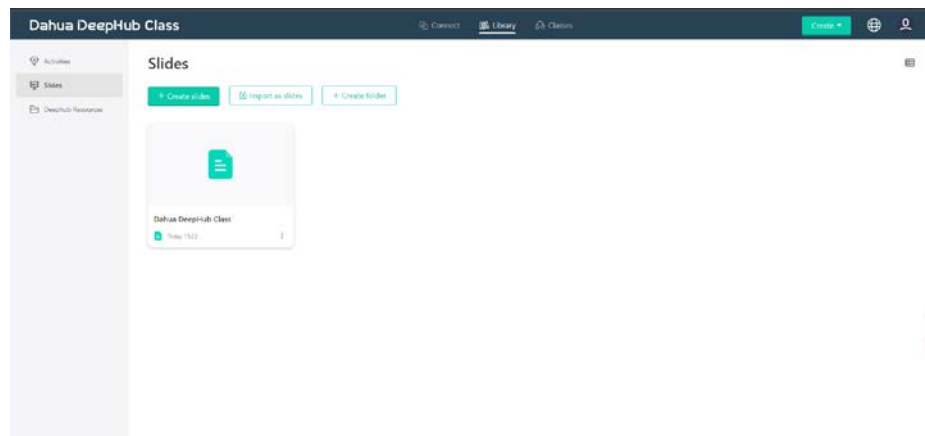
Icon	Function	Description
	Scan to share	Easy send to students via QR code.
	Cloud Storage	Easy save the content to the cloud.
	Export	Export to PPT, PDF, PNG format.
	About	View the current version and its description.
	Go to Preparation	Visit https://class.deephub.net to Prepare System.
	Login	Support email, QR code, Google/Microsoft login.
	Desktop	You can still use more tools under Windows interfaces.

6 Prepare System

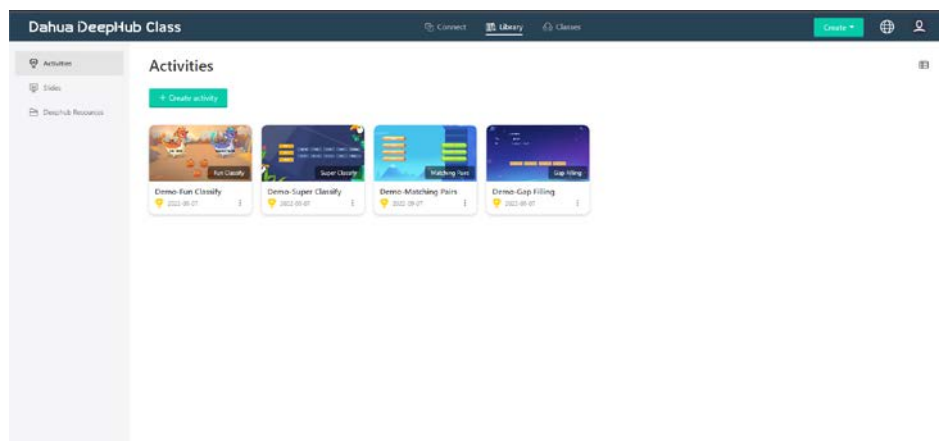
All you need in one platform: <https://class.deephub.net>.

- Interactive slides, add teaching materials, digital media, and interactive elements to the lesson.
- Practice games, turn your materials into a practice game.
- Classes, import your class roster to make class games more exciting.

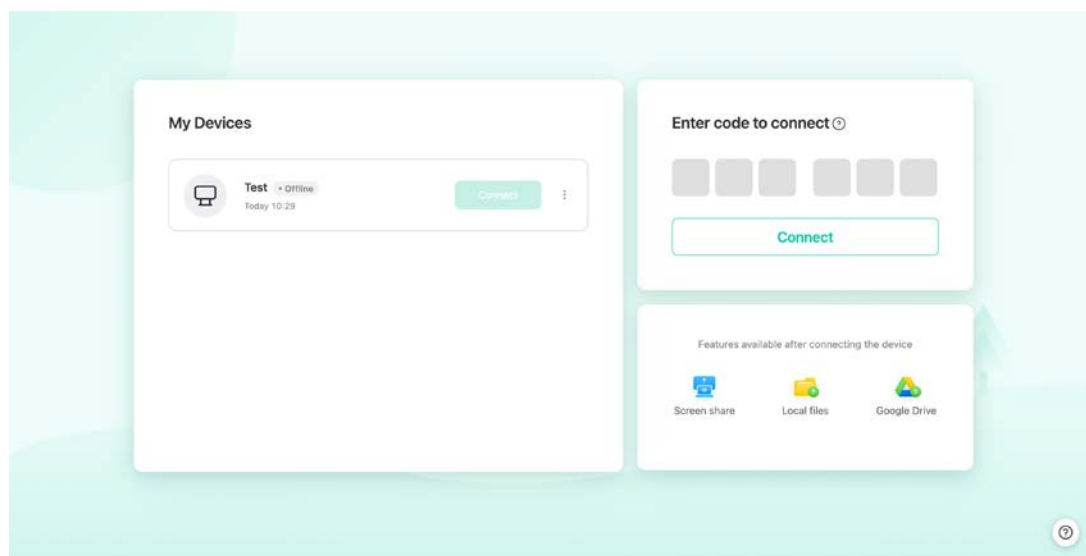
Interactive slides



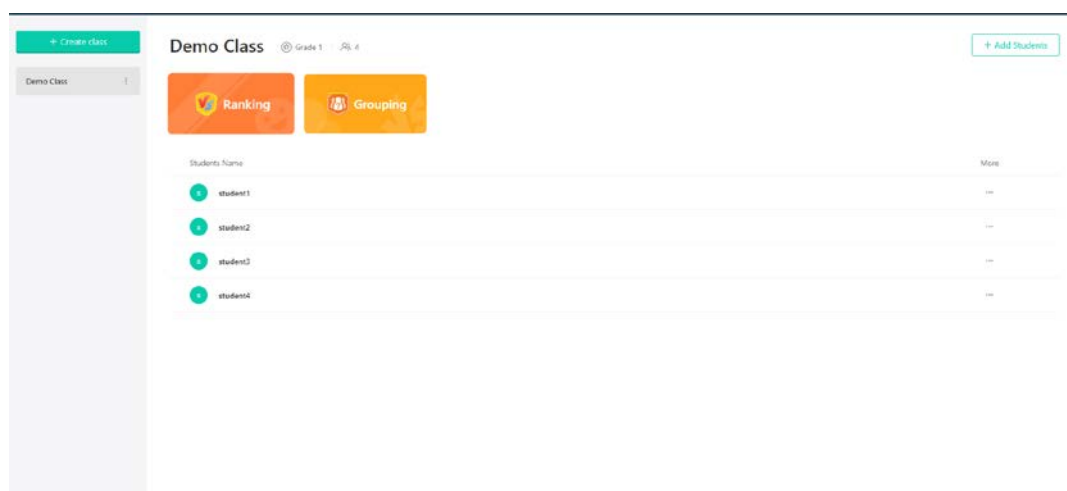
Practice games



Devices connect and manage



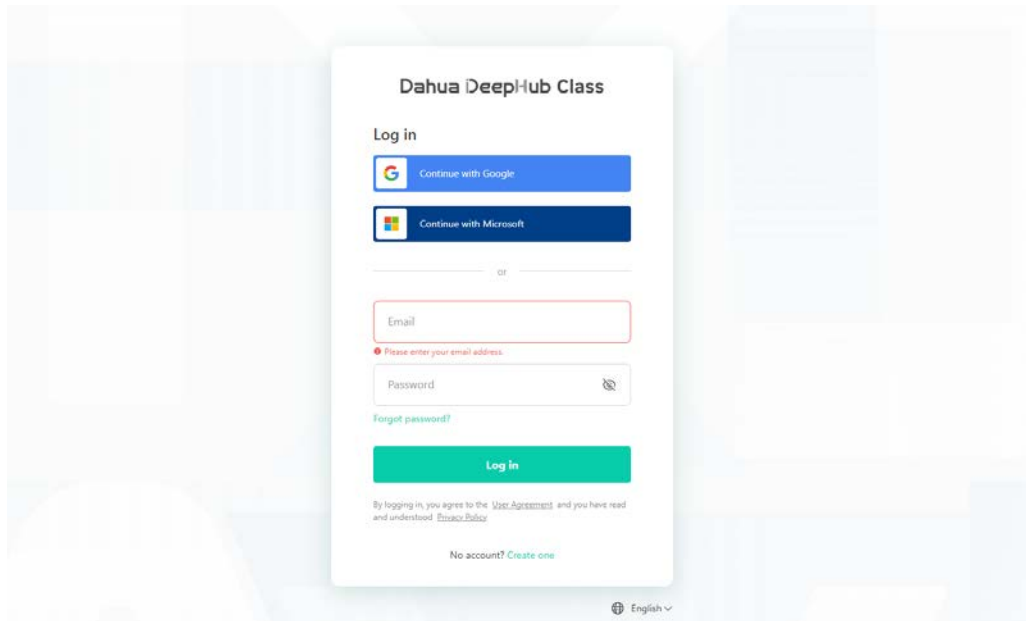
Classes



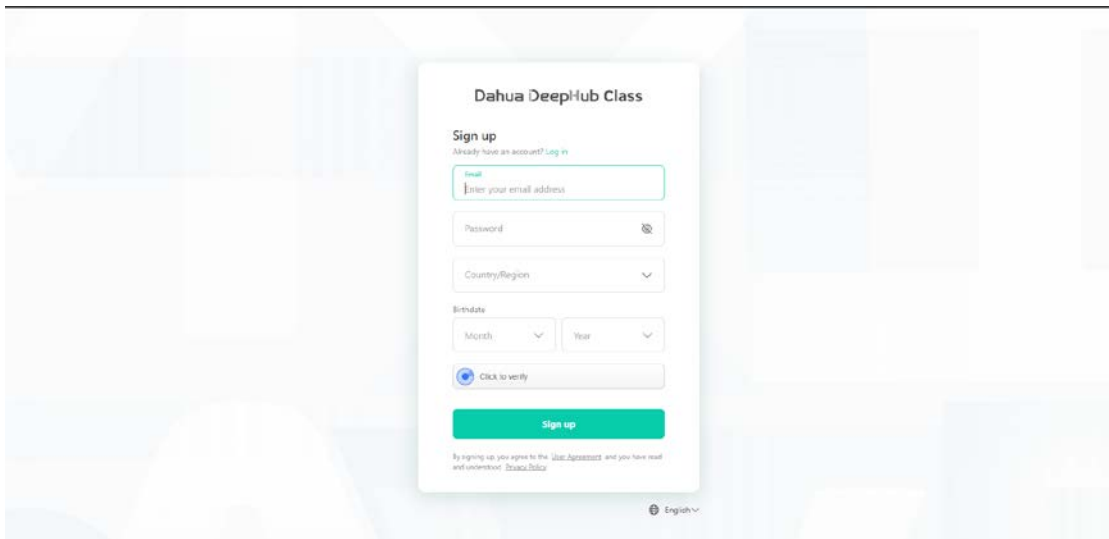
7 Teacher Account

7.1 Create Account

Step 1 You can open your resources anywhere anytime with Dahua DeepHub account. Click Create One (<https://class.deephub.net>) to register.



Step 2 Enter the email and password, click Verify to register and you will receive an activation code email. Enter the code and your registration is successful.

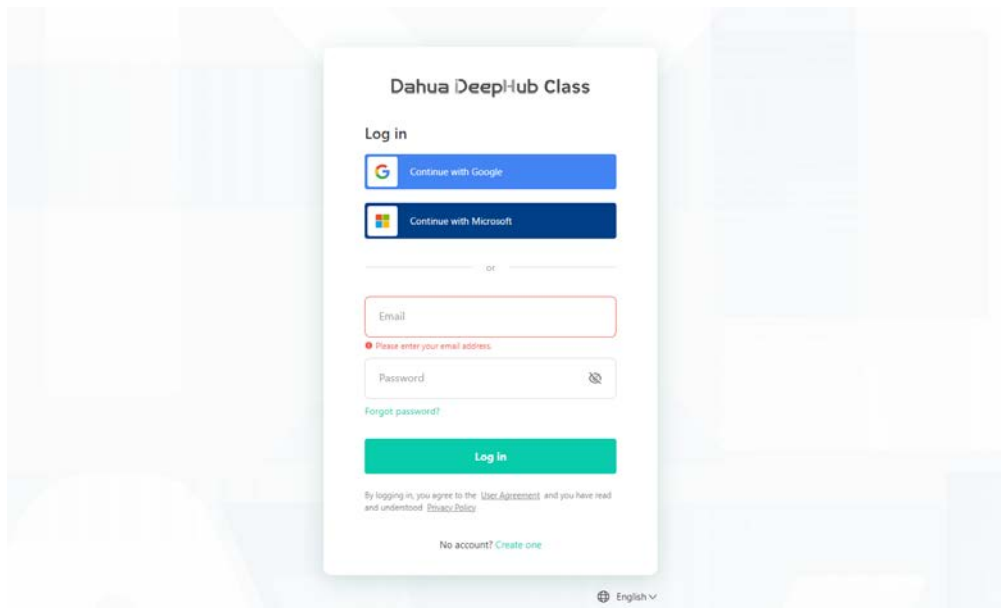


Step 3 You can also create with Google/Microsoft Account directly.

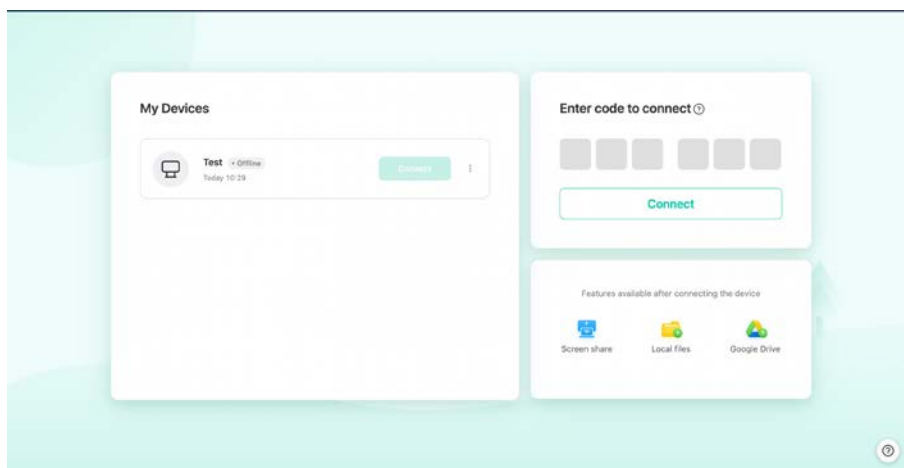
7.2 Login

The first way: Log in via Google or Microsoft account directly.

The second way: Enter your registered Dahua DeepHub account to log in.

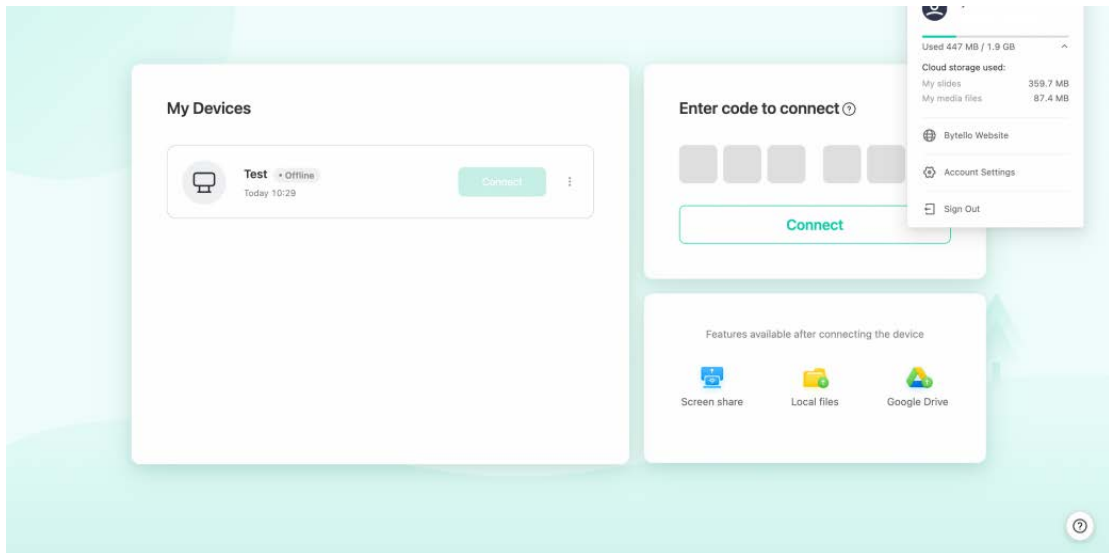


After logging in, you can experience the rich preparation tools provided by Dahua DeepHub Class.

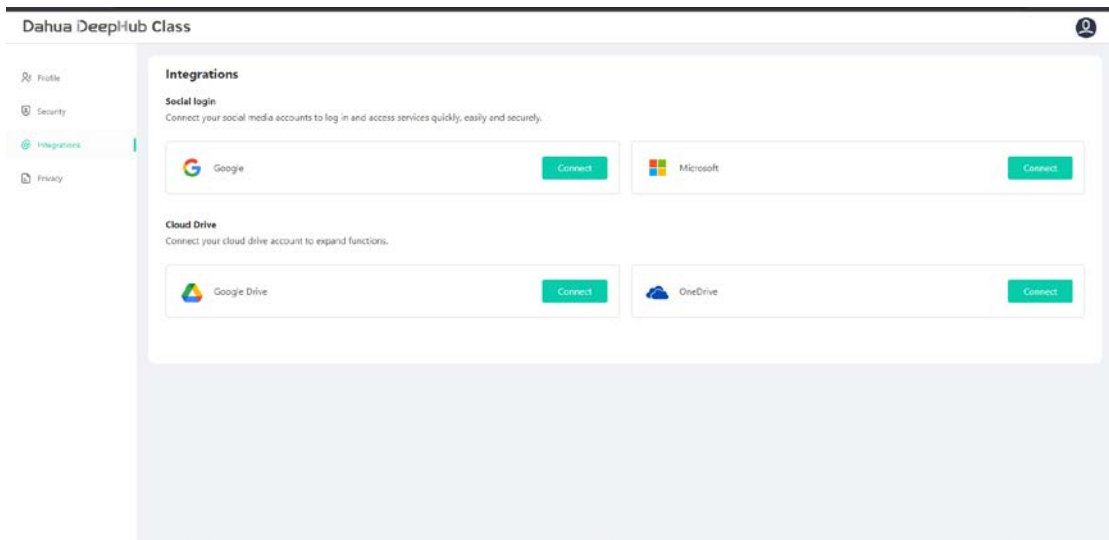


7.3 Account Settings

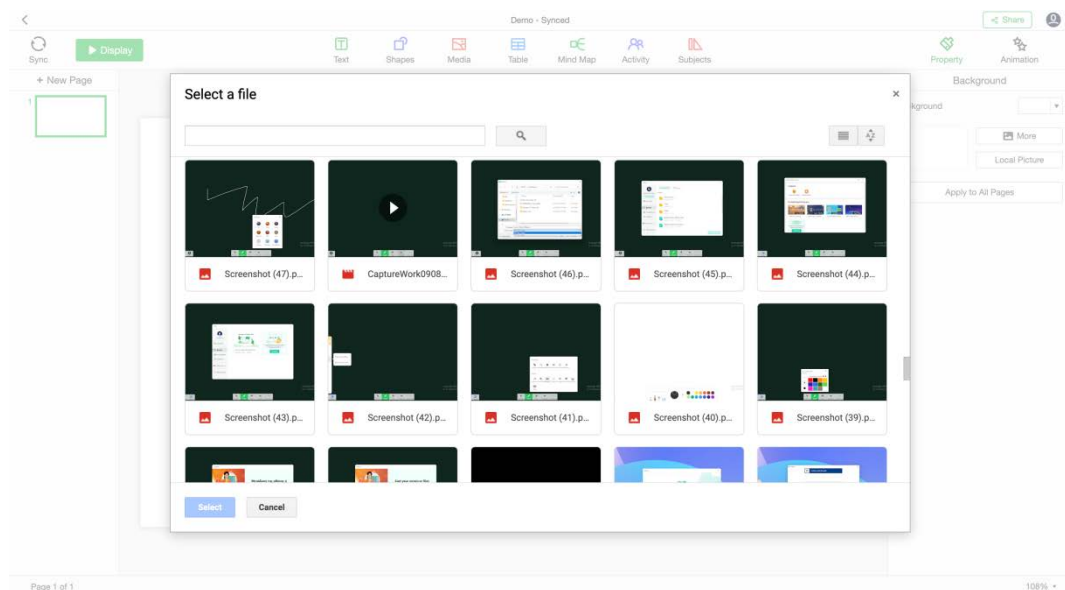
Step 1 Click the account icon in the upper right corner of the top bar, you can view account information in detail.



Step 2 Click the Account Settings option to manage your account. You can connect your Google Drive and Onedrive for prepare mode.



Step 3 When you are editing the Slides, you can quickly insert the materials from the cloud disk.

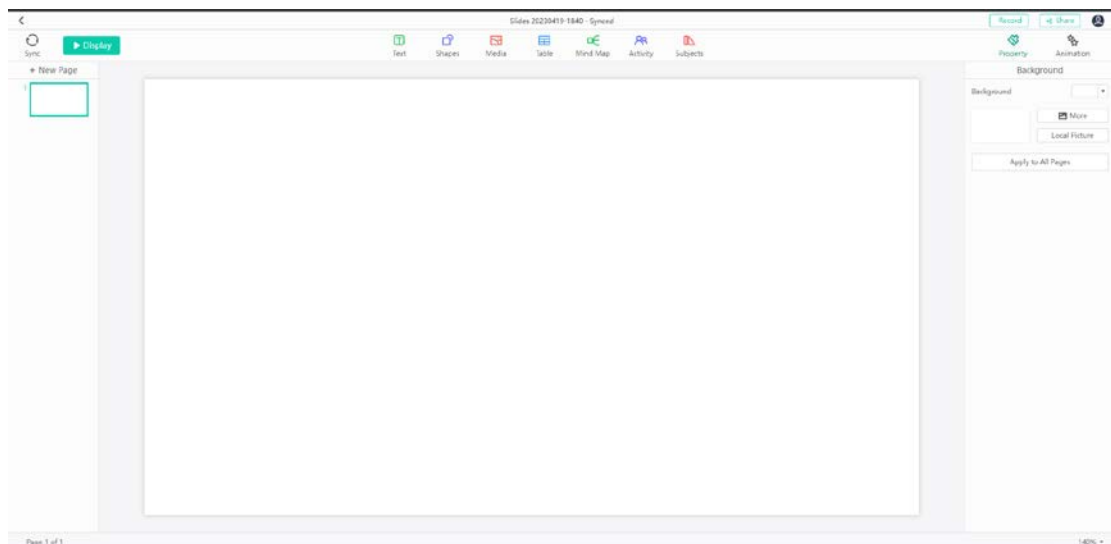
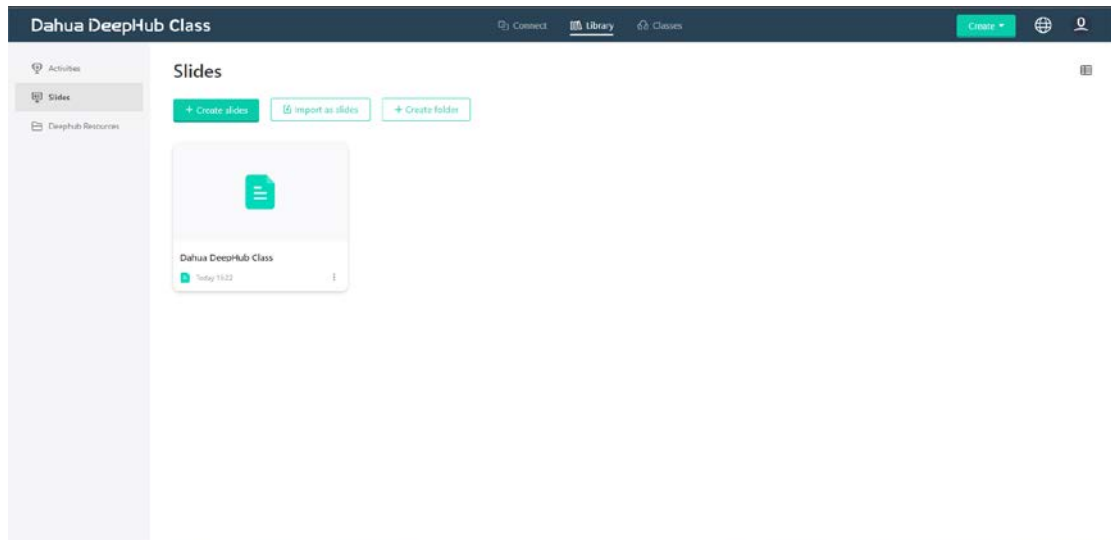


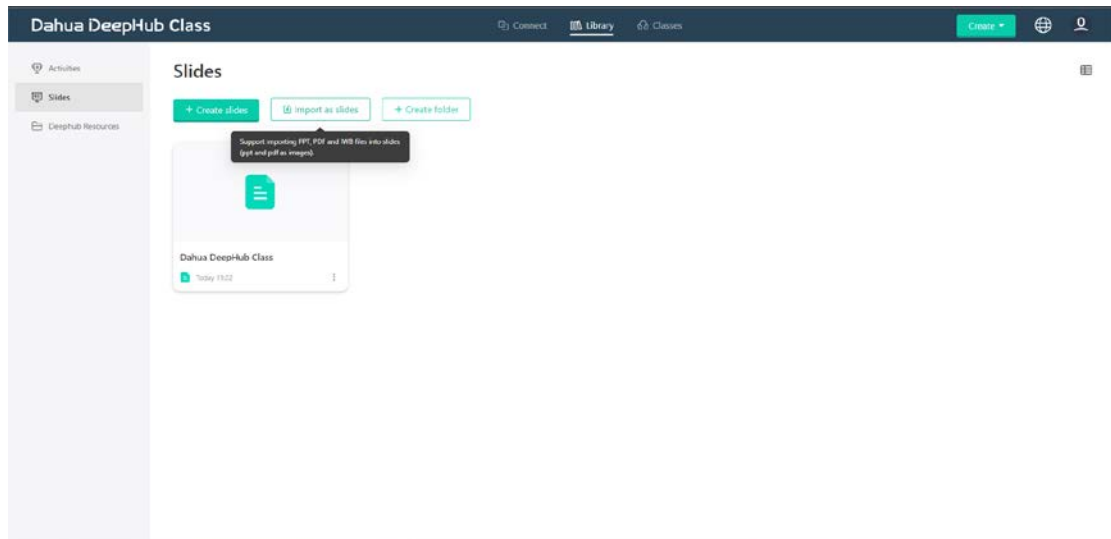
Step 4 When you are teaching on IFP, you can also quickly access the resources from the cloud disk without login again.

8 Create Slides

8.1 Create and import

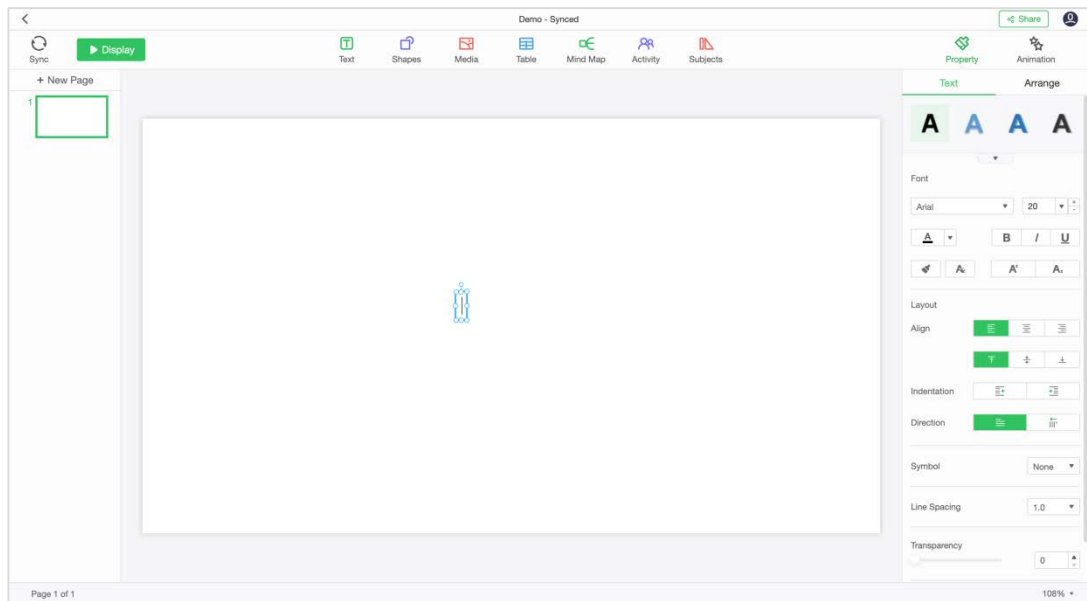
Step 1 Click the Create button to create a blank Slides. It also supports to import PDF and PPT formats to create.



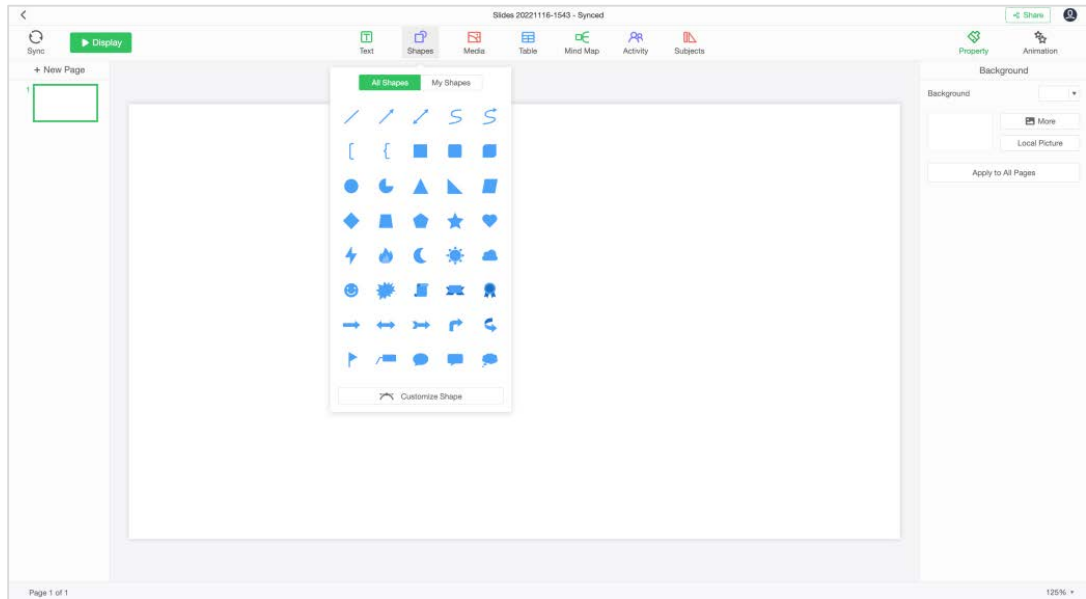


8.2 Edit mode

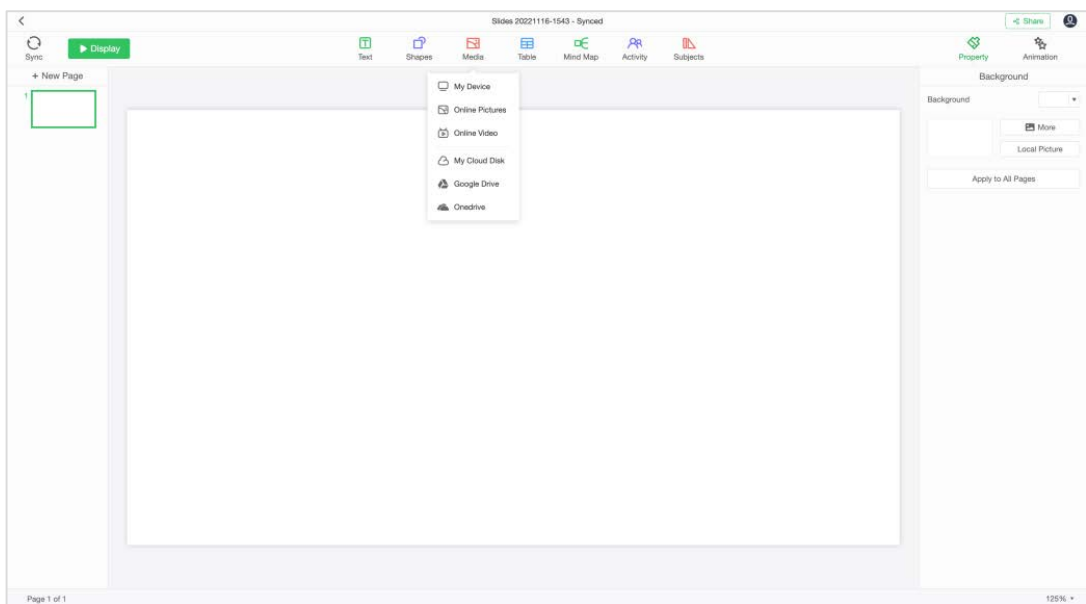
8.2.1 Text Element



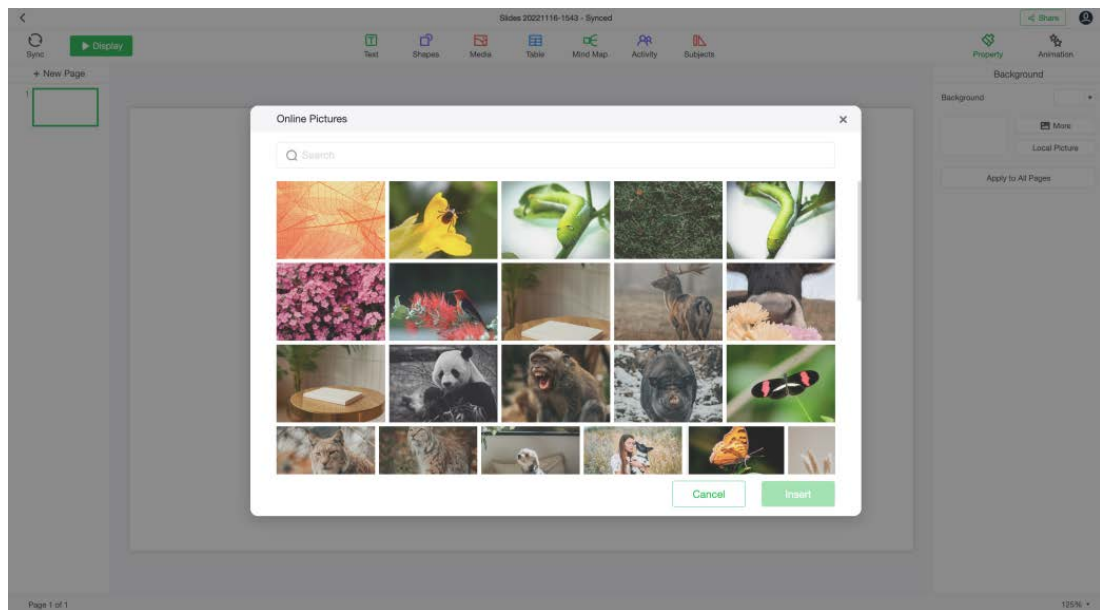
8.2.2 Shape Element



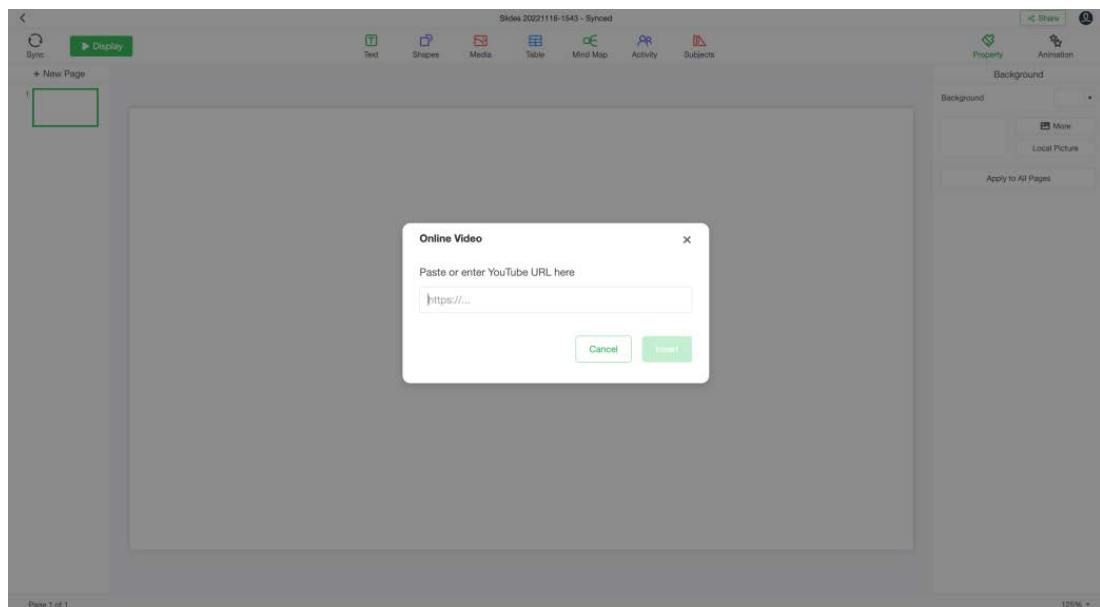
8.2.3 Media Element



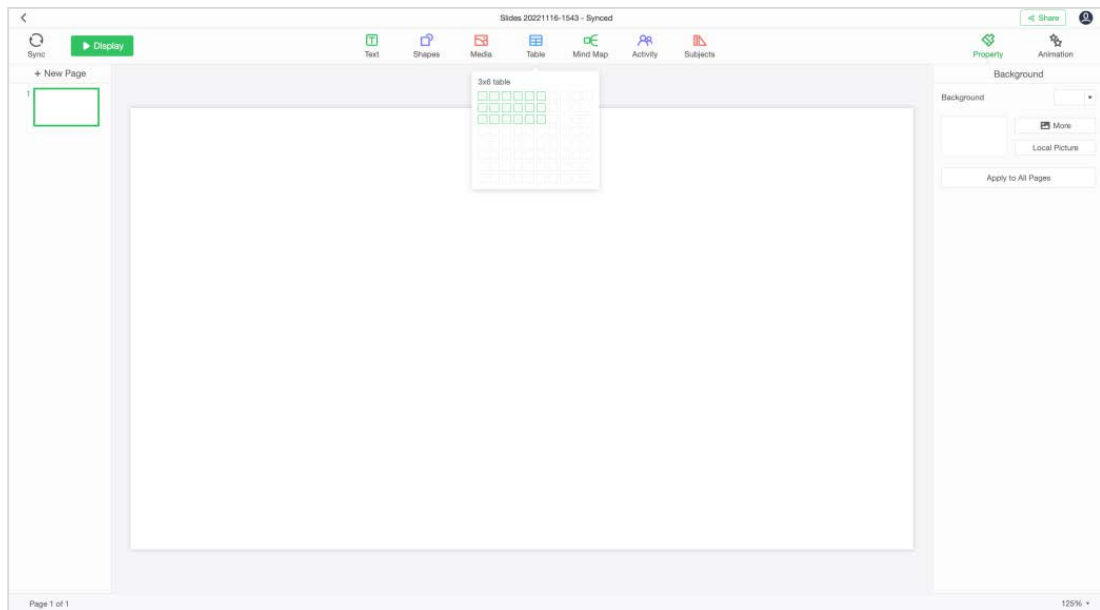
- Online Picture: Allows to insert Creative Commons licensed images directly from a search engine.



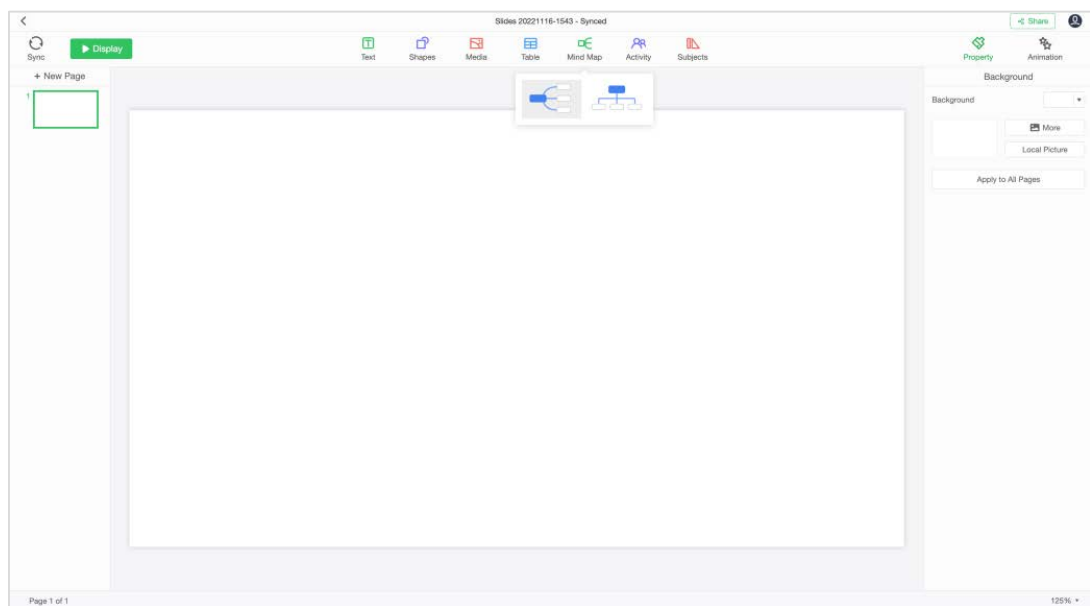
- Online Video: Enter the YouTube link to insert a teaching video.



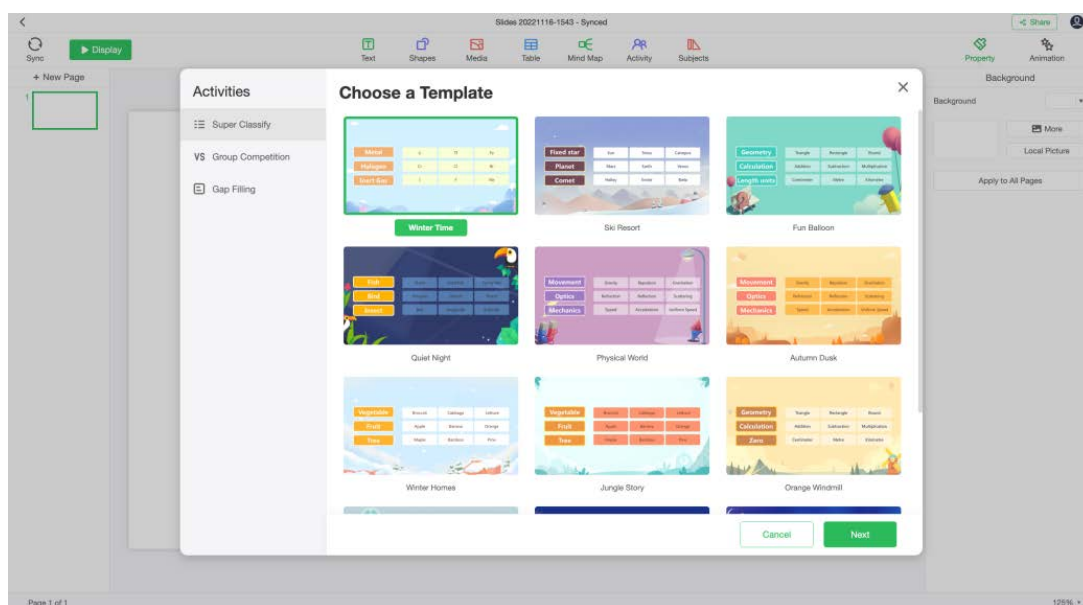
8.2.4 Table Element



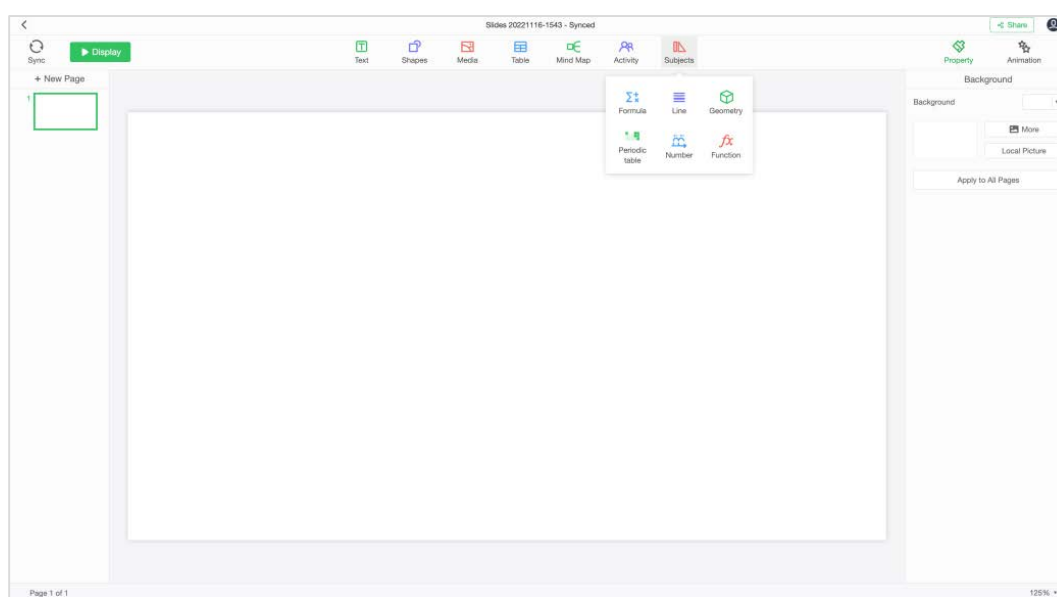
8.2.5 Mind map Element



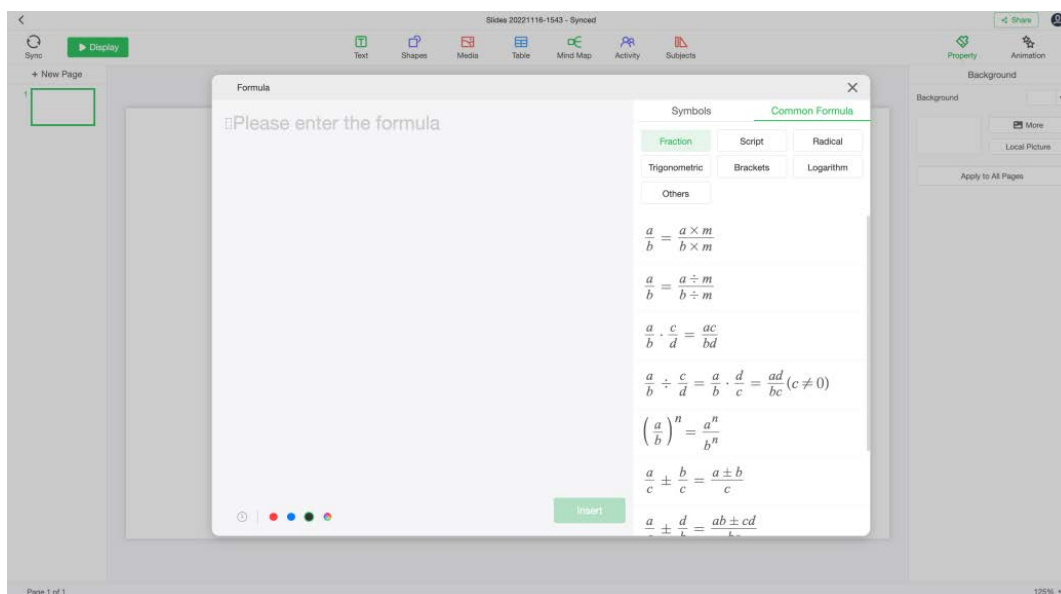
8.2.6 Activities



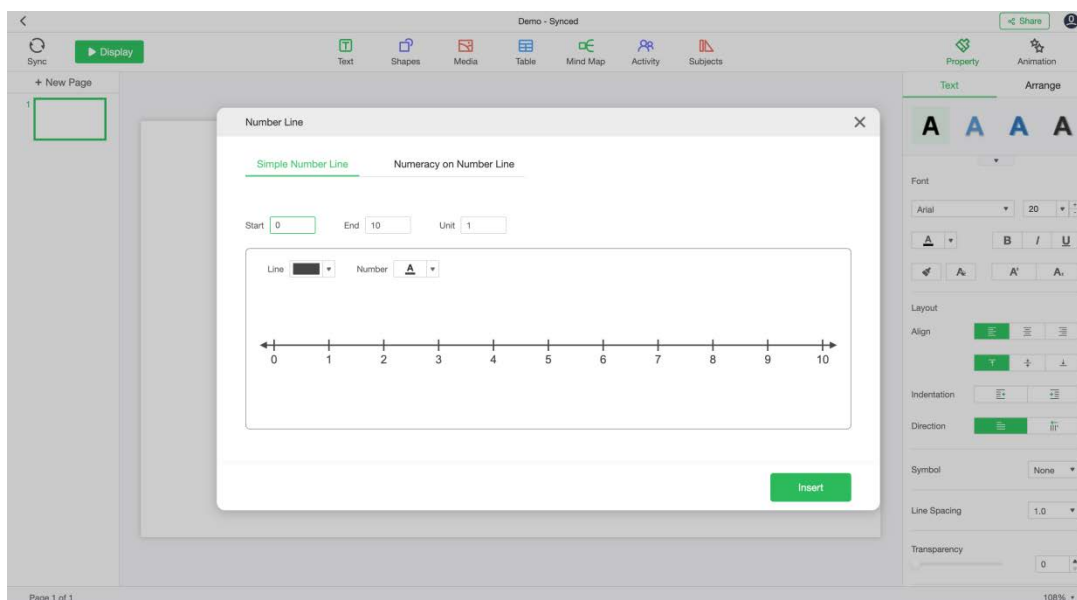
8.2.7 Subject Element



Formula:

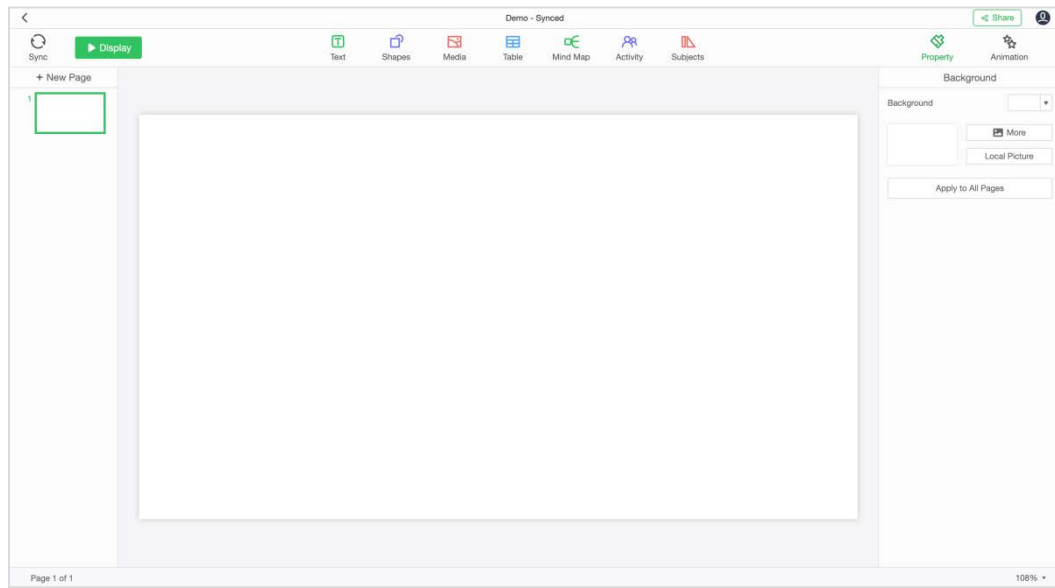


Number Line:

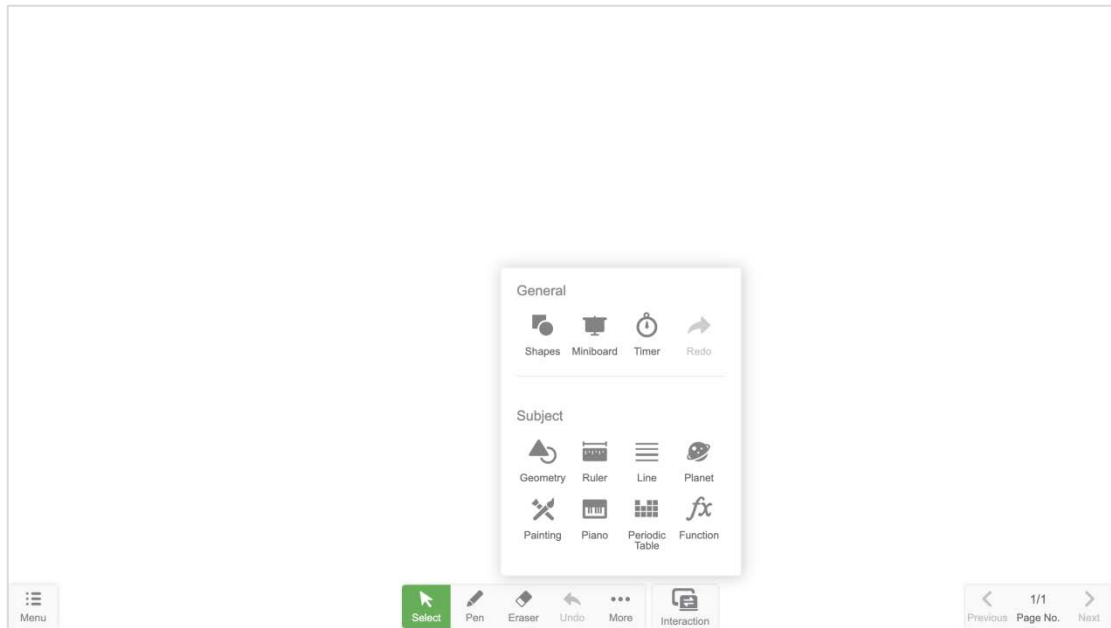


8.3 Display Mode

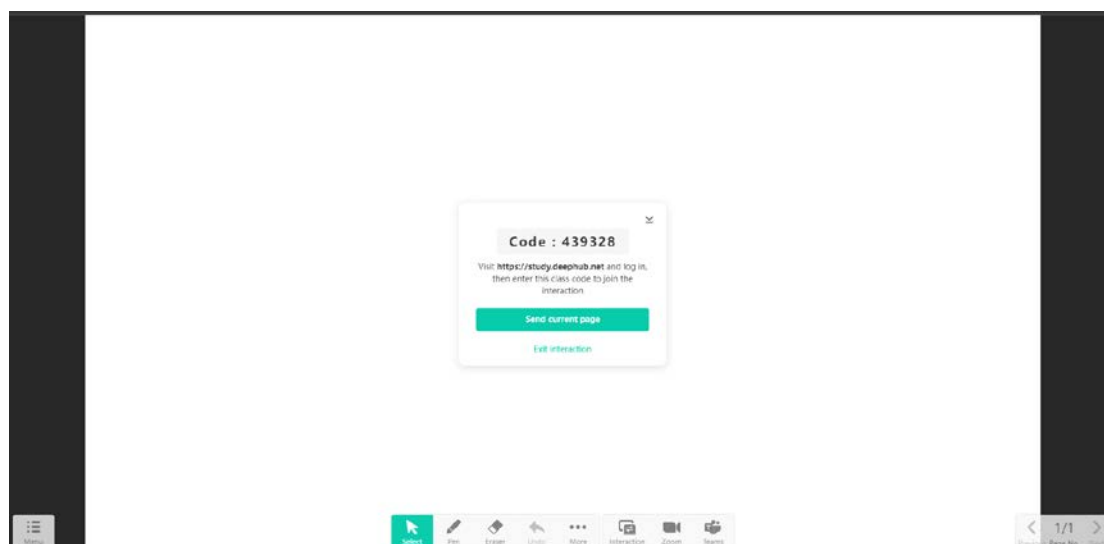
Click the Display button in the upper left corner to start teaching.



The bottom toolbar provides a wealth of teaching tools.

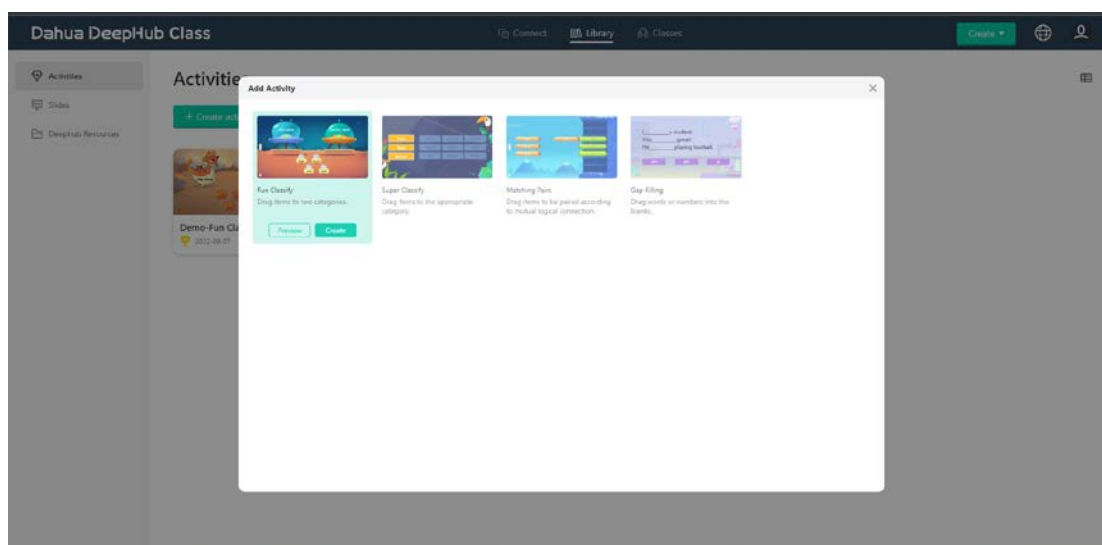
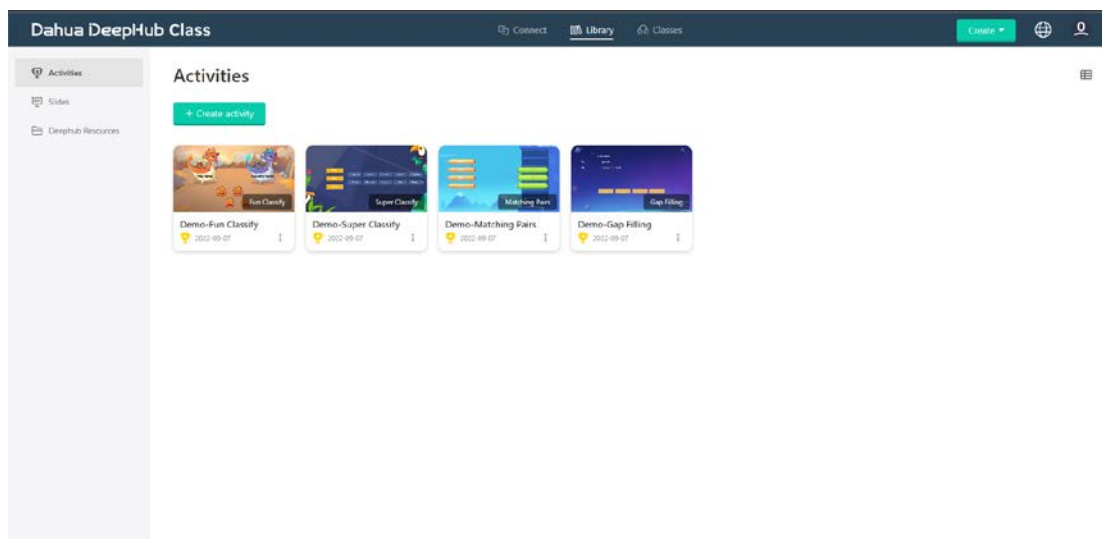


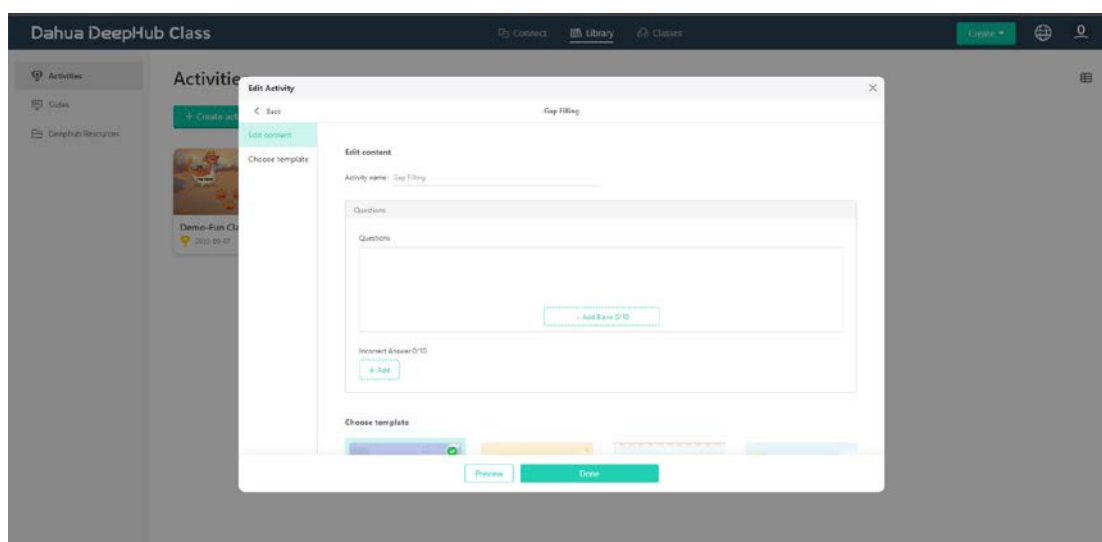
Students can join the whiteboard to interact with the teacher.



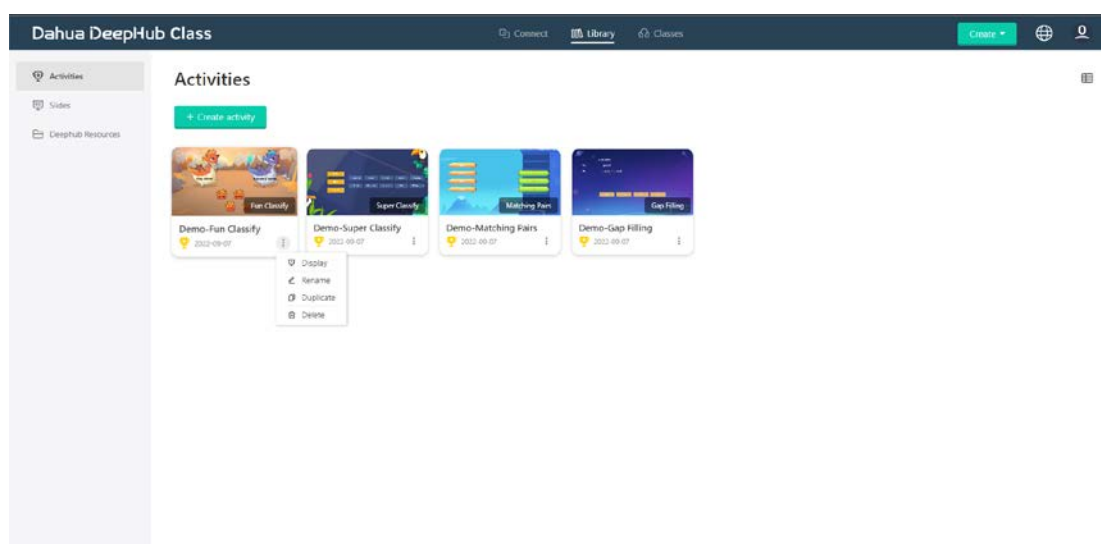
9 Create Activities

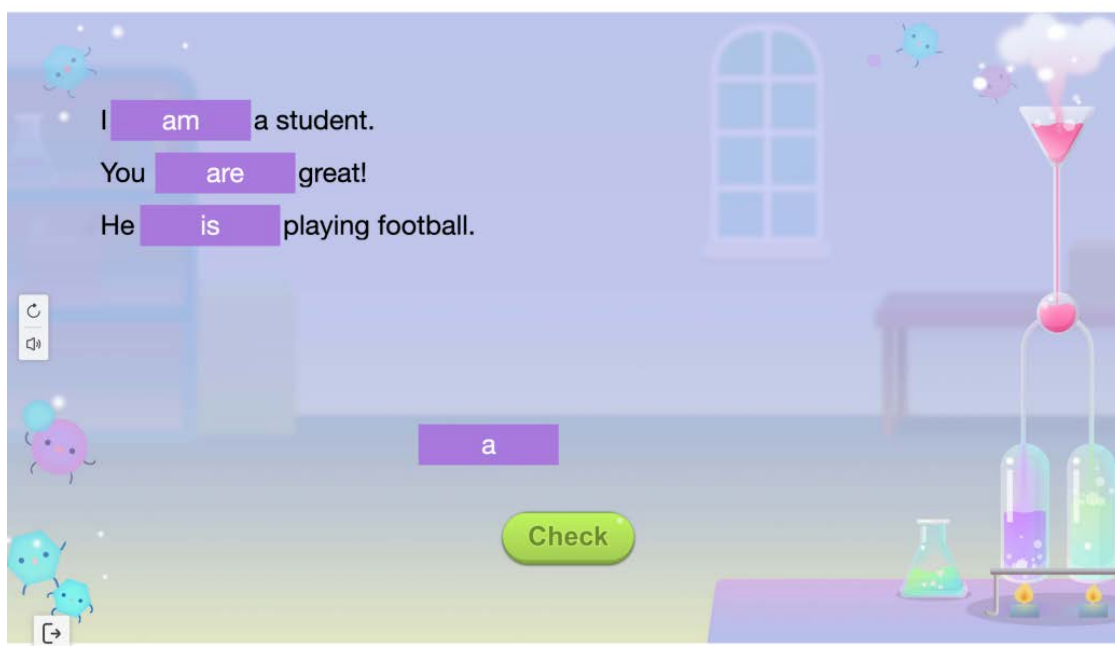
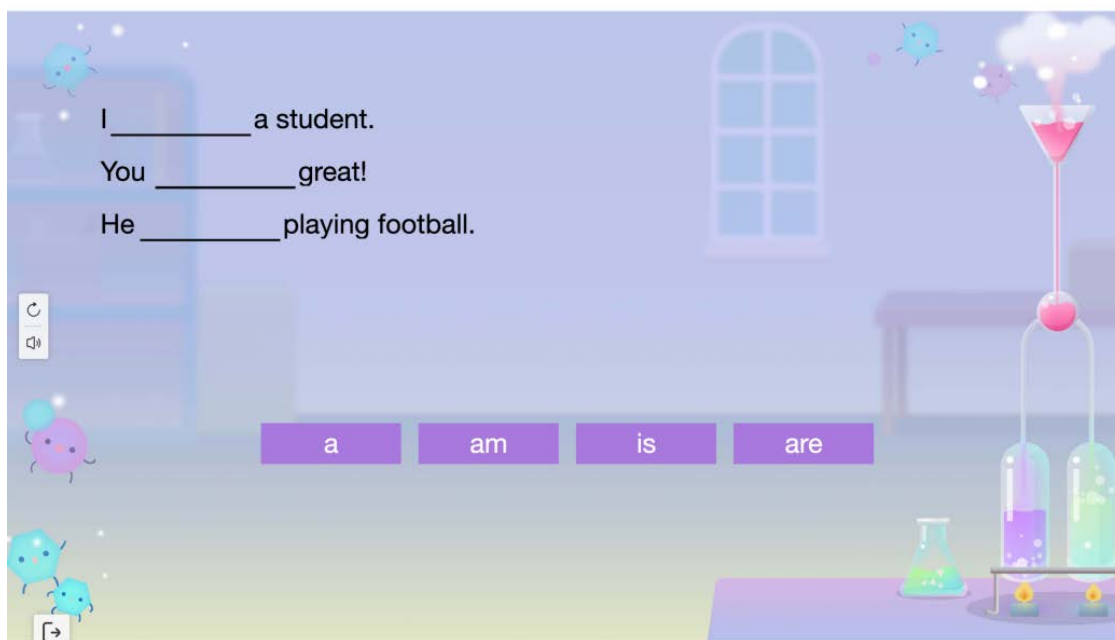
9.1 Create





9.2 Display

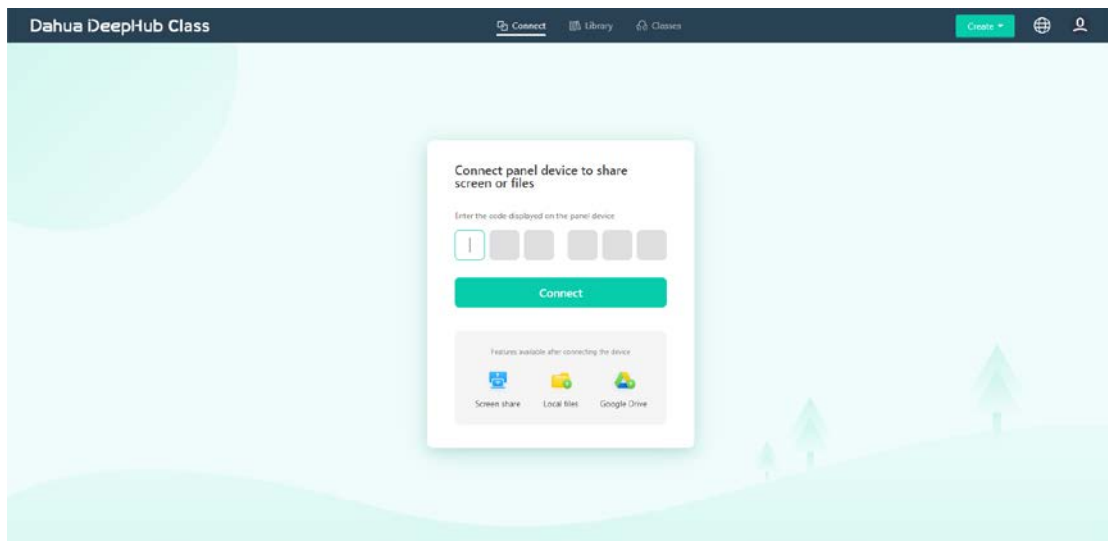




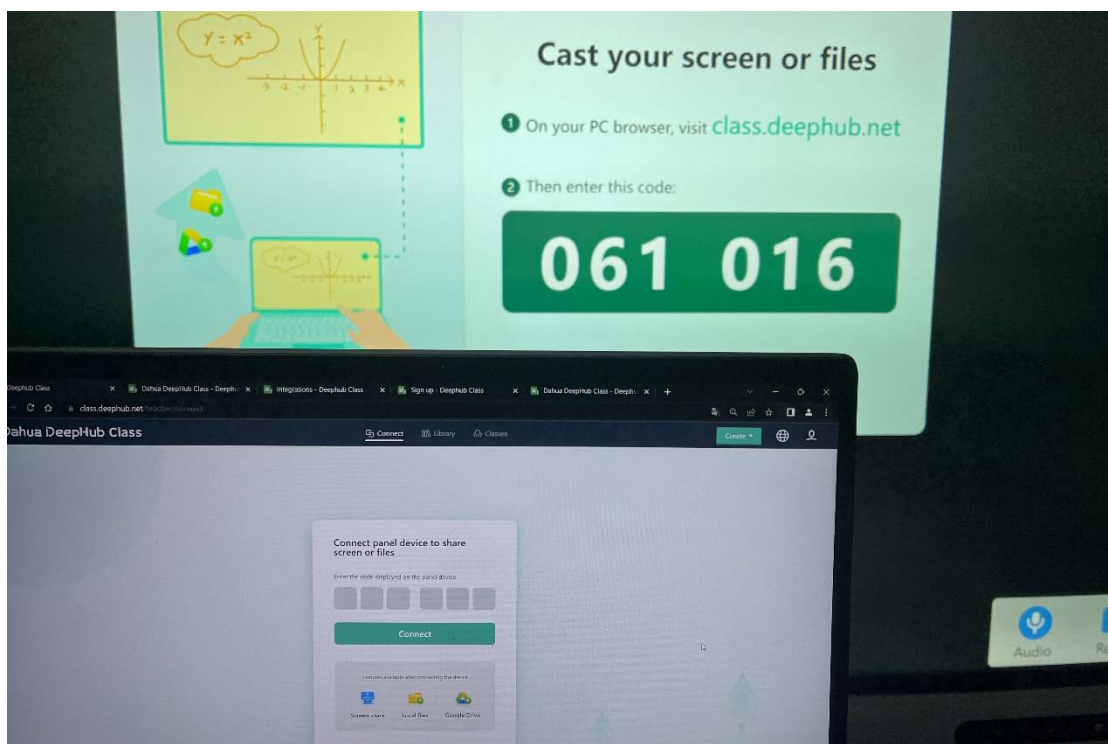
10 Connect

Connect function help teachers access personal resources on interactive panel more efficiently. Teachers can easily transfer content between PC and interactive panel via 6-digit code.

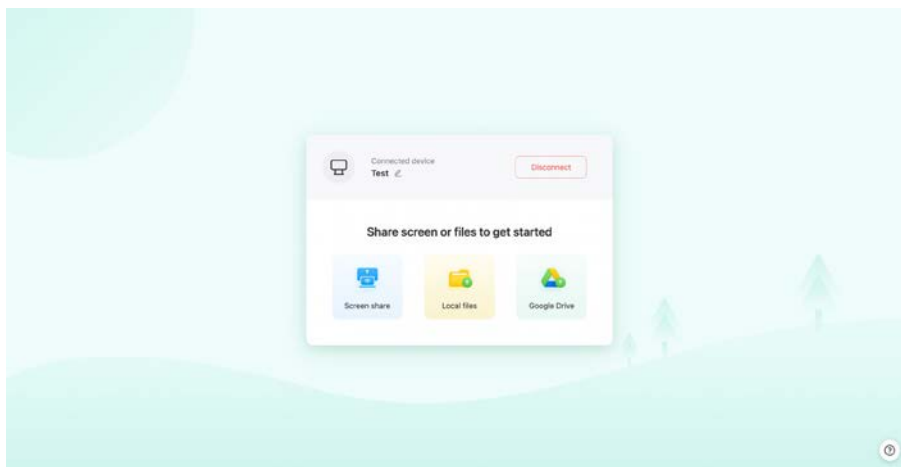
10.1 Enter Code to Connect



Open Dahua DeepHub Class on interactive panel. It will pop up a 6 digits code. If it doesn't appear, click on the cast icon in the lower left corner.



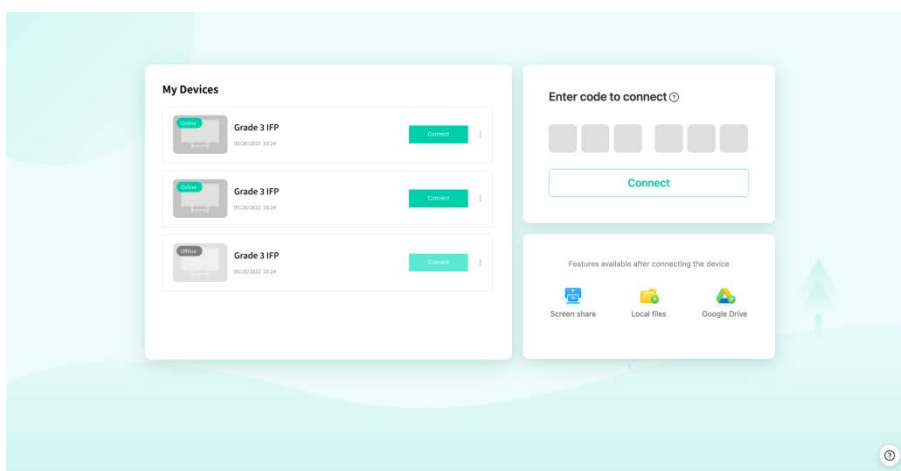
10.2 Share Screen or Files



Now you have successfully connected devices.

You can choose to share the screen from the PC to IFP, or you can choose to send files to IFP from local storage or cloud disk.

10.3 My Devices

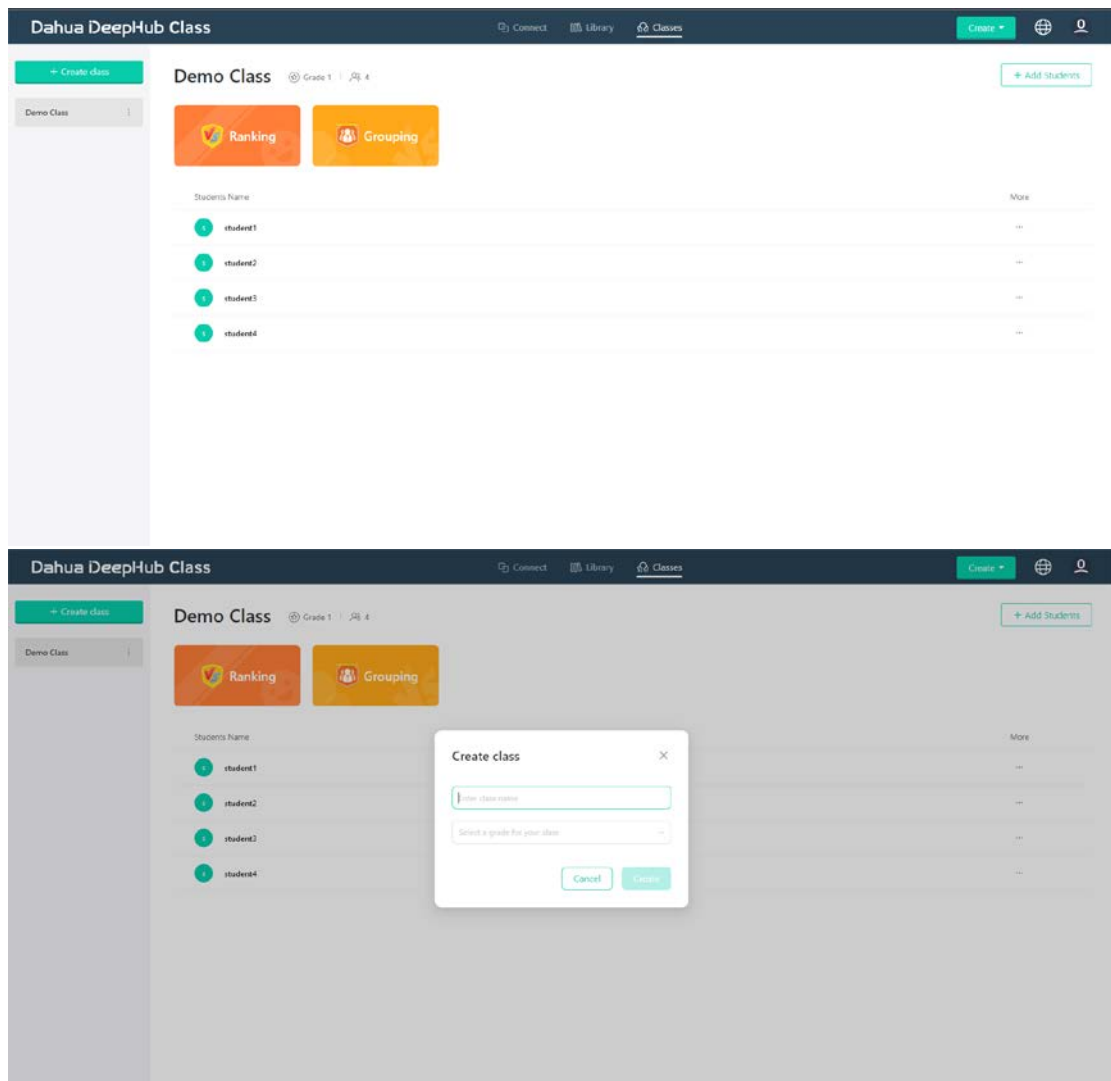


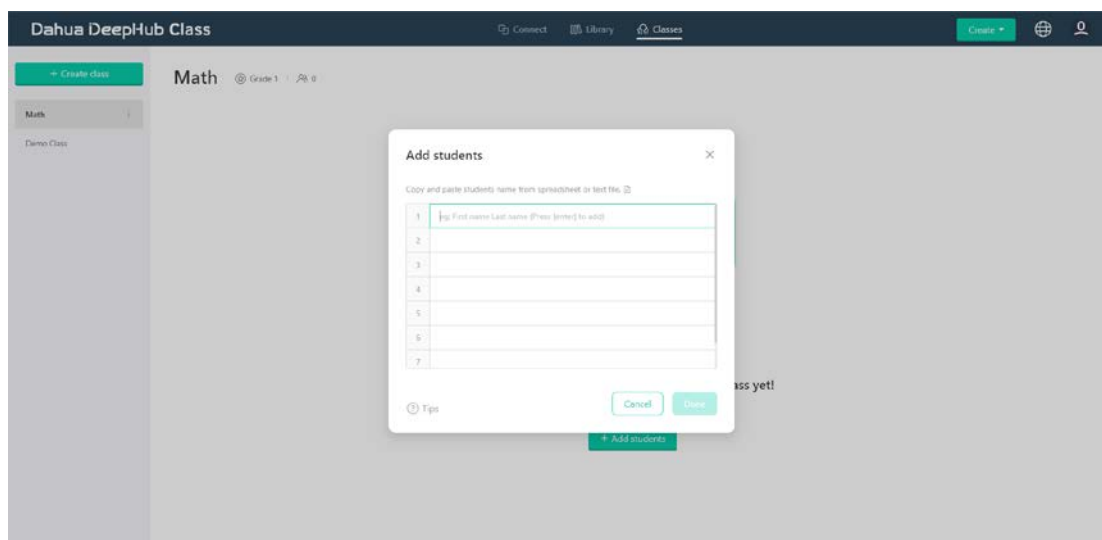
You can manage your Classroom devices on Dahua DeepHub Class. In the next time, you only need to click connect button to continue using without Enter code again.

11 Classes

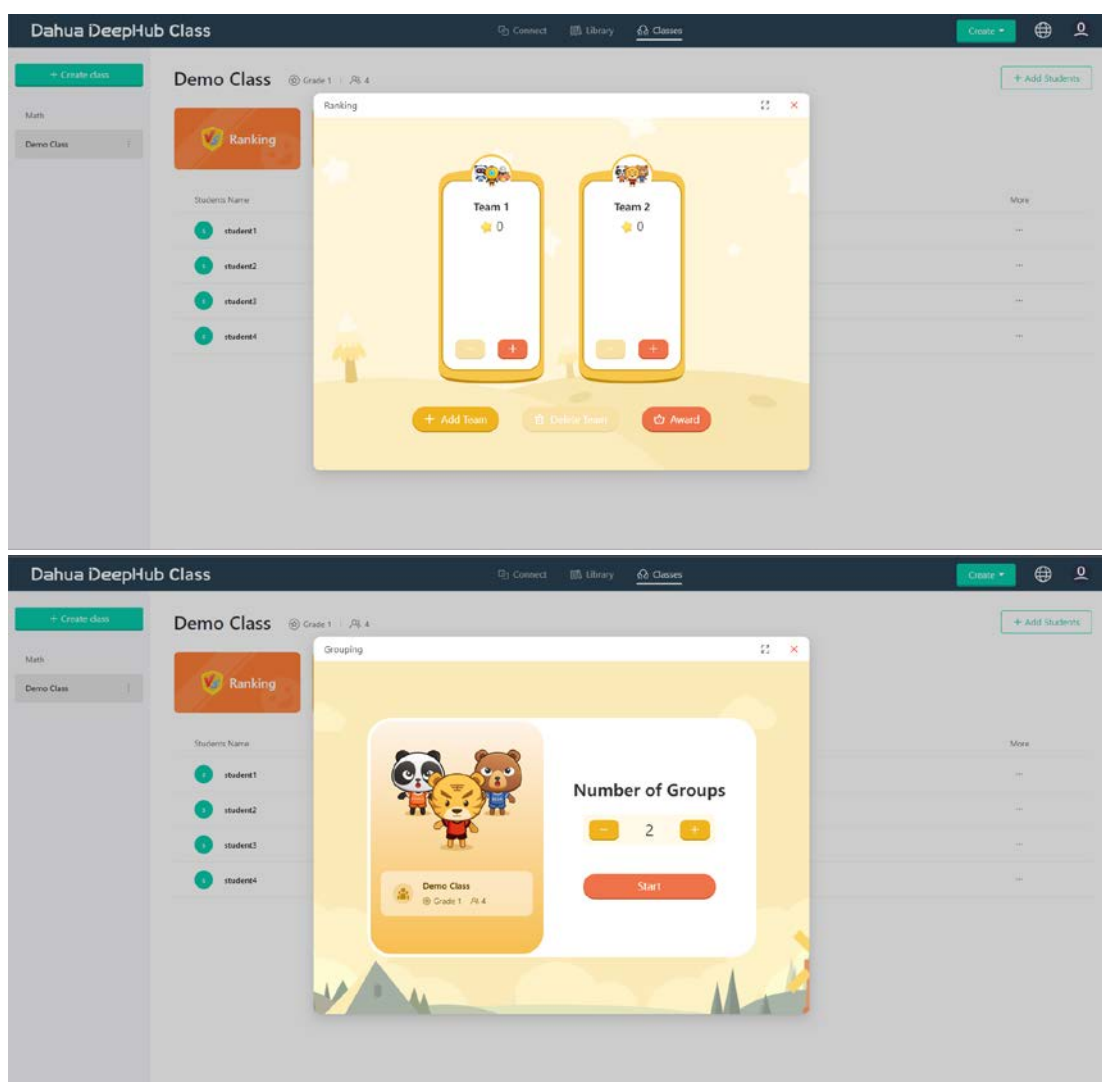
Import your class roster to make classroom games more exciting.

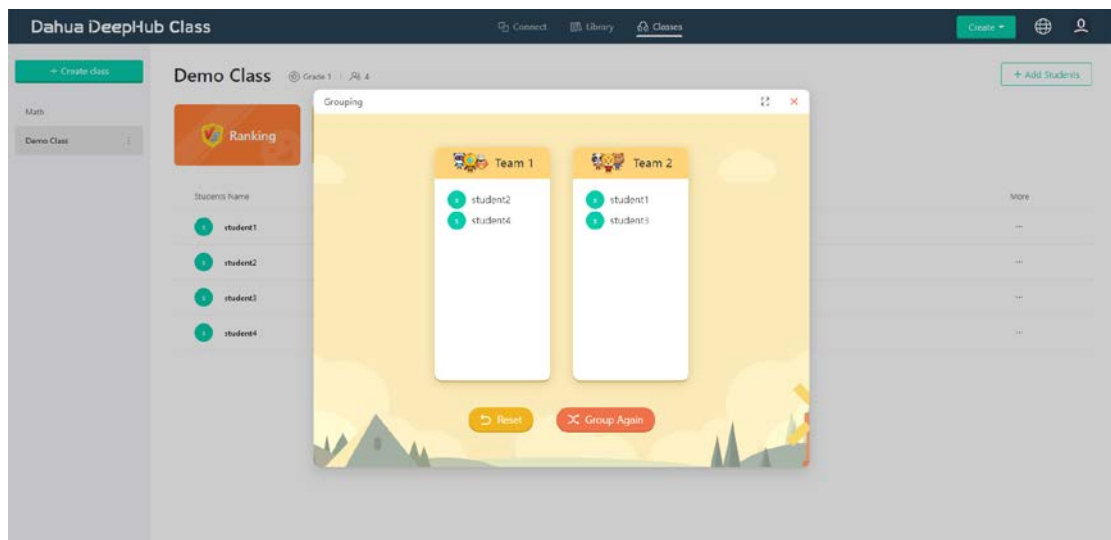
11.1 Create Class and add students





11.2 Ranking and Grouping





Appendix 1 Cybersecurity Recommendations

Cybersecurity is more than just a buzzword: it's something that pertains to every device that is connected to the internet. IP video surveillance is not immune to cyber risks, but taking basic steps toward protecting and strengthening networks and networked appliances will make them less susceptible to attacks. Below are some tips and recommendations from Dahua on how to create a more secured security system.

Mandatory actions to be taken for basic device network security:

1. Use Strong Passwords

Please refer to the following suggestions to set passwords.

- The length should not be less than 8 characters.
- Include at least two types of characters; character types include upper and lower case letters, numbers and symbols.
- Do not contain the account name or the account name in reverse order.
- Do not use continuous characters, such as 123, abc, etc.
- Do not use overlapped characters, such as 111, aaa, etc.

2. Update Firmware and Client Software in Time

- According to the standard procedure in Tech-industry, we recommend to keep your device (such as NVR, DVR, IP camera, etc.) firmware up-to-date to ensure the system is equipped with the latest security patches and fixes. When the device is connected to the public network, it is recommended to enable the "auto-check for updates" function to obtain timely information of firmware updates released by the manufacturer.
- We suggest that you download and use the latest version of client software.

"Nice to have" recommendations to improve your device network security:

1. Physical Protection

We suggest that you perform physical protection to device, especially storage devices. For example, place the device in a special computer room and cabinet, and implement well-done access control permission and key management to prevent unauthorized personnel from carrying out physical contacts such as damaging hardware, unauthorized connection of removable device (such as USB flash disk, serial port), etc.

2. Change Passwords Regularly

We suggest that you change passwords regularly to reduce the risk of being guessed or cracked.

3. Set and Update Passwords Reset Information Timely

The device supports password reset function. Please set up related information for password reset in time, including the end user's mailbox and password protection questions. If the information changes, please modify it in time. When setting password protection questions, it is suggested not to use those that can be easily guessed.

4. Enable Account Lock

The account lock feature is enabled by default, and we recommend you to keep it on to guarantee the account security. If an attacker attempts to log in with the wrong password several times, the corresponding account and the source IP address will be locked.

5. Change Default HTTP and Other Service Ports

We suggest you to change default HTTP and other service ports into any set of numbers between

1024–65535, reducing the risk of outsiders being able to guess which ports you are using.

6. Enable HTTPS

We suggest you to enable HTTPS, so that you visit Web service through a secure communication channel.

7. MAC Address Binding

We recommend you to bind the IP and MAC address of the gateway to the device, thus reducing the risk of ARP spoofing.

8. Assign Accounts and Privileges Reasonably

According to business and management requirements, reasonably add users and assign a minimum set of permissions to them.

9. Disable Unnecessary Services and Choose Secure Modes

If not needed, it is recommended to turn off some services such as SNMP, SMTP, UPnP, etc., to reduce risks.

If necessary, it is highly recommended that you use safe modes, including but not limited to the following services:

- SNMP: Choose SNMP v3, and set up strong encryption passwords and authentication passwords.
- SMTP: Choose TLS to access mailbox server.
- FTP: Choose SFTP, and set up strong passwords.
- AP hotspot: Choose WPA2-PSK encryption mode, and set up strong passwords.

10. Audio and Video Encrypted Transmission

If your audio and video data contents are very important or sensitive, we recommend that you use encrypted transmission function, to reduce the risk of audio and video data being stolen during transmission.

Reminder: encrypted transmission will cause some loss in transmission efficiency.

11. Secure Auditing

- Check online users: we suggest that you check online users regularly to see if the device is logged in without authorization.
- Check device log: By viewing the logs, you can know the IP addresses that were used to log in to your devices and their key operations.

12. Network Log

Due to the limited storage capacity of the device, the stored log is limited. If you need to save the log for a long time, it is recommended that you enable the network log function to ensure that the critical logs are synchronized to the network log server for tracing.

13. Construct a Safe Network Environment

In order to better ensure the safety of device and reduce potential cyber risks, we recommend:

- Disable the port mapping function of the router to avoid direct access to the intranet devices from external network.
- The network should be partitioned and isolated according to the actual network needs. If there are no communication requirements between two sub networks, it is suggested to use VLAN, network GAP and other technologies to partition the network, so as to achieve the network isolation effect.
- Establish the 802.1x access authentication system to reduce the risk of unauthorized access to private networks.

- Enable IP/MAC address filtering function to limit the range of hosts allowed to access the device.

More information

Please visit Dahua official website security emergency response center for security announcements and the latest security recommendations.

ENABLING A SAFER SOCIETY AND SMARTER LIVING

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