

Digital Blackboard, Heineking Media

Digital blackboard with two folding whiteboards based on a Windows Computer, including the blackboard software, multiple hdmi and usb ports, and the possibility to (wirelessly) control and mirror one's personal computer.

POSSIBLE TEACHING SCENARIOS:

REPLACES BLACKBOARD AND PROJECTOR BY COMBINING BOTH CONCEPTS:

The digital blackboard offers a highly functional system which can both be used to project e.g. presentations, and as a traditional blackboard featuring multiple helpful tools and games useful in teaching. Furthermore, the blackboard's wireless abilities allow students to share their results instantly. Teachers can correct and include these into the blackboard software to create comprehensive session slides and save the work progress. Furthermore, the digital blackboard is well suited for multiple people working on it at the same time. The software can detect up to 25 fingers and/or pens at the same time.



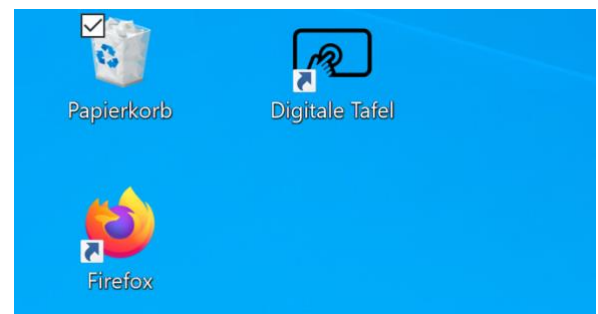
FEATURES / BENEFITS:

- ✚ The blackboard software combines blackboard and projector.
- ✚ The software can create pdf files from slides, offering the possibility to create commented and modified versions of your original presentation or a session protocol.
- ✚ Connecting a computer allows you to not only mirror your screen but also to control your device with the touch screen and/or the appropriate wireless keyboard.

Plug & Play:



Press "on" button.



Log into the account "Anglistik" and manually start the "Digitale Tafel" application. The symbols in the top right corner signal whether the application is activated or not.

Windows



Tafel App



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1. Blackboard

This section shows how to start up the digital blackboard and explains the basic functions of the software.

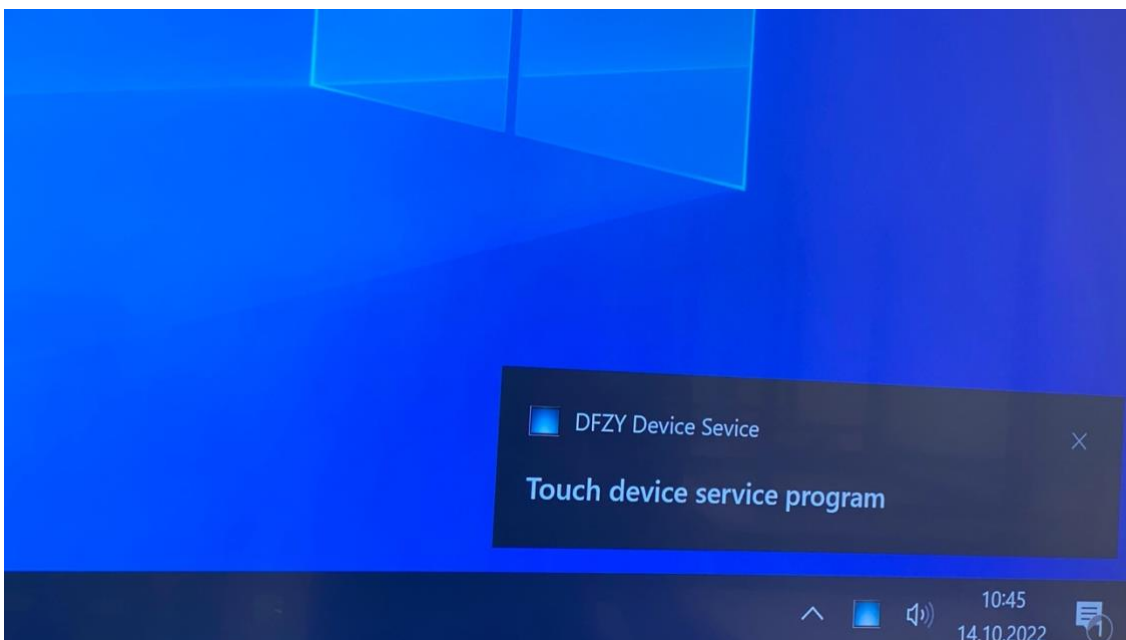
1.1 Turn on/off

The digital blackboard can be set up anywhere near a power outlet. On the backside you find two cables. One cable powers the adjustable mount, the second one powers the device. As soon as the blackboard is connected to a power outlet, the power button at the bottom right lights up red. Press the button to turn on the device.

It takes a few moments for the windows computer to boot. Log into the *Anglistik* account with the wireless keyboard that is already connected to the board. Please **DO NOT** try to login with your University account. *Anglistik* is the only available user profile for the blackboard.

The digital blackboard is connected to Eduroam. Please **DO NOT** try to access wifi with your staff ID and password. If the wifi does not connect or asks for a password, contact Dr. Ingrid Paulsen (paulsen@anglistik.uni-kiel.de) or Sean Holt (holt@anglistik.uni-kiel.de).

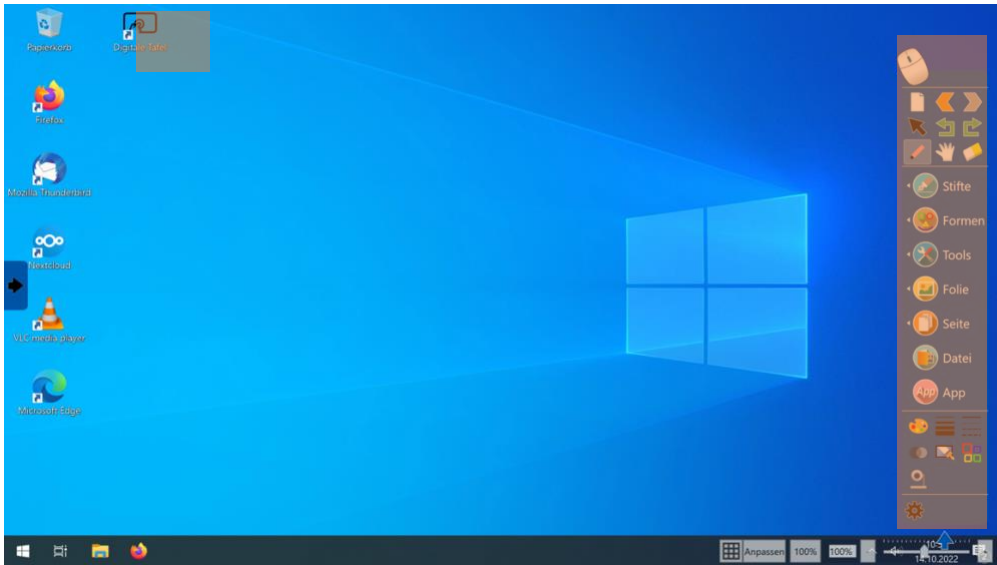
After logging in, the message below will appear on the screen within the first minute. Wait for this message after logging in to avoid complications with the software. The message indicates that the blackboard software is now ready to use.



In order to **turn off** the digital blackboard press “on” again. Before disconnecting from the power outlet, make sure the button lights up red again!

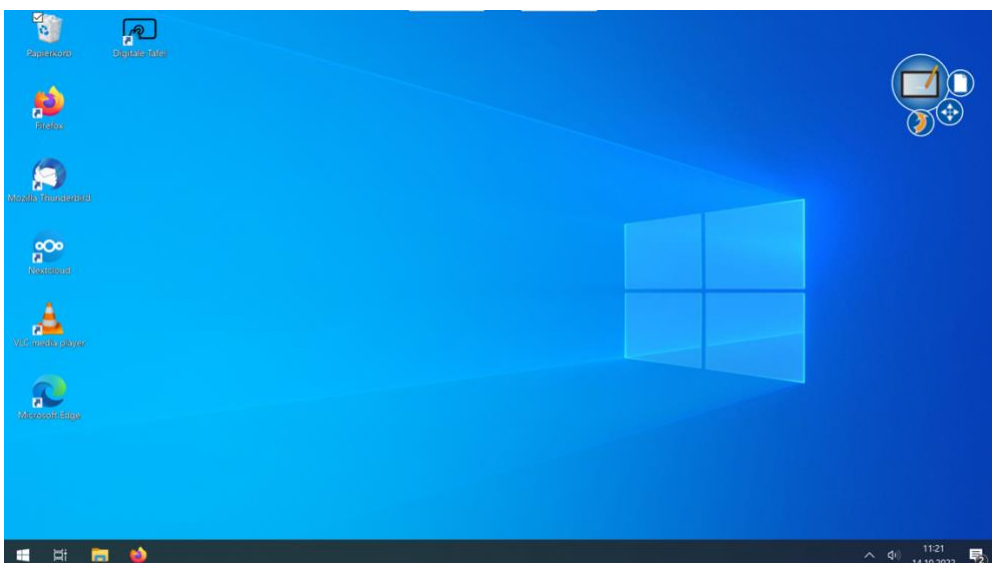
1.2 Digital Blackboard application

The main function of the digital blackboard is that users can create an overlay which uses a screenshot of the current background as a base. The user can draw and comment on the the background image (either the screenshot or any other picture/background chosen in the software). When finished, the progress can be saved as a .pdf file or in the application's format (.donv) in order to continue working with the previous work. In order to use this function, run the *digital blackboard* application (highlighted) after following the steps outlined earlier.



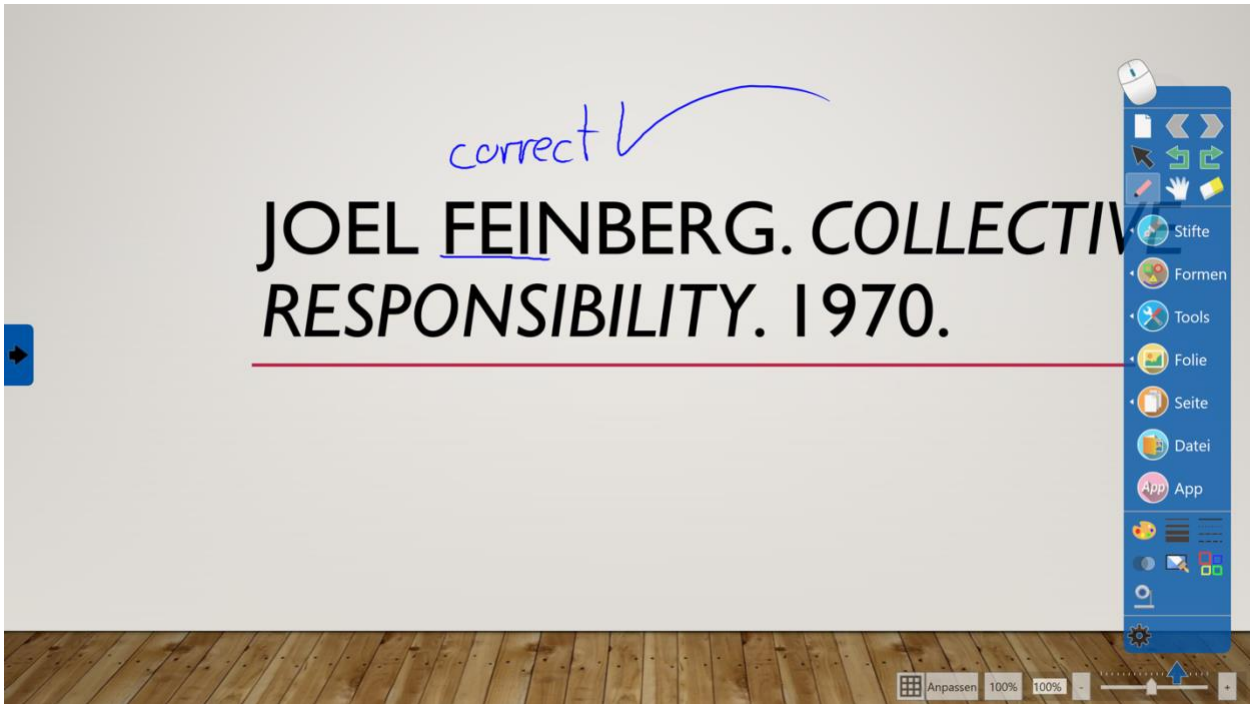
The software runs successfully when the toolbar on the right (highlighted) appears.

The mouse icon at the top indicates that you are using the *digital blackboard* overlay. You can switch back to the windows computer by clicking on the mouse icon. The toolbar will disappear and the mouse symbol will change into a blackboard symbol (see below). You can drag the box across the screen to arrange it in a way that is comfortable for you to work with. If you click on the blackboard symbol, the digital blackboard overlay will reappear.



1.2.1 Drawing

When the toolbar on the right appears, the digital blackboard application is activated. The software uses a screenshot of the current computer screen as the background of the digital blackboard application. For example: if you are showing a powerpoint presentation, you can draw on the slides.

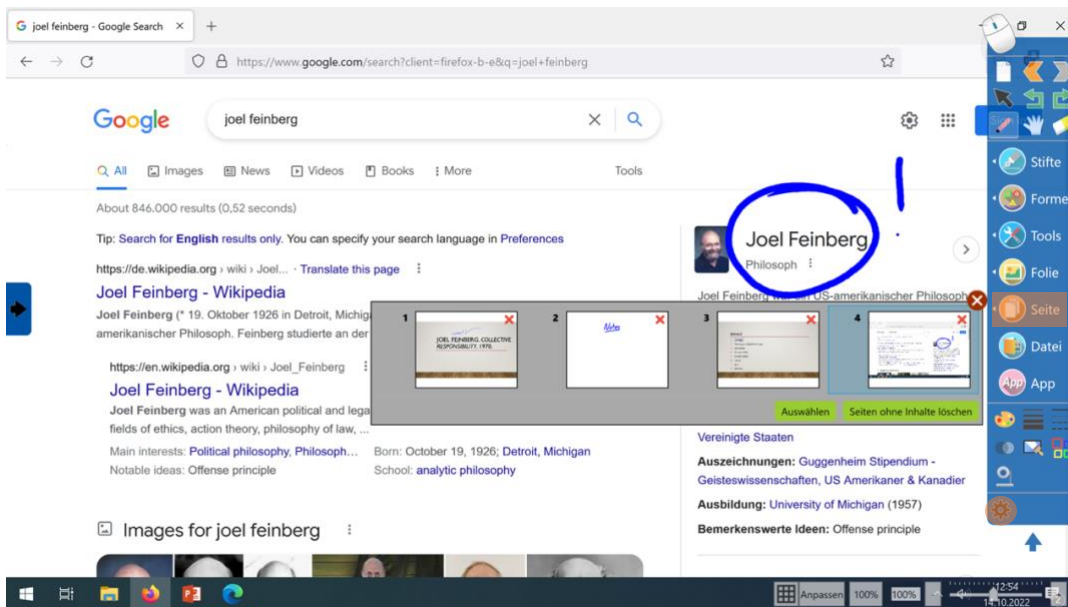


To continue the powerpoint presentation you must then click the mouse icon again. Please note that you are **NOT** altering your presentation; the software only creates a screenshot of the current slide that you can then write and draw on either with the appropriate pens or your fingers. The device can process up to 25 fingers/pens simultaneously which makes the blackboard ideal for collaborative working in class.

1.2.2 Page Management

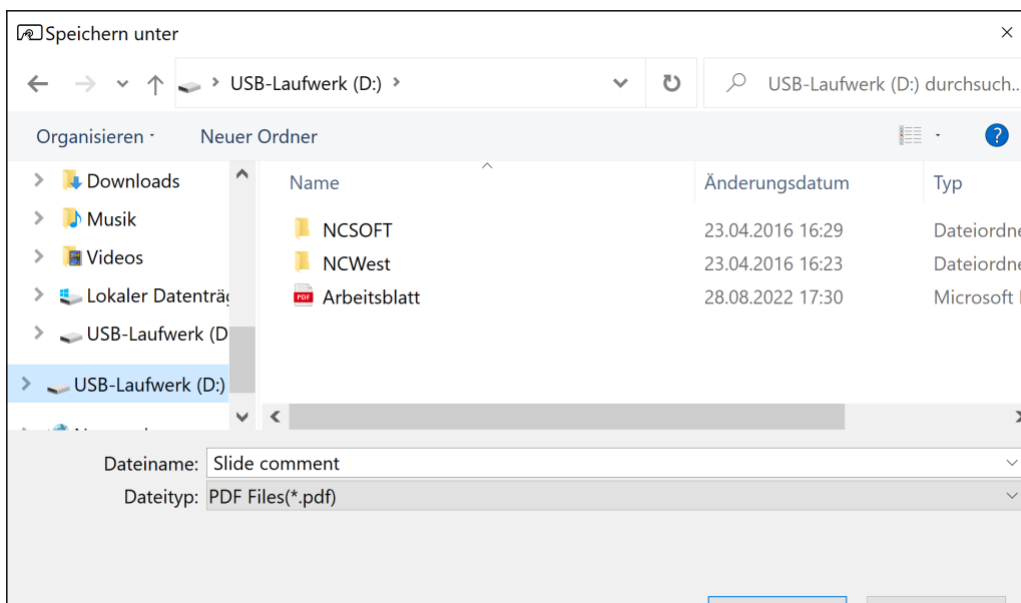
Switching between the blackboard overlay and the windows computer creates a new page each time. In the pages menu (highlighted below), you can see all pages from the current session.

In the pages menu, you can rearrange pages by dragging them into their target position and delete individual pages by pressing the **X** icon at the top right corner of each page. By clicking “Auswählen”, you can select multiple pages to rearrange or delete at once.



1.2.3 Saving Pages

At the end of a session, you can save your pages. Make sure to sort the pages and delete any you do not want in your final document. When you are ready to save your pages, click the gear icon at the bottom left of the menu (highlighted above). Then click “speichern unter”:



Choose the appropriate file format:

.donv is the format of the blackboard software. It allows you to reopen your last session and continue working with your previous pages.

PDF is the appropriate format to save your pages and share them. It will create a .pdf file. Each page represents one page in your .pdf file.

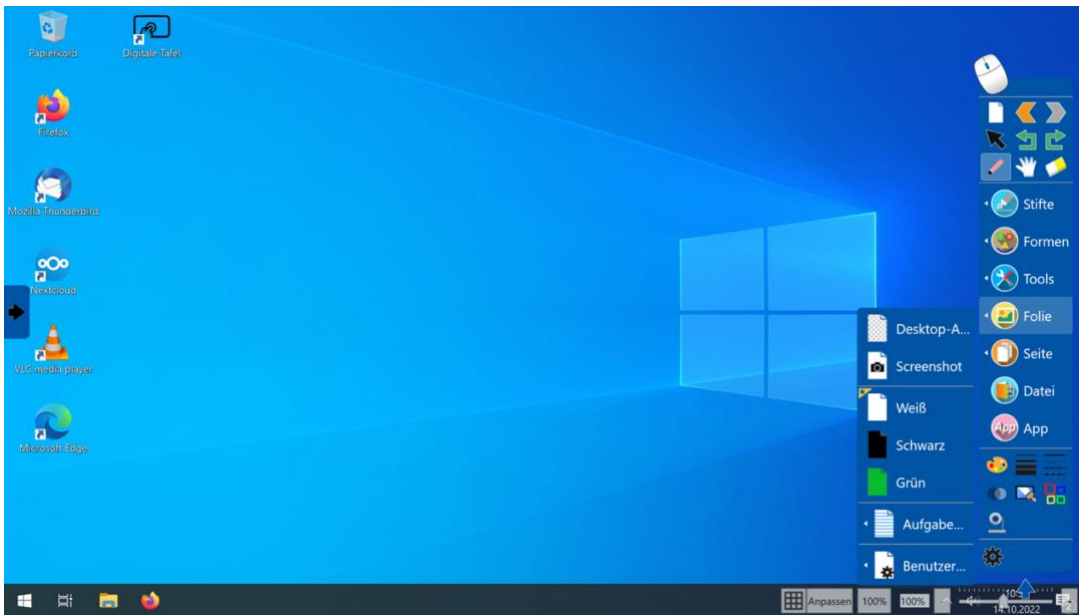
Name your file and please **SAVE** the file to your personal USB stick. Files on the blackboard are regularly deleted to keep the computer clean!

Please note:

Quitting the software completely, e.g. by restarting the computer, will **delete all pages!**

1.2.4 Important Tools

The digital blackboard application offers a broad variety of tools for you to discover. This section summarises the most important tools to get you started.



As explained above, the blackboard software uses a screenshot of the current background to work on. However, the software also allows you to use other already integrated overlays as backgrounds. Simply click the menu “**Folie**” (highlighted above) and then you can choose a white, black or green background. Alternatively click “**Aufgabe...**” to access ruled or checked backgrounds.

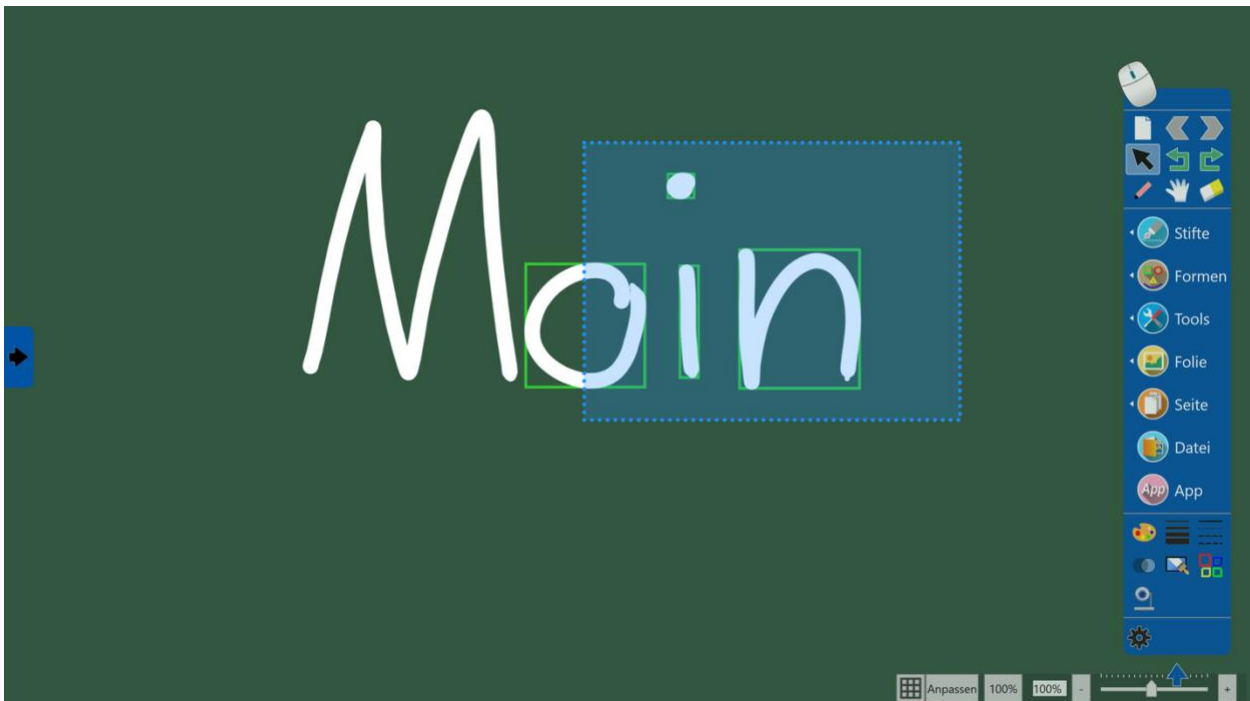
The picture below shows the green background option. The highlighted symbol at the top of the menu bar (left) indicates that the writing tool is activated. At the bottom, in the highlighted area, you can choose a pen colour (left), the line thickness (center), and the line type (right). The rubber symbol at the top of the menu bar (right) allows you to erase previously drawn lines.

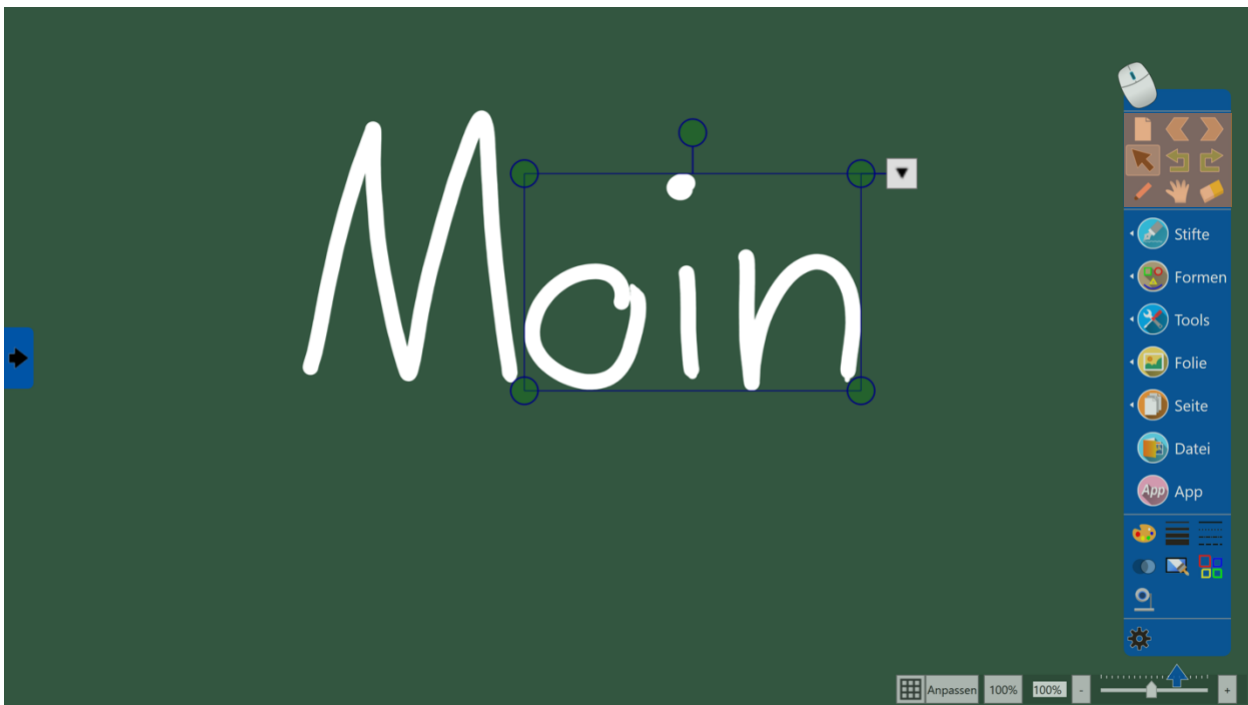


The mouse icon (highlighted below) allows you to select items by clicking on them.



Alternatively you can drag a finger across the screen to select multiple lines as shown below. You can drag the box across the screen. Furthermore, you can scale and rotate the selected items by using the green points attached to the box.





The top part of the tool bar (highlighted above) contains more useful tools.

- The paper icon at the top left creates a new page.
- The gray arrows allow you to switch between the previous and next page.
- The green arrows allow you to re- and undo actions.
- The hand icon lets you move the background. CAUTION: this function does not move your drawing, it moves the whole background!

This is not an exhaustive list of all the features the board provides. Feel free to try them out yourself and find a workflow that suits your personal teaching best!

1.3 Powerpoint

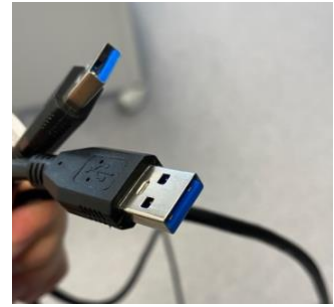
The digital blackboard can be used without running the digital blackboard application. The digital blackboard can function as a standard windows computer. Please use the keyboard that is connected to it or simply the touch screen. If you want to show presentations (or other files) you can simply bring them on an USB drive. There is no need for an external device like a laptop or tablet. For more information read **2. External Devices** below.

2. External Devices

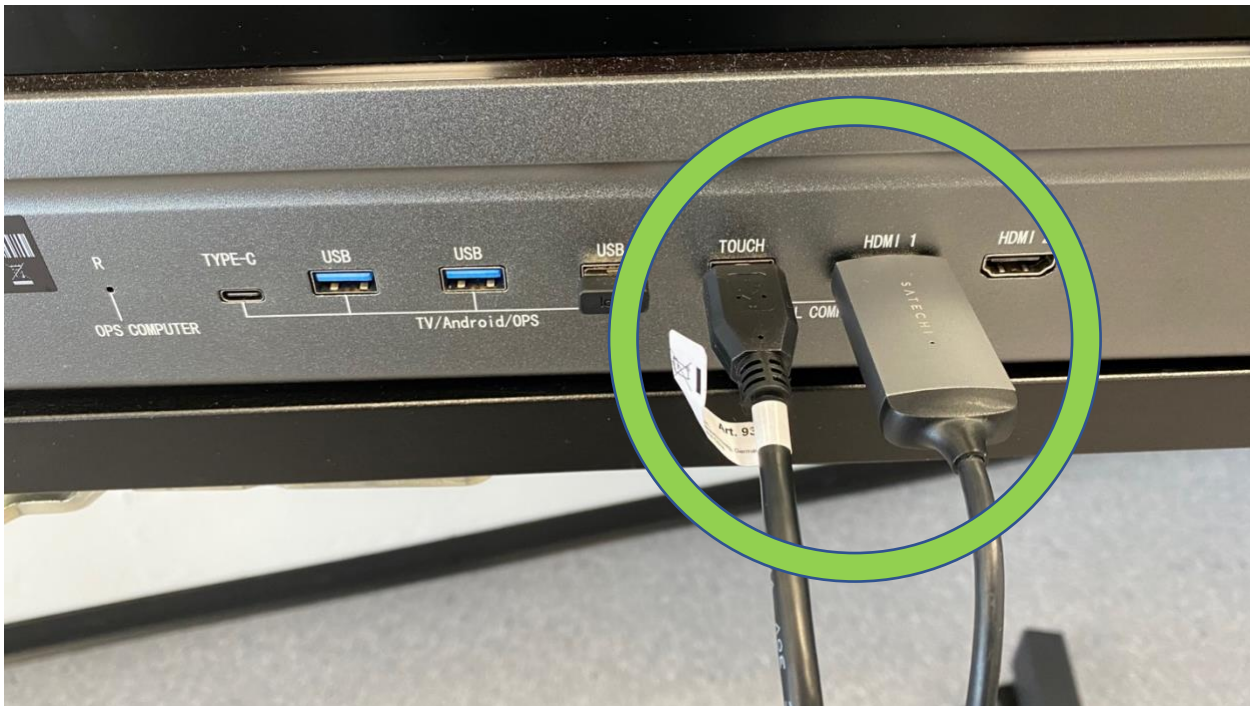
The following section explains the use of external devices (e.g. laptop or tablet) on the digital blackboard. Please NOTE that by mirroring an **external** device's screen you generally will **not** be able to use the digital blackboard application's overlay (the only exception here is connecting your device via MiraCast → 2.2.1)

2.1 Wired connection

The digital blackboard can mirror the screen of your laptop or tablet. Furthermore, by connecting a second cable you can control your device with the blackboard's screen and external keyboard. The necessary cables can be found in the accessory box. You need **1.** an hdmi cable and **2.** the USB A to USB A cable (see picture on the right). If your device does not feature an hdmi and/or USB A port, please use an appropriate adapter such as the USB-C adapter in the accessory box.



Simply connect your computer to **HDMI 1** and the usb port called **TOUCH** (see below).



It is not required to connect to the **TOUCH** outlet for projecting your laptop or tablet screen to the digital blackboard. However, if do not connect the USB cable you will **not be able** to navigate your device through the blackboard's touch screen or external keyboard. You will have to use your personal device for doing so.

When your device is connected, click the small arrow symbol either on the right or left of the digital blackboard's screen. In the pop-up menu click the highlighted sources icon. Connected sources show a green dot underneath. In the picture on the right, you can see that "OPS" (the inbuilt windows computer) is active, and FRONT HDMI 2. If you have followed the steps above, there should be a green dot underneath FRONT HDMI 1. Click the icon and your screen will show



the screen of your own device. Furthermore, you are now able to use the touch screen and wireless keyboard to control your device, given you are connected to the touch USB port.

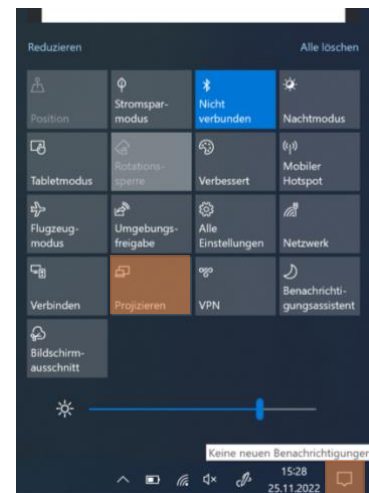
2.2 Wireless connection

Another option to project the screen of your personal device or the devices of students is to establish a wireless connection to the digital blackboard.

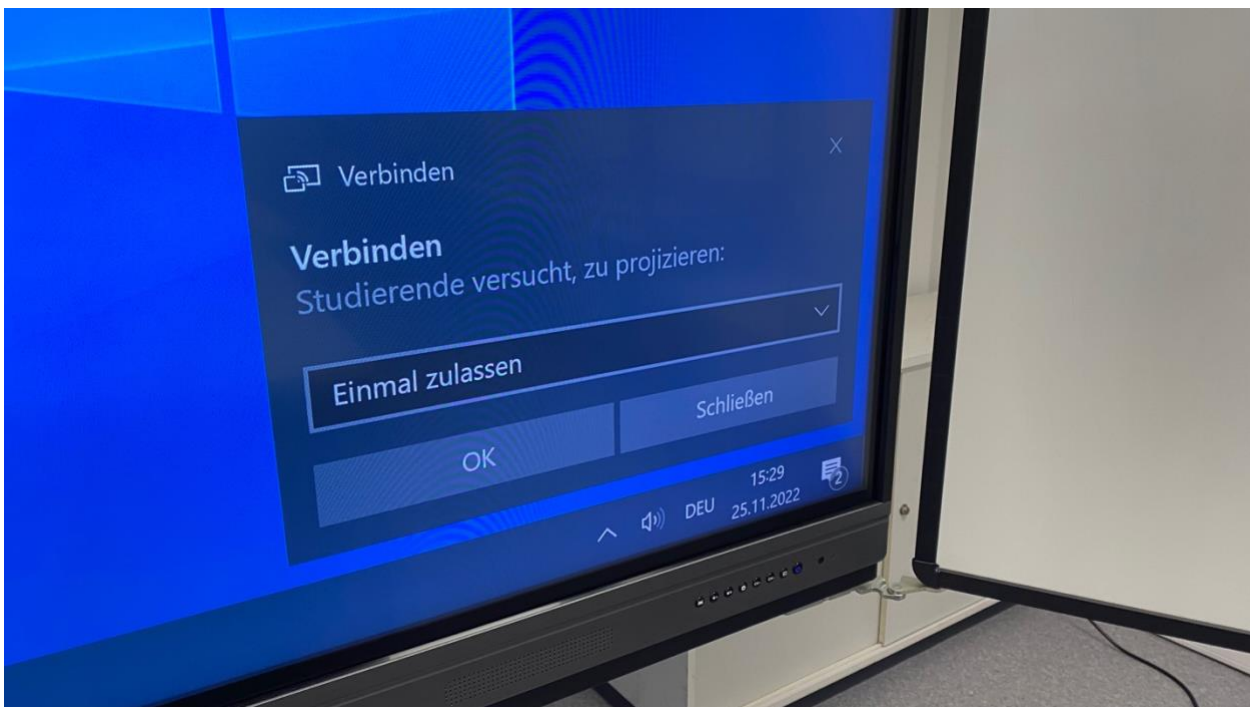
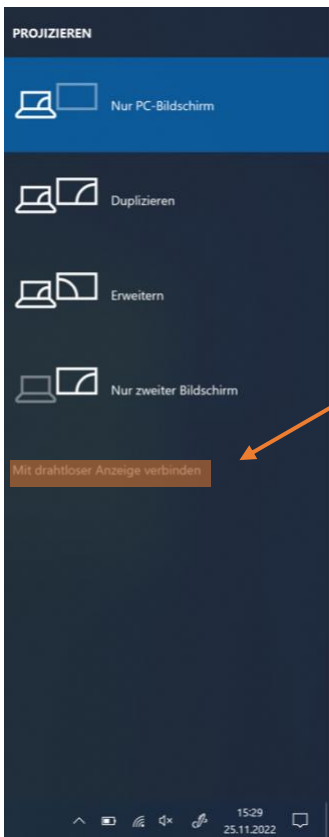
2.2.1 MiraCast

Sharing your screen with MiraCast is the **only wireless** option to use the digital blackboard application with your personal device or the devices of your students. However, MiraCast exclusively works with **Bluetooth** compatible **Android** and **Windows** devices (no Apple devices).

In order to share your screen, click the highlighted icon in the right corner of your device's task bar. Then press "projizieren".



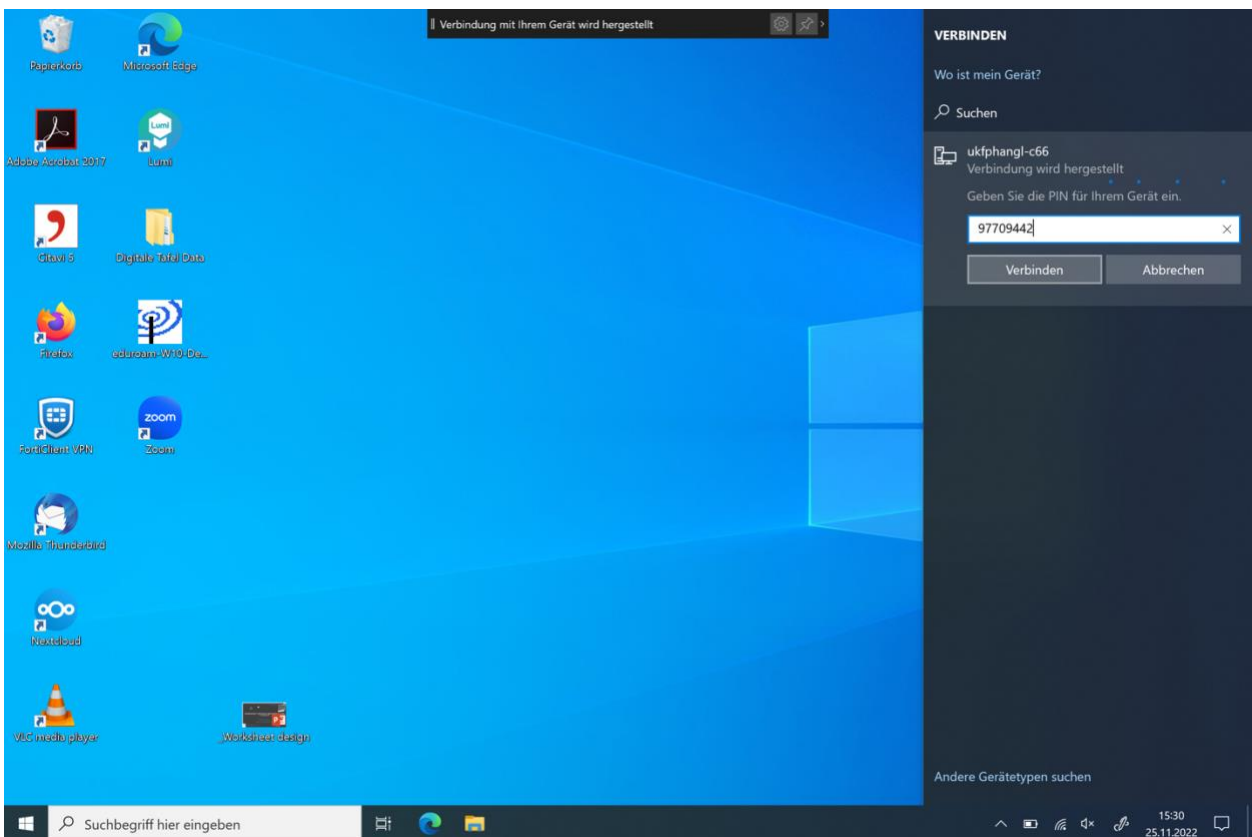
After these steps, the screen will show different options for projecting your screen (see below). Ignore the icons and click on "Mit drahtloser Anzeige verbinden". The screen will show "ukfphangl-c66". Klick on that name to connect with the blackboard.

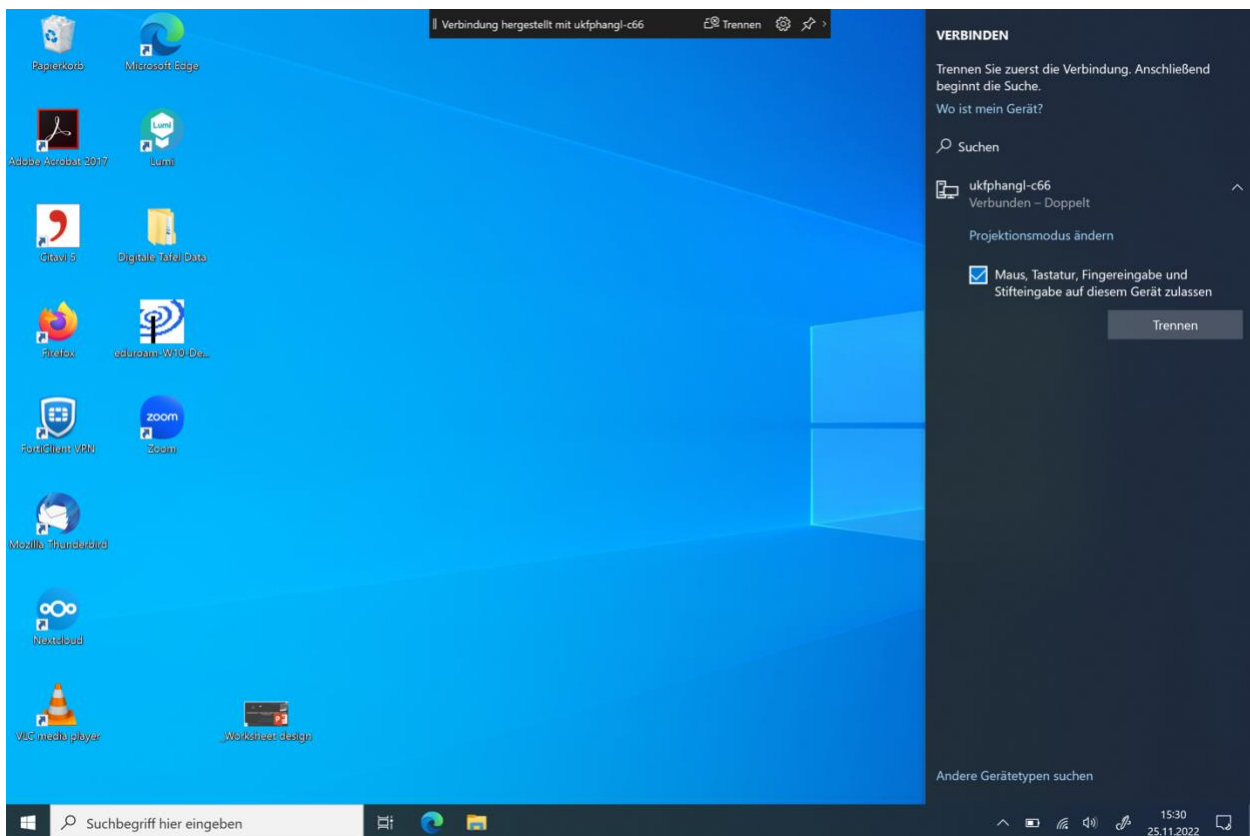


The message above will appear on the blackboard's screen. Accept the request by clicking "ok". The screen will then show the message below.



Meanwhile, your device will ask for a password. The password is shown on the blackboard's screen above. In this case: "97709442".

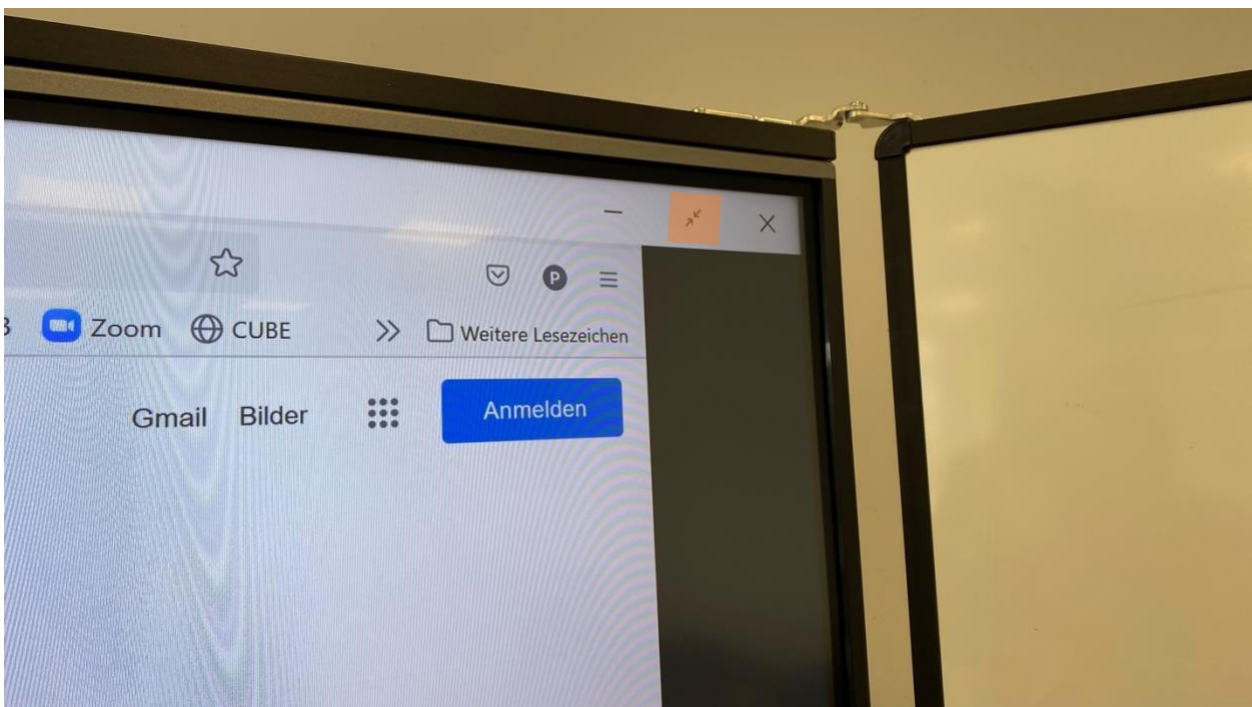
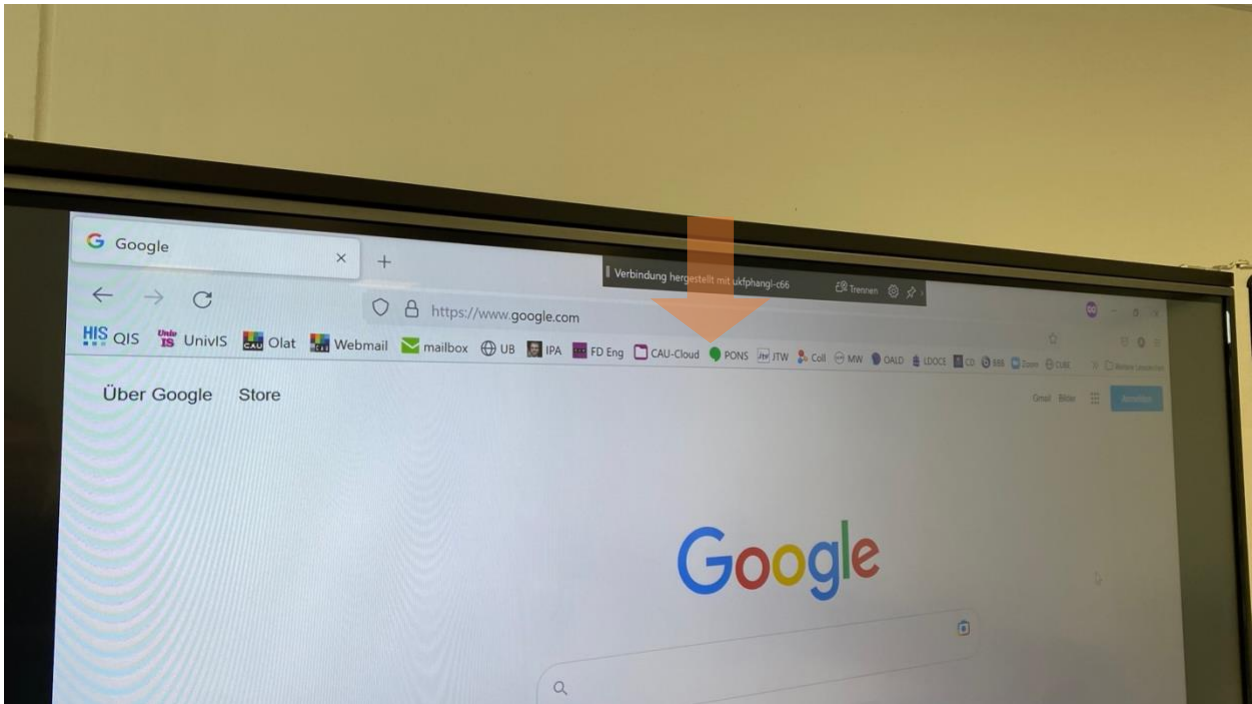




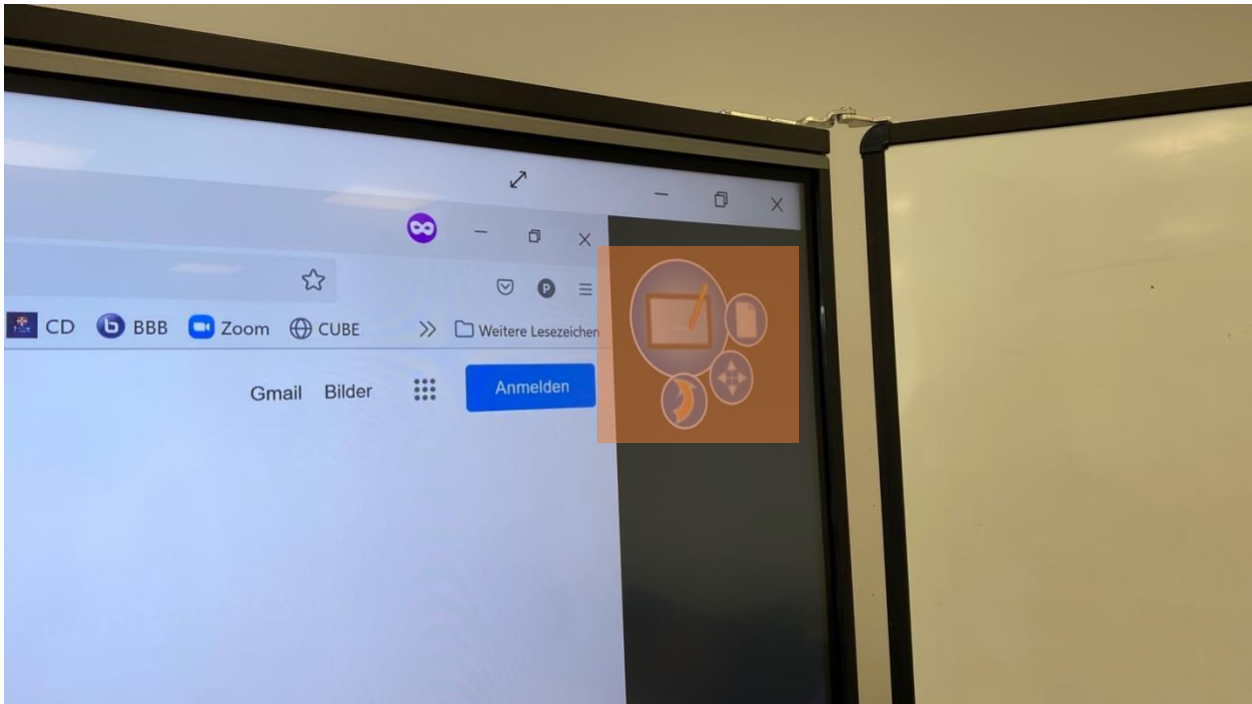
Finally, do not forget to check the box “Maus, Tastatur, Fingereingabe und Stifteingabe auf diesem Gerät zulassen“ on your personal device.

This allows you to access and navigate the external device with the blackboard’s touch screen and keyboard.

Similar to the digital blackboard application, MiraCast is a program running on the windows computer. Therefore, you can access the blackboard without disconnecting your screenshare. Simply swipe down from the top of the blackboard’s screen. A white strip will appear with three icons in the top right corner. Tap the icon showing two arrows pointing at each other diagonally (highlighted below).



After clicking the icon, the MiraCast application exits full screen. You are now able to use the Digitale Tafel application overlay or minimise the window to access the windows computer. To get back to screenshare click the MiraCast icon on the task bar.



2.2.2 EShare

In order to use EShare, the projecting device must download and install the EShare app (<https://eshare.app/#once>). The app is available for all common systems (Apple iPad, iPhone, Mac; Android; Windows). A more detailed guide for EShare can be found here: <https://digitale-tafel.com/downloads/anleitungen/AnleitungEShare.pdf>. Please note that you will **not** have an **internet connection** on your personal device while projecting with EShare.

In order to use EShare, you need to switch to the built-in Android system. By using the side menu (see 2.1), you can either use the EShare icon, the Android/OPS icon, or the sources menu (highlighted below).

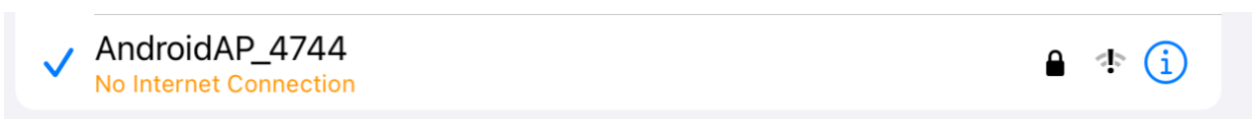


The first option will instantly access EShare. The latter options lead you to the Android home screen. From here press Apps, then EShare (highlighted below).

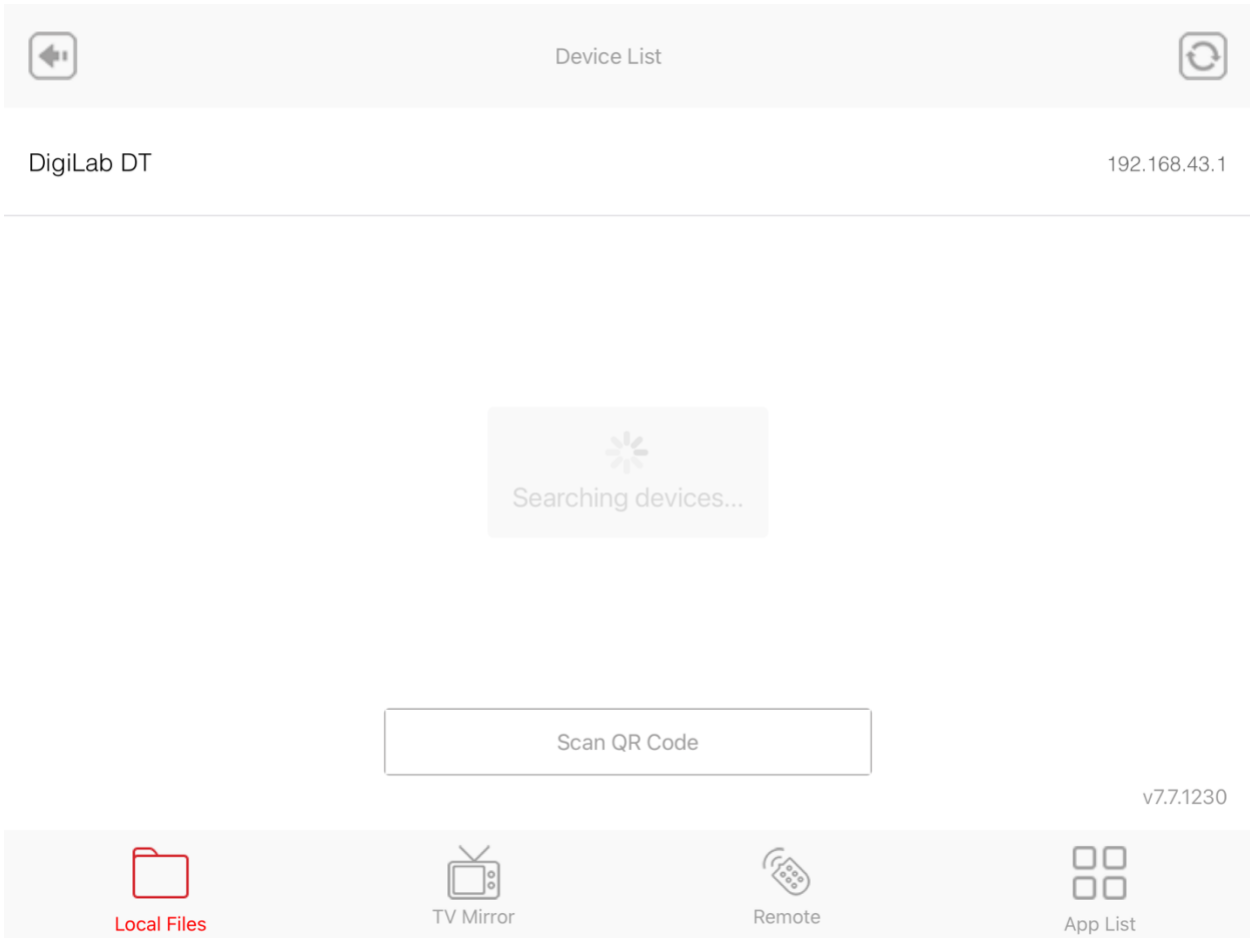




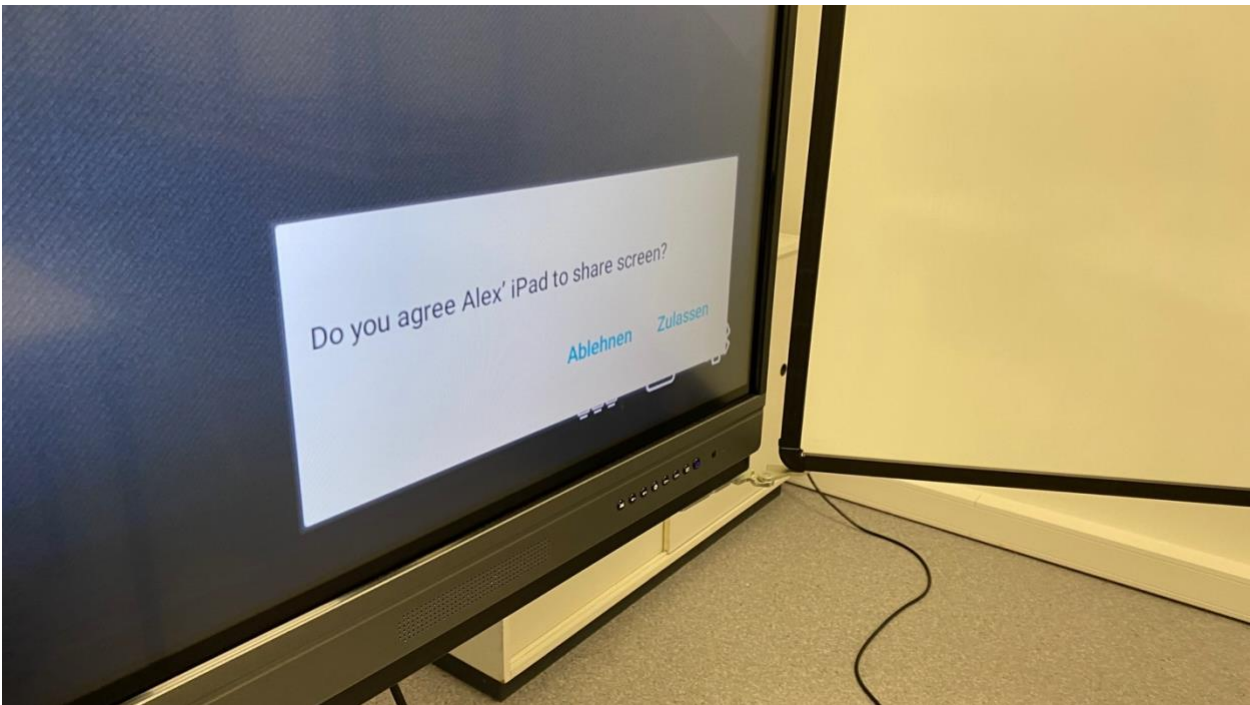
On the device that is supposed to be mirrored (here exemplified on an iPad), connect to the WiFi Hotspot “AndroidAP_4744”.



When connected, switch back to the EShare app.

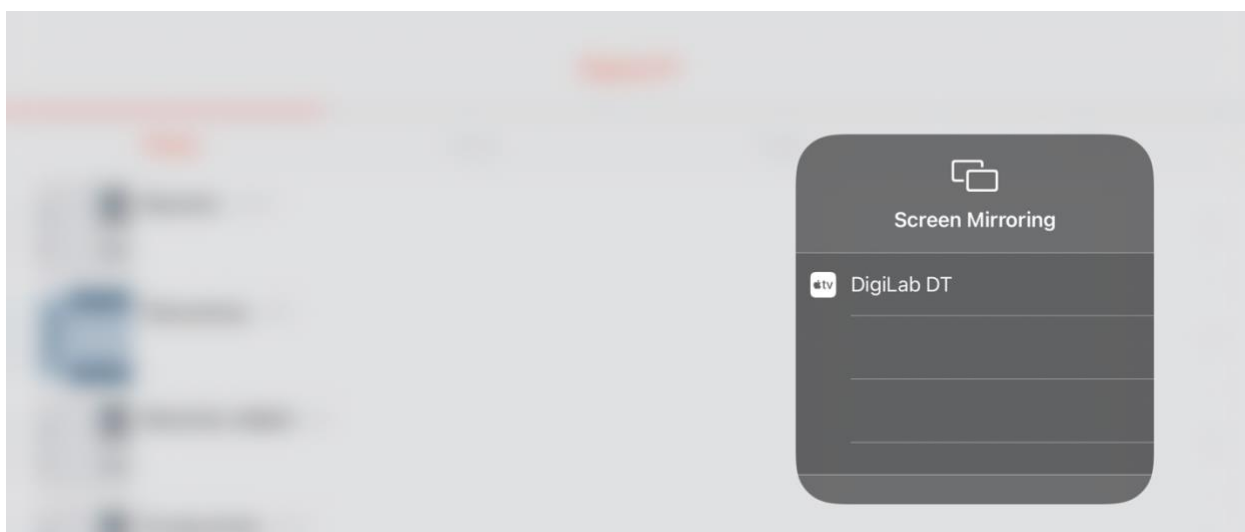
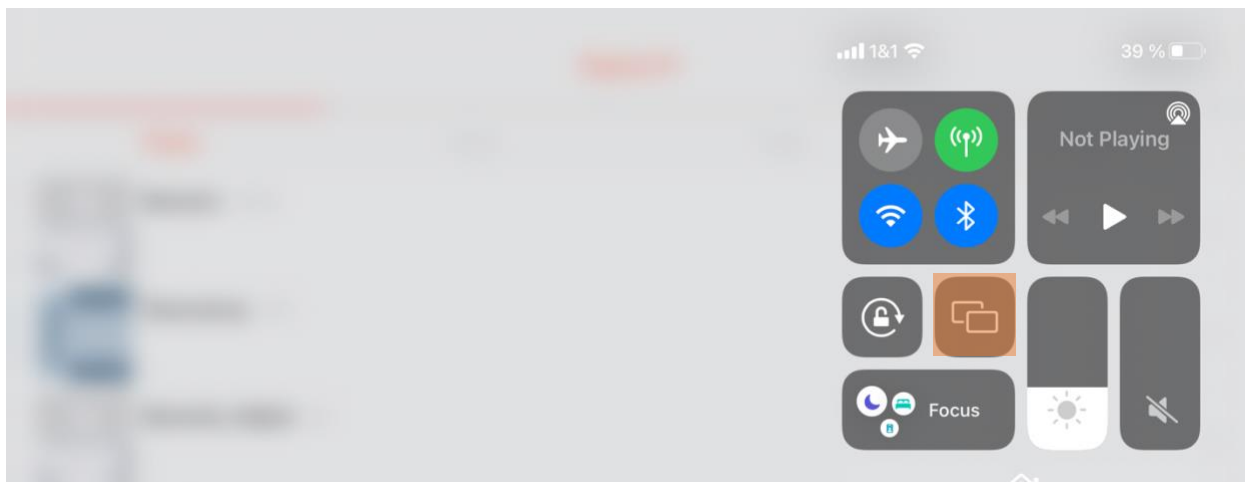


In the EShare app the blackboard is listed as “**DigiLab DT**”. Tap the device and enter the password shown on the blackboard, in this case: 496607.



Accept the screen share request on the blackboard.

On an iPad, proceed by swiping down from the top right corner of your screen. Click the button highlighted below and choose DigiLab DT once again.

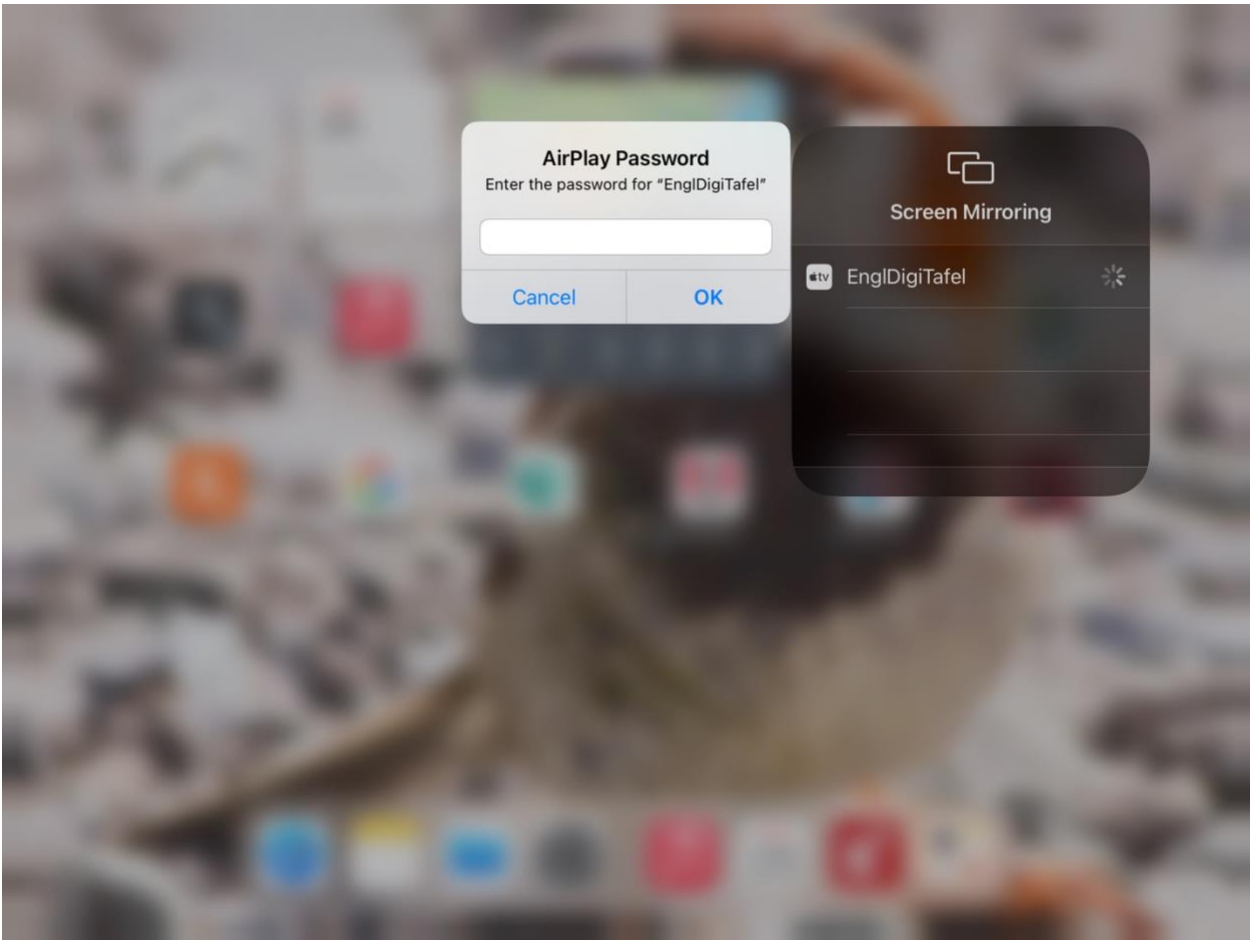
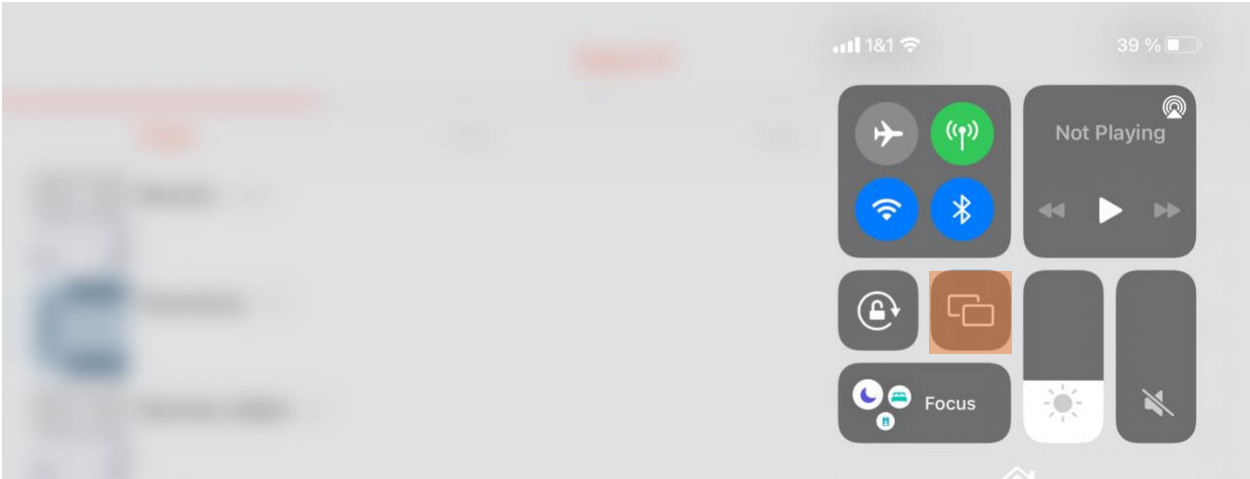


3. Apple TV

The third option to mirror external devices on the digital blackboard is to use the included Apple TV. The device turns on automatically. In order to use the Apple TV, simply choose **HDMI 3** from the source menu (see 2.1). If no green dot shows for the source, press the ON button on the Apple TV remote found in the accessory box. **Apple** devices can find the Blackboard in their AirPlay options:

iPhone/iPad:

Swipe down from the top right corner of the device. Click the icon highlighted below. Connect to “**EnglDigiTafel**”. No extra application is needed.



Mac:

Click the highlighted button below, then click on Screen Mirroring. Choose the device “EnglDigiTafel” and enter the password. No extra application is needed.

