

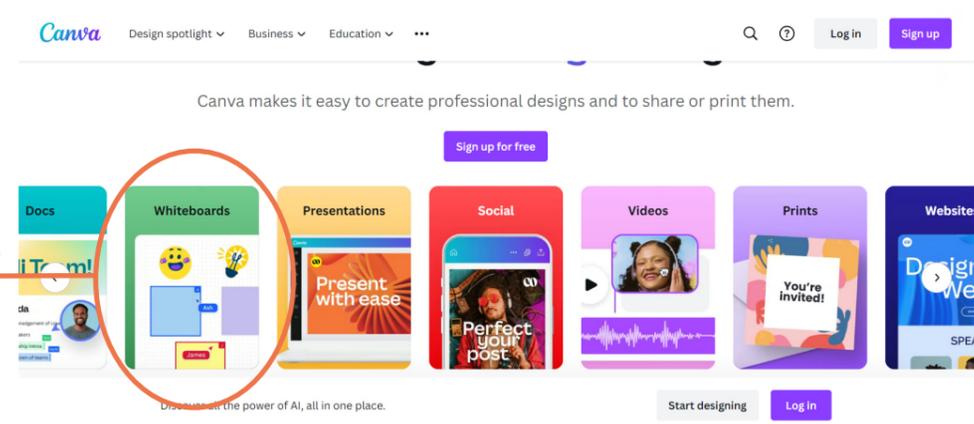


HANDOUT 1 HOW TO USE CANVA AND CREATE A MIND MAP

Canva is a free-to-use online graphic design tool. You can use it to create presentations, posters, videos, mindmaps, infographics and more. Teacher can even create personalize lesson plans.

Getting started

1. Go to https://www.canva.com/en_gb/ and click on Whiteboards.

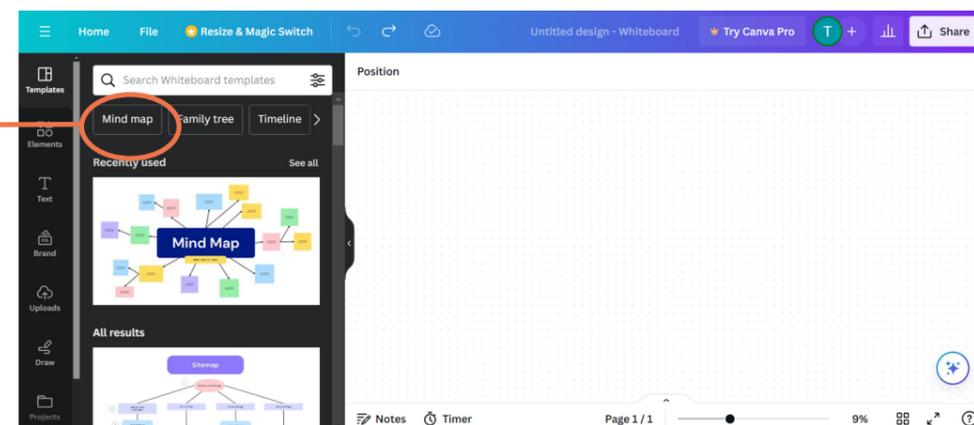


click on Whiteboards

2. Log in. Use your email At eligible schools Canva is 100% free for teachers and students. But you can also use the free basic version.
3. Click on Mind Map; take a tour or immediately choose a template and create your mind map to visualise, clarify, and organize your results and ideas.

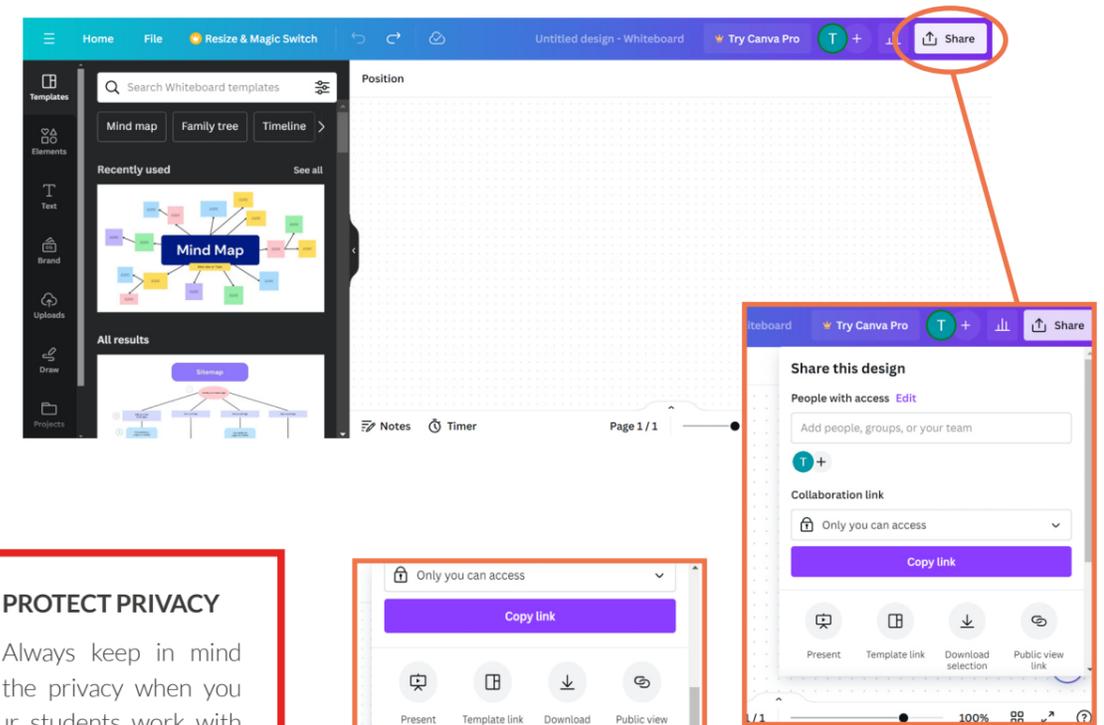


click on Mind Map

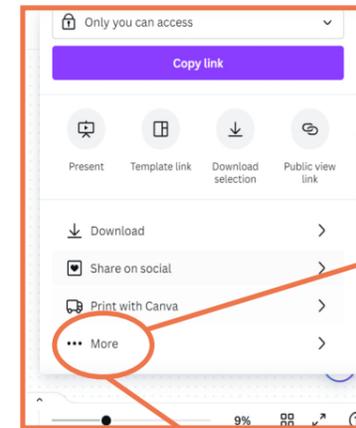


How to share?

There are many option to share your content.

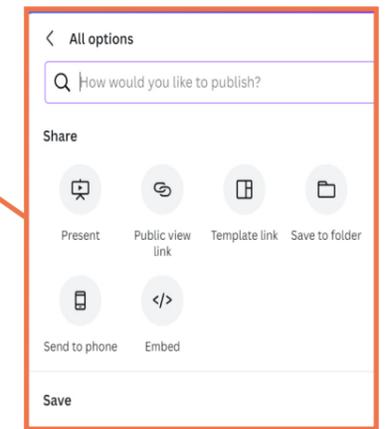


PROTECT PRIVACY
Always keep in mind the privacy when you and your students work with online tools. Never share personal details such as name, location, etc. of yours or your students on any Padlet. Also ask your students not to share personal details.



Scroll down and click on More

Send to phone is a nice option in order the share the content more easily.





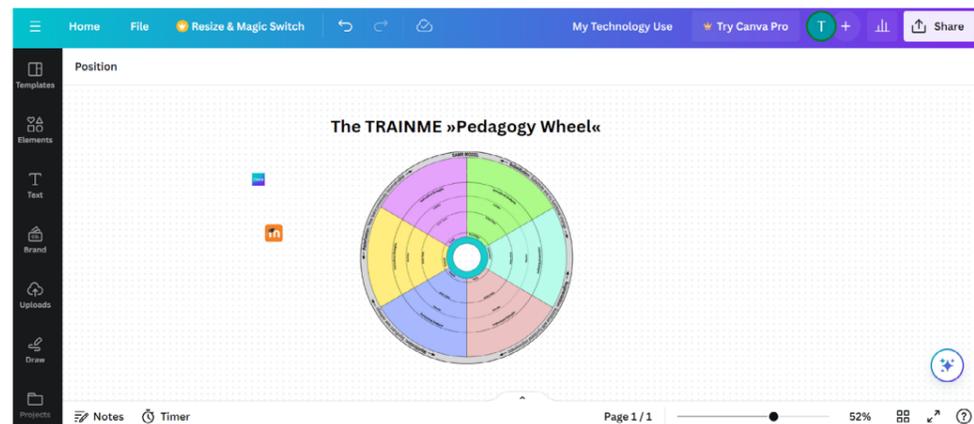
HANDOUT 2 HOW TO USE CANVA AND COLLABORATE

Canva is a free-to-use online graphic design tool. You can use it to create presentations, posters, videos, mindmaps, infographics and more. Canva also enables real-time collaboration, shared designs and folders. Teacher can even create lesson plans.

Getting started

1. Open [link to our project »The TRAINME Padagogy Wheel«](#) on Canva.
2. To get started with Canva, users need to create an account. This can be done by visiting the Canva website and clicking on the **Sign up** button. Users can sign up using their Google or Facebook accounts, or by providing their email address and creating a password.

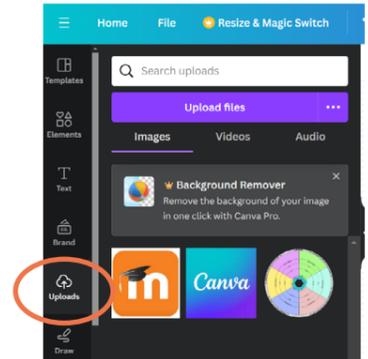
At eligible schools Canva is 100% free for teachers and students. But you can also use the free basic version.



3. [Get to know the Canva editor.](#)
4. Now start to add
 - an image of the technology (apps, hardware etc.) for our design.
 - add a link to the image that leads to the app (homepage) to download it later
 - text that describes activities, skills and action verbs.

How to add an image to a design

1. On the editor side panel, select the **Uploads** tab.
2. Click **Upload files**. Select the files that you want to upload.
3. You can also drag them from your computer folder to the Uploads tab.
4. You can also copy from Google and paste into Canva.



How to add and edit text

1. On the editor side panel, click on the **Text** tab.
2. Click on the option to add a heading, subheading, or body text. You can also choose from our font combinations.
3. Double-click the text box that you want to edit.
4. Delete or edit its contents. Use the text edit options on the editor toolbar to format your text.
5. Click outside the text box to finish.

How to delete images and text

1. Click to select the image or text box that you want to delete.
2. On the floating toolbar that appears above or below it, click on **Delete**. You can also press Delete on your keyboard.

How to add hyperlinks

1. Click the element you want to add a link to.
2. Click the **More** icon from the floating toolbar.
3. Select **Link**.
4. To link to another website page, enter the link, and press **Enter** on your keyboard or click anywhere on the editor.



HANDOUT 3 HOW TO CREATE AND DISTRIBUTE QR CODES

QR codes are free, easy to make and quick to access (once you have downloaded a QR code reader). QR codes can be created using websites that generate QR codes or certain web browsers.

In this training you learn two ways to generate QR codes:

- in Microsoft PowerPoint, Word, and Excel
- with the free online QR code generator QRCode Monkey
- and in Canva.

IMPORTANT CONSIDERATIONS

When planning to have students, use QR codes for classroom activities; instructors should ensure that all students have access. Some students may lack smartphones or tablets, and others might face constraints on data. If this is the case, consider utilizing QR codes for small-group activities in which only one student in the group would need to have a device. Conducting QR code activities in settings where students will have access to free campus Wi-Fi is desirable, but backup plans are needed in case the Wi-Fi happens to be spotty or down that day.

How to generate QR Codes

Generate QR Codes in Microsoft PowerPoint, Word, and Excel

1. Go to Add-ins to install QR4Office or get it [here](#).
2. Now enter the URL / text that you'd like to encode.
3. Click **Insert**.

Here is [a quick tutorial](#).



Generate QR codes with QRCode Monkey

QRCode Monkey is one of the most popular free online QR code generators with millions of already created QR codes. The high resolution of the QR codes and the design options make it one of the best free QR code generators on the web.



1. Go to <https://www.qrcode-monkey.com>.
2. Select a content type at the top for your QR code (URL, Text, Email, etc.). Enter all fields that should appear when scanning your QR code). Make sure everything you enter is correct because you can't change the content once your QR code is printed.
3. Set the pixel resolution of your QR code with the slider. Click the **Create QR Code** button to see your QR code preview. Please make sure your QR code is working correctly by scanning the preview with your QR code scanner. Use a high resolution setting if you want to get a png code with print quality.
4. Now you can download the image files for your QR code as .png or or .pdf. You can easily insert .png-files as an image to any document (offline and online).

For experts:

You want your QR code to look unique? Set a custom color and replace the standard shapes of your QR code. The corner elements and the body can be customized individually. Add a logo to your QR code. Select it from the gallery or upload your own logo image. You can also start with one of the templates from the template gallery.

Generate QR codes in Canva

Also in Canva you can easily generate QR codes.



1. Go to <https://www.canva.com/qr-code-generator/>.
2. Click **Generate a QR Code** and you will be redirected to the QR code app on Canva.
 - If you are already on the editor side panel, go to the  Apps on the left sidebar.
 - Under **Create something new**, click on **QR Code** or search of QR Code.
3. Enter the URL of the page you want your QR code to open.
4. Click on **Generate code**. The QR code will be added to your design.
5. Save and download your design as JPG or PNG.

For experts:

You want your QR code to look unique? Set a custom color and replace the standard shapes of your QR code. The corner elements and the body can be customized individually. Add a logo to your QR code. Select it from the gallery or upload your own logo image.

How to distribute

You can add QR Codes to any printable product or display the code on a projector. Your students scan the code individually.



HANDOUT 4 HOW TO USE PADLET

Padlet is a versatile and intuitive virtual post board that can be shared with your students either in class or as an extension to their learning. Padlet allows you to post and share images and videos from your device, webcam, or the Internet. The most common uses for sharing and documenting are:

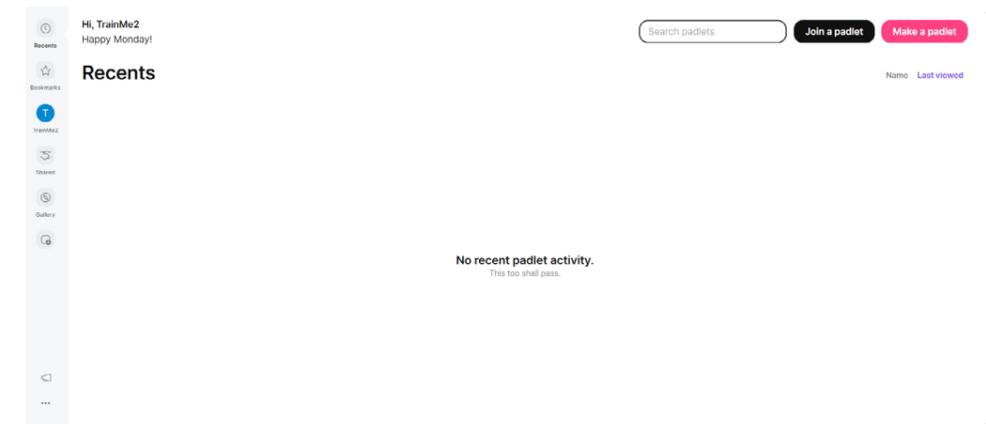
- [File- Manager](#) to post, organize, store essential documents, resources, and links. Here are [more examples](#).
- [Link list](#) as a centralized hub of clickable links. Guide visitors to various sites, platforms, or resources.
- [Instruction manual](#) to provide a clear set of visual instructions to guide a task or process.
- [Glossary](#) to compile a list of words and their definitions. Enhance vocabulary and understanding by including usage examples and related words.
- [Research notes](#) to compile, organize, and share key findings, resources, and insights from research activities. Here is [another example](#).

Getting started

1. Go to <https://padlet.com/> or install the Padlet app for [Apple](#) or for [Android](#) on your phone.
2. Create an account. It's free. You can use your Google or create a unique login. Whilst there is a free version it only has 3 walls per account. You can delete and clear walls as you wish but you will only have three active walls at a time
3. Now create your own Padlet.



How to create a padlet



1. From your dashboard, click on the pink **Make a padlet** button in the upper right corner of the screen.
2. Next, you have two options:
 - [Create a padlet from scratch \(using a Blank board\)](#)
 - [Use a Template from the Gallery](#)

Recently Padlet released AI Beta tools. Anyone with a Teacher account can [create with AI an entire padlet](#).

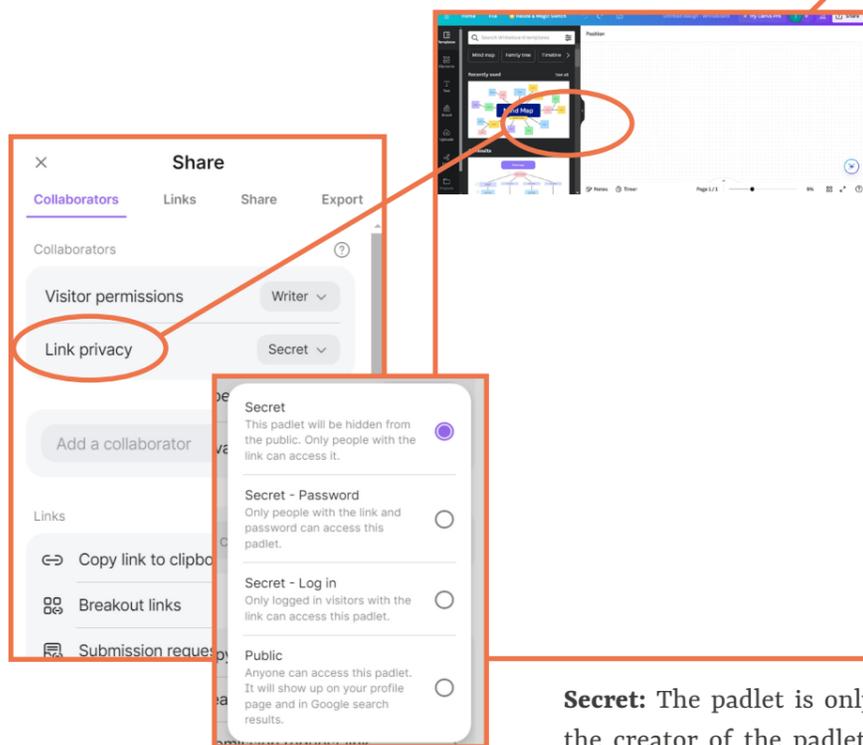
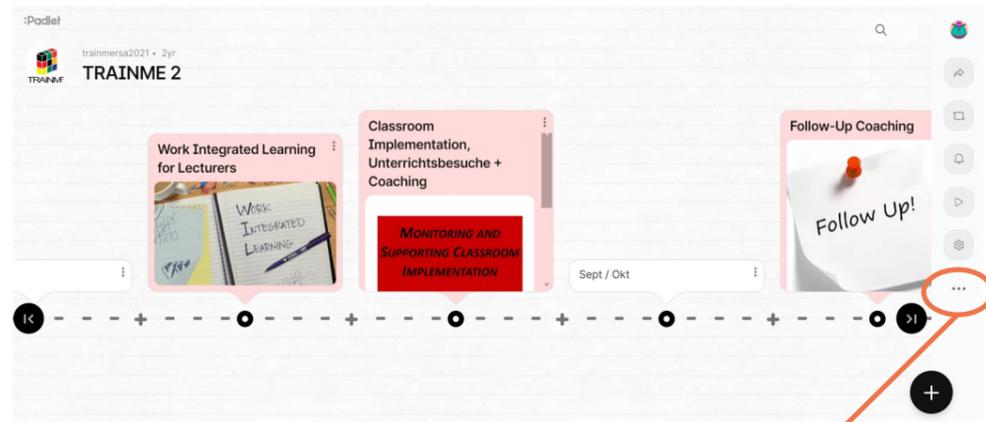


PROTECT PRIVACY

Always keep in mind the privacy when you and your students work with online tools. Never share personal details such as name, location, etc. of yours or your students on any Padlet. Also ask your students not to share personal details.

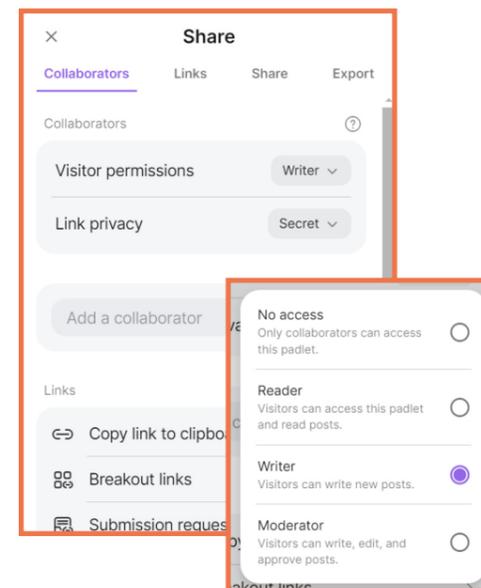
How to share

1. When you create a padlet, you can choose a privacy setting to control who can access it. You can access your privacy settings by opening the **Share** menu of any padlet.



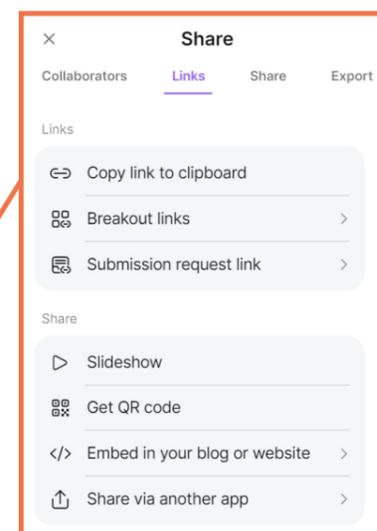
Secret: The padlet is only accessible to the creator of the padlet and any user who has the link. The link will be hidden from Google and public areas of Padlet. To share secret Padlets with others (your students), you must invite them through the **Share** menu.

Once you choose your privacy, you can also select Visitor permissions. These dictate whether visitors (your students) can read, write on, or edit the padlet.



- Reader: If the permission is set to **Reader**, students can read others' posts, comment and add reactions (if these options are enabled). »Reader« will not be allowed to create new posts.
- Writer: With **Writer** permissions enabled, students can do everything a »Reader« can do but they can also make new posts.

There are many options to share your Padlet with your students.



Ask your students to download the Padlet app. Your students can continue as visitor, without creating an account. Then...

- copy link to clipboard and let your students insert the link in the browser or in the Padlet app,
- get a QR code and let your students scan the code, or
- share via another app (preferably e-mail).



HANDOUT 5 CREATING A VIDEO WITH POWTOON

Powtoon is an online editor that can be used to create an explainer video using a modular principle. In this way, educational content that would otherwise be given as a teacher lecture can be presented visually. The app is particularly suitable for the flipped classroom method, as explainer videos play an important role.

In the free version, explanatory videos with a total length of up to 3 minutes are possible. In addition, only the standard resolution is available and the video cannot be downloaded, but only published via a link. Furthermore, the available building blocks in the free version are limited.

Getting started

1. Visit the <https://www.powtoon.com/> and sign up.

- You can use your Google logins or create a unique login.
- You can choose from a free version of Powtoon.

Now you're ready to create your animated videos.

In Powtoon you use the timeline (frame-to-frame) technique to create an animation. With the timeline tool you set the timing of the objects on the stage, create entry and exit effects, and more.

Powtoon EDU

Powtoon also offers an education plan that starts at \$8 /mo or \$96 / billed annually, Powtoon can also be used with up to 60 students.

<https://www.powtoon.com/edu-home/>

How to create an animation

The screenshot shows the Powtoon dashboard with a grid of templates. A blue circle highlights the '+ Create' button in the top left corner, with a red line pointing to the text 'click on +Create'. A red circle highlights the 'Animated Explainer' option in the 'Create with AI' dropdown menu, with a red line pointing to the text 'click on Blank'. Other templates visible include 'Food Industry Solutions', 'Company Principles - Our DNA', 'Meet Kate', 'Industry Update', 'Happy Hour', 'Noise Exposure', 'Time Management Tips', 'Urgent Security Update', and 'Video Chat'.

Powtoon offers a variety of templates to choose from. But we want to start with a blank project.

1. From your dashboard, click on the blue **+Create** button in the upper left corner of the screen and click on **Animated Explainer**.
2. Now select a blank template, choose **Horizontal** and **Animation Look** and start creating scenes in your animation.

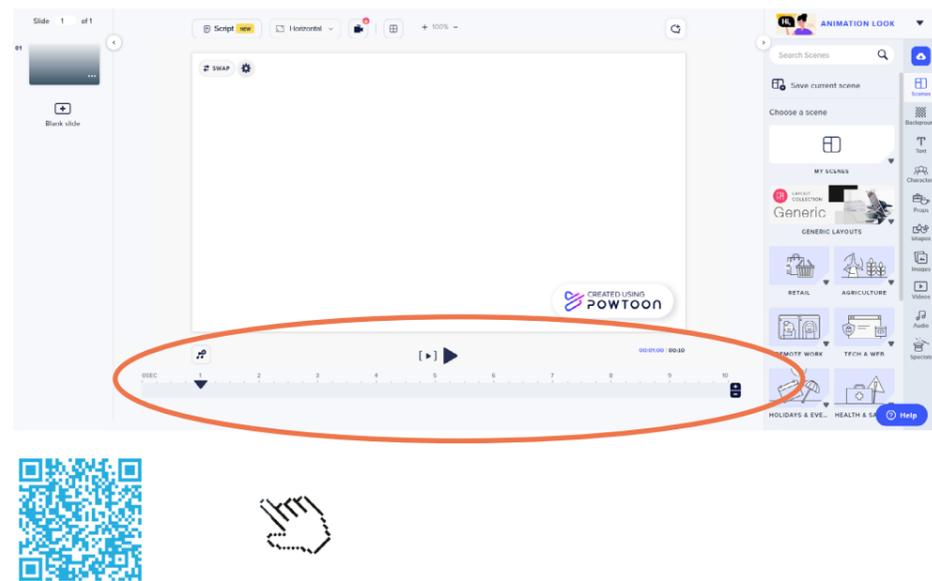
In Powtoon, scenes serve as the building blocks of your video. Each scene may represent a specific segment or step in a tutorial, for instance.

Now, it's time to customize your blank scene to fit your content. You can do the following:

1. **Add text:** Click on the text box within a scene to edit the text. You can change the font, size, color, and alignment to enhance readability.
2. **Insert images and graphics:** Upload images or choose from Powtoon's library of assets to visually illustrate each step.
3. **Incorporate animations:** Powtoon offers a range of animations to make your video more dynamic. Apply animations to text, images, or entire scenes to add visual interest.

- Record voiceover: If narration is necessary for your video, you can record a voiceover directly within Powtoon or upload an existing audio file.
- Transitions: Smooth transitions between scenes help maintain the flow of your video. Powtoon provides various transition effects to choose from. Apply transitions between scenes to create a seamless viewing experience.

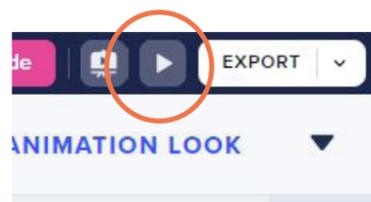
How to Use the Powtoon Timeline



Previewing and Editing

Once you've finished creating your video, take some time to preview it. Previewing allows you to check for any errors or areas that need improvement. Make necessary edits to refine your video further.

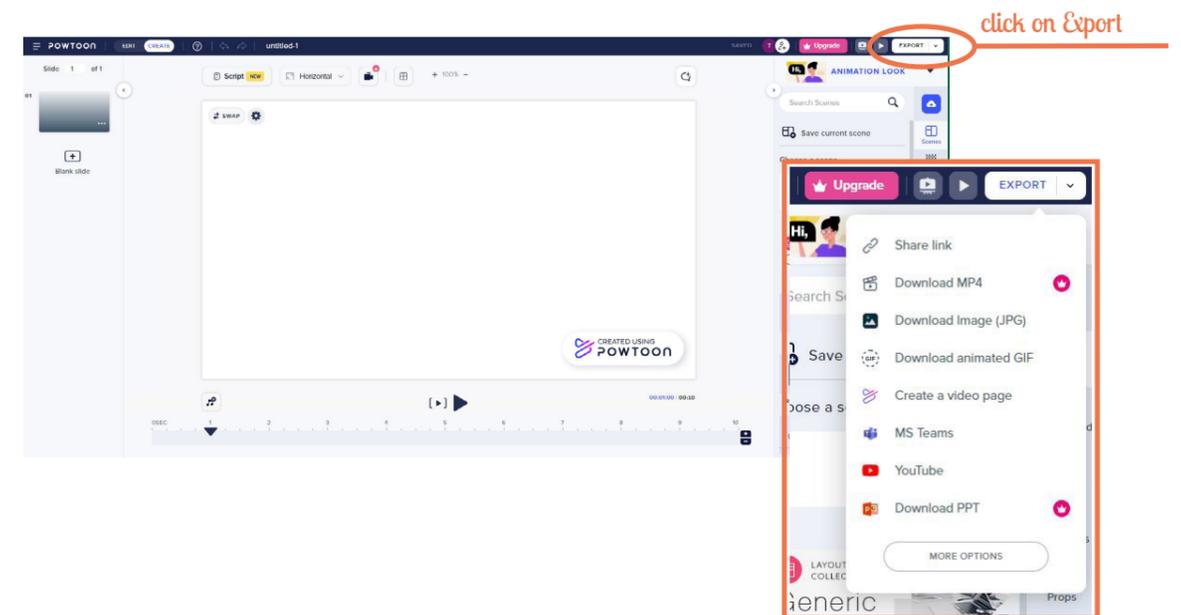
From your dashboard, click on the **Preview Video** icon in the upper right corner of the screen.



Publishing and Sharing

The free version of Powtoon allows you to upload your video on Youtube or share it directly to social media platforms or embed it on your website. To download your video as MP4 needs an upgrade to lite.

From your dashboard, click on the **Export** button in the upper right corner of the screen.





HANDOUT 6 CREATING PROJECTS WITH EDPUZZLE

Edpuzzle is a well-established online video-editing, and formative assessment tool. Co-founded in 2013 by Joaquim Sabria Mayorga, a former teacher from Barcelona, Spain, Edpuzzle is the result of his classroom experience teaching high school math (Mattproadmin, 2014).

You can upload any video from the Internet to use for classroom instruction. Videos can be cropped to the segment most applicable for their instructional purposes. You can also create and upload your own video lessons and add notes, voice-over instructions, comments, and create either multiple-choice or open-ended questions.

The tool allows you to augment and personalize your classroom instruction with videos and audios embedded into a variety of learning management systems (LMSs), such as Google Classroom, Microsoft Teams, Canvas, Schoology, Clever, PowerSchool, Blackbaud, Blackboard, Moodle, and D2L.



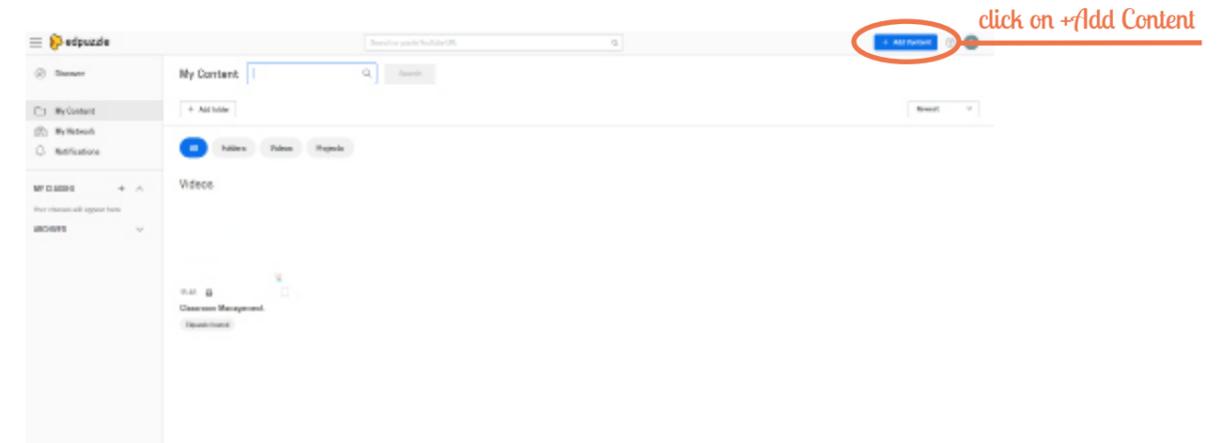
In this video, Quim Sabria will take you through the world of EdPuzzle, starting from how EdPuzzle works to where EdPuzzle is best used in the classroom.

Getting started

1. Go to <https://edpuzzle.com/>.
2. Sign up as a teacher. It's free. You can use your Google or Microsoft logins or create a unique login at Edpuzzle.
 - After creating your account, you can easily connect with your school and department.
 - When prompted, enter your school name in the search field and select it from the drop-down list.
 - If you can't find your school by searching, create it by clicking "Add my school or organization" at the bottom of the pop-up window. From there, type in your school name and enter the city and state. Then click "Add school."
 - After choosing your school, select the grade level(s) you teach and your subject(s).

Now you're ready to create your interactive videos.

How to create an interactive video



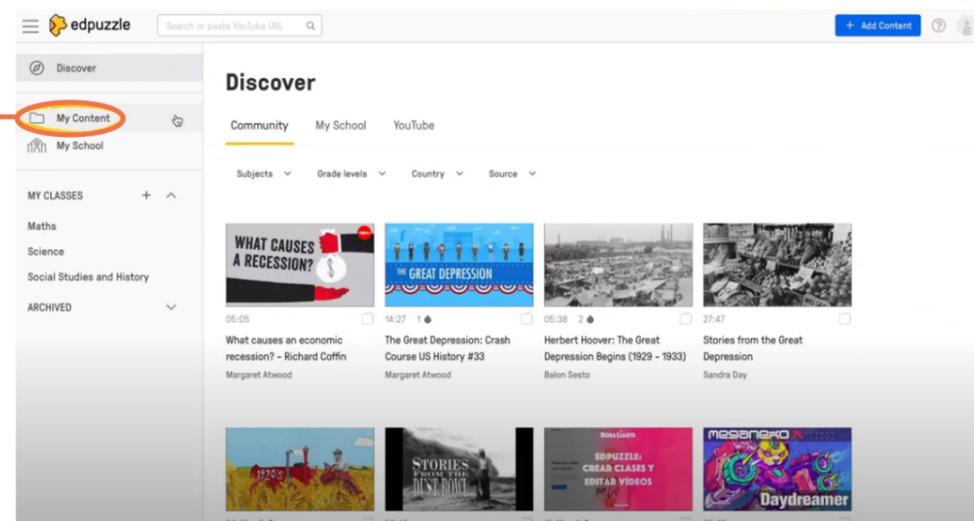
1. From your dashboard, click on the blue **+Add Content** button in the upper right corner of the screen.
2. Next, you have five options:
 - [Discover video content](#) (e. g. find a video on YouTube)
 - [Upload a video](#) (e. g. your own or re-use a video created by another teacher)
 - [Record a video](#)
 - [Create playlist](#)
 - [Students project](#)
3. Then, edit the video to create your lesson.
4. Assign the video to your students and check their progress in real-time while they learn at their own pace.

! COPYRIGHT

Always keep in mind copyrights when using third-party videos.

How to edit a video

1. On the editor side panel, click on the **My Content** tab.
2. Select the video you want to edit.
3. From your dashboard, click on the **Edit** button in the upper right corner of the screen.
4. Now you can
 - cut the video,
 - add a voiceover,
 - create questions and add notes to give more information or get students' attention.
5. Click outside the text box to finish.



How to add questions to a video

1. Click on the **Questions** tab above the video.
2. In the timeline below the video, click on the spot where you'd like to add a question or note.
3. Select **Multiple-choice question**, **Open-ended question** or **Note** from the options on the right.
4. Add your question or note, and click the blue **Save** button.
5. To add another question or note to the same point in the video, click on the **+** icon for the question type or note of your choice below the text **Add another note or question here**.

After you've added your question(s), you can click the play button to confirm that they appear in the video at the right spot. If the timing is wrong, you can drag the question box along the timeline to the left or right until it's perfectly timed, or just click on the time box to the left of your question or note to enter the exact minute and second.

If you want to learn more, check out [Edpuzzle Help Center](#).

How to assign a video

You can either assign each video individually or assign multiple videos at once. Here's how:

1. Click on your **My Content** library from the menu on the left-hand side of your page.
2. Check the box(es) below the video(s) you wish to assign.
3. Select **Assign** from the bottom menu.
4. Choose the class(es) you want to assign the video to. By default, the video(s) will be assigned to all the students in your selected class(es), including any students who may join your class(es) in the future.
5. If you only want to assign the video to certain students in a class, use the **Student** drop-down next to the class name to select those students. (Please note that this option isn't available for LMS-integrated classes.)

6. Click the **Next** button at the top of the page.
7. Add a start date and due date (if necessary).
8. Choose if you want to prevent skipping by toggling the switch for this option On or Off.
9. Use the drop-down under **Attempts** to select the number of attempts you'd like to offer students to complete the assignment.
10. If the video has closed captions added, you'll have the option to enable or disable those captions using the On or Off toggle switch for this option.
 - Closed-captioning is available for any YouTube videos on Edpuzzle that have been originally captioned within YouTube, as well as for Edpuzzle Originals and most teacher-uploaded content.
11. Choose if you want to allow students to speed up the video lesson(s) by toggling the switch for this option On or Off.
 - When enabled, students will be able to watch videos at 1.25, 1.5, 1.75, or 2 times the normal speed.
 - Students will always be able to watch videos at .5, .75, or 1 times the normal speed, regardless of your choice for this setting.
12. Click the **Assign** button at the top of the page and you're done!

Here's a quick video tutorial to walk you through the above steps:



How to share

To share your assignment via a link, follow the instructions below:

1. Select a class from the **My Classes** menu on the left-hand side of your page.
2. Click on the assignment you want to share.
3. When viewing the assignment, click the **Share Assignment** button towards the top of the page.
 - For Google Classroom- and Microsoft Teams-integrated classes, simply click the ellipsis (...) at the top of the page and choose Share Assignment from the drop-down menu. If you use another integrated LMS, this feature is not available.
4. A pop-up will appear and provide you with the assignment link and embed code.
5. Copy the link or embed code to and paste it wherever your students will see it.

How to manage students' progress

If you want to learn more, check out [Edpuzzle Help Center](#).

Here is a full [Getting Started playlist](#).





HANDOUT 7 CREATING CONTENT WITH LEARNINGAPPS.ORG

The free web 2.0 platform LearningApps.org supports learning and teaching processes with small, interactive, multimedia exercises. Teachers and students can create and manage multimedia exercises very easily online.

The exercises can be used online and with smartphones. The exercises themselves do not represent complete learning units. They are intended for practicing and deepening skills and are not suitable for explaining complex concepts.

The web 2.0 service LearningApps.org was created in Switzerland as part of a research project by the Bern University of Teacher Education in cooperation with the Johannes Gutenberg University Mainz and the Hochschule Zittau/Görlitz and in close collaboration with around a dozen teachers.

Getting started

1. Go to <https://learningapps.org/>
2. From your dashboard, click on the **Login** button in the upper right corner of the screen.
3. Register new account. It's free.

Now you're ready to create interactive, multimedia exercises.

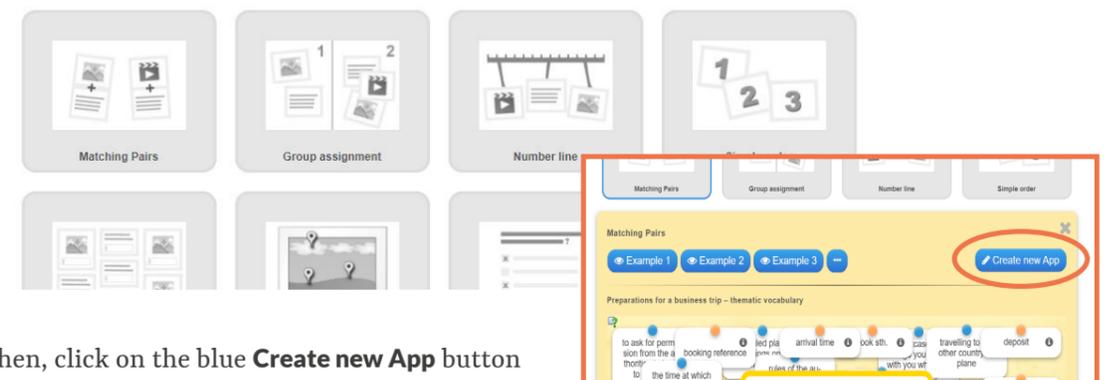
LearningApps.org offer around twenty task formats commonly found in authoring tools like HotPotatoes or JClc. These include multiple-choice tests, crossword puzzles, and arranging objects on a timeline, all of which support the utilization of different media. There are also completely new task formats that make consistent use of existing Web 2.0 services. For instance, cultural assets can be linked to specific locations on a map integrated via Google Maps. Alternatively, films can be paused at any point, allowing questions or entire tasks to be interwoven for learners to engage with. This approach fosters active student involvement with the film's content. Students can use their smartphone to learn with learningapps.org.

Teachers can put together apps for the classroom to track learner work status with collections.

How to create interactive, multimedia exercises



1. From your dashboard, click on the **Create App** button in the upper middle of the screen.
2. Next, you have around twenty options: These include multiple-choice tests, crossword puzzles, and arranging objects on a timeline.
3. Pick a template.



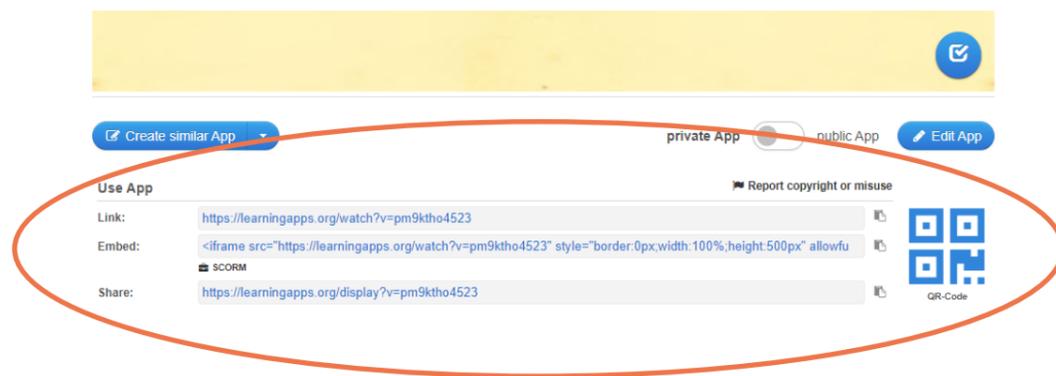
4. Then, click on the blue **Create new App** button
5. Start to create your "app".
6. Choose an app title, describe the task and fill in content
7. Click finish editing and show preview.
8. Save your app. You can find it in **My Stuff**.
9. Now share the content with your students.

Under **Browse Apps**, you will find all the freely accessible apps.

How to share

To share the content (“app”) with your students, copy link and send it or distribute the QR-Code to give your students easy access.

The **Share** link opens the app on the website, while **Link** displays the app in the users’ browser window without any other information (like menu bar, links, or sharing information). The embed code allows you to add the apps directly to your website, webpage or your Learning Management System.



PUTTING TOGETHER APPS FOR THE CLASSROOM & HOW TO TRACK LEARNER WORK STATUS

- Select your own apps or other apps for a topic. The names of the apps can be customized.
- The apps can be grouped and provided with subtitles or instructions.
- The default setting is that the apps can be edited by the learners in any order.
- Optionally, the apps can only be solved one after the other, if the previous one has been solved in each case.
- Optionally, a text can be displayed as feedback after solving all apps.
- Communicate the collection link or QR code to students.
- The collection is not displayed publicly on LearningApps.org. Optionally, the collection can be displayed to others in your profile page.



Track learner work status with collections

At the teacher’s request, students can sign in after they have solved an app. The teacher can thus display an overview of the work statuses, export or reset the work status. The work statuses are automatically deleted after one year.

Note: When teaching multiple classes, for example, students should always indicate their class before their name or pseudonym



HANDOUT 8 CREATING AN INTERACTIVE VIDEO WITH LEARNINGAPPS.ORG

The free web 2.0 platform LearningApps.org supports learning and teaching processes with small, interactive, multimedia exercises. Teachers and students can create and manage multimedia exercises very easily online.

The exercises can be used online and with smartphones. The exercises themselves do not represent complete learning units. They are intended for practicing and deepening skills and are not suitable for explaining complex concepts.

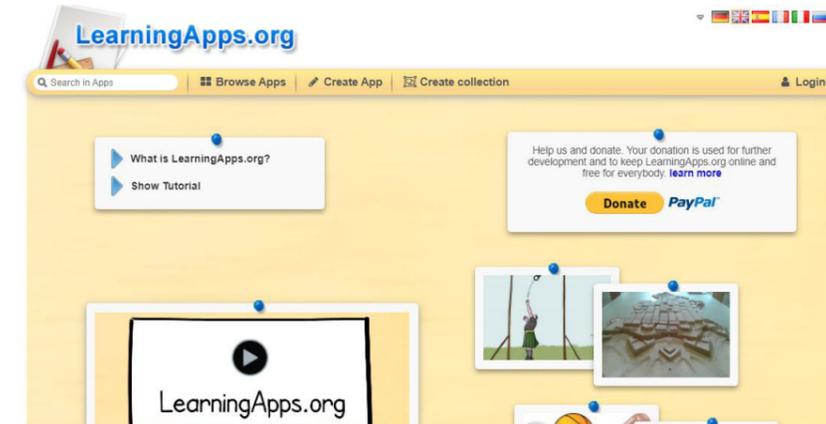
The web 2.0 service LearningApps.org was created in Switzerland as part of a research project by the Bern University of Teacher Education in cooperation with the Johannes Gutenberg University Mainz and the Hochschule Zittau/Görlitz and in close collaboration with around a dozen teachers.

Getting started

1. Go to <https://learningapps.org/>
2. From your dashboard, click on the **Login** button in the upper right corner of the screen.
3. Use your account you created before (Handout 7).

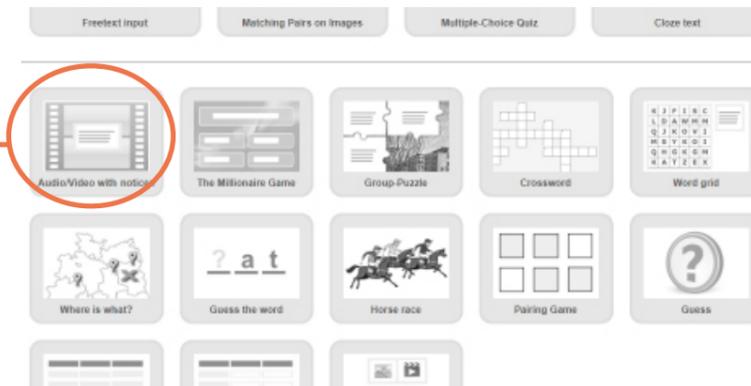
Now you're ready to create interactive videos with learningapp.org.

How to create interactive videos



1. Click on **Create App** and go to **Audio/Video with notices** and create a new app. This app will be your interactive video.

click on *Audio/Video with notices*



2. Choose an app title, describe the app.
3. Then select a video on Youtube.
4. Now pro-



Before you create your video, you have to create an "app" with questions or exercises (see Handout 7) that you can use in your video.

vide a time (like 0:34) from the source audio/video where the question should pop up. The question is the app that you have created before. Hence, click on **Select app** and choose the app in the folder **My Stuff**.

5. Save and share your product.



COPYRIGHT

Always keep in mind copyrights when using third-party videos.

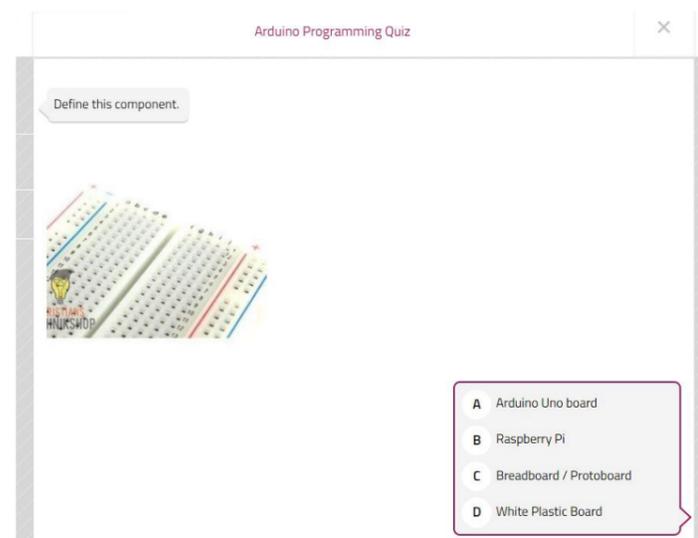


HANDOUT 9 CREATING INTERACTIVE LEARNING CONTENT WITH LEARNING SNACKS

The concept of the free webbased tool Learning Snacks is based on the idea of game-based-learning. Within Learning Snack, learning content is presented interactively in a sort of chat history. The tool enables the playful review of learning contents or the immersion into a new topic. Your students can “snack” the learning content wherever they are, they just need a smartphone. You can create a learning “snack” in an online browser. You can insert questions, answers, emojis, images or videos.

Learning Snacks was launched in Germany in May 2015. Students do not need an account in order to learn with Learning Snacks.

THIS IS WHAT A LEARNING SNACK LOOKS LIKE:

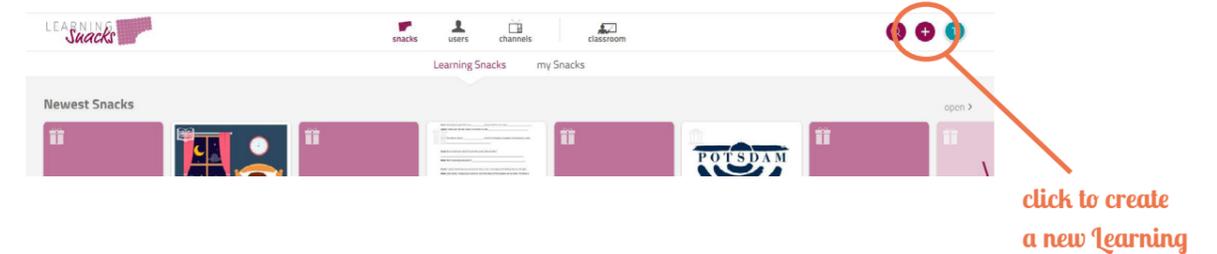


Getting started

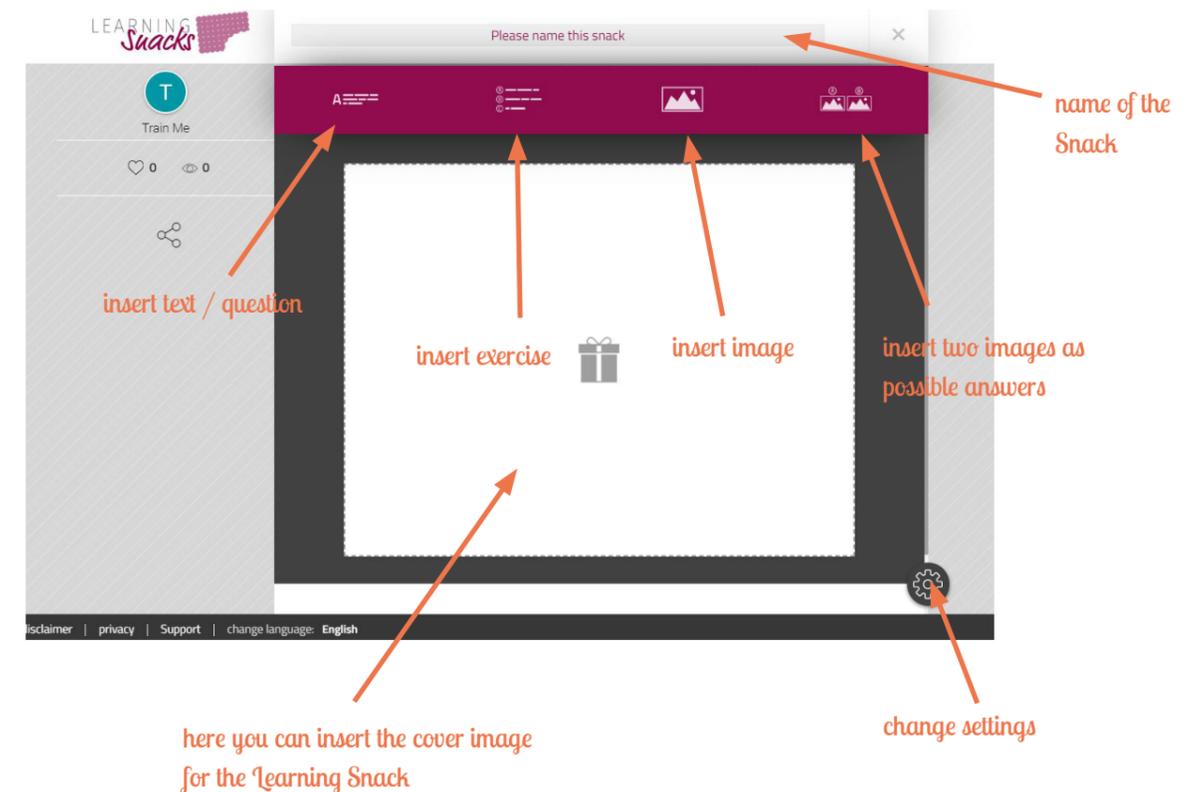
1. Open the website <https://www.learningsnacks.de/#/welcome> in a browser.
2. From your dashboard, click on the **Login** button in the upper right corner of the screen. You can use your Google or create a unique login.

Now you're ready to create interactive learning content.

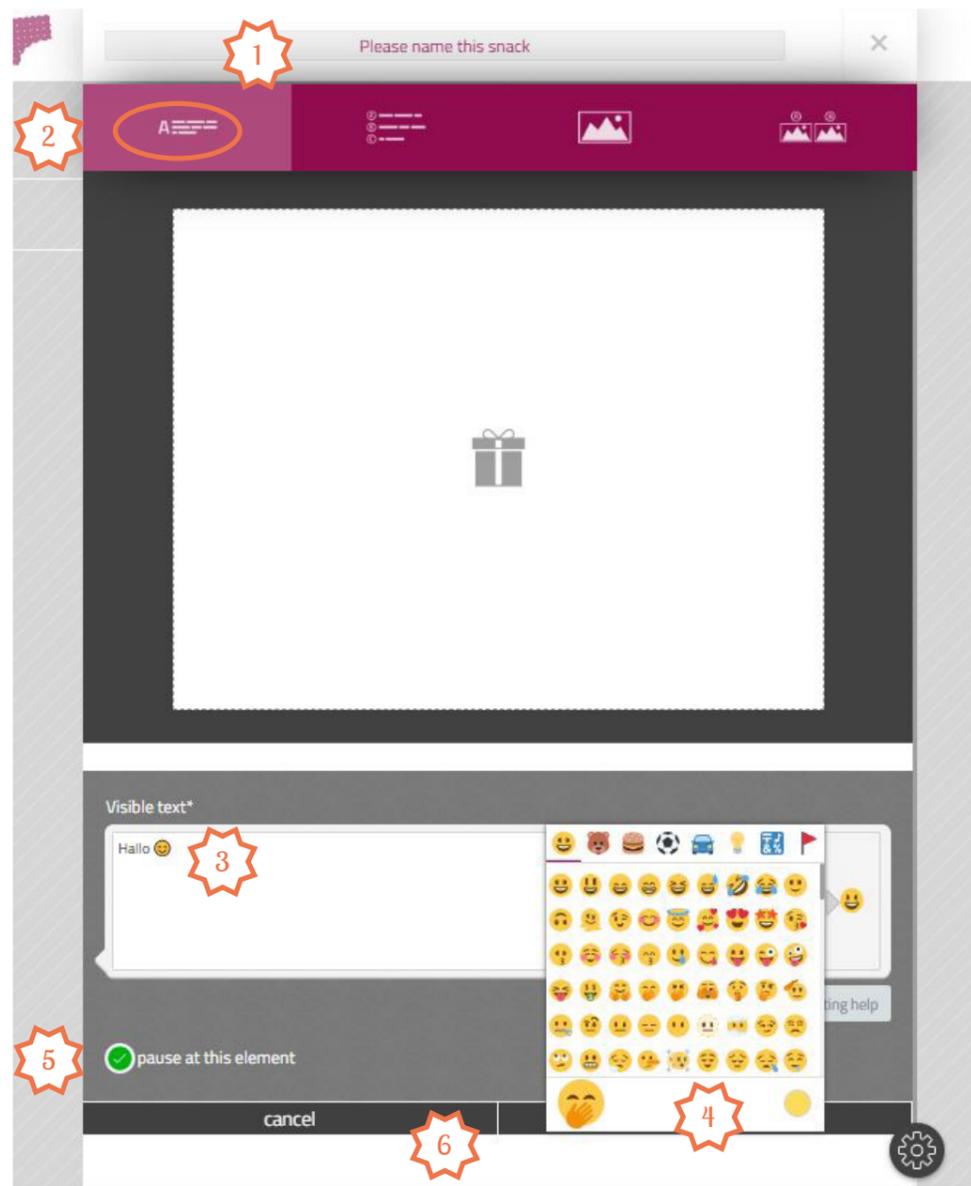
How to create a Learning Snack



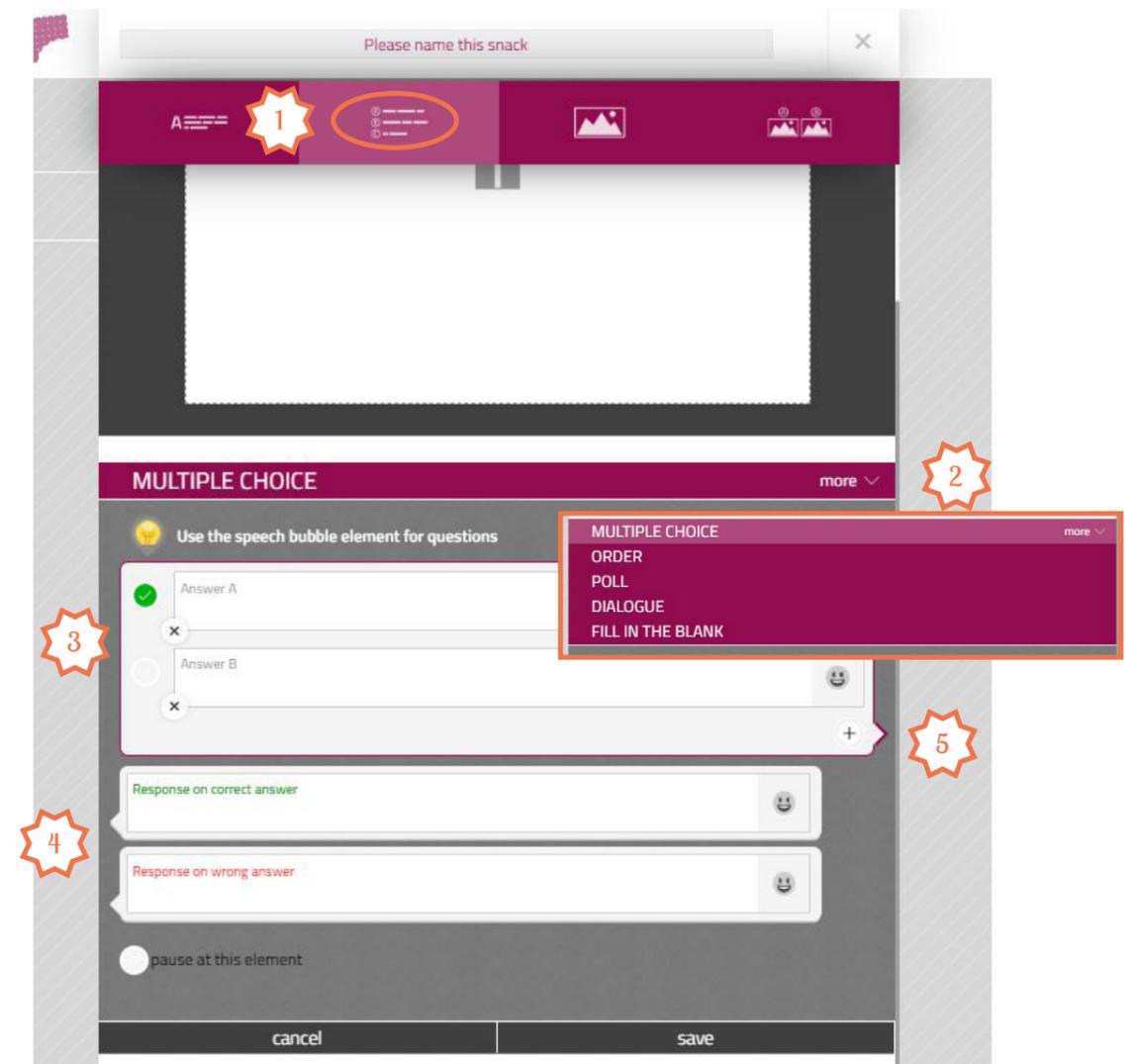
1. In the upper right corner of the screen click on  to create a new Learning Snack.



1. Name your Learning Snack (1).
2. Begin your Learning Snack by choosing the section **Text / Question** (2) and starting with a greeting (3). You can insert any text or question. You can also add emojis (4).
3. When choosing **pause at this element** (5), the Learning Snack pauses while playing until the user clicks the **next** button (Most of the times it makes more sense to select this option).
4. Now you can either discard (and rewrite) or save the text (6). Your snack will be saved in **my Snacks**.



5. Now choose the section **Tasks** (1) to write answers to your questions, start a survey or create a cloze text (3). Choose the element in the drop-down list **more** (2).
6. You can react to correct or incorrect answers (4). Here you can e.g. give tips to incorrect answers or praise correct ones. You can also add emojis.



Tips & Tricks

- Insert a * before and after the text that you want to write a text in ***bold***. It is important to not insert a space between the star and the text.
- You can immediately show a YouTube-Video in the chat by inserting the URL into a text field.
- Visibility, language and other settings can be adjusted in **Settings**
- Your snacks are saved in **my Snacks (1)**. You find **my Snacks** in the **snacks** section (2).



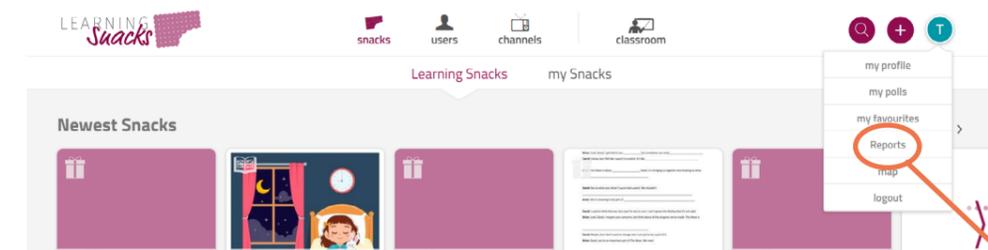
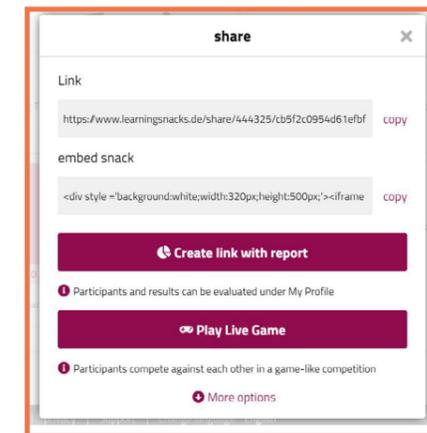
How to share a Learning Snack

There are four possibilities to share you snacks with your students

- Share link (tracking of students' activity is not possible)
- Embed snack in e.g. in Moodle
- Share link with report. Here you can track your students results.
- Play Live Game. Here your students can compete against each other in a live game-like competition.

How to assign a Learning Snack and track students' activity

1. Go to **my Snacks** in the **snacks** section.
2. Choose the snack that you want to share with your students.
3. Click on the **share** icon. A pop up window opens.
4. Click on **Create link with report** and name the report and click on **create link**.
5. Now share the link or QR code with your students. Your students do not need an account.
6. Students' results can be evaluated in **Reports** under **My Profile**.



find students' results in Reports

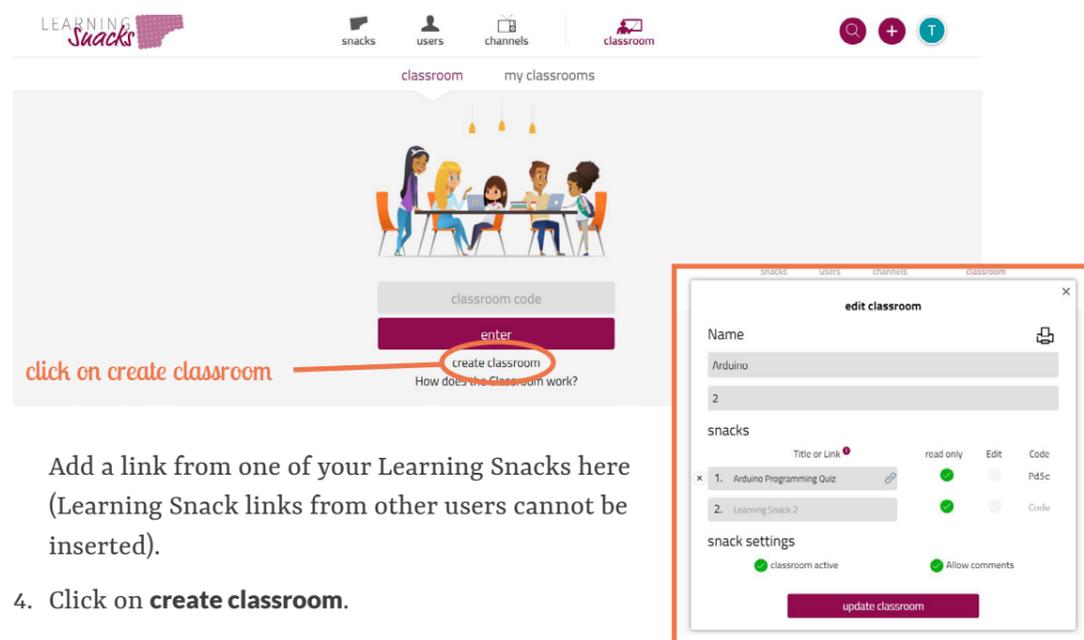
Classroom section

You can create classrooms and upload any learning snacks there. The advantage is that learning snacks that have already been created can be used in different classes without having to generate and distribute links or QR codes for each individual learning snack. Learners only need one PIN to access all content in a digital classroom. Learners can also access old learning snacks afterwards without having to save the appropriate link for each learning snack and upload their own learning snacks.

1. From your dashboard, click on the **classroom** button in the upper middle of the screen.
2. Now click on **create classroom**. A pop up window opens.



3. Name classroom and enter the title for the new Learning Snack to be created.



Add a link from one of your Learning Snacks here (Learning Snack links from other users cannot be inserted).

4. Click on **create classroom**.
5. Now go to **my classroom** in the **classroom** section and choose the class you want to share the snack with. There is a classroom PIN on each Learning Snack cover that you can share with your students.

TIP

If you want to share the Learning Snack with your colleagues change the setting from read only to edit.



HANDOUT 10 KEY FACTS ABOUT PHYPHOX

BACKGROUND INFORMATION

Phyphox is a multisensor app. The app uses different sensors in the smartphone and allows measurements and export of the measured data.



Supported sensors

Currently, phyphox supports the following inputs and outputs:

Inputs

- Accelerometer
- Magnetometer
- Gyroscope
- Light sensor
- Pressure
- Proximity sensor
- Microphone
- GPS/Location
- Bluetooth for custom devices (for example an Arduino)*

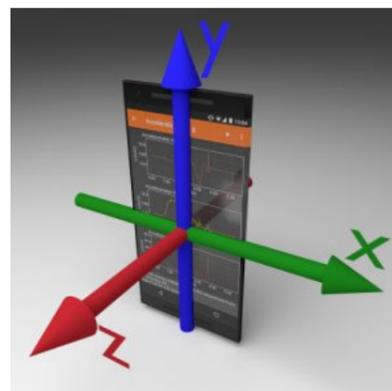
Outputs

- Speaker
- Bluetooth for custom devices (for example an Arduino)*

* Bluetooth support is still work in progress. At the moment it is only available for Android, but the developers intend to add it to iOS as well.

The coordinate system

In phyphox, the z axis is perpendicular to the screen, pointing out of it. The x axis points to the right when holding the device in its default position. For phones this means, that it points to the right while looking at the screen in portrait (vertical) orientation. The y axis points upwards along the long side of the phone. However, on some larger tablets, the default orientation can be landscape (horizontal), in which case x points along the long side of the device.



Data Export

Export your data in many common formats to analyse it in your favourite software. Save or share the data through any app on your phone.

Remote control

Phyphox can be controlled remotely from any device that is on the same network as the phone and has a contemporary web browser. You may want to watch the short video below or read the extensive explanation on [this page](#).



Watch on YouTube

Click or scan to watch

Experiment Editor

Phyphox allows you to create your own experiments using a visual experiment editor, which will generate a simple file, that defines your experiment including data analysis. You can then copy this file to your phone or share it with colleagues or students, so they can perform the experiment, which you have designed. Learn more [here](#).



HANDOUT 11 CREATING AR CONTENT WITH ASSEMBLR STUDIO

WHAT IS WEB AUGMENTED REALITY?

AR Studio offers WebAR (Web Augmented Reality) is a technology that allows users to experience augmented reality (AR) applications directly from their web browser without having to download or install additional apps.

Assemblr Studio is a free Augmented Reality platform that enables you to create, view, and share your own AR content. With Assemblr Studio you can easily create WebAR (Web Augmented Reality) projects without any programming skills. The interfaces are adaptive and CV libraries are available. You can also upload your own images, 3D objects.

Basic features / limitations

- 30 MB Storage of Custom 3D Objects
- Access to Free 3D Bundles
- Access to Free Templates
- 1 Custom Marker
- QR Markers

Assemblr EDU Plan (free)

- Access to 400 Free 3D objects
- 30 MB Storage per Seat
- Limited Educational Topics
- Limited Access Edu Kits
- 1 Custom Marker
- Unlimited Virtual Classes
- QR Markers

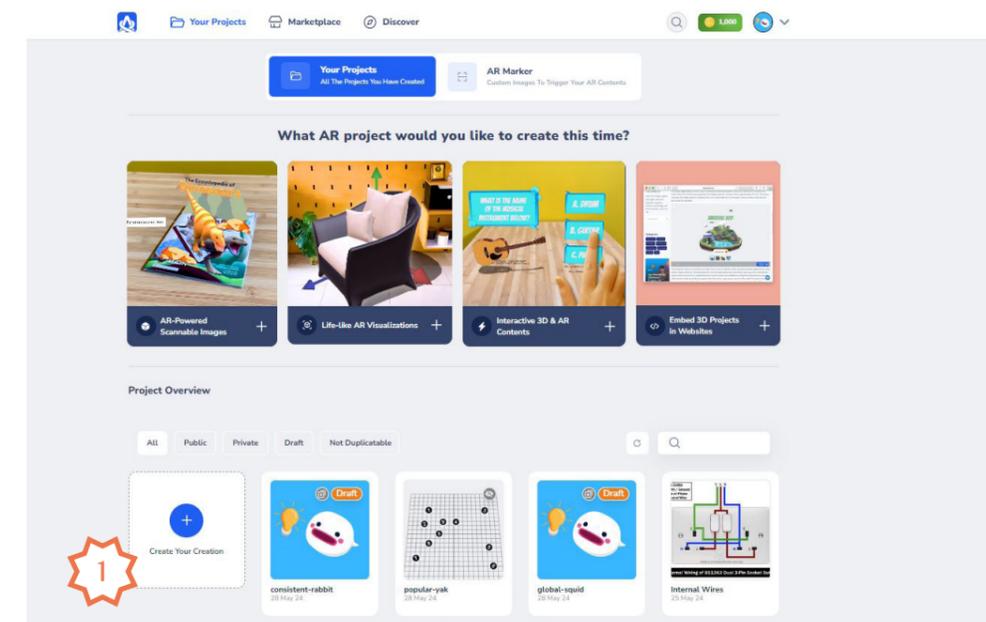
Assemblr EDU Plan (\$2.99/ month)

- 1 Premium Member Seats
- Access to up to 6,000 Free & Pro 3D objects
- Unlimited Access to Topic
- Unlimited Access Edu Kits
- 300 MB Storage per Seat
- Access to Pro 3D Text Fonts 5 Custom Markers per Seat
- Upload Audio File
- Unlimited Virtual Classes
- Share Projects in Private
- Hide Project Information on Embed Content
- Make Transparent Background on Embed Content
- QR Markers
- Hide Project Watermark

Getting started

1. Open the website <https://studio.assemblrworld.com/explore> in a browser.
2. From your dashboard, click on **Login / Register** in the upper right corner of the screen. You can use your Google or create a unique login.

Now you're ready to create your Augmented Reality content. You can choose to create your AR project from blank or you can use the premade AR templates.



For your first project, start with a blank one. Click on **Create Your Creation (1)**. You will be redirected to the design canvas of the Assemblr Studio interface.

