



# AI Tools in Canva

Beautiful Learning



### /digicompetence

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## AI Tools in Canva — Beautiful Learning

#### A few words to begin

Dear Teacher,

You are receiving a teacher material developed to support the teaching of artificial intelligence at the elementary and secondary school levels. This material provides a step-by-step approach to engaging students in creating design proposals that can help improve their school environment. The activity fosters teamwork, visual thinking, and digital skills. Through this method, students will learn how to visualize their ideas and turn them into concrete proposals that can have a real impact on their surroundings. We believe this skill will benefit them not only at school, but also in their future lives.

#### - AI for Children team



To implement this guide, you'll need a school license for Canva, which offers the most advanced version of the app for schools free of charge. This license includes all necessary features and allows students and teachers to collaborate in a shared workspace. We recommend requesting the license well in advance, as the approval process can take several days or even weeks. The minimum age requirement for Canva is 13+.



Students in this project use the "Magic Edit" feature, which must be enabled by an administrator in their student accounts.



Project board template



<u>Presentation template</u> for students

### **Lesson Overview**

### Recommended Age, Lesson Length

Children aged 11—15, time allocation depends on your instructional approach.

#### What Are the Students Learning?

Canva can be used as an effective tool for creating and presenting visual content.

#### Why Are They Learning This?

Students become more observant of their surroundings and learn to shape them using technology.

#### How Do We Know They Have Learned It?

They use Canva's AI features to edit a photo.

#### Tools

Teacher: Projector, printed Canva board "A More Beautiful School." Students: Device with camera, tablet/laptop/PC (one per student or group).

#### **Digital Competence**

Professional Engagement.

### Five Big Ideas

5-D-II AI for Social Good (Using AI to Solve Societal Problems).

Note: Gender equality is key for AI for children, but for brevity we use masculine formulations in our methodologies.

#### Bloom's Taxonomy

Understanding: Students learn basic principles of working in Canva's diaital environment.

Applying: They use Canva tools to design and present ideas. Evaluating: They assess the quality and feasibility of their designs. Creating: They produce proposals and presentations, including descriptions, timelines, and cost estimates.

## Glossary of terms

#### Artificial Intelligence (AI)

There is no single universally accepted definition of artificial intelligence. However, all definitions agree that AI refers to systems designed to simulate human thinking and behavior.

AI typically takes the form of a computer program and is used to solve tasks that once required significant human intellect and were considered the domain of people. Artificial intelligence is also a scientific discipline that emerged in the first half of the 20th century. Its aim is not only to understand intelligent systems but—more importantly—to create them.

#### Machine Learning (ML)

Just as humans can learn from examples and experiences, machines created by humans can do the same. This ability is made possible through a method called machine learning. It allows AI systems to move beyond pre-programmed rules and start coming up with their own solutions.

The goal of machine learning methods is to uncover patterns hidden within large amounts of data. Machine learning is a subfield of artificial intelligence.

#### Generative Artificial Intelligence (GAI)

Generative AI is a type of artificial intelligence designed to create new content—such as text, images, music, or —based on the data it has been trained on. Unlike traditional AI systems, which focus on analyzing or classifying information, generative AI uses algorithms such as neural networks to "learn" the style and structure of existing data, allowing it to generate original content that is often difficult to distinguish from content created by humans.

#### Generating images using AI

Generative models allow anyone to easily create images based on text inputs (so-called prompts, or other types of input). From the user's perspective, the process is very simple — you describe your idea in words, and the AI turns it into an image. Currently, two main types of generative models are commonly used:

Diffusion Models (DALL-E, Midjourney, Stable Diffusion...) These models are trained by adding noise to images and teaching the model to reverse the process — essentially learning to remove the noise. When generating new images, the model applies this denoising process to gradually transform pure noise into a realistic image.

GANs – Generative Adversarial Networks (e.g., StyleGAN) GANs use two neural networks – a generator and a discriminator – that compete against each other to improve. The generator tries to produce new data that resembles the training data as closely as possible, while the discriminator evaluates how well the generator succeeded. This back-and-forth training cycle is repeated hundreds of times until the model produces a convincing image.

#### Canva

Canva is an online graphic design tool that allows users to easily create posters, presentations, videos, and even websites. It offers a simple, drag-and-drop interface with customizable templates, where you can add text, images, and various elements, along with effects like filters or animations. Canva is ideal for school projects, team collaboration, and personal creativity. Schools can access an advanced set of features for free through an education license. Canva also includes many AI-powered tools and supports third-party apps directly within the platform.

### **Inpainting**

Inpainting is an AI technique used to fill in missing or removed parts of an image by "guessing" what should be there and generating matching content. It is commonly used to remove unwanted objects, restore damaged photos, or apply creative edits.

## Preparation for teachers

This guide walks you through a process in which students will design proposals to improve areas of their school environment. The first step is to photograph spaces that students perceive as problematic, uninviting, or in need of enhancement. These photos should be taken in the highest quality possible and with good lighting — making it a great opportunity to introduce basic photography concepts such as composition, lighting, and the rule of thirds. The goal of this activity is to encourage students to reflect on the spaces they walk through every day and to explore ways to improve or repurpose them. Students will then use the images in Canva, editing them to match their vision. If you'd like to expand this activity, you can include additional tasks, such as creating a website in Canva where students present their proposals to the whole school. Other students and teachers can vote on the designs, and if the school leadership supports the initiative, some proposals might even move toward real implementation. This material not only nurtures students' creativity and teamwork but also encourages meaningful engagement in shaping their learning environment.

### Registering your school with Canva

The school license offers the full version of Canva for free. It includes all the necessary features and allows teachers and students to collaborate in a shared environment. To start using it, you need to:

- + sign up at canva.com/education as a teacher (with a school email address).
- + fill in your school name to find it in the system (the Canva database includes all registered institutions). The approval of a school license may take some time, so we recommend registering through Google Workspace for a faster process.

### How to approach this methodology

Canva offers countless ways to use its features, but in this material, we focus mainly on tools that leverage generative artificial intelligence to create or edit content. The extent to which you choose to use the teaching material is up to you (you know your students best). You can try simple photo edits powered by AI, or dive into more complex projects, such as finishing a presentation or creating an entire website. To help you decide, we'll introduce Canva features that are relevant to this guide, including the estimated time each activity may take. The following pages break down the individual parts in detail.

### Notice

The availability and features of individual tools in the Canva application may change over time, and this guide may not always reflect the most up-to-date information. If you come across anything outdated, we'd really appreciate it if you let us know via email at eva@aidetem.cz. Thank you!



## Magic Studio

Magic Studio is the main tool we'll be using for photo editing. The Magic Studio menu appears when students select an image directly in the document. In the pop-up toolbar on the page, they need to click on Edit, which opens a side panel—Magic Studio is the first feature listed there. It offers six key features available with the teacher license, while five of them are accessible with the student license.



#### **Background Remover**

The Background Remover tool allows you to quickly remove the background from images. It works perfectly when the background is simple. For more complex patterns, it may occasionally leave behind unwanted elements, which you can further refine using advanced settings.



#### Magic Eraser

The Magic Eraser removes an object from the image and automatically fills in the background based on the surrounding area. The results are often not perfect, so we recommend using the Magic Grab tool instead in many cases.



#### **Grab Text**

If an image contains text, you can use this feature to turn it into an editable text layer. AI tries to recognize the font used in the image, though the results are not always fully accurate.



#### Magic Grab

With Magic Grab, you can select and "grab" an object from the image to turn it into a separate layer. This makes it easier to move or delete elements. Unlike Magic Eraser, this tool also regenerates the background more effectively.



### Magic Expand

Magic Expand lets you enlarge an image to a desired format (e.g., from square to rectangle), with AI automatically filling in the missing parts.



### **Magic Edit**

This feature lets you select part of an image (using a brush or a click) and replace it with another object or detail using text input (called a "prompt"). In student accounts, this feature is disabled by default. That's why it is only available in teacher Canva accounts.

#### Advanced features in Magic Studio

When editing images and photos, you can also make use of additional apps available within the Magic Studio environment. These apps appear in the same panel as the main Magic Studio tools, allowing students to explore them independently, discover which ones they find useful, and incorporate them into their work. For the purposes of this teaching material, we recommend several features that we find particularly interesting. We also highlight one additional feature that is only available with the teacher license, but which can significantly enrich this project.

## Other generative functions

### Magic Media

The Magic Media feature allows you to generate your own image, graphic, or short video based on a text prompt. You can also set the style of the image (e.g. realistic, sketch, or artistic) and choose the format. Generation is limited by credits, but the default amount is usually sufficient.

### Magic Write

Magic Write in Canva is used for text generation. You'll find it in the text box menu when editing text in a document. Magic Write offers pre-set tools for working with text. If students want to use Magic Write (those with student accounts), the function must be enabled by the school's Canva admin.

It's great for quickly drafting outlines, brainstorming ideas for projects, or improving texts for presentations.

### Dream Lab

The Dream Lab tool enables advanced image generation based on a given prompt. If it's available in your Canva environment, you'll find it in the left panel under the Apps icon. The tool can generate images in various formats and styles. You can also upload your own image and Dream Lab will create a new version in a similar style.

Unlike Magic Media, you can view the history of your generated images and edit them further using Magic Studio features.

### **Automatic Text Translation**

Canva offers a great feature for translating any document with just one click. If you have a document created in English and want to convert it into Spanish or another language, go to the appropriate document menu, select Resize from the drop-down, and then choose Translate.

In our experience, the translations (English-Spanish) are of good quality, though they may need to be fine-tuned for style or clarity.

### Video Captions

Canva offers automatic transcription and subtitle editing for videos. After inserting a video, simply use the Generate Subtitles option found in the main menu under the Apps section. This tool creates a text transcription from the audio, which you can easily edit directly in the editor.

The text is fully synchronized with the video as a text layer. You can also adjust how the subtitles look—change the font, color, or placement.

### Apps that extend Canva's functionality

Canva collaborates with many third-party developers, allowing you to add various apps to Canva that provide features not available in the standard version. You can browse available apps at: <a href="mailto:canva.com/apps">canva.com/apps</a>.

### Formats in Canva

### Interactive Presentation

Presentations are one of the basic formats in Canva. In our activity, students use them at the end to present their More Beautiful School project. You can show them how interactivity works during a presentation. These are interactive sessions where the audience can comment or respond using their mobile devices. There's also the option of advanced controls, including presenting directly from a smartphone.

### Whiteboard

Canva offers a Whiteboard format, which acts as an infinite canvas for adding images, videos, animations, text, music, and other media. Students can use the whiteboard throughout the More Beautiful School project. It's not only an ideal space for presenting ideas, but also an excellent collaborative tool for teaching.

### Website

Canva allows you to easily create and publish websites without any coding skills. Choose a website template or start with a blank canvas. Adjust the design to your needs—add text, images, videos, and interactive elements. Once your site is ready, click Share and choose Publish as Website. You can publish it for free using a Canva-generated URL (link), or purchase a custom domain. After publishing, you'll receive a link that can be shared with others.

### Video

You can easily present your project outcomes in the form of a video, which can be created and edited directly within Canva. A variety of video formats are available, and with the school license, you get access to an extensive media library — from music and short clips to visual effects. Video editing in Canva is very intuitive and suitable for beginners. However, it lacks more advanced features for complex editing or working with sophisticated effects. A particularly helpful feature is the ability to generate subtitles, which can be easily edited and translated.

## Activity workflow



Beautiful Learning Template

## The entire project journey for you and your students is guided by the Beautiful Learning Whiteboard.

To begin preparing the project, first download the whiteboard file we created in Canva. You can copy the template from this link: <a href="mailto:bit.ly/beautiful\_learning\_template">bit.ly/beautiful\_learning\_template</a>. Please feel free to customize or edit the whiteboard to suit your needs.

The whiteboard serves as a collaborative space where all students join and work together to go through the individual phases of the project. Share the whiteboard with students at the beginning of the project. Important: Do not send them our template link — always send them the downloaded (and possibly edited) file. Many objects on the board are locked to prevent accidental changes. To unlock an object, click on it and then on the padlock icon.

#### Project structure - navigating the whiteboard

Below, you'll find a step-by-step breakdown of the project. Each step corresponds to a numbered section on the whiteboard, where a specific project activity takes place. The whiteboard is not only a collaborative space for students and teachers but also a central hub where all project resources can be found.

- 1. Basic project information, including a central media library
- 2. Project timeline and milestones
- 3. Research on the school environment
- 4. Documentation using mobile devices or tablets
- 5. Work with the whiteboard
- 6. Photo editing
- 7. creation
- 8. Final presentation



#### Basic orientation in Canva

**Explain to students that the central workspace will be the Beautiful Learning whiteboard**, and you'll be moving through the different activity stations together. At station one, in the section called "Totally Basic Tips", you'll find useful advice for using the whiteboard, placing images, and working with various objects. You can go through the tips together and let students try them out immediately.



### Project overview

### Explain to students how the project will unfold.

Don't run the activities just yet - this station is only to inform them about what's coming next.



### Ideas for places that deserve improvement

**Students work independently at station three and write down places** they believe could be improved – one idea per sticky note (including optional comments).

#### You can guide this activity with the following questions:

If you could improve one spot at school, what would it be?

Is there anything you don't like in this area or something that could be used in a better way?

What would this place look like if you could redesign it based on your imagination?

Do you think changing this spot would benefit other students too? If yes, how?



### Selecting and photographing relevant places

### Students divide into groups based on the place at school they chose to improve.

Each group should photograph their selected location so they can later work with the images. The photo session should be organized in agreement with the students. We recommend setting ground rules together in advance to ensure smooth and safe movement around the school.

Before taking any photos, go over the basic principles of good photography so students don't have to return to the location due to unusable or poor-quality shots. Here are a few key tips:

**Composition:** Think about what should be the main subject of the photo. Make sure the photo includes even the empty space that might be changed.

**Lighting:** The best photos are taken in natural daylight. If there's not enough daylight, make sure the area is well lit with artificial light.

Angle: Experiment with different angles - for example, shoot from above, below, or ground level.

Clutter: Ensure the photo isn't filled with mess or distracting objects that could take focus away.

**Sharpness:** Make sure the images are clear and not blurry. Holding the phone steady is key to taking good photos.

**Quantity:** Take several photos from different angles and distances so you won't need to revisit the location later.



### Uploading photos to Canva

The easiest way for students to upload photos to Canva is by using the Uploaded Images button (the cloud icon with an arrow in the left bar). If you are uploading photos in bulk, you can create a shared folder on Google Drive or Dropbox. Alternatively, students can upload photos to a pre-created album on Google Photos.





### Editing photos using Magic Studio features

Students copy the selected photo they want to edit from the previous frame.

### Magic Edit

If students want to add new objects to their photos and don't find a suitable image or graphic in the Elements section, they can use the Magic Edit feature to insert objects into the photo using a text prompt.

This feature is also available in student accounts, but it must first be enabled in the Canva admin settings.



### Voting

Students/groups now copy their final edited photos into the designated boxes at station seven. Each box is for one group or student. Add your name or your group's name and duplicate the photo (Ctrl+D).

Then, all students vote. Each student can give a total of five votes to the ideas they would most like to see implemented — considering both their appeal and feasibility.



**Note:** The voting station is an effective tool only if there is a real chance that one of the suggested improvements will be implemented at school as part of the project. If you're not planning to carry out any changes, we recommend removing the voting station from the board. Otherwise, it may lose its meaning and some students might feel disappointed if their idea doesn't get enough votes.



### Creating the presentation

Based on the voting results, students select a few ideas to develop into a presentation. We've prepared a template they can use as a starting point. The link is also available on the whiteboard at station eight (in the colored box): <a href="mailto:bit.ly/beautiful\_learning\_template">bit.ly/beautiful\_learning\_template</a>.

The presentation may include:

- + A description of the current state of the location
- + Photos of the site as it looks now
- + A description of the proposed change: a) why it should change, b) who would benefit from the change
- + A proposal of how the place could look after the improvement
- + A list of what would be needed for the transformation (materials, tools, etc.)
- + Where to source the materials/tools and how much it would cost
- + A timeline for implementing the changes

### Final reflection

Ask students how they felt about the activity, what potential they see in their proposals, and whether they would like to see them actually implemented. What further steps might be needed to make that happen (e.g. convincing the school leadership, involving classmates from other grades, etc.)?

### You can use some of the following reflective questions:

Which space or proposal caught your attention the most, and why? How would you personally like to contribute to making this change happen? What should be the next step, in your opinion, to make the proposal a reality? Which Canva features helped you the most with editing, and why? Was Canva easy for you to work with? What would make it even easier? Do you use Canva for any other projects or activities?

We're very curious to see what ideas the students came up with and how they got involved in the project. If your final outputs are in the form of a website, shared link, or any other shareable format, we'd love it if you could send them to us and share your work! We'll add them to a gallery linked from the methodology — a source of inspiration not just for students, but for you as well. You can send your links to: eva@aidetem.cz and bara@aidetem.cz. We look forward to seeing them!

