

## POSTERS OF THE FUTURE

Duration	Age	Difficulty
45 min	15-16	Low
#ART #COLORS		

## DESCRIPTION

Students, organized in mixed teams, will create a series of critical posters based on real data about social issues (such as climate change, gender equality, or digital consumption). They will use digital tools to design them, analyze information, and reflect on the power of art as a tool for social communication.

The activity combines digital art with research, technology, mathematics (data interpretation), and critical thinking. At the end, they will share their creations in a collaborative digital exhibition.

## KEY COMPETENCES (EU)

- Digital competence
- Cultural awareness and expression
- Science and technology competence
- Learning to learn
- Social and civic competence
- Gender equality and democratic participation

## ACTIVITY OBJECTIVES

List of objectives that the activity with its development intends to cover:

- **Critically analyze** real data on current issues.
- **Use digital tools** to create artistic posters.
- **Understand art as a vehicle** for social communication and cultural analysis.
- **Apply critical thinking and collaborative work** with a gender perspective.
- **Raise awareness and promote gender equality** through visual expression.



## MATERIALS



Optional:  
Computer +  
Internet access



Optional:  
Canva account



Continuous  
paper/Big papers  
for physical  
posters



School material  
for writing and  
decorating



Mobile phone or  
camera to take a  
picture of the  
poster

- Provided by students
- Provided by the teacher/institution
- Downloadable Elements

## PREVIOUS PREPARATION

- Divide students into mixed groups of 3–4 people, balancing gender and participation.
- Assign each group a theme (at least one group will work on gender equality).
- Distribute a comparative data table to each group.
- Watch introductory video: "Can a poster change the world?" (link provided by the teacher).
- Have at least one computer or mobile phone where they can test the colour adaptation of their posters

## CONTEXTUALIZATION AND ADAPTATION

Art has always been a tool for social critique. In the digital age, posters continue to be powerful visual expressions that combine graphics, slogans, and data to inspire, provoke, and educate. This project aims for students to understand that digital art can be a powerful form of analysis and social intervention, while also fostering digital competence, teamwork, critical thinking, and visual communication.

Additionally, the activity addresses the role of women and gender-diverse individuals in STEAM fields, promoting their visibility and leadership in creative development.

### GUIDING QUESTIONS:

- Can a poster be considered art?
- How can art help us understand social problems?
- What hidden messages are in the visuals we see every day?
- How is gender represented in public visual culture?



### Note for the teacher

Posters have served as powerful tools for social messaging since the late 19th century. With the invention of lithography in the 1790s and its refinement in the 19th century, posters became a popular medium for communication. By the early 20th century, they had evolved beyond commercial advertising to address political and social issues.

During World War I and II, governments widely used posters to boost morale, encourage enlistment, and promote war bonds. Iconic examples include the U.S. "Uncle Sam Wants You" and Britain's "Keep Calm and Carry On." These posters combined striking visuals with bold slogans to motivate the public.

The 1960s and 70s marked another surge, as posters became a central element of civil rights, anti-war, feminist, and environmental movements. Artists and activists used them to spread messages quickly and accessibly, often employing vivid colors and provocative imagery.

In the digital era, while traditional posters have somewhat declined, their visual language persists in social media campaigns, protests, and awareness efforts worldwide. The poster remains a symbol of grassroots activism and social expression.

Here are some specific historic examples of social posters that have had a lasting impact:

**"We Can Do It!"** (1943, USA): often called the Rosie the Riveter poster, created by J. Howard Miller to inspire American women to join the workforce during World War II.



**"Keep Calm and Carry On"** (1939, UK): produced by the British government at the start of World War II to raise public morale in case of a German invasion. It became a global cultural icon decades later.

**"El Pueblo Unido Jamás Será Vencido"** (1970s, Chile): used by Chilean social movements and later worldwide, this slogan and its accompanying posters became emblematic of resistance against dictatorship.



**"Make Love Not War"** (1960s, USA): a rallying cry of the anti-Vietnam War movement, often featured in psychedelic and pop-art style posters.



**Environmental Posters** (1970s onward, global): organizations like Greenpeace and WWF have used bold posters to raise awareness of environmental issues, from whaling to deforestation



Art is a powerful tool to express social issues, but sometimes even well-intentioned messages can unintentionally **exclude** part of the population. This reflective appendix challenges students to critically analyze the accessibility of their own creations, focusing on how **color vision deficiency** (commonly called **color blindness**) may affect the interpretation of their posters.

Watch video 🧠 - “How COLOR VISION Works (Types of Color Blindness, Genetics & Disease)”

<https://www.youtube.com/watch?v=bZgzWeiNqmQ>

Watch video 🧠 - “What It's Like To Be Color Blind”

[https://www.youtube.com/watch?v=FKSOe5NK\\_qQ](https://www.youtube.com/watch?v=FKSOe5NK_qQ)

In the following image, you can see how the logo of a well-known soda brand appears under different types of color blindness.



For example in the next image, you may see a set of colors that are recommended to avoid when designing posters or visual materials. These colors can pose challenges for individuals with color vision deficiencies, making the content harder to interpret.



Source:

<https://www.animateyour.science/post/how-to-design-a-colour-blind-friendly-scientific-poster>



The core idea of this activity is for students to work in groups to create a poster addressing one of the proposed social topics from the session, with a particular emphasis on color accessibility and inclusion.

Once the posters are completed, students will take a photo of their work and use a color blindness simulator tool to observe how their poster appears to individuals with various types of color vision impairments. This reflection will help them understand the importance of accessible design.

Optionally, as an extension of the activity, students may choose to add digital media elements to their posters. For example, after scanning the physical poster, they could integrate a short video or animation using platforms like Canva. These additions are not mandatory and can be done at a later time, outside of the classroom session.

## ACTIVITY

1. **Research:** Each group analyzes the assigned data set, identifying key figures, patterns, and issues. A specific focus is placed on how gender inequality or representation appears within the data. Students use the provided comparative tables to examine trends.

### Note for the teacher

This is an example of possible items to include in a table to analyze different data to be included in the posters

- **General topic:** the broader area or issue (e.g., gender, environment, digital habits).
- **Specific indicator:** the concrete data point being compared (e.g., gender pay gap, CO<sub>2</sub> levels).
- **Data source:** organization or entity that published the data.
- **Year of data:** year or time period of the data.
- **Country or region:** geographic context.
- **Numerical value:** quantitative data expressed in % or units.
- **Graph available:** is there a visual representation? (Yes/No) or insert a mini graph.
- **Interpretation:** what does the data say? What does it reveal? Why is it important?
- **Visual impact potential:** how could it be powerfully represented in a poster?

Example:

- General topic: Gender and STEAM
- Specific indicator: % of women in engineering programs
- Data Source: UNESCO
- Year: 2021
- Country: Spain
- Numerical value: 25%
- Graph available: yes
- Interpretation: low female presence in engineering
- Visual impact potential: human icons visual comparison.



## ACTIVITY

1. **Discussion and reflection:** Guided by a reflection template, groups discuss which pieces of data impacted them most and why. They explore how visual design can highlight or distort meaning and begin brainstorming central messages.
2. **Sketching and Storyboarding:** Each group drafts several visual ideas for their poster. They decide on layout, visual elements (color, fonts, images), and the message they want to express. The teacher should encourage them to ensure inclusivity and avoid stereotypes.
3. **Traditional media:** Participants will now begin sketching their poster on continuous paper or any large sheet. They should carefully consider their color choices based on the discussion and guidelines provided earlier in the "Contextualization and Adaptation" phase of this session. The goal is to visually communicate the selected social topic in a way that is clear and accessible.

To support their work, students may refer to the initial drafts they created earlier in the session, using them as a foundation for their final poster design.

Optionally—if the teacher plans to extend the activity beyond the allotted session time—students may leave a blank space within the physical poster. This reserved area can later be used to digitally insert an image, animation, or moving element such as a GIF. Tools like Canva or other image editing applications may be used to enhance the poster digitally at a later stage.

This optional digital integration is not part of the core activity and should be treated as a supplementary step, carried out after the main session if time and resources permit.

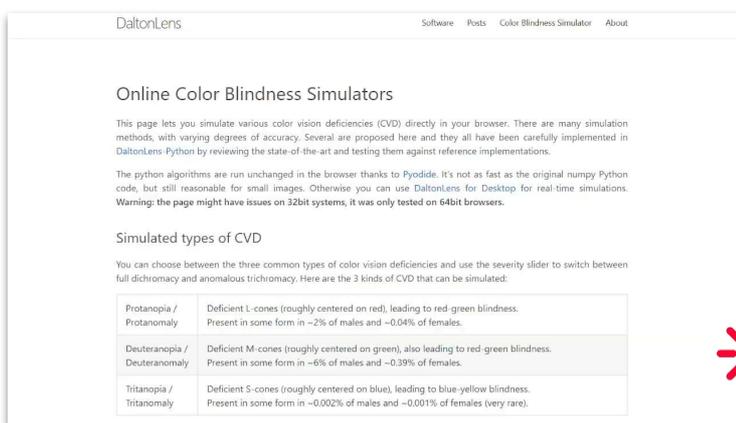
Next, is a reminder of how people with different colour vision detect color ranges to have into account while designing the more esthetic part of out poster:





1. **Testing colors of our poster:** Once the posters are complete, students will take a picture of their work. This can be done using the standard camera app on a mobile phone or, alternatively, with a scanning app that captures the image more clearly and with better alignment.

After capturing the image, students will upload it to a designated website that simulates how visual content is perceived by individuals with color vision deficiencies. This step will help students evaluate the accessibility of their posters and reflect on how inclusive their design choices are for people with visual impairments related to color perception. In the next video you may see an example of how to use the following page to achieve this:



**WEB FOR SIMULATION:**

[Online Color Blindness Simulator | DaltonLens](#)



2. **EXTENSION (OPTIONAL): Digital creation:** Students can upload their scanned poster into a digital design platform (like Canva or Adobe Express) to improve them. They integrate graphics, charts, headlines, and visuals in a clear, aesthetic, and impactful way. Attention is given to visual hierarchy and inclusive language.

**Peer Feedback and Iteration:** Groups swap their drafts with another team and complete a short peer review sheet, evaluating clarity, effectiveness, and respect for gender perspectives. Each group then improves their design accordingly.

**(OPTIONAL) Digital Exhibition:** Final posters are uploaded to a shared class gallery (Padlet, Google Slides, or similar). Each group presents their work briefly, explaining their visual decisions, message, and how their design addresses the issue.

These videos can serve as a tutorial for the teacher if they have never worked with Canva, helping them prepare for the activity and anticipate any possible questions from the students. They can also be used to project segments in the classroom as visual support.

Watch video 🎥 - “How to make posters for any occasion”

<https://www.youtube.com/watch?v=46HCRzfyZDA>

“How to make a poster in Canva (Step by step)”

<https://www.youtube.com/watch?v=2qAk9Xfv8zE&t=8s>



## CONCLUSION AND SHARING

- Final debate: "Art and social media: tools for awareness or misinformation?"
- Individual written reflection: "What did I learn about the power of art in society and its impact on gender equality?"
- Share on school networks using hashtags #PostersWithPurpose #GenderInSTEAM

### Final reflection questions

- What was the biggest challenge: analyzing the data or expressing it visually?
- Do you think your poster can impact others? Why?
- What other topic would you like to explore in this format?
- What role do women and gender-diverse people play in the visuals we see every day?

### Expansion options:

- Design a digital campaign using posters as the central tool.
- Integrate animation to create digital slideshows or short videos.
- Create posters that highlight women leaders in STEAM.

Don't forget to take a photo of your experience and share it with us!



[LinkedIn](#)



[Instagram](#)

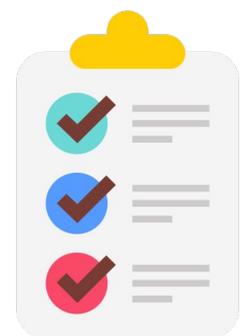


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## BIBLIOGRAPHY AND REFERENCES

How to design a colour blind-friendly scientific poster:

<https://www.animateyour.science/post/how-to-design-a-colour-blind-friendly-scientific-poster>





## PROJECT EVALUATION

Activity Objectives	Key Competences (EU)	Evaluation Criteria
Critically analyze real data on current issues.	Science and technology competence; Social and civic competence	The student interprets relevant quantitative data from reliable sources and explains its significance in the context of a social issue.
Use digital tools to create artistic posters.	Digital competence	The student effectively uses digital platforms (e.g., Canva) to design posters that integrate text, visuals, and data coherently.
Understand art as a vehicle for social communication and cultural analysis.	Cultural awareness and expression	The student reflects on the role of art in shaping public discourse and embeds meaningful symbolism into the poster's design.
Apply critical thinking and collaborative work with a gender perspective.	Learning to learn; Gender equality and democratic participation	The student participates actively in group discussions and incorporates gender-sensitive analysis and inclusive language in their design.
Raise awareness and promote gender equality through visual expression.	Social and civic competence; Gender equality and democratic participation	The poster clearly communicates a message related to gender equality, and the design choices avoid stereotypes and support inclusive representation.