TUTORIAL 06

Building Bridges Between Art and Science

TEACHER / YOUTH FACILITATOR RESOURCE • Ages 12–20 • Suggested session: 45–55 minutes

1. About the video

In this video, artist Roxana Alvarado explains the essence of Art and Science workshops: building bridges between a scientific concept and artistic forms, colours and expression. She encourages young people to rediscover creative freedom and reconnect with their sensitivity in a world she describes as increasingly rational and pragmatic. The activity below is a teaching extension, not a demonstration shown in the video.

2. Learning objectives

- Identify a scientific concept that could inspire an artistic creation.
- Explore how shapes and colours can communicate an idea or feeling.
- Create a personal artwork connecting a scientific reference with aesthetic choices.
- Express and respect different perspectives without expecting one correct artistic answer.

3. Key ideas

For Roxana Alvarado, the workshop connects two fields without treating them as identical: science provides a concept, while art draws on shapes, colours and human sensitivity. She argues for personal expression in response to what she sees as growing demands for rationality, including in the context of artificial intelligence. This is the artistic and educational viewpoint expressed in the video, not a scientifically demonstrated conclusion.

4. Suggested learning sequence

Stage	Time	Facilitator guidance
Watch and listen	5 min	Play the video. Ask learners to identify “bridges”, “scientific concept”, “shapes”, “colours” and “sensitivity”.
Choose an idea	10 min	In small groups, choose a simple scientific concept and note two verifiable features. Imagine shapes or colours that might evoke it.
Create freely	20 min	Make a visual composition linking the chosen concept to personal expression. Encourage experimentation without imposing a model.
Share and discuss	10–15 min	Present the concept and the choice of shapes and colours; discuss what the artwork expresses beyond scientific facts.

5. Materials

Video playback device; A3 or A4 paper, paint or markers, brushes, glue and coloured paper; prompts featuring simple scientific concepts (water cycle, cells, gravity, waves). Adapt materials to the group.

6. Questions for discussion

- How can a scientific concept become shapes or colours?
- Must an artwork depict science literally to be connected to it?
- What do your colour choices express that words might not?
- How can scientific activities make room for personal sensitivity?

7. Assessment and follow-up

Each group or learner presents their starting concept and two artistic choices. Assess whether they can explain the connection between science and art, distinguish scientific ideas from interpretation, and listen to others. As a follow-up, organise an exhibition with short scientific and artistic captions.

8. Accessibility and adaptation

Offer several modes of expression (drawing, collage, painting, sculpture or speaking). Do not grade artistic talent. Provide concept examples and a simple vocabulary list (shape, colour, material, concept, sensitivity). Allow individual or group work.

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