EARTHWORKS

Artistic creations connect deeply to the physical world. Our earth provides more than inspiration: it also provides the resources and tools we use to make art. As the world changes, impacted by human-caused climate change, so does art. FirstWorks’ EARTHWORKS theme, developed in consultation with scientists and science teachers, explores how art engages with essential questions around climate change, sustainability, civic responsibility, and environmental rights.

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At FirstWorks, our arts education programs aim to help students succeed in school, life, and work. We combine the power of the arts with experiential learning serving both students, their families, and educators. Reaching diverse neighborhoods and under-resourced districts, our education programs provide access to performing arts experiences from around the world. Find out more at: firstworks.org/learn
About this Lesson Plan

The following pages offer a framework that educators may use to construct arts-integrated lesson plans, using videos from FirstWorks’ Virtual Learning Series. Bloom’s Taxonomy, a hierarchal classification model that differentiates levels of thinking and assessment, informs its format. To customize a lesson plan for your students and curriculum, we provide adaptable objectives and discussion questions, suggestions for integrating art into your curriculum, advice for accommodating student needs, and an extensive list of applicable RI Core Standards.

**EarthWorks**

In this theme, students employ critical thinking skills to apply an intersectional understanding of scientific studies. The arts help to share knowledge and history about the environment, climate change, and other aspects of environmental justice—analyzed through artists’ lived experiences and creations. EarthWorks encourages analyzing and using creative expressions, beyond the art itself, to inspire and empower students to investigate the following questions:

- How do natural resources impact available resources to create art?
- How can landscapes and soundscapes affect the way that we create art?
- How does art serve as a text to understand climate change over time?
- How does art serve as a text to understand different environments?
- What makes art an effective tool to advocate for environmental justice?
- How can we create art in environmentally sustainable ways?

**FirstWorks’ Arts Integration**

FirstWorks advocates for arts-integrated education, defined by the Kennedy Center as “an approach to teaching in which students construct and demonstrate understanding through an art form. Students engage in a creative process which connects an art form and another subject and meets evolving objectives in both.” Students introduced to various artistic mediums, careers, and artists have an opportunity to think critically about how to use creativity in many disciplines while developing their interpersonal and professional skills.

FirstWorks creates new ways for Rhode Island educators to bring accessible arts-integrated education to their students. We provide informative descriptions, videos, and adaptable lesson plans for schools, teachers, and parents, to use in the classroom or online. Our content uses RI Core Standards to integrate arts into academic areas such as English Language Arts (ELA), sciences, social studies, and STEAM-focused learning.

**Additional Tips**

We encourage using FirstWorks’ Virtual Learning Series in conjunction with this lesson plan, but more importantly, we encourage arts-integrated education. Feel free to adapt this lesson plan to incorporate any form of relevant art into your curriculum. Our education team is excited to support you! Please contact us for any help you may need.

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Objectives

Mix and match these objectives to meet student and curricular needs. They provide you with a starting point for creating more specific goals. Each numbered objective reflects an increasing level of cognitive skills.

1. **Comprehension**
   Students will be able to:
   - **Define | Identify | Explain** artists and describe the type of art they create.
   - **Observe | Recognize | Summarize** the context and purpose of the general art and/or specific work.
   - **Tell | Discuss | Give Examples | Interpret | Outline** how the artist communicates about the environment and/or climate justice through their work.
   - **Relate | Match | Translate** the art with other classroom topics.

2. **Application**
   Students will be able to:
   - **Identify** how art is used and **Interpret | Apply | Make Connections** in a variety of ways to show understanding of new topics.
   - **Employ | Implement | Perform** an artistic medium to demonstrate understanding.
   - **Apply | Associate | Connect | Model | Use** the art with other classroom topics.

3. **Analysis**
   Students will be able to:
   - **Analyze | Examine | Distinguish | Research | Investigate** what an artist aims to communicate. What issues are highlighted? Why might they have chosen these topics?
   - **Break down | Highlight | Question | Research** how the arts show different perspectives and relationship(s)/experiences with the natural world.
   - **Analyze | Discuss** how art can increase understanding of scientific and social truths.
   - **Analyze | Discuss | Distinguish | Inspect** how environmental justice is intersectional and connects with other subjects.
   - **Consider** the arts’ power to transcend time and space, and what role(s) they could play in transforming current and future climate realities.

4. **Synthesis**
   Students will be able to:
   - **Construct | Create | Design | Develop | Produce** artwork based on **Knowledge | Comprehension | Analysis** of topics such as climate science/mitigation, social and environmental health/transformation, ecological relationships, land stewardship, etc.
   - **Use art to Assess | Criticize | Debate | Explain | Interpret | Measure** topic(s).
   - **Use art to Argue | Convince | Defend | Disprove | Influence | Justify | Persuade | Support** topic(s).
Mix and match these questions to create impactful discussions related to the videos from our Virtual Learning Series. The questions corresponding to each objective are designed to prompt discussion about voice, followed by opportunities to react and relate to a video according to the different cognitive goals or abilities of your students.

**Knowledge & Comprehension**

- **What do you know about this artist** (i.e. their perspective, context, background, experiences)?
- **Describe the medium(s) and/or materials this artist uses.** Why might they have chosen this type of art-making? Think about the cultural and environmental contexts and how they reflect one another.
- **What message(s) is the artist trying to communicate?** In what ways are they connecting aspects of community, the environment, and justice? What might be the artist’s goal?
- **How does this art connect to:**
  - the broader social context/speak to the times?
  - scientific truths?
  - historical trends/systematic oppression/movements for liberation?

**Application**

- **What context(s) was this art intended for?** Who is the “audience?”
- **Explore creative practice** using similar mediums for expressions of student choice.
- **In what other subjects** can we use this creative method to communicate meaning/show understanding?

**Analysis**

- **Whose story (stories) are being told through this art?** While climate change affects everyone, who or what is at stake first, here?
- **Is the artist communicating about the past, present, or future?**

**Synthesis & Evaluation**

- **Have you seen data** around the air, water, and infrastructure quality in your school/neighborhood/town or city? If so, is it easily accessible information? If not, how could access to information be improved through art?
- **If there is not enough information available, could you conduct a citizen science project** to gather and later share information through creative means?

Pair these Synthesis and Evaluation questions with the following section on integrating arts into your classroom!
Questions for Further Reflection

On Creative Practice

• In what ways do you currently practice creativity alone? How do you share creative experiences with others? What are the pros and cons of both options?
• In what ways can your art-making process be more environmentally friendly?

Reflecting on Relationships with/Access to Nature

• How do you already engage with nature? This can be as basic as a walk outside.
• What are some natural systems you are already connected with/depend on? How so?
• What are some natural elements or systems that you feel disconnected from? How so?
• Who gets to experience/enjoy nature? What are some obstacles or barriers that get in the way of people’s joy/engagement in the natural world?
• How can art & nature connect support mindfulness and mental health, especially when thinking about climate realities?
• In what ways might your students experience environmental inequities and/or environmental racism?
• How can this inform your sensitivity to and teaching of related topics?

On Land, Stewardship, and Responsibility/Identifying Roots of Climate Injustices

• What Indigenous groups live/lived on the land your school and/or greater community occupies?
• Considering how Indigenous people make up only 5% of the global population, but steward 80% of the planet’s biodiversity—what can we learn from Indigenous ways of being to protect our ecosystems and natural resources—and therefore one another’s health?
• Beyond individual responsibility, analyze what systems, practices, countries, and companies are responsible for the vast majority of the climate crisis. How can art powerfully communicate and/or respond to these truths?

On Hope & Inspiration for Transformation

• What inspires you/gives you hope people can manifest a more stable and healthy environmental future?
• How has art (i.e. graphic design, art via social media, posters/fliers, photography, film, music) influenced environmental movements (awareness, defense, legislation)?
• Where are specific roles the arts already play in environmental movements?
• How can art transform our thinking? Our ways of being? Our collective future?
• What are some local, national, or global groups you and your students can connect with to learn more about the environment and/or take collective action for a more sustainable future?
Synthesis

Integrating the arts into your lesson plans is a powerful tool for engaging students. FirstWorks’ Virtual Learning Series demonstrates how artists use art to understand and interact with the world around them, and provides a model for how your students can do the same in your classroom.

Everyone is an Artist

We may not all teach art or think of ourselves as an artist, but we all engage with art daily. Sound, movement, theatre, and writing are all part of our lived experience. In our daily practices, we are creative individuals who constantly make decisions that professional artists—musicians, dancers, and actors—also make. We decide where we put the couch, our favorite plant, or what color to paint the accent wall in our living room so it feels tranquil. We create playlists to set the right mood and tempo to energize our workouts. On tough days, we act as energized and engaged teachers to continue inspiring and our students and to make learning fun. We are all artists.

As you view a Virtual Learning Series video with your students, focus on how the artist uses their medium to share an idea. How can you take a similar approach in your curriculum? Focus on the artist’s voice. Use discussion questions to explore how the context of their lived experience shapes their voice and, in turn, how they share their voice through art. Let it serve as a form of inspiration for arts integration. Encourage your students to take a similar approach—to use art as a tool in expressing their comprehension, application, analysis, synthesis, and evaluation of a topic. Consider how you and your students can use familiar and comfortable skills so that art functions as a helpful tool for delving into a topic, rather than an end in itself.

Using Art in an Accessible Way

- Consider available resources. Use what you and your students can gather.
- Allow students to use different forms of artistic expression, ones which make them feel comfortable and confident.
- Participate in art-making with your students to share how you would approach an arts-integrated project.
- Don’t evaluate based on perfection or technical skills, but assess how the content and depth of students’ artwork reflects their understanding of your curriculum.
- Consider interdisciplinary partnerships with teachers to explore ways in which your curricula might align (for example, between an art and a social studies teacher).

The goal is for students to come to understand art as more than just a creative outlet. It is also as an accessible way to make sense of the world around them. Often, this can provide equitable, inclusive, and diverse pathways, not just towards becoming a creative individual, but to the many creative ways they can understand, be part of, and contribute to society. Remind students that they are intersectional individuals who come from an endless combination of backgrounds and experiences that influence who they are, their voices, and how they share and interact with others.
Accommodation for different student needs

A considerable component of art-making is that there are many ways to do something, and that no one way is wrong. Integrating arts into your classroom can increase a topic’s accessibility for a range of learners. By offering multiple means of representation, expression, and engagement, it can allow for accommodations for students with disabilities, talented or gifted students, or for English language learners—i.e. a Universal Design for Learning* approach to teaching.

For Students with Disabilities

• Students with disabilities may benefit from the flexibility to choose the artistic mediums they’re most comfortable with or which present an appropriate challenge.

• Personal connections to nature, the surrounding environment, and concrete focus areas may help ignite student engagement and understanding.

• Choices to work individually or in groups is another way to differentiate. Working in groups may help students break down more significant ideas into smaller, more manageable tasks. From there, students can work individually within a specific art form, or agree on one together, and contribute to a collage that addresses the overall topic.

• Consider an intersectional analysis of accessibility for students with physical disabilities and how this relates to voice. What are some ways creative thinking can increase accessibility?

• Consider visits to different environments beyond the classroom. How might you bring tangible experiences into your class?

For English Language Learners

• Consider how the arts have a unique power to transcend language to communicate complex information, ideas, and moods.

• Encourage students to share stories that are significant to them, their families, their community, and the various art forms that inspire them. Linguistic affinity groups, and encouragement to engage in whatever language students feel most comfortable with, can be a great place to start.

• Remind students that speaking other languages is an asset, not a shortcoming. Doing that encourages a more holistic, global perspective, essential for understanding and aiding one another, and the complex issues we face, on this singular, shared planet.

• How do musical, theatrical, and/or culinary arts, for example, connect with the natural environment of students’ local communities or communities in other parts of the country or world? How are the seasons different in different parts of the world? How does this reflect or impact art/art making?

• Are there environmental activists and/or creative resources available in students’ native languages to deepen understanding? Are there artists you can bring into the classroom, or otherwise connect students to, that reflect their cultural heritage?

UNIVERSAL DESIGN FOR LEARNING (UDL)

A set of principles that guide teachers in meeting the diverse needs of all learners, including:

• Multiple means of representation to give learners various ways of acquiring information and knowledge;

• Multiple means of expression to provide learners alternatives for demonstrating what they know;

• Multiple means of engagement to tap into learners’ interests, offer appropriate challenges, and increase motivation.

For Students who Could Benefit from Additional Challenges

- Some students may benefit from the added challenge of identifying topics of choice to research, comparing and contrasting how different art forms communicate about the same subject, or collaborate to create in-school or community-based solutions for increased environmental health and/or sustainability.

- Is there another classroom teacher who is interested in collaborating for a more in-depth, intersectional approach environmental learning?

- Can students interview and/or work with community members (i.e. Elders in the community who can speak to how the land has transformed over time; Leaders who are involved in environmental justice campaigns)?

- Is there a broader activist community students can engage with on social media? Are there specific grants, competitions, or residencies gifted students can apply for around environmental messaging/art projects?

- Consider long-form projects that grow from identifying target issues to taking action, using one or more art forms.

Protecting the Mental Health of all Learners

Consider art as therapy to aid processing traumatic climate realities. While matters are urgent for the world as a whole to address—this does not have to be the case for your classroom. Taking a deliberately calm and caring approach, prioritizing students’ connections with, and perhaps reconnections with the healing powers, beauty, and wonders of nature will only benefit your students’ mental health. This will not only have a positive impact on them socially and emotionally, but also academically and existentially as they grow more connected and invested in our natural world.

So often students are pressured to come up with solutions to environmental problems they’ve inherited. For many of the systemic issues faced, solutions already exist. Learn about them and uplift them through art. No one likes to be rushed through creative practice! A slow, mindful approach to art-making will better serve your students’ mental health while deepening their understanding of the subjects at hand.
Applicable Academic Standards

Common Core Standard
- CCSS.ELA-LITERACY.CCRA.SL.1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.
- CCSS.ELA-LITERACY.CCRA.SL.2: Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
- CCSS.ELA-WRITING.CCRA.RBP.7: Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

Music Standards
- Anchor Standard 4: Select, analyze, and interpret artistic work for presentation.
- Enduring Understanding: Analyzing creator’s context and how they manipulate elements of music provides insight into their intent and informs performance.
  - Explain how context (such as social, cultural, and historical) informs performances.
  - Identify how cultural and historical context informs performances.
  - Identify how cultural and historical context informs performances and result in different musical interpretations.
- MU:Cr1.1.C.Ia.9-12: Describe how sounds and short musical ideas can be used to represent personal experiences, moods, visual images, and/or storylines.
- MU:Re7.2.C.Ia.9-12: Analyze aurally the elements of music (including form) of musical works, relating them to style, mood, and context, and describe how the analysis provides models for personal growth as composer, performer, and/or listener.
- MU:Re8.1.C.Ia.9-12: Develop and explain interpretations of varied works, demonstrating an understanding of the composer’s intent by citing technical and expressive aspects as well as the style/genre of each work.
- MU:Cn11.00.2a-6a: Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.

Visual Art
- Anchor Standard 1: Generate and conceptualize artistic ideas and work.
- Enduring Understanding: Creativity and innovative thinking are essential life skills that can be developed.
  - Combine concepts collaboratively to generate innovative ideas for creating art.
  - Formulate an artistic investigation of personally relevant content for creating art.
- VA:Cr1.1.Ia: Use multiple approaches to begin creative endeavors.
- VA:Cr1.1.5a: Combine ideas to generate an innovative idea for art-making.
- VA:Cr2.1.8a: Demonstrate willingness to experiment, innovate, and take risks to pursue ideas, forms, and meanings that emerge in the process of art-making or designing.
- VA:Cr2.3.2a: Repurpose objects to make something new.
- VA:Cn11.1.5a: Identify how art is used to inform or change beliefs, values, or behaviors of an individual or society.
- VA:Cr2.3.3a: Individually or collaboratively construct representations, diagrams, or maps of places that are part of everyday life.
- VA:Cr2.3.4a: Document, describe, and represent regional constructed environments.
- VA:Cr2.3.5a: Identify, describe, and visually document places and/or objects of personal significance.
- VA:Cr2.3.6a: Design or redesign objects, places, or systems that meet the identified needs of diverse users.
- VA:Cr3.1.Iia.9-12: Engage in constructive critique with peers, then reflect on, re-engage, revise and refine works of art and design in response to personal artistic vision.

Theater Arts Standards
- TH:Pr5.1.5.b: Demonstrate the use of technical elements in a drama/theatre work.
- TH:Pr6.1.5.a: Present drama/theatre work informally to an audience.
- TH:Cn11.1.5a: Investigate historical, global and social issues expressed in drama/theatre work.

Next Generation Science Standards
- K-2-ETS1-2 Engineering Design: Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.
- MS-ETS1-4 Engineering Design: Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.
- MS-ESS3-5: Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past centuries.
- HS-ESS3-5 ESS3.3.D: Analyze geoscience data and the results from global climate models to make evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth.
- HS-ETS1-1 ETS1.A: Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.
• K-ESS3-2: Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

• K-ESS3-3: Communicates solutions that will reduce the (negative impact) of humans on the land, water, air, and/or other living things in the local environment.

• K-ESS2-2: Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.

• KLS1-1: Use observations to describe patterns of what plants and animals (including humans) need to survive.

Civics and Social Sciences

• C&G 4 (9-12) 2d: Students demonstrate an understanding of the democratic values and principles underlying the US government by discussing different historical understandings/perspectives of democracy.

• C&G 3 (9-12) 1b: Students demonstrate an understanding of citizens’ rights and responsibilities by comparing and contrasting human rights provided for in various seminal documents or materials.

• C&G 2 (9-12) 2b: Students demonstrate an understanding of how individuals and groups exercise (or are denied) their rights and responsibilities by accessing the political system (e.g. letter writing, petitioning).

• C&G 4 (5-6) 2a: Students demonstrate their participation in political processes by using a variety of sources to form, substantiate, and communicate an opinion and presenting their opinion to an audience beyond the classroom.

• C&G 4 (7-8) 2a: Students demonstrate their participation in political processes by expressing and defending an informed opinion and presenting their opinion to an audience beyond the classroom.

• C&G 4 (9-12) 2a: Students demonstrate their participation in political processes by using collaborative decision making/problem solving to consider multiple perspectives on a current political, social, or economic issue, evaluating the consequences of various options and developing a plan of action.

• C&G 4 (9-12) 2b: Students demonstrate their participation in political processes by working individually or with others to identify, propose, and carry out a community/civic engagement project/initiative.

• HP 1 (9-12) 2b: Students interpret history as a series of connected events with multiple cause-effect relationships by interpreting and constructing visual data in order to explain historical continuity and change.

• HP 2 (EXT) 1a: Students connect the past with the present by tracing and analyzing how a present situation or problem has been constructed/affected by its historical roots.

• HP 2 (9-12) 2a: Students chronicle events and conditions by creating narratives based on a particular historical point of view.

• HP 5 (EXT) 1b: Students demonstrate an understanding that a variety of factors affect cultural diversity within a society by critiquing the role of demographic factors (e.g. ethnicity, class, gender) in creating cultural diversity at a variety of scales (e.g. neighborhood, country).

• HP 5 (EXT) 3a: Various perspectives have led individuals and/or groups to interpret events or phenomena differently and with historical consequences by comparing and contrasting the distinct historical narratives of the same events and determining how the narratives impacted social events.

• G1 (9-12) 2b: Students interpret the characteristics and features of maps by integrating visual information from maps with other sources to form a coherent understanding of an idea or event.

English Language Arts (ELA)

• CCSS.ELA-LITERACY.RI.2.8: Identify the main purpose of a text, including what the author wants to answer, explain, or describe.

• CCSS.ELA-LITERACY.RI.4.6: Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.

• CCSS.ELA-LITERACY.RI.5.3: Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

• CCSS.ELA-LITERACY.RI.6.6: Determine an author’s point of view or purpose in a text and explain how it is conveyed in the text.

• RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts.

RI-Social Emotional Learning (SEL)

• RI-3. Social Awareness: The ability to take the perspective of others and empathize with them, including those from diverse backgrounds and cultures, and to understand norms for behavior.

• RI-3B: Individual seeks to understand and demonstrates respect for individuals, including those with diverse backgrounds, cultures, abilities, languages, and identities.

• RI-3C: Individual demonstrates empathy for other people’s emotions and perspectives.

Social Studies

• G 2 (K-2) – 1a: Students understand the physical and human characteristics of places by identifying and describing natural/physical features (e.g., river, mountains, oceans, weather, climate).

• G 2 (3-4) – 1a: Students understand the physical and human characteristics of places by explaining ways in which geographic features determine how people live and work (e.g. living near the ocean gives opportunity to be fishermen or marine biologist).

• G 2 (5-6) – 1a: Students understand the physical and human characteristics of places by explaining and/or connecting how the geographical features influenced population settlement.

• G 2 (5-6) – 1b: Students understand the physical and human characteristics of places by comparing and contrasting patterns of population settlement based on climate and physical features.
• G 3 (5-6) – 1.a: Students understand why people do/do not migrate by identifying and explaining the push and pull factors that lead to a decision to migrate.

• HP 5 (7-8) – 1.a: Students demonstrate an understanding that a variety of factors affect cultural diversity within a society by identifying how movement (e.g., ideas, people, technology) impacts cultural diversity.

• HP 4 (9-12) – 1.a: Students demonstrate an understanding that geographic factors and shared past events affect human interactions and changes in civilizations by utilizing maps, graphs, and charts to draw conclusions on how societies historically were shaped and formalized.