

STEAM LESSON PLAN

Created by Joslyn Education Staff

Grade Level Middle school (adaptable for lower and higher grades)

THEME Controversy

INSPIRED BY Edgar Degas, *Little Dancer, Fourteen Years Old*

PROJECT TITLE: BUSY AS BEES

DRIVING QUESTION

How would the depletion of bees affect artists?

STUDENT LEARNING OBJECTIVES: Put these on the board or have students write them in a notebook/journal.

- I will **create** art inspired by Edgar Degas and dancers.
- I will learn about controversies surrounding "Little Dancer" and **respond** with thoughts.
- I will learn about infographics and **present** my research in one.
- I will **connect** with the past as we discuss Paris in Degas' time.

CONTENT STANDARDS

[NEBRASKA CONTENT AREA STANDARDS](#)

[IOWA CORE STANDARDS](#)



Edgar Degas (French, 1834–1917), *Little Dancer, Fourteen Years Old (La Petite Danseuse de quatorze ans)*, 1881, cast ca. 1920–21, plaster, 39 x 19 ½ x 20 in., Gift of M. Knoedler & Co., Inc., New York, 1971.271.a-b

THE FOUR C'S FOR STEAM CAREER READINESS SKILLS

- **Critical Thinking:** students will need to consider the idea of controversy and think about how it is woven into *Little Dancer*.
- **Creativity:** students will demonstrate their creativity from creating their artworks (including problem-solving) to presenting their honey bee research in an infographic.
- **Collaboration:** students will work together to learn how sculptors work with foundries to create their bronzes.
- **Communication:** students will share their research in a visually appealing manner by displaying their artworks and infographics created in this lesson. (Optional idea: work with a community organization like the Omaha Bee Club).

VOCABULARY: armature, beeswax, controversy, dancer, foundry, gesture drawings, honey bee, medium, plaster cast, sculpture

RESOURCES: [Degas Teaching Poster](#); [Degas Pinterest board](#); writing prompts (below); [Nelson Teacher Resource Center](#)

- Video – [“Little Dancer Aged Fourteen,” National Gallery of Art.](#)
- Video – [“How to Make Wire Armatures for Sculpture by Janice Tanton”](#)
 - Preview all videos before sharing with students.
- Website – [“Modeling Movement Degas's Dancers,” National Gallery of Art.](#)
- Website – [“Little Dancer Internal Construction,” National Gallery of Art.](#)
- Website – [The Story of Sculpture: From Clay to Bronze,” Sculptureworks.](#)
- Website – [“Sawdust Clay Recipe,” PAH.](#)
- Website – [“Bees Making Wax,” Beeswax Co., LLC.](#)
- Website – [“Nebraska State Symbols”, Nebraska Access](#) (Honey Bee is State Insect)
- Lesson – [“Infographics” for Language Arts, Grades 6-8, Creative Educator](#)
- Local – [Omaha Bee Club.](#)
- Writing – [“The Dancers and Degas,” The Metropolitan Museum of Art.](#)
- Article – [“Did Degas Make This Plaster? An Expert Now Says Yes,” William D. Cohan, The New York Times](#)
- Article – [“Buzz Over Bee Health: New Pesticide Studies Rev Up Controversy,” NPR.](#)
- Article – [“Honeybees: Humans Have Relied on Beeswax Since the Stone Age,” Nature World News.](#)
- 3D View – [“Little Dancer of Fourteen Years,” by Myo Studio](#); (Museum of Fine Arts, Boston)

SUGGESTED MATERIALS: newsprint, toned drawing paper, pastels, charcoals, pencils, pastels, images of Degas' artworks, period music, beeswax or examples of products that use beeswax

PROCEDURE

- **Engage:** Introduce students to Edgar Degas' *Little Dancer, Fourteen Years Old*, and ask them "what does the honey bee have to do with this artwork?" After some brainstorming, show them the video "Little Dancer Aged Fourteen," and share with them all of the different materials the artist used to create his sculpture, emphasizing pigmented beeswax.
- **Deliverables: Tell students they will...**
 - 1) practice creating gesture drawings.
 - 2) create a sculpture using similar techniques as Degas.
 - 3) develop an infographic to explain how beeswax is created or how it gets from bee to artist.
- **Art Talk:** Set the scene. Share Degas' story with students and give it context by also talking about what it was like to live in Paris during the high points of his career, mid-late-19th century. Describe how the Paris Salon worked and how radical the artworks on display at that Impressionist exhibitions were considered. But, then Degas exhibited his sculpture, "The Little Fourteen-Year-Old Dancer."

Ask students...

- 1) what do you think of this sculpture?
- 2) how do you think the public received it? (focus on the subject of the sculpture)
 - then show them typical Academic artworks including paintings in Joslyn's collection by Jean-Léon Gérôme, William-Adolphe Bouguereau, and Georges Rochegrosse.
 - tell them about how ballet dancers were viewed, especially young and inexperienced ones.
- 3) now considering those two aspects in late 19th century Paris, how do you think the public received Degas' "The Little Fourteen-Year-Old Dancer?"

- 4) to keep in mind this idea of controversy, and how it surrounds this famous sculpture from the subject to the medium. How many different controversies will we discover in this lesson? Encourage students to keep a journal to record their thoughts and sort through their findings.
- **Description of Activity:** Get to know the sculpture.
 - 1) Degas frequently sketched ballet dancers in class, rehearsals, and performances. Have students practice gesture drawings using pencil, charcoal, or pastels. To set the mood, students should research the music to play while drawing. Students may take turns posing, use images of dancers, or copy Degas' drawings. Remind students that it's not about capturing an identical likeness, rather the motion or feeling of the dancer. Refer to **Draw Like Degas** (below) for more details.
 - 2) As you prepare to shift to three dimensions, show students the 3D view of "Little Dancer of Fourteen Years" scanned from the sculpture in Boston MFA's collection. Students may view this sculpture from every angle and if your school has a 3D printer, download the file to print.
 - 3) When Degas created *Little Dancer*, he started with a framework. You can compare it to a skeleton. Share the x-ray scan and schematic diagram of the armature of the original wax figure.
 - 4) Provide students with armature wire to create their own framework. As you walk through creating the structure, compare it to parts of our skeleton. As students create their figure, have them refer to their sketches or images of dancers for ideas for poses. Have them physically recreate the pose to work through problems or understand the pose. Take the opportunity to discuss scale and proportion.
 - 5) You can have students use self-hardening clay or sawdust clay and wire mesh to build out the figure. Refer to the schematic diagram of the armature again, and provide students with additional materials (pine cones, rope, yarn, and more). The exterior of Degas' original sculpture is beeswax, however it may not be the most cost effective option, so you may want students to finish the clay exterior.
 - 6) While the sculptures dry, have students research how a plaster cast (Joslyn's *Little Dancer, Fourteen Years Old*) is created from a wax original. Then discover how a bronze cast is made from that plaster version. Have students work in small groups to research foundries and how the process has changed or not changed from when Degas' *Little Dancer* was cast 100 years ago.
 - 7) Beeswax. Why do you think Degas used that medium? Have students study how the honey bee produces the beeswax that artists use today. Students may choose to depict their understanding of the process of creating the beeswax or process from bee to artist, and they should create an infographic to share with the school.
 - 8) Study the controversy surrounding the depletion of bees. Consider working with the Omaha Bee Club to learn more about local beekeeping issues and promote positive bee advocacy in the community.
 - **Closing:** Have students curate an exhibition to share their drawings, sculptures, and infographics.
 - **Assessment:** Create a rubric appropriate for your grade level.

STEAM LESSON PLAN Joslyn Art Museum uses the Nebraska Department of Education's STEM Approach as a guide, but we took the liberty of adding the "**A**" to emphasize the **ARTS**.

NDE's STEM Approach reflects an integrated and interdisciplinary philosophy to teaching and learning that emphasizes collaborative school-based, work-based, family-based, and community-based experiences as a context for helping students to master key competencies within science, technology, engineering, and mathematics.

Teaching and learning resources, experiences, and example activities included within NDE's STEM Approach serve as a standards-based framework for supporting the engagement of students in hands-on, authentic, and contextual learning experiences that provide students with the opportunity to learn STEM content while promoting essential career readiness skills, including communication, creativity, collaboration, and critical thinking.

NDE's STEM Approach strives for compatibility with all content-areas, all grade levels, and all career clusters, not just those traditionally defined as STEM.