



Glass Gallery Unit Plan

Collaborating and Innovating Art and Exhibits

Students will explore how collaboration can aid innovation as they explore the medium of glass (using the substitute of candy or “sugar” glass) and curate an exhibit.

Intended Audience: 6th-8th Grade Art

Duration: Four 55-minute periods, plus one recommended field trip at outset

	Recommended Field Trip: Henry Ford Museum of American Innovation™	Lesson 1: Studio Glass and Collaboration	Lesson 2: Independent Studio Glass	Lesson 3: Curators and Exhibits Part 1	Lesson 4: Curators and Exhibits Part 2
Essential Question:	What innovations have there been in the field of studio glass?	How can we work together to create a sculpture?	How do I want to implement what I've learned about studio glass/candy glass/sugar glass?	How can I design a gallery that conveys a theme, works in my space and meets viewer's needs?	How can I design a gallery that conveys a theme, works in my space and meets viewer's needs?
Learning Outcome:	Students will analyze how glass art has changed over time through firsthand experience.	Students will collaboratively create a sculpture using an unfamiliar medium, addressing the theme of working together.	Students will work individually using the techniques and message of their choice and reflect upon their choices.	Students will collaboratively design a gallery that conveys a theme, deals with space constraints and meets viewer's needs.	Students will collaboratively design a gallery that conveys a theme, deals with space constraints and meets viewer's needs.
Standards:	VA:Cn11.1.6a Analyze how art reflects changing times, traditions, resources, and cultural uses.	VA:Cr1.2.8a Collaboratively shape an artistic investigation of an aspect of present-day life using a contemporary practice of art and design.	VA:Cn11.1.6a Analyze how art reflects changing times, traditions, resources, and cultural uses.	VA:Pr5.1.6a Individually or collaboratively, develop a visual plan for displaying works of art, analyzing exhibit space, the needs of the viewer, and the layout of the exhibit. VA:Pr5.1.8a Collaboratively prepare and present selected theme-based artwork for display, and formulate exhibition narratives for the viewer.	VA:Pr5.1.6a Individually or collaboratively, develop a visual plan for displaying works of art, analyzing exhibit space, the needs of the viewer, and the layout of the exhibit. VA:Pr5.1.7a Based on criteria, analyze and evaluate methods for preparing and presenting art. VA:Pr5.1.8a Collaboratively prepare and present selected theme-based artwork for display, and formulate exhibition narratives for the viewer.
Key Concepts:	Studio glass Artisan Artist	Collaboration Aesthetics Functional	Collaboration Aesthetics Functional	Gallery Exhibit flow Curator	Gallery Collecting Exhibit flow

Recommended Field Trip: Henry Ford Museum of American Innovation™	Lesson 1: Studio Glass and Collaboration	Lesson 2: Independent Studio Glass	Lesson 3: Curators and Exhibits Part 1	Lesson 4: Curators and Exhibits Part 2
1. Davidson-Gerson Modern Glass Gallery in Henry Ford Museum of American Innovation	1. Introducing Studio Glass	1. Review of Collaborative Pieces	1. Review Davidson-Gerson Modern Glass Gallery, Exhibits and Curators	1. Build Time
2. Other Art & Design Exhibitions in Henry Ford Museum of American Innovation	2. View Studio Glass Art	2. In Your Own Studio	2. Group Assignment	2. Gallery Visits
3. Check for Understanding	3. Collaborative "Toledo" Workshop	3. Check for Understanding	3. Building a Collection	3. Class Discussion
			4. Plans	4. Check for Understanding
				5. Clean Up

Students will explore how collaboration can aid innovation as they explore the medium of glass (using the substitute of candy, or “sugar” glass) and curate an exhibit.

Recommended Field Trip Henry Ford Museum of American Innovation

Essential Question: What innovations have there been in the field of studio glass?

Learning Outcome: Students will analyze how glass art has changed over time through firsthand experience.

Key Concepts: Studio glass, artisan, artist

Standards: VA:Cn11.1.6a Analyze how art reflects changing times, traditions, resources, and cultural uses.

(30 min.)

1 Davidson-Gerson Modern Glass Gallery

Small groups with a chaperone visit the gallery to observe glass pieces being produced on video. Individual students should each use the field trip worksheet provided to draw and make notes on what they see.

For information on planning your field trip, please visit thehenryford.org.

(As available)

2 Other art and design exhibitions in Henry Ford Museum of American Innovation

You may also want your students to see the following:

Fully Furnished (furniture exhibit)

Dymaxion House

Mathematica, opening fall 2017

Driving America (automobile exhibit)

We recommend leaving half the field trip time for free exploration.

(15 min.)

3 Check for Understanding

When you return to the classroom, discuss students’ observations. Also discuss how the gallery was arranged. At conclusion of this discussion, inform students that this arrangement is known as the exhibit flow.



Field Trip: Henry Ford Museum of American Innovation

Collaborating and Innovating Art and Exhibits

Name _____

Key Vocabulary Terms

Artist - a person who produces works which are valued for their beauty rather than usefulness

Artisan - a person or company that makes a high-quality or distinctive product in small quantities, usually by hand or using traditional methods

Studio Glass - art glass produced by an independent artist in the studio

Davidson-Gerson Modern Glass Gallery

Draw a studio glass piece created in the 1960s or early 1970s (the early years of studio glass).

Note the piece's name, creator and date.

Describe how this piece is different from pieces in the gallery created before the 1960s or early 1970s.

Find a piece influenced by glass artisans of the past.

The case on your left as you enter the gallery displays some of these pieces. Some ways to determine if a piece has been influenced by the past are similarities in shape, form, style and artist technique.

Give its name, creator, date and how you think the past influenced the art/artist.

Draw your favorite studio glass piece.

What are some innovations that you have observed in the field of studio glass?

Collaborating and Innovating Art and Exhibits

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Lesson 1 STUDIO GLASS AND COLLABORATION

Essential Question: How can we work together to create a sculpture?

Learning Outcome: Students will collaboratively create a sculpture using an unfamiliar medium, addressing the theme of working together.

Key Concepts: Collaboration

Standards: VA:Cr1.2.8a Collaboratively shape an artistic investigation of an aspect of present-day life using a contemporary practice of art and design.

Preparation: Obtain the sugar glass (candy) created in science class. If not coordinating with a science teacher, see Lesson 1 Resource Making Sugar Glass. The teacher can make the glass ahead of time or could involve students in the process, primarily as a demonstration. Plan for at least 30 minutes to make sugar glass, plus additional cooling time, ideally overnight.

(5 min.)

1 Introducing Studio Glass

Prepare students to understand why studio glass is an innovation.

Ask students to predict the temperature required to melt sand – silica – into molten glass. (Answer is 2,000+ degrees Fahrenheit.)

Ask students where most glass is produced. (Answer is a factory setting.)

Now, using a computer and digital projector, show Connect 3: Studio Glass.

Check that students understand that glass could now be worked with in a new setting.

(10 min.)

2 View Studio Glass Art

Using a computer and digital projector, view The Henry Ford Digital Collections set “Messages in Studio Glass”. Noted with each piece is the message or inspiration for the piece. Ask students to note how messages are conveyed without words, as they will be asked to do so with their pieces as well.

(40 min.)

3 Collaborative “Toledo” Workshop

Just as Harvey Littleton created the workshop in Toledo and invited fellow colleagues to help him, students will work in small groups. With various sugar glass shapes, colors and sizes, students will work collaboratively to create a 3-D form. Encourage students to explore multiple ways to attach the sugar shards together. The message of their pieces should somehow investigate the idea of collaboration, or working together. Encourage students to make multiple pieces, as it will be helpful during Lesson 3 to have a number complete.

Have student groups title their pieces. They may write the titles and group members’ names on papers placed under their pieces, mimicking a pedestal.

Allow time for cleanup.

Collaborating and Innovating Art and Exhibits

Teacher Background: Early History of Studio Glass

In March 1962, **Harvey Littleton**, a ceramics instructor at the University of Wisconsin-Madison, decided to hold a two-week glassblowing workshop in a shed on the grounds of the Toledo Museum of Art. These workshops set the stage for what would become known as the studio glass movement.

Up until this point, glass was looked on as a functional craft, not an art form or particular style of art. This was partially because glass had to be made in a factory setting because of the high temperatures and materials involved. An individual artist couldn't create glass works in his/her own studio.

At the Toledo workshop, with the help of Dominick Labino, who had been trained as an engineer and had a professional career in a glass manufacturing plant, Littleton experimented to see if they could work with glass on a smaller scale. They created a furnace using bricks from Littleton's pottery studio kiln in Wisconsin. However, the first batch did not melt properly, and Littleton's stoneware crucible broke apart in the heat. Labino suggested that they melt the glass directly in the furnace. Labino also used a low-melting formula #475 marble that he had developed for John Manville for the production of fiberglass. The marbles melted at a relatively low temperature and produced glass that was malleable enough to blow. Thanks to this collaboration between artist and scientist, the workshop's experiments in glassblowing were able to continue.

Littleton would go on to found the first studio program in art glass in the United States, paving the way for others. Dominic Labino went on to open his own glass studio, designing glassblowing and finishing tools and building his own furnaces and annealing ovens. Through his research and development of new technologies, he provided multiple ways to create glass as art in a studio. For the first time in its 3,500-year history, glass was no longer limited to a factory-like setting. It has since become the fastest-growing studio art medium.

Collaborating and Innovating Art and Exhibits

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Lesson 2 INDEPENDENT STUDIO GLASS

Essential Question: How do I want to implement what I’ve learned about studio glass/candy glass/sugar glass?

Learning Outcome: Students will work individually using the techniques and message of their choice and reflect upon their choices.

Key Concepts: Collaboration

Standards: VA:Cn11.1.6a Analyze how art reflects changing times, traditions, resources and cultural uses.

Preparation: You may need to make additional sugar glass if there is not much left from Lesson 1. See Lesson 1 Resource Making Sugar Glass. Plan for at least 30 minutes to make sugar glass, plus additional cooling time, ideally overnight.

(10 min.)

1 Review of Collaborative Pieces

Have each group show the piece they created in the previous session. Ask them to share what techniques they used to work with the candy sugar glass material.

(35 min.)

2 In Your Own Studio

Just as Harvey Littleton intended studio glass to be an individual process, students will independently use the sugar glass to create 3-D forms using balance, unity and movement. Students may choose any theme or message for their pieces. Encourage students to make multiple pieces, as it will be helpful tomorrow to have a number complete.

Have students title their pieces. They may write the titles and their names on papers placed under their pieces, mimicking a pedestal. Allow time for cleanup.

(10 min.)

3 Check for Understanding

Students should use the worksheet to reflect on their experience yesterday and today.



Collaborating and Innovating Art and Exhibits

Name _____

Lesson 2: INDEPENDENT STUDIO GLASS

Check for Understanding

How did your techniques change from Day 1 to Day 2? Why did they change? How do the changes in your own techniques mirror the changes in studio glass?

What are some advantages of working alone with sugar glass? Disadvantages?

What are some advantages of working collaboratively? Disadvantages?

Which do you prefer and why?

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Lesson 3 CURATORS AND EXHIBITS PART 1

Essential Question: How can I design a gallery that conveys a theme, works in my space and meets viewer’s needs?

Learning Outcome: Students will collaboratively design a gallery that conveys a theme, deals with space constraints and meets viewer’s needs.

Key Concepts: Exhibit flow, curator, collecting.

Standards: VA:Pr5.1.6a Individually or collaboratively, develop a visual plan for displaying works of art, analyzing exhibit space, the needs of the viewer, and the layout of the exhibit. VA:Pr5.1.8a Collaboratively prepare and present selected theme-based artwork for display, and formulate exhibition narratives for the viewer.

Preparation: Have available gallery materials like tables, boxes, trays or poster boards. Also, give students access to small boxes and paper that can be used as pedestals.

(20 min.)

1 Review Davidson-Gerson Modern Glass Gallery, Exhibits and Curators

If you took the field trip, remind students of how the Davidson-Gerson Modern Glass Gallery was set up.

As a class, read the article on Davidson-Gerson Modern Glass Gallery. Show the Exhibit Flow resource to examine the exhibit’s flow, and read the information about exhibit flow. Be sure students understand the key concepts of curator, collecting and exhibit flow.

(5 min.)

2 Group Assignment

Place students in small groups. Each small group will build a collection and create a gallery of candy or “sugar” glass.

(15 min.)

3 Building a Collection

If you have multiple sessions of this class, pool all sculptures together so that there are plenty to choose from. Small groups should take turns choosing sculptures made during Lessons 1 and 2 for their gallery until each group feels its gallery is full.

Sculptures, however, should be kept on a table apart from the gallery spaces until building time. This mimics a curator’s challenge of choosing where to place pieces, yet moving them as little as possible to avoid breakage.

(15 min.)

4 Plans

Have small groups think about what theme and/or organizational structure their exhibit may have. Refer back to the exhibit flow of the Davidson-Gerson Modern Glass Gallery.

Students should draw plans to designate where each sculpture should go. You should define gallery spaces using tables, boxes, trays or poster boards. Also, give them access to small boxes and paper that can be used as pedestals.

Plans should take into account the group’s space, the desired organizational flow, good visibility for viewers and sizes/shapes/colors/messages of the art pieces.

Davidson-Gerson Modern Glass Gallery

In fall 2016, The Henry Ford opened the new Davidson-Gerson Modern Glass Gallery inside Henry Ford Museum of American Innovation. The gallery highlights the studio glass movement's founding in 1962 and its development to the present. It features The Henry Ford's world-class collection and showcases key artists' creativity and ingenuity.

The studio glass movement is recognized as a turning point in the history of glass, as artists explored how glass could be made in a studio. Their goal was to create fine art, not the craft or mass-produced glass of the past. Guests of the gallery see featured artists' work as well as the materials and tools used in their creation.

The gallery features almost 100 works of art selected from the recently acquired Bruce and Ann Bachmann Collection of studio glass. Inside the gallery cases, guests can learn more about featured artists, including:

Founder Harvey Littleton, who led the experimental 1962 workshops,

Paul Stankard, the father of modern paperweights,

Dale Chihuly, one of the most famous names in studio glass.

"Our exhibit is a deep dive into how studio glass unfolded," said Charles Sable. Sable is The Henry Ford's curator of decorative arts. "It's the story of the combination of science and art that created a new and innovative chapter in the history of glass. As a history museum, we look at the impact of studio glass on everyday life. We will include a section on mass-produced glass influenced by studio glass but sold by popular stores."

A museum curator has two main areas of responsibility:

- 1) maintaining and building a collection of art or artifacts
- 2) determining how to display the art or artifacts in the collection.

Guests will also learn how artists create glass create through a video "spin browser." This technology lets the user toggle through the various steps of the glassmaking process. The video features artists in Greenfield Village's Liberty Craftworks Glass Shop.

"Guests will not only be wowed by the beauty on display, but will leave inspired by the stories of the artists behind the movement," said Patricia Mooradian, president of The Henry Ford.

The Davidson-Gerson Modern Glass Gallery was made possible through a generous grant from the William Davidson Foundation. For a closer look inside The Henry Ford's collection of modern studio glass, visit thehenryford.org/collections-and-research/digital-collections/expert-sets/101250/#mod=exhibit-view.

Exhibit Flow

Exhibits are displays of art or artifacts, thoughtfully arranged by a curator.

The flow of the exhibit is the expected path the visitor would take through the pieces and information. When deciding the flow of the exhibit, a curator takes into account many factors: the subject matter of the pieces, the techniques used in the pieces, the time period when the pieces were produced, the physical needs of the pieces (size, colors, etc.) and the stories that are together told by the pieces.

The curator must also think about the physical space in which the exhibit will go, for instance: Are there walls dividing the pieces? What kind of light is available? Are there multiple points of entry or just one door?

Davidson-Gerson Modern Glass Gallery



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Lesson 4 Curators and Exhibits Part 2

Essential Question: How can I design a gallery that conveys a theme, works in my space and meets viewer’s needs?

Learning Outcome: Students will collaboratively design a gallery that conveys a theme, deals with space constraints and meets viewer’s needs.

Key Concepts: Exhibit flow, curator, collecting.

Standards: VA:Pr5.1.6a Individually or collaboratively, develop a visual plan for displaying works of art, analyzing exhibit space, the needs of the viewer, and the layout of the exhibit. VA:Pr5.1.7a Based on criteria, analyze and evaluate methods for preparing and presenting art. VA:Pr5.1.8a Collaboratively prepare and present selected theme-based artwork for display, and formulate exhibition narratives for the viewer.

(15 min.)

1 Build Time

Reunite small groups and be sure each has their exhibit plan. It is now build time. Have students first prepare any pedestals, etc. Then sculptures can be moved carefully to their planned location.

Have students clean up their extra build materials as they finish, to create an inviting space for their visitors.

(10 min.)

2 Gallery Visits

When complete, allow students to visit each other’s galleries.

(15 min.)

3 Class Discussion

Discuss the exhibits as a group. Questions might include:

Were you able to understand how or why other groups set up their galleries in a certain way?

Did other groups understand how your gallery was set up?

How do you think going through the collecting and design planning process affected your exhibit compared to just taking a few pieces and placing them randomly?

Were there any conflicting opinions along the way? How did you deal with them?

Compare, analyze and connect the Davidson-Gerson Modern Glass Gallery to the flow students have created in their galleries.

(10 min.)

4 Check for Understanding

Complete lesson with an exit ticket for additional assessment.

(5 min.)

5 Cleanup

If another class session will be using the sculptures, have students carefully place them all back in one area.

