PICTURING HISTORY:
The Art of Glass
A Teacher’s Resource Guide for Using Art to Teach 8th Grade Social Studies and ELA
How to Use These Materials
The materials presented here are developed with the middle school student in mind. The focus is on social studies, English language arts (ELA) and visual arts content. All lesson plans are aligned to the Common Core Standards.

Tips for Using This Guide
• Review the guide and lesson plans. Some of the lesson plans require you to select an image for discussion. Images of art from the collection of the Toledo Museum of Art can be viewed online at http://emuseum.toledomuseum.org/collections. Consider showing these works of art on a smart board in your classroom.
• To make the most of this guide, we recommend completing the pre-visit lesson plan before your visit to TMA. You can customize these lessons with the suggested extension activities to enhance students’ connections with social studies, ELA and visual arts content.
• Take your tour experience back to the classroom by completing the post-visit lesson plan after your TMA field trip. Use the post-visit lessons to help stretch your student’s critical thinking and descriptive writing skills.

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How were these resources developed?
The materials presented here are the result of the Teacher Leaders program, a year-long collaboration between the Toledo Museum of Art and social studies, ELA and visual arts middle school teachers from the Northwest Ohio area.

Why use works of art to support social studies and ELA?
Research has shown that when works of art are a part of arts-integrated efforts to teach social studies and ELA content, students develop new connections to the material by absorbing the visual content and translating it into new knowledge. In this way, the visual arts offer students a unique window to other places and times. Arts exposure cultivates students’ reflective and multi-sensory thinking, allowing for insightful connections to previous knowledge (schema) while stimulating students’ creative and analytical thinking.

Benefits include:
• **Excitement and motivation:** Museum objects motivate students to learn about the past.
• **Active participation in the learning process:** Participating in hands-on guided experiences in the Museum allows students to take full ownership of their learning experience.
• **Construction of historical knowledge:** Students develop historical thinking skills connecting social studies content to a larger framework of knowledge.
• **Improved student writing:** Research has shown that pre-writing experiences can foster critical thinking and lead to more precise vocabulary use.

What are the benefits of looking closely at art?
Taking the time to observe works of art develops the imagination while improving visual and reading aptitudes through visual literacy. It allows for a different way of learning about the past and making knowledge relevant in a tangible fashion.

“I learned how to incorporate art and visual literacy into my lessons to make them more meaningful.”
—Cathleen Smith-Lee (Old West End Academy)
Where can I learn more about the benefits of arts-integrated approaches to teaching ELA and social studies?

Here are some additional resources you may wish to review:

- Toledo Museum of Art School Partnerships website, schoolpartnerships.toledomuseum.org

PRE-VISIT LESSON PLAN

Use this lesson plan prior to your visit to help prepare your students for their Picturing History tour. During the activity students will examine and appreciate the complexity and diversity of glass production. This lesson is approximately 45 minutes.
Forced Fit

About this Lesson:

This lesson was developed by:

• Luke Fannin (Jefferson Junior High School)
• Nancy Garand (Harvard Elementary School)
• Joni Klopfenstein (Wayne Trace Jr./Sr. High School)
• Sharon Morrin (Fassett Junior High School)

Goals:

To develop close looking skills and ways of looking at objects in a new way. This can further help students in their career exploration, as they will learn to see opportunity in uncommon places and situations.

Objectives:

The objective for this lesson is to encourage students to think creatively and critically about a work of art by encouraging them to make unexpected connections.

• The student will practice close looking.
• The student will build Tier II vocabulary.
• The student will think about an image in an unexpected way.

Common Core Standards Addressed:

• 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.

Materials:

Index cards, pencils, and printed copies of images from the TMA collection.

Suggested Images:

1. Dale Chihuly, Chandelier Campiello del Remer #2, 1996 (2006.54)
3. William Morris, Urn, 2000 (2016.204A-B)

Images can be found at http://emuseum.toledomuseum.org/collections
TOUR SUMMARY

Thank you for choosing the Toledo Museum of Art’s Picturing History program for your class field trip! Your Museum experience will be more fun from the start if you remember to do the following:

• Visit toledomuseum.org/visit/tours/school-tours/ to request your tour.
• If you have any children with special needs, please share any necessary accommodations when you make your tour request.
• Divide your class into groups of 12-15 students, and assign one adult chaperone to each group.
• Have each student wear a name tag with her/his first name in large print.
• Arrive on time.

What to expect during your visit?
The tour for this lesson explores the history of glass looking at the different uses, processes, styles and techniques involved. As part of this tour, students will have the opportunity to witness a glassblowing demonstration inside the Glass Pavilion Hot Shop. Activities for this visit will encourage close looking, critical thinking and creative writing.

“My students loved their visit to TMA! They couldn’t stop talking about what they saw.”

–Karen Angst (Eisenhower Intermediate School)
POST-VISIT LESSON PLAN

Use this lesson plan after your visit to help your students connect their Picturing History field trip experience with the classroom and extend their learning. This lesson is approximately 45 minutes.

Mind Mapping

About this Lesson:
This lesson was developed by:

• Luke Fannin (Jefferson Junior High School)
• Nancy Garand (Harvard Elementary School)
• Joni Klopfenstein (Wayne Trace Jr./Sr. High School)
• Sharon Morrin (Fassett Jr. High School)

Goals:
To encourage students to explore a career in the arts that interests them.

Objectives:
This lesson aims to give the students an opportunity to investigate the diverse range of careers in the arts field.

• The students will brainstorm about possible arts careers.
• The students will use their brainstorming to create questions for further exploration.
• The students will demonstrate research skills.

Common Core Standards Addressed:

• ODE 5RE: Identify professions that use art and design and explore the relationship between art, technology, and industry.
• CCSS.ELA-LITERACY.W.8.7: Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
• CCSS.ELA-LITERACY.W.8.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
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Materials:
Large sheets of Kraft paper or poster board and markers, one set for each group.

Alternative: If you have access to laptops or a computer lab this activity can also be done digitally. A variety of Mind Mapping applications for tablet and laptops can be found in the Android, Apple, and Google Play stores.

Step 1: Tell the students they will be creating a mind map with words and pictures about careers in the arts. If you have never used mind mapping in class, it might be helpful to do a demonstration as a class using a simple topic such as school lunch or homework.

Step 2: Divide the students into groups of 3–4. Give each group one large sheet of paper and some markers.

Step 3: Ask the students to create a mind map of art careers. For the first layer, ask them to generate a list of arts related jobs. Encourage them to think about the people they have seen, met and discussed during their visits to the Museum.

Step 4: After they have added spokes for each job, ask them to add detail by brainstorming attributes for the various jobs. Ask students to include the skills, education and interests someone with the various jobs would need to be successful. For example: an artist might need to be able to draw, a degree in fine arts, and to be self-motivated.

Step 5: Ask the students to step back and look at the completed maps. Which of the careers best match their personal skills and interests?

Step 6: Ask the students to choose one of these careers for further investigation. Have students generate a list of questions about their chosen careers. Alternative: if a student has a career (not traditionally associated with the arts) that they feel strongly about – ask them to research how their preferred career could relate to the arts. For example, Dr. James Ravin is an ophthalmologist who studies the effect of eye disease on Impressionist artists and their work.

Step 7: Have the students choose at least one of the questions above to research. Students should use this research to create a one-page essay on the topic.

Discussion Questions:
• What is something you learned from exploring careers in the arts?
• How could your career contribute to the future of the Toledo Museum of Art?

“...the TMA program has built my student’s confidence in respect to their ideas and thoughts.”

– Ashlie Dempsey (Byrnedale Elementary)

Extension Activity
To learn more about the students’ chosen careers, have the students find a professional in this field and then have them develop an interview questionnaire for this person. Have the students use the research and interview material to create posters about their chosen careers. Hold a classroom job fair for them to present their work.
VISUAL ART LESSON PLAN

Use this lesson inspired by the work of Dale Chihuly to help students deepen their investigation of contemporary design and studio glass. This lesson is approximately 30 minutes.

Modern Glass

About this Activity:
This lesson was developed by:
• Angie Stokes (Wayne Trace Middle School)

Goal:
To learn about glass production and the multiple creative possibilities within.

Objective:
Inspired by the modern-day glasswork of Dale Chihuly, students will create their own organic glass-like form.

Ohio Visual Arts Standards Addressed:
• Producing/Performing 1: Select, organize and manipulate skills, elements and techniques appropriate to the art form when making art.
• Producing/Performing 5: Collaborate to create a thematic work that combines visual art with other arts disciplines.

Materials:
Clear plastic Solo cups, 8” clear plastic plates, or Grafix Dura-Lar film, Sharpies, heat source, fishing line, nail and hammer for punching holes in plastic.

Step 1:
Have the students lay a piece of medium-weight Grafix Dura-Lar film, plastic plate, or clear Solo cup on top of a piece of white paper and then create an organic or geometric design with light colored Sharpie markers on the plastic. Tell the students to look at how colors will darken when the plastic is heated. If using the film, use scissors to cut out the design.

Step 2:
If using the film, ask the students to use a heat gun to melt and form the film until it shrinks, using metal tongs and heat-resistant gloves. Have the students punch a hole into the film to be able to hang it for display.

Step 3:
If using plates or cups, have the students bake them in a 350-degree oven for 1-2 minutes or until the forms begin to slump. Ask the students to carefully remove the melted cups from the oven and allow to cool. Note: This activity should be completed in a well-ventilated area.

Step 4:
Have the students punch a hole in their plastic forms and hang them with the fishing line for display, either individually or collectively for a more Chihuly-like display. Ask the students to alternatively stack Solo cups to create a unified display. Tell the students to play with specific color schemes or themes from nature to create more detailed displays.
ADDITIONAL RESOURCES

- The Art Career Project website: https://www.theartcareerproject.com
- Khan Academy resource on Glass: https://www.khanacademy.org/partner-content/getty-museum/antiquities/ancient-glassmaking/a/glassmaking-history-and-techniques
- Scholastic resource on stained glass windows: http://www.scholastic.com/browse/article.jsp?id=3754175
- Seattle Glass Blowing Studio website: http://seattleglassblowing.com/?page_id=81
- TMA Reference Library: http://www.toledomuseum.org/education/reference-library

GLOSSARY

- **Anneal**: To slowly cool a completed object in a secondary or separate part of the glass furnace. This important part of the glassmaking process allows a hot glass object to cool slowly. If allowed to cool too quickly, the glass may be highly strained by the time it reaches room temperature and may break.
- **Blowpipe**: An iron or steel tube, usually about five feet long for blowing glass.
- **Casting**: The generic name for a wide variety of techniques used to form or pour glass into a mold.
- **Cutting**: Grinding any pattern into the glass by using a consistent speed on a rotating wheel coated with cloth, diamond dust, or another abrasive.
- **Gaffer**: Head of a glassblowing team.
- **Glass**: The oldest man-made material. Most glass is a mixture of silica (from sand or sandstone), an alkali to lower the melting point and line to act as a stabilizer. The mixture when melted fuses together.
- **Glass blowing**: The craft of making glassware by blowing air through a tube of semi molten glass.
- **Furnace**: An enclosed structure for the production and application of heat.
- **Hot Shop**: A studio containing furnaces for working with molten glass.
- **Sandblasting**: A method used to remove layers of glass. A cloudy, dull finish will result with every layer removed.

From the Corning Museum of Glass, Glass Vocabulary at www.cmog.org
Museum Hours of Operation
Tuesday and Wednesday
10 a.m. – 4 p.m.
Thursday and Friday
10 a.m. – 9 p.m.
Saturday
10 a.m. – 5 p.m.
Sunday
Noon – 5 p.m.
Closed Mondays, Independence Day, Thanksgiving Day, and Christmas Day

Admission
Admission to the Museum is always free. Special exhibitions or events may require purchased tickets. Members are admitted free to all exhibitions and receive free admission and discounts for special programs, events, and Museum Store purchases.

Location
The Museum is just west of Toledo’s downtown business district, directly off Interstate 75, at 2445 Monroe Street at Scottwood Avenue.

419.255.8000
toledomuseum.org

Our Mission
We believe in the power of art to ignite the imagination, stimulate thought, and provide enjoyment. Through our collection and programs, we strive to integrate art into the lives of people.

Thank You
This resource is made possible in part by a grant from the Martha Holden Jennings Foundation.

More teacher resources from the Toledo Museum of Art are available online at toledomuseum.org