

Chapter Four



visual arts *visual arts*

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Visual Arts

Creating and Responding in Visual Arts: A Close Look at the NAEP 1997 Visual Arts Assessment

The Content of the Visual Arts Assessment

The view that a complete arts education combines rigorous teaching about works of art and artists with having students create their own artworks is not a new one.¹ However, it is a view that has found fresh expression in recently published documents such as the *National Standards for Arts Education* and the *NAEP Arts Education Assessment Framework*. The standards and the framework both emphasize the idea that creating artwork is enriched by knowledge and understanding of art forms from a variety of historical and cultural contexts, and that this knowledge and understanding are in turn enriched by the act of creating.

The NAEP *Arts Education Assessment Framework* outlines an innovative assessment intended to reflect this view of good arts educational practices and the complex nature of art making. Students are to apply their knowledge of aesthetic properties and their expressive and technical skills to the analysis, interpretation, and creation of works of art and design.

Following the Framework closely, the NAEP Visual Arts Assessment is built around the processes of Creating and Responding. While Creating in the assessment, students show their abilities to communicate in works of art, think of different solutions to visual problems, generate ideas for works of art and design, and use their technical proficiency

in realizing those ideas. While Responding, students analyze works of art and design (both two- and three-dimensional). In doing so, they demonstrate their knowledge of media and techniques, visual organization, the cultural contexts of artworks, how works of art convey meaning, and how user needs are met with well-designed functional objects. Responding exercises include both constructed-response (written) questions and multiple-choice questions.

Creating an arts performance assessment posed interesting challenges. In arts classrooms, there are many opportunities for discussion, planning, and revising. This is not the case in a timed assessment. So that students had as much of



¹ Stankiewicz, M.A. (1994). Foreword. In D. N. Perkins, *The intelligent eye: learning to think by looking at art*. Santa Monica, CA: The Getty Center for Education in the Arts.

an opportunity as possible to demonstrate their arts knowledge and skills, it was necessary to create context for the assessment exercises. This was done in three important ways. First, students were introduced to works of art or design and to Creating activities with explanatory texts and visual examples. Second, instructions for exercises were carefully crafted to guide students through a sequence of related tasks step by step, and to give students as much information as possible about what they were being asked to demonstrate. In these ways, the visual arts assessment attempted to avoid asking students to Respond to and to Create works of art and design in a conceptual vacuum.

At the same time, instructions were designed not to "overteach" students, and hence damage assessment results. Third, Creating and Responding exercises were built around a theme, concept, or work(s) of art, so that students could focus on just a few works or issues. This gave students the opportunity to think more deeply about the assessment tasks, and ensured that students were not asked isolated questions about unrelated works of art.

An overview of the grade 8 visual arts assessment "blocks" (a group of exercises administered as separate units to be completed in a set time frame) is presented on page 82 in Figure 4.1. As shown in the figure, the assessment

consisted of seven blocks. Four of those blocks featured Responding and two-dimensional Creating exercises. These were multiple-choice and constructed-response questions asking students to analyze, describe, and identify different aspects of works of art, as well as tasks that asked students to draw and work with collage materials.² The four Responding blocks include stimulus works that represent a variety of cultures, genres, and historical periods.

The remaining three blocks consisted of three-dimensional Creating tasks asking students to work with plasticine (a clay-like substance) and other materials to create works of art.

² In spite of the fact that these blocks contained Creating tasks, for ease of reference, they will be referred to as Responding blocks in the text of this report.



Figure 4.1**The Content Description of the NAEP Visual Arts Assessment****Block Name**

"Self-Portrait"
(Responding and 2-D
Creating block)

Students are introduced to self-portraiture by observing two self-portraits. They analyze the self-portraits, applying their knowledge of aesthetic properties such as composition, style, and line. They also consider the relationships between these properties and the expressive qualities of each self-portrait. Then students create their own self-portrait drawings.



"Mother/Child"
(Responding block)

Students analyze five artworks on the theme of mother and child, representing a variety of cultures, forms, and historical periods. They apply their knowledge of aesthetic properties, using their technical and art historical knowledge, and their understanding of how artists convey meaning in their works.



"Collage"
(Responding and 2-D
Creating block)

Students focus their observations on a collage by Romare Bearden. They respond to the images they see in the artwork and apply their perspectives to interpret the "story" depicted in the collage. Finally, students create collages around the memory of a childhood place.



"Whisper Box"
(Responding and 2-D and
3-D Creating block)

Students are introduced to the relationship between form and function in design by studying photographs of several packages. They apply their understanding of this relationship to analyze different kinds of packages. They then create two designs: one for a package to carry a fish on a bicycle, and one to hold a sound.



"Metamorphosis"
(3-D Creating block)

Students hear a short story about metamorphosis, and examine a drawing showing a transformation. They are then asked to render a metamorphosis of a man to a fish in plasticine.



"Monument"
(3-D Creating block)

Students are introduced to the concept of the monument. They are asked to sketch an idea for a monument based on the theme of International Children's Day, and then to realize that idea in chipboard and plasticine.



"Kitchen Sculpture"
(3-D Creating block)

Students are introduced to a contemporary sculpture that explores and transforms a common object. They are asked to sketch a series of ideas for a sculpture based on a kitchen implement, and then to realize those ideas in a sculpture using plasticine and wire.



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Sample Responding and Creating Blocks and Exercises

In Parts 1 and 3 of this chapter, the different components of the visual arts assessment will be examined to provide more detailed information about what students know and can do when they are asked to create, analyze, and interpret works of art. Part 1 includes Figures 4.2 to 4.5, which feature the four visual arts Creating/Responding blocks. (Figures 4.2, 4.3, and 4.5 are found on the

CD-ROM version of this report.) Part 3 includes Figures 4.9 and 4.10, which feature two of the visual arts Creating blocks. (Figures 4.9 and 4.10 are found on the CD-ROM version of this report.)

Each figure includes either the whole of a visual arts block, or selected exercises from a block. The figures demonstrate how Responding exercises were organized and presented to students, how Creating exercises were combined with Responding exercises, and how well students performed on both. Many sample

student responses will be shown, to give a detailed picture of the range of student abilities. Percentages of students choosing the correct answer for multiple choice questions, or at the different levels in a constructed-response question scoring guide, are also featured. Parts 2 and 4 of this chapter examine overall summaries of Responding and Creating results, respectively, and their relationships to student-reported background variables.

Part One

Sample Questions from the Visual Arts Creating and Responding Blocks

Figure 4.2



Sample Questions and Student Responses from the “Self-Portrait” Block are found on the CD-ROM version of this report.



Figure 4.3



Sample Questions and Student Responses from the “Mother/Child” Block are found on the CD-ROM version of this report.



In this block, students study a collage by Romare Bearden. Students have an 8” by 11” print of the work, and a poster hung up in the room to give them a distant, overall view. They respond to the images they see in the artwork, applying their perspectives to interpret the “story” depicted in the collage and to examine relationships between technical and expressive aspects of the work. Finally, students make collages created around the memory of a childhood place.

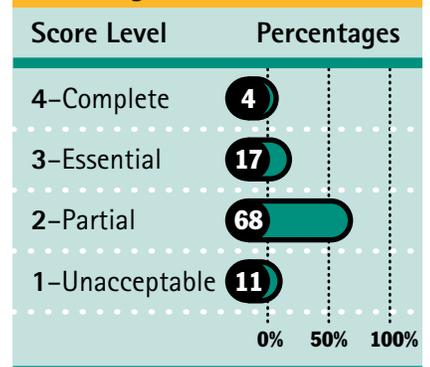


Pittsburgh Memories: Romare Bearden, Courtesy of Carnegie Museum of Art.

**Sample Question 1
(Item 2 in Block)**

After answering a question asking them to write down three of their first impressions of the Bearden collage, students were asked to deepen their observations of the artwork. They glued a postcard of the collage into their test booklets and were asked to draw arrows to aspects of the artwork the artist may have wanted people to notice. They then wrote descriptions of those aspects. Responses to this extended constructed-response item were scored with a four-level scoring guide that allowed for two levels of partial credit. The sample student responses that follow represent a Partial score, an Essential score, and the highest score, Complete.

Percentage of Eighth Graders Receiving Various Scores



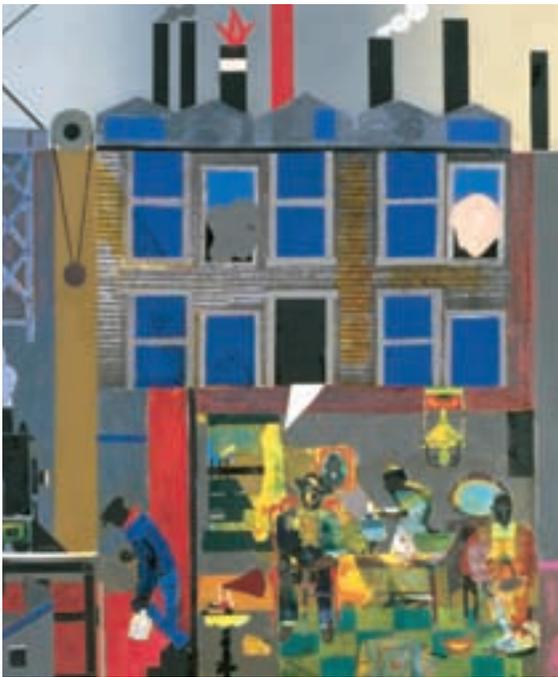
NOTE: Of the 11 percent of student responses in the lowest score level, 2 percent consists of omits and otherwise unscorable responses.



Sample Student Response Receiving a Score of Partial

Take out a postcard, glue-stick, and black felt-tip pen from your packet. Now paste your postcard in the space below. Look closely at the image. What features do you think Bearden wants you to notice in this work? Use your black felt-tip pen to draw arrows from the margin to at least three features you think Bearden wants you to notice. Label the features you have identified with brief but thoughtful descriptions, as shown in the example below.

Partial. This student, typically for partial responses, offers a few general observations about the collage that show a perception of some important parts of the work.



They are communicating through windows
- Write a thoughtful and specific description of what you think Bearden wants you to notice next to each arrow.

This is a family that are eating and relating.

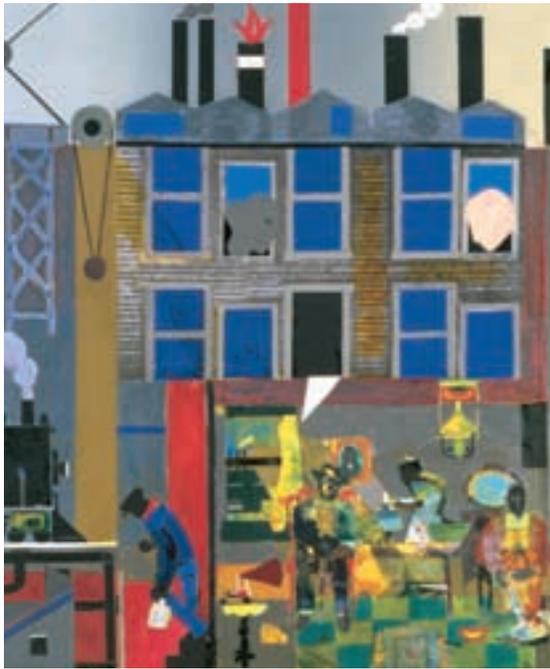
Pittsburgh Memories: Romare Bearden, Courtesy of Carnegie Museum of Art.

The man is a workingman that is tired



Sample Student Response Receiving a Score of Essential

Take out a postcard, glue-stick, and black felt-tip pen from your packet. Now paste your postcard in the space below. Look closely at the image. What features do you think Bearden wants you to notice in this work? Use your black felt-tip pen to draw arrows from the margin to at least three features you think Bearden wants you to notice. Label the features you have identified with brief but thoughtful descriptions, as shown in the example below.



Pittsburgh Memories: Romare Bearden, Courtesy of Carnegie Museum of Art.

Bearden wants you to notice these faces in the windows.

Write a thoughtful and specific description of what you think Bearden wants you to notice next to each arrow.

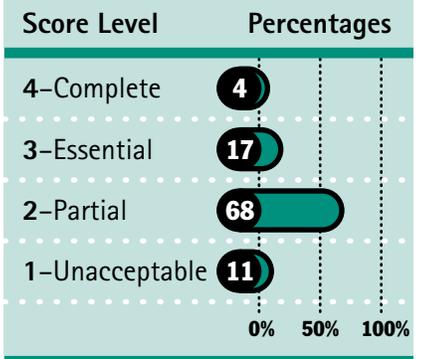
Bearden wants you to notice the people in this room, because they are brighter colors than the rest.

Bearden wants you to notice this man that looks kind of sad walking down the steps.



Essential. This student focuses on the same features as the student in the previous example. However, the response demonstrates a higher level of observation. This student comments on the brighter colors in the interior that contrast with the rest of the work and capture the attention of the viewer.

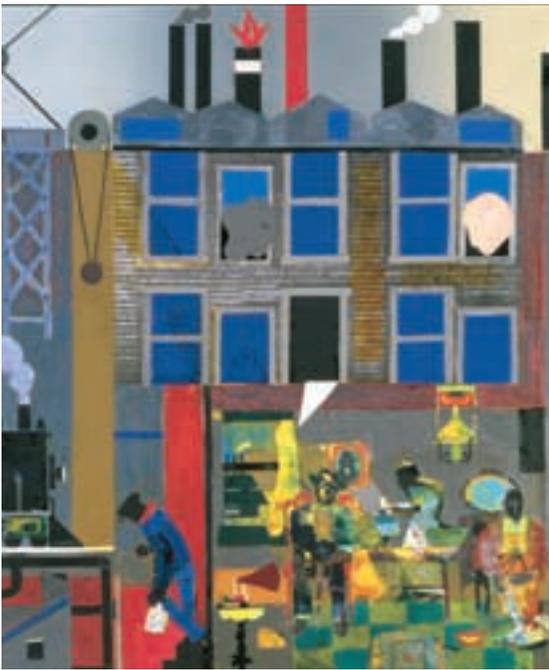
Percentage of Eighth Graders Receiving Various Scores



NOTE: Of the 11 percent of student responses in the lowest score level, 2 percent consists of omits and otherwise unscorable responses.

Sample Student Response Receiving a Score of Complete

Take out a postcard, glue-stick, and black felt-tip pen from your packet. Now paste your postcard in the space below. Look closely at the image. What features do you think Bearden wants you to notice in this work? Use your black felt-tip pen to draw arrows from the margin to at least three features you think Bearden wants you to notice. Label the features you have identified with brief but thoughtful descriptions, as shown in the example below.



— I think he wants us to notice the flame and red pipe because they are a burst of color amongst the black ones.

— Write a thoughtful and specific description of what you think Bearden wants you to notice next to each arrow.

← I think that because this family & their home is so colorful, that it draws your attention.

Pittsburgh Memories: Romare Bearden, Courtesy of Carnegie Museum of Art.

I think that we are to notice this man because when you see him, it makes you think: What's he doing? What's he carrying? And you search the painting for an answer.

Complete. This student also focuses on the man and family. Like the student who received the Essential score, he or she explains why each feature is noticeable. Each observation suggests that the student is beginning to pay attention to how parts of the work lead the viewer's eye to other parts. This is especially true for the observation about the man and how his pose and placement create curiosity in the viewer. Few students were able to offer three observations this astute.



visual arts

NAEP 1997 Arts Report Card

Sample Question 2 (Item 3 in Block)

Once students had been given the opportunity to think about specific parts of the collage, they were asked to step back and consider the work as a whole. In this question, students were asked to tell the "story" of the collage, seeing it as a visual narrative. Responses to this question were challenging to score because the range of interpretations was wide, and students tended to offer general responses.

Sample Student Response Receiving a Score of Partial

Some art critics call this work a "visual narrative." A "narrative" is an orderly account of events or a story.

Look again at the work. What do you think is the story Bearden tells in his memory of Pittsburgh? Put into words what you think the story is about. Talk about specific things you see in the work that help you see the story.

I think the story is about the industrial times in Pittsburgh; where people would work long hours for little pay and have to support a family and a house on the little money they had.

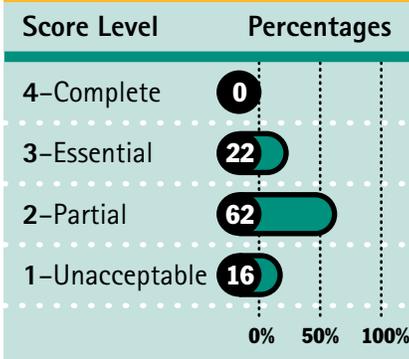
Sample Student Response Receiving a Score of Essential

Some art critics call this work a "visual narrative." A "narrative" is an orderly account of events or a story.

Look again at the work. What do you think is the story Bearden tells in his memory of Pittsburgh? Put into words what you think the story is about. Talk about specific things you see in the work that help you see the story.

The life in Pittsburgh is rough. The air is polluted because of power plants. Blacks and whites don't never get along. People go to work every day to make a little money. Families still spend time together every though it is a struggle to live in Pittsburgh.

Percentage of Eighth Graders Receiving Various Scores



NOTE: Of the 16 percent of student responses in the lowest score level, 2 percent consists of omits and otherwise unscorable responses.

Partial. Students at the Partial level often gave general interpretations of the collage that made few if any specific references to the work to defend their opinions.

Essential. This student attempts to support his or her interpretations of the collage with observations about the work. However, it is not clear how the student deduces conflicts between Blacks and Whites.



Sample Student Response Receiving a Score of Complete

Some art critics call this work a "visual narrative." A "narrative" is an orderly account of events or a story.

Look again at the work. What do you think is the story Bearden tells in his memory of Pittsburgh? Put into words what you think the story is about. Talk about specific things you see in the work that help you see the story.

It is a story of people. Ordinary people living in a poor district, because of the train and factories, who brighten their lives with a little color in contrast to the bland scene. Also of misery and shame by the stoop of the man's shoulders.

Complete. This student clearly ties each interpretation of the collage to an aspect of the work.

Sample Question 3 (Item 4 in Block)

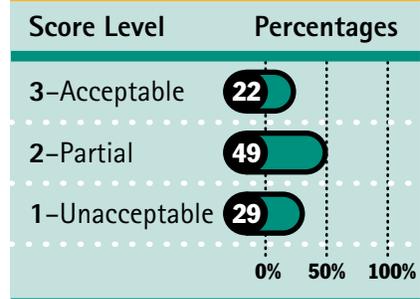
In item 4 students were asked to examine and articulate the relationship between the whole work and an important part of the work. Responses to this short constructed-response question were scored with a three-level scoring guide that allowed for partial credit. The sample student responses that follow represent a Partial score, and two samples of the highest score, Acceptable. Two samples are represented because of the information each offers about how students perceived the Bearden work at this point in the block.

Sample Student Response Receiving a Score of Partial

Identify something in the work that is unusual or unexpected. What is it and how does it contribute to the work as a whole? Be thoughtful and specific.

A train headed towards the building

Percentage of Eighth Graders Receiving Various Scores



NOTE: Of the 29 percent of student responses in the lowest score level, 6 percent consists of omits and otherwise unscorable responses.

Partial. Many students at this level were able to identify and describe an unusual part of the collage, but could not articulate its contribution to the overall meaning of the work. This student notes the placement of the train in the collage.



Sample Student Response Receiving a Score of Acceptable

Identify something in the work that is unusual or unexpected. What is it and how does it contribute to the work as a whole? Be thoughtful and specific.

The big train is unusual because right next to it is an apartment building and it looks like it's going to run right into it. But the train adds more movement.

Sample Student Response Receiving a Score of Acceptable

Identify something in the work that is unusual or unexpected. What is it and how does it contribute to the work as a whole? Be thoughtful and specific.

The bright mixed colors in only one area of the picture. It shows that he is happy when he goes home. It shows his emotions change as he goes from place to place.

Acceptable. The first student receiving this score notes the juxtaposition of the train and the building. He or she also perceptively observes that the train adds movement to the work, which shows the student is responding to the overall experience of the work.

Acceptable. Many students noted the bright colors of the interior of the building. Some speculated about the happiness that the colors might suggest. This student is especially observant because he or she registers the figure leaving the house as a means of connecting the interior and exterior parts of the work. The student also grasps that the collage may be trying to represent different moments in time, appropriate for a memory.

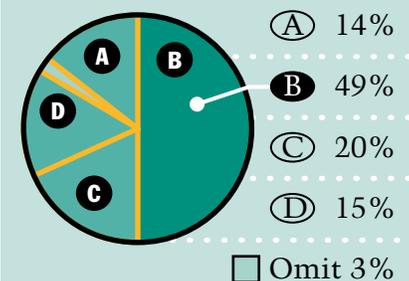
Sample Question 4 (Item 6 in Block)

After students had been given time to study the collage and think about relationships between parts of the work and the whole work, they were asked to focus their attention on certain technical aspects of the composition. This multiple-choice question measures students' abilities to recognize a significant technical dimension of the collage. The question was scored either correct or incorrect. The correct answer is B.

Which of the following is emphasized in the work?

- (A) The use of shading to make the subject look realistic.
- (B) A grid-like arrangement using horizontal and vertical rectangles
- (C) A composition that uses traditional approaches to perspective
- (D) The use of a single color scheme with varying values

Percentage of Eighth Graders Answering Correctly: 49%



NOTES: Percentages do not sum to 100 due to rounding.

The omit percentage reported includes student refusals, blank or multiple responses, and illegible or otherwise unscorable responses.

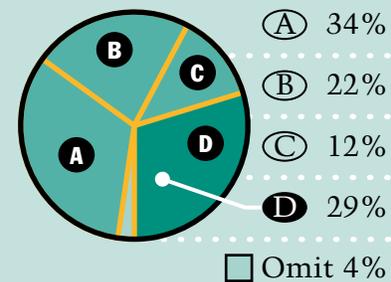
Sample Question 4 (Item 7 in Block)

This multiple-choice question measures students' abilities to place the collage in stylistic context. The question was scored either correct or incorrect. The correct answer is D.

Which of the following most clearly identifies the style of this work?

- (A) Impressionism
- (B) Photographic realism
- (C) Surrealism
- (D) Semiabstract representation

Percentage of Eighth Graders Answering Correctly: 29%



NOTES: Percentages do not sum to 100 due to rounding.

The omit percentage reported includes student refusals, blank or multiple responses, and illegible or otherwise unscorable responses.

Sample Question 5 (Item 8 in Block)

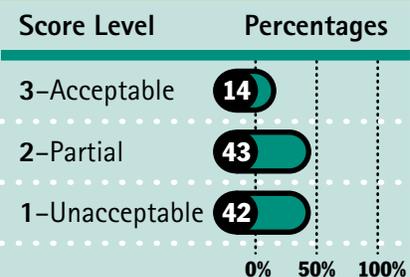
This short constructed-response question asks students to explore relationships between interior and exterior areas of the collage. The question is in part intended to prepare students for the Creating task in which they are asked to make collages that portray both the inside and the outside of a remembered place. Responses to the question were scored with a three-level scoring guide that allowed for partial credit. The sample student responses that follow for the first part of question eight represent responses that received a Partial score, and the highest score, Acceptable.

Sample Student Response Receiving a Score of Partial

Look again at the Bearden work. How does Bearden show us the contrast between the interior and the exterior areas of the building? Be specific.

He shows on the upper part of the picture the outer side of the building and what the people are doing. To show the inner part of the building he goes to the bottom of the picture and shows what the people are doing inside.

Percentage of Eighth Graders Receiving Various Scores



NOTES: Percentages do not sum to 100 due to rounding.

Of the 42 percent of student responses in the lowest score level, 8 percent consists of omits and otherwise unscorable responses.

Partial. As with most Partial responses, this one describes in a general way how Bearden shows the inner and outer areas of the building, but does not explain how he creates contrast between the two areas.



Sample Student Response Receiving a Score of Acceptable

Look again at the Bearden work. How does Bearden show us the contrast between the interior and the exterior areas of the building? Be specific.

For the outside he uses grays and he texturizes it differently. On the other hand the inside has grays, but also has lots of bright colors and movement like all the people being busy and cleaning or doing whatever.

Acceptable. This student observantly refers to color and movement to explain how Bearden creates contrast between the two areas.

Sample Question 6 (Item 9 in Block)

Once students had been given the opportunity to observe and analyze the Bearden collage, they were asked to do some creative work of their own, according to the instructions shown below. The instructions clearly illustrate the attempt made to engage and guide students through the task.

Sample Question 6 (Item 9 in Block)

Take time to look again at your print of Pittsburgh Memories. The collage you see visually expresses a memory of Bearden's own past, as well as his deep appreciation for aspects of everyday life. (A collage is a work of art in which different pieces of different kinds of materials are assembled and fastened onto a flat surface.)

Study the Bearden work, and think about how the collage shows the artist's memory of what life in Pittsburgh was like. Notice how Bearden combines and organizes objects and places in unusual and unexpected ways to express what it is like to remember. Look for the ways in which interesting contrasts between inside and outside areas and the use of details and colors communicate a memory.

Now think of a memory of a place where you once lived, where you live now, a friend's house, or another place important to you in your community. What kinds of pictures do you see in your mind when you remember what it was like to be there?

Being as creative as you can, create a memory collage of the place you choose. In your collage, communicate what you remember about what it was like both inside of this place and outside in the neighborhood.

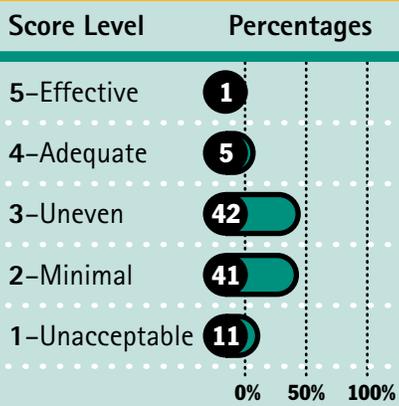
To make your collage:

- Take out all of the materials from your packet. You may use your scissors and/or tear materials you choose for your collage.
- Assemble on your sheet of white drawing paper pieces of any of the materials provided to show both the inside of the place you choose and what it was like outside.
- Once you have pasted down these areas, you can add details with markers and oil pastels.

After you have completed your memory collage, you will answer a question about your collage. You will have 43 minutes to do your collage and to answer the question.

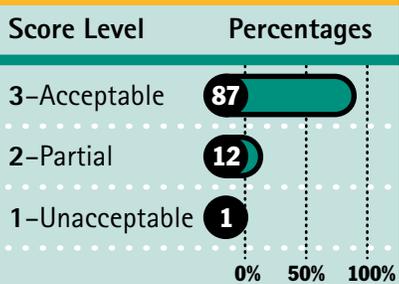


Percentage of Eighth Graders Receiving Various Scores – Collage



Students' works were scored with a five-level scoring guide that allowed for three levels of partial credit. The scoring guide was intended to capture how well students used their technical abilities to communicate a sense of a remembered place in a collage. The sample student collages represent the lowest score, Unacceptable, partial scores called Minimal, Uneven, and Adequate, and the highest score, Effective.

Percentage of Eighth Graders Receiving Various Scores – Self-Evaluation



Each collage is shown with its accompanying student self-evaluation, the response to item 10. As explained above, after most Creating tasks, students were asked to evaluate their own work. Responses to item 10 were scored with a three-level scoring guide that allowed for partial credit. The student responses that appear with the collages that follow represent the range of scores: the lowest score, Unacceptable, Partial scores, and the highest score, Acceptable. Good Creating work did not always correspond to good self-evaluation work, and vice-versa, as the self-evaluation responses shown demonstrate.



Student 1: Sample Collage Receiving a Score of Unacceptable



Unacceptable for Collage.

Many collages at this level showed either no use of collage techniques, or, as in this work, very limited use. This student has used collage to show smokestacks on a building, but the rest of the work is drawn. The work is colorful and does succeed in conveying a building covered with graffiti, but it does not do so with collage techniques.

Student 1: Sample Self-Evaluation Response Receiving a Score of Partial

Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

I described my place
with graphete on buildings
which is about the only
thing I remember when
I lived there.



Partial for Self-Evaluation: Students who received a Partial score for their written comments about their own collages tended to make fairly general observations about their work. As was observed during the discussion of the Self-Portrait task, this may indicate that self-evaluation of their own artwork is challenging for students when they have not had the opportunity to create more than one work over a period of time. Additionally, students may lack experience with evaluating their own work.

Student 2: Sample Collage Receiving a Score of Minimal



Minimal for Collage. At this level, the ability to use collage to express a memory of a place was barely evidenced. This student seems to be trying to represent a house, and it is possible that both inside and outside areas are shown. Collage is used to show what are probably windows, a roof, and what could be a door, although the circular shape near the bottom of the work is ambiguous. Overall, the work lacks a scheme of place and relies on basic forms without detail.

Student 2: Sample Self-Evaluation Response Receiving a Score of Unacceptable

Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

The ways to show a memory of a place is to think a know.

Unacceptable for Self-Evaluation. This lower-level response, in common with many others, repeats the prompt instead of addressing the question. Most students were able to write at least brief comment about the content of their collages.



Student 3: Sample Collage Receiving a Score of Uneven



Uneven for Collage. Students at the Uneven level exhibited the ability to use collage techniques in parts of their works. Their choice and use of materials showed occasional awareness of pattern, texture, color, contrasts, and the relationships of these qualities to depicted objects. Parts of their works sometimes lacked variation or experimentation with materials. Collages at this level also sometimes showed a lack of compositional unity and an uneven ability to capture a mood or feeling about a remembered place.

This first Uneven collage uses materials in interesting ways here and there. The textured cardboard seems to show a roof, while the marbled paper in the bottom half of the work may be the outside of a house upon which an interior scene is drawn with craypas. Although the work demonstrates some awareness of composition, it is hard to tell what is outside and what is inside.

Student 3: Sample Self-Evaluation Response Receiving a Score

Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

The artwork is about a city
home were kids are playing
outside enjoying the weather
playing in the field. inside at nite
where everyone getting ready to
eat dinner.

Acceptable for Self-Evaluation.

This student gives a reasonable amount of specific information about his or her collage. While this is not a very strong sample of this level of response, it helps a viewer to make sense of the collage. Interestingly, the written response in this case also confirms the score of the collage by demonstrating the gap between this student's ideas and his or her ability to realize those ideas. It is hard to see that the open triangle in the upper part of the work is a field outside, and that there is a meal taking place in the lower half of the work.

Student 4: Sample Collage Receiving a Score of Uneven



Uneven for Collage. This collage also received a score of Uneven. The choice of the textured cardboard to show the wood of a dock is effective, as is the blue craypa to show water. But most parts of the collage are depicted in a rigid way and rely exclusively on basic forms.

Student 4: Sample Self-Evaluation Response Receiving a Score of Acceptable

Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

being right on the water
+ going fishing and the
little walkway so you
can see the water

Acceptable for Self-Evaluation.

This student gives a reasonable amount of specific information about his or her collage. While this is not a very strong sample of this level of response, it helps us to make sense of the collage, in particular the stick figures floating in white space on what is meant to be a walkway. Responses at this level usually helped to clarify student work; most, however, did not supply information about how materials were actually used to accomplish different effects.



Student 5: Sample Collage Receiving a Score of Uneven



Uneven for Collage. This final sample of an Uneven collage is quite well done in parts. The use

of tissue paper to show a blue sky and floating grayish clouds demonstrates a good awareness

of how to utilize transparency and texture, and the tissue paper contrasts well with the heavy red construction paper used to show the apartment building. The yellow and black construction paper showing lit and dark windows is effective. All of these choices show the student's capacity to evoke a mood or feeling of a remembered place. However, while the work is strong in some ways, it does not show an interior space, but rather suggests one with the figure in the window. Hence it received an Uneven score.

Student 5: Sample Self-Evaluation Response Receiving a Score of Partial

Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

I chose the apartment building I used to live in.

Partial for Self-Evaluation: This student merely identifies the subject of his or her collage, and so received a Partial score.



Student 6: Sample Collage Receiving a Score of Adequate



Adequate for Collage. The three student works chosen to show the Adequate level each demonstrate the ability to use collage technique throughout most of the work. Each shows both the inside and outside of a remembered place, although the two areas in each work may not be well inte-

grated or equally well done. Forms and objects in each work are generally clear and have distinguishable features, and most objects are shown in relation to one another and to the whole page. Each collage is also reasonably expressive.

The first Adequate work shows a deliberate use of technique and color to depict certain objects and to convey the feeling of a remembered place. Red construction paper contrasts with the yellow half of the house to represent the inside area. The inside is identifiable by the contrasting paper and by the bed with a teddy bear on it drawn in craypas. While both the exterior and interior could have been more effectively integrated, overall, this student has addressed several components of the problem.

Student 6: Sample Self-Evaluation Response Receiving a Score of Acceptable

Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

I showed my old house. Because of the white paper used to make on I used yellow construction paper colored white as my house. I chose to represent my room in the old house. The cardboard & tissue created the 3-D effect of curtains, doors, clouds, flowers, and a small porch. blending was used to hopefully give a semi-surreal effect.

Acceptable for Self-Evaluation.

This student gives a very strong evaluation of his or her work. The student articulately uses art vocabulary and explains how he or she used materials to create different effects. Particularly notable is the reference to blending the craypas to create a surreal effect, which suggests that the student was aiming to capture the quality of a memory. This is an exceptional response that suggests some experience in evaluating his or her own work.

Student 7: Sample Collage Receiving a Score of Adequate



Adequate for Collage. This second Adequate collage effectively uses color, literal representation, (particularly in the rendering of the figures), contrasts, and pattern, and appears to have an organized composition. Collage is used to show a central structure and detail, such as umbrellas and towels. However, the interior space is somewhat ambiguous.

Student 7: Sample Self-Evaluation Response Receiving a Score of Unacceptable

Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

I didn't finish my collage

Unacceptable for Self-Evaluation. Some students, such as this one, may have run out of time.



Student 8: Sample Collage Receiving a Score of Adequate



Adequate for Collage. The last Adequate collage uses collage technique effectively to depict the inside and outside of a house in a yard. The deliberate choice of the glossy green paper for the treetop and grass help to evoke a mood or feeling. The student has also adeptly used variation in size of windows and spaces (as does Bearden) to show what may be a porch area of the house that is further back. The student did not get the highest score because the area and objects depicted on the right float ambiguously in space.

Student 8: Sample Self-Evaluation Response Receiving a Score of Acceptable

Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

Outside, a brick house with a big
shop in the front yard with a basket-
ball goal in the driveway. Inside,
there is a cozy couch with an oriental
rug.

Acceptable for Self-Evaluation.

This student gives a solid evaluation of his or her work. The student explains fairly specifically what he or she intended to show. The evaluation does help in understanding the work.



Student 9: Sample Collage Receiving a Score of Effective



Effective for Collage. The two student collages chosen to show the Effective level both demonstrate the ability to use collage technique throughout the whole work. Each collage clearly shows both the inside and outside of a remembered place. The inside and outside areas are skillfully done and are well integrated in each work. Materials are used in both

collages in deliberate ways to represent ideas, forms and objects. Finally, objects in both works are effectively combined and organized in unexpected ways that appear to express the quality of a memory. Very few students (1 percent) were able to successfully address this many components of the problem.

The first Effective work shows an excellent sense of pattern, texture, color, transparency, and contrast. Mounds of snow in a snowstorm are effectively rendered with overlapping, repeated shapes of blue and gray tissue paper. A capacity to evoke the mood or feeling of a remembered place is evident in the rhythmic pattern of dark trees varying in size and at angles to one another, and in the pattern of dark clouds that frame the scene. An interior space is clearly shown by a large shape of more tissue paper, suggesting a hollow in the snow or, as the student explains, a cave. The two abstract figures, the windows, and the fire done with construction paper all add detail and clarity to the interior area, and separate it from the woods outside.

Student 9: Sample Self-Evaluation Response Receiving a Score of Acceptable

Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

In my collage, I put it as a snowstorm. There are bright green trees on the snow, & there are black & white storm clouds. I also put a cave. In the cave I have 2 people by a fire, & behind them, are 2 windows.

Acceptable for Self-Evaluation. This student gives a thorough description of his or her work.

Student 10: Sample Collage Receiving a Score of Effective



Effective for Collage. This second Effective work is very different, but equally skilled. The student seems to have

explored some of Bearden's methods. A stairway, figure, and a textured cardboard roof separate inside and outside

areas and the inside is shown by cutting away the walls of the house. Objects, lines, and shapes are carefully and deliberately placed to tell a story. Collage materials and drawing tools are used to create lines of varied thickness and texture that unify the parts of the work and express a strong feeling. The figures, gestures, and facial details (rarely seen in responses to this task) are meaningful parts of the overall expression of the collage.

Blank for Self-Evaluation. Either this student ran out of time because of the effort put into the collage, or simply skipped the last question in the block. Twenty-one percent of students left this question blank, suggesting the challenge in planning assessment time for a creative, hands-on activity.



Figure 4.5



Sample Questions and Student Responses from the “Whisper Box” Block are found on the CD-ROM version of this report.



Part Two

The Visual Arts Responding Item Map and Student Profile

Reporting the Visual Arts Assessment Results

In this section, overall summaries of Responding results in terms of student-reported background variables and the Responding scale are featured.

The overall summaries deal with Responding and Creating results separately. While the knowledge and skills students draw upon to Create and Respond in visual arts do overlap and inform one another, it is plausible that some students will Create but not Respond well, and vice versa. To do justice to differing abilities among students, results for Creating and Responding exercises are summarized separately.³

The Visual Arts Responding Scale

The visual arts assessment measured students' Responding abilities with both short and extended constructed-response questions and multiple-choice questions. Item Response Theory (IRT) methods were used to produce a scale that summarizes the results from these questions. The scale ranges from 0 to 300. Item Response Theory (IRT) is a set

of statistical models useful in summarizing student performance across a collection of test exercises requiring similar knowledge and skills. In the context of the visual arts assessment, IRT methods were used to create a summarizing scale that relates the probability of students doing well or badly on the visual arts assessment exercises to their general Responding abilities (abilities to analyze, describe, and interpret works of art).

To give meaning to the levels of the Responding scale, it is useful to illustrate the kinds of questions that students at particular scale score levels of performance can answer correctly. Figure 4.6 presents this illustration, called an "item map," for the Responding scale. An item map is a visual representation that compares questions with scale scores and indicates which kinds of questions students can likely answer correctly at each level on the scale. Constructed-response questions are shown in regular type and multiple-choice questions are shown on the item map in italics. The position of a constructed-response question on the item map represents the scale score attained by students who had at least a 65 percent probability of

reaching a given score level on that question. The position of a multiple-choice question on the item map represents the scale score attained by students who had at least a 74 percent probability of correctly answering that question.

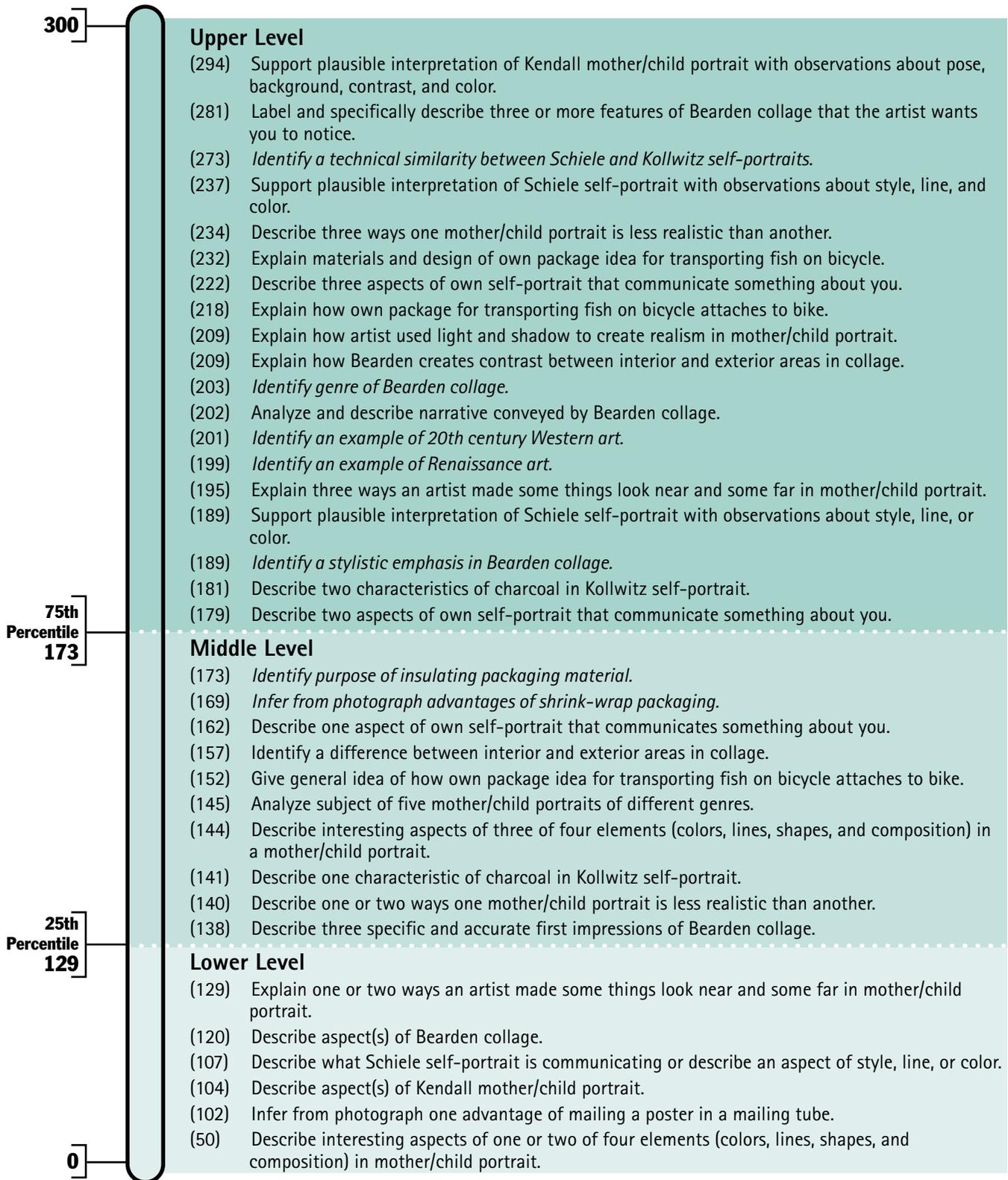
An example of how to interpret the item map may be helpful. In Figure 4.6, a 4-option multiple-choice question about the stylistic emphasis in a Romare Bearden collage maps at the 189 point on the scale. This means that students with visual arts scale scores at or above 189 were likely to answer this question correctly – that is, they had at least a 74 percent chance of doing so. Put slightly differently, this question was answered correctly by at least 74 of every 100 students scoring at or above 189 on the scale. This does not mean that students at or above the 189 scale score always would have answered this question correctly, or that student below the 189 scale score always would have answered it incorrectly. Rather, the percentage of students who can successfully answer the question depends on their overall ability as measured on the visual arts Responding scale.



3 Furthermore, a measurement requirement for summarizing student responses to different exercises together is that those exercises measure the same or similar knowledge and skills. The range of visual arts knowledge and skills is very wide. Knowledge and skills are also related in subtle and various ways in their applications to Creating and Responding. These factors diminish the possibility that the processes, in strict measurement terms, utilize knowledge and skills in ways similar enough to be summarized on a single scale.

Figure 4.6

**Map of Selected Questions on the NAEP Visual Arts
Responding Scale: Grade 8**



NOTE: Italic type indicates a multiple-choice question. Regular type indicates a constructed-response question.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

As another example, consider the constructed-response question that maps at a scale score of 209 on Figure 4.6. This question asked students to explain how Romare Bearden creates contrast in his collage between interior and exterior areas. Scoring of responses to this question allowed for partial credit by using a three-level scoring guide. Mapping a question at the 209 scale score indicates that at least 65 percent of the students performing at or above this point were likely to have achieved a score of 3 ("Acceptable") on the question. Among students with lower scores, less than 65 percent were likely to have given acceptable responses to the question.

In Figure 4.6, there are numerous occasions when points on the Responding scale represent different scores achieved by students for the same question. For example, the exercise just discussed that maps at a scale score of 209 indicates that at least 65 percent of students performing at or above this point were likely to have been able to explain how Bearden creates contrast. Hence, these students were likely to have achieved a score of 3 for this exercise. However, at the 157 point on the scale, a lower score of 2 for the same question is represented; i.e., at least 65 percent of the students performing at or above 157 on the Responding scale were likely to have been able to identify a dif-

ference between the interior and exterior areas in the collage, but not explain how the artist achieved contrast between those areas.

The Visual Arts Responding Item Map

As explained above, the NAEP visual arts scale, ranging from 0 to 300, summarizes the overall Responding score results of students. The following descriptions of students' Responding knowledge and skills in visual arts are based on sets of questions that were answered successfully by students performing within three ranges on the scale. These ranges represent lower-, middle-, and upper-level performances based on percentiles.⁴ (These ranges are also visually represented on the item map in Figure 4.6).

Students in the Lower Range of the Responding Scale

Students who were in the lower range of the visual arts scale (points 0 to 129) were able to make some rudimentary observations about the technical aspects or subjects of artworks, such as a quality of color in a Schiele self-portrait or the presence of a factory in a Bearden collage. They were able to offer sparse interpretations of what an artist may have been trying to communicate in a work of art. They were also able to make simple inferences about package design, for example, an advantage of mailing a poster in a mailing tube.

Students in the Middle Range of the Responding Scale

Students who were in the middle range of the visual arts Responding scale (points 130 to 173) showed sufficient technical knowledge to be able to identify one characteristic of charcoal in a Kollwitz self-portrait. They could make some observations about, and comparisons of, works of art in terms of concepts like near and far and realism or a lack of realism. These students were able to make some initial connections between technical aspects of works and their expressive qualities, linking characteristics like color with what they intended to convey in their own self-portraits. They were also able to apply simple design principles to describe some important characteristics of their own designs for a package to carry a fish on a bicycle.

Students in the Upper Range of the Responding Scale

Students who were in the upper range of the visual arts Responding scale (points 174 to 300) showed solid knowledge and skills in observing and describing technical aspects of works of art and relationships between technical and expressive aspects of works. They were able to support interpretations of a Schiele self-portrait and a Kendall mother and child portrait with specific references to characteristics such as line, composition, background, and color. They were also able to identify

⁴ A percentile is a scale score below which a specified percentage of the population scored. For example, the 25th percentile as given in Figure 4.6 is 129. Twenty-five percent of students had scale scores of 129 or lower. Similarly, the 75th percentile as shown in Figure 4.6 is 173. Seventy-five percent of the students had scale scores of 173 or lower. Equivalently, 25 percent of the students had scale scores above 173.

three aspects of their own self-portraits that conveyed something about their personalities. These students knew the historical and cultural contexts for several works of art, and could identify the genre of a Bearden collage and the historical period of a mother and child portrait. They could also clearly and thoroughly describe and compare works of art in terms of concepts like near and far and realism or a lack of realism. Students in the upper level of the scale were able to apply design principles to analyses of the operation and materials of their own designs for a package to carry a fish on a bicycle.

Profile of Students' Visual Arts Experiences

Figure 4.7 provides some context for understanding the range of student performance represented on the item map and described previously by "profiling" students who fell into the lower, middle, and upper ranges on the visual arts Responding scale.⁵ The profile represents these students in terms of their own descriptions of their visual arts studies. As part of the NAEP 1997 Visual Arts Assessment, students were asked a series of questions about the nature and extent of their visual arts instruction, as well as their visual arts-related experiences outside of school. The results of these questions provide a picture of the sorts of activities students do when learning and engaging in visual arts.

An examination of the profile reveals a common pattern: in-school activity is positively associated with student performance. Significantly larger percentages of students in the upper and middle levels of the Responding scale than in the lower level of the scale were taking visual arts. Similarly, a significantly larger percentage of students in the upper level of the Responding scale than in the middle and lower levels of the scale painted or drew at least once a week. The percentage of students in the middle level of the scale who painted or drew at least once a week was also significantly larger than the percentage of students in the lower level of the scale who did so.

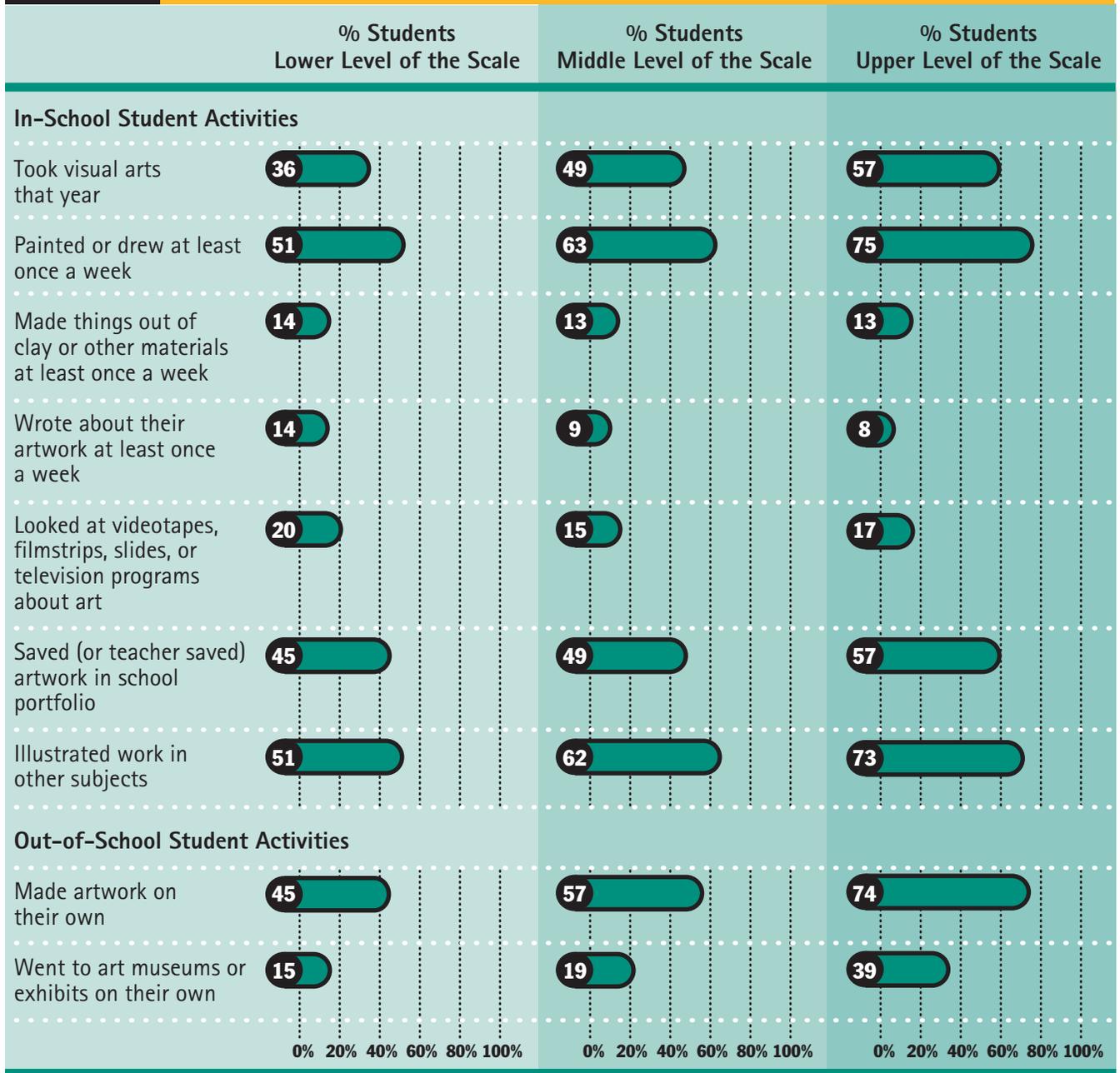
There were no significant differences among percentages of students in the lower, middle, and upper levels of the Responding scale who made things out of clay or other materials at least once a week. However, although it does not appear in the profile, the percentages of students in the upper and middle levels of the Responding scale who made things out of clay or other materials *once or twice* a month were significantly larger than the percentages of students in the lower level of the scale who did so. The pattern was the same for percentages of students who watched videotapes, filmstrips, slides, or television programs about art. While there were no significant differences among percentages of students who looked at such media at least once a week, there were significant differences among percentages of students who did so once or twice a month. (Again, readers are cautioned against drawing causal inferences from these results.)

Assessment results show that keeping a portfolio bears a positive relationship to performance. The percentage of students in the upper level of the Responding scale who saved their artwork (or whose artwork was saved by their teachers) in portfolios was significantly larger than the percentages of their peers in both the middle and lower levels of the scale who saved their artwork in portfolios. This may be of interest to arts educators who believe that

⁵ The lower group comprised students whose scores fell into the lowest 25 percent of the population. The middle group comprised students whose scores fell into the middle 50 percent of the population. The upper group comprised students whose scores fell into the highest 25 percent of the population.

Figure 4.7

Visual Arts Responding Profile of Percentages of Students in Lower, Middle, and Upper Levels of the Responding Scale, by Selected In- and Out-of-School Activities



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.



portfolios can help students evaluate and direct their own arts learning.⁶ Also, a significantly larger percentage of students in the upper level of the Responding scale than in the middle and lower levels of the scale illustrated their work in other subjects. The percentage of students in the middle level of the scale was significantly larger than the percentage of students in the lower level. These findings are of

potential value to educators interested in integrating the arts with other subjects.⁷ A significantly larger percentage of students in the lower level of the Responding scale wrote about their artwork at least once a week in school than did percentages of students in the middle and upper levels.

Finally, it is worth noting that doing artwork and going to art museums and exhibits outside of

school were positively associated with student performance. For both variables, percentages of students in the upper level of the scale were significantly larger than percentages of students in the middle and lower levels of the scale. Additionally, for doing artwork, the percentage of students in the middle level of the scale was significantly larger than the percentage of students in the lower level.

Relationships Between Student Visual Arts Creating and Responding Results

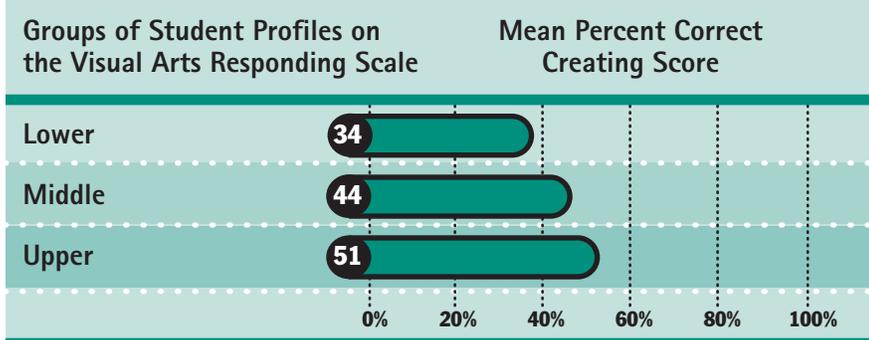
As previously explained, results for student Creating and Responding are not summarized together. However, to explore potential relationships between student results for the different processes, the average Creating scores for students in the lower, middle, and

upper levels of the Responding scale are presented in Figure 4.8 below. As shown in the figure, there is a positive relationship between student performance on the Responding portion of the assessment and their Creating scores. Creating scores of students in the middle level of the Responding scale were significantly higher than scores of students in the lower level of the scale, and scores of students in the upper level of the Responding scale

were significantly higher than scores of students in the middle and lower levels of the scale. This is interesting in light of the view that knowledge and skills necessary for Responding to visual arts overlap with those necessary for Creating in visual arts.

More detailed conclusions are not within the scope of this Report Card. Further research would be necessary to determine precisely how Creating and Responding abilities are related.

Figure 4.8 Creating Mean for Lower, Middle, and Upper Responding Score Groups



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.



6 Wolf, D.P., and Pistone, N. (1991). *Taking full measure: Rethinking assessment through the arts*. New York: The College Board.

7 Armstrong, C. L. (1994). *Designing assessment in art*. Reston, VA: National Art Education Association, 32.

Boston, B.O. (1996). *Connections: The arts and the integration of the high school curriculum*. New York: The College Board and The Getty Center for Education in the Arts.

Part Three

Sample Tasks from the Visual Arts Three-Dimensional Creating Blocks

The Metamorphosis and Kitchen Sculpture tasks both required students to explore three-dimensional artwork in real space. Students created sculptural works using materials such as plasticine and other materials. (Examples of these works are found on the CD-ROM version of this report.)

Because of the quantity of student works and their fragility, these works could not be shipped to a scoring site. Instead, the artworks were photographed for later scoring. Assessment administrators were given careful training in how to photograph student works from both a close-up and a more distant

view. Administrators were also instructed to take four shots of each artwork from different 30 degree angles, to capture as much of the work as possible.

Even so, it was not possible to get lighting conditions and the kind of photographic accuracy that would have guaranteed very clear views of all student works. Administrators did their best to photograph artworks in school classrooms.

Raters used the photographs to score three-dimensional student works. Even when looking at actual works, agreeing on scores was challenging because of the variety of students' solutions to visual prob-

lems, the wide range of student abilities, and the range of views about qualities of artworks. Using photographs to score increased this challenge. For this reason, readers are asked to keep in mind the challenge in making judgments about student works when encountering scores assigned to students.

The assessment scoring circumstances also explain references in the text to giving students the benefit of the doubt when an aspect of a work is somewhat unclear. Raters tended to score supportively, on the assumption that characteristics of student works may have been obscured in photographs.

Figure 4.9



Sample Questions and Student Responses from the “Metamorphosis” Block are found on the CD-ROM version of this report.



Figure 4.10



Sample Questions and Student Responses from the “Kitchen Sculpture” Block are found on the CD-ROM version of this report.



Part Four

Summarizing Visual Arts Creating Results

In this section, visual arts Creating results are discussed in terms of total (or "aggregate") scores.⁸ These scores represent averages based on student performances on each Creating task. The relationships of these averages to opportunity-to-learn variables are presented in Tables 4.1 to 4.5. As shown in the tables, there is often a positive relationship between these opportunity-to-learn variables and student Creating results. Students reporting greater opportunities to learn about visual arts exhibited higher average Creating scores than students reporting fewer opportunities.

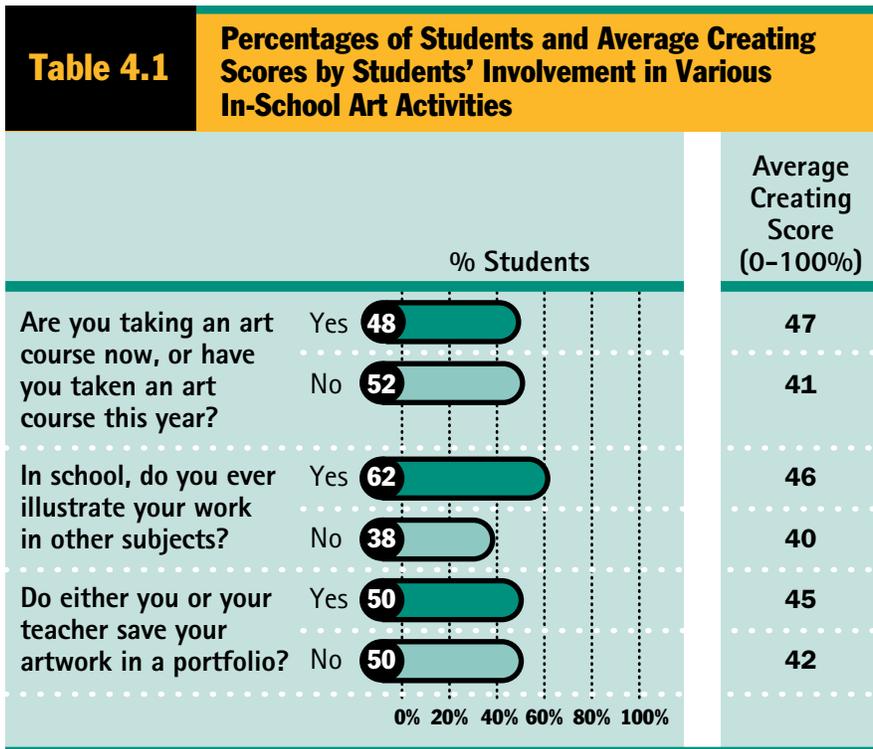
Visual Arts Course Taking and Activities at School

Table 4.1 features results for students who indicated whether or not they had taken a visual arts course; illustrated their work in other subjects; or saved their work in a portfolio. Nearly half (48 percent) of students indicated that they were taking a visual arts course, or had taken one that year. Sixty-two percent of students indicated that

they illustrated their work in other subjects. Finally, about one half of students saved their work (or had their work saved for them by teachers) in portfolios.

Coursework in visual arts had a positive relationship to student average Creating scores, as did the other two activities. Students who

indicated that they were taking or had taken an art course that year had higher average Creating scores than did students who indicated that they were not taking, or had not taken, such a course. Further, students who illustrated their artwork in other subjects outperformed their peers who indicated they did



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.



⁸ Creating tasks are not summarized using a standard NAEP scale. A measurement requirement for scaling assessment results is that there be a sufficient number of students taking a given group of exercises and a sufficient number of exercises of a given type to be scaled. This was not the case for the Creating exercises. Although they consumed far more assessment time than written exercises, there were fewer exercises to group together into a scale.

not, a result interesting in light of recent ideas about the possible value of cross-disciplinary arts activities for educational achievement.⁹ Students who saved their

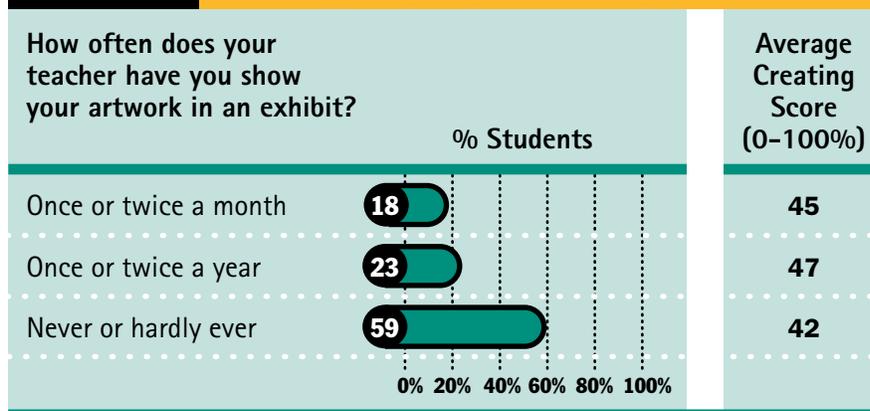
artwork (or had their artwork saved by a teacher) in a portfolio also had higher Creating scores than did students who indicated they did not. This finding may be useful to arts

educators who believe that portfolios can help students to evaluate and direct their own arts learning over time.¹⁰

Students' arts learning can be encouraged by exhibiting student artwork.¹¹ Table 4.2 presents results for students who indicated how often their teachers exhibited their artwork. Eighteen percent of students indicated that their teachers exhibited their work once or twice a month, and 23 percent indicated that their teachers exhibited their work once or twice a year. Fifty-nine percent of students never or hardly ever had their artwork exhibited. Those students whose artwork was exhibited once or twice a year had higher average Creating scores than students whose work was never or hardly ever exhibited.

Table 4.3 features how many times students had gone with their class to an art museum, gallery, or exhibit. Opportunities to look at actual works can increase students' understanding and appreciation of the nature of art and artmaking, as well as the social and historical contexts of artworks. While 21 percent of students indicated that had gone with their class one or two times in the last year to such exhibits, 2 percent indicated that they had gone three or more times. Seventy-eight percent of students indicated that they had not gone to such exhibits in the last year. There were no relationships between these frequencies of visits and student scores.

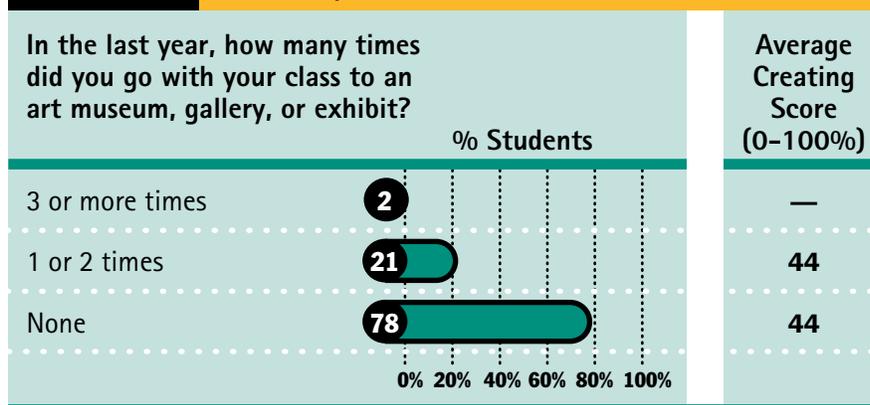
Table 4.2 Percentages of Students and Average Creating Scores by Frequency of Exhibiting Artwork



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.



Table 4.3 Percentages of Students and Average Creating Scores by Frequency of Visits to Art Museums, Galleries, or Exhibits



NOTES: Percentages do not sum to 100 due to rounding.
 — Sample size is insufficient to provide a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.



9 Armstrong, C.L. (1994). *Designing assessment in art*. Reston, VA: National Art Education Association, 32.

Boston, B.O. (1996). *Connections: The arts and the integration of the high school curriculum*. New York: The College Board and The Getty Center for Education in the Arts.

10 Wolf, D.P., and Pistone, N. (1991). *Taking full measure: Rethinking assessment through the arts*. New York: The College Board.

11 National Center for Education Statistics. (1995). *Arts education in public elementary and secondary schools*. (Publication No. NCES 95-082). Washington, DC: US Department of Education, 23. (See also <http://nces.ed.gov/surveys/frss.html>)

Classroom Instruction in Visual Arts

Some kinds of classroom instruction in visual arts had a generally positive relationship to student scores. Table 4.4 presents the frequencies for various kinds of classroom arts activities. Students were asked most frequently to paint or draw: 63 percent of students were asked to do so at least once or twice a week. The next most frequent activity was talking with others about their artwork or that of other students, an encouraging finding given the opinion of some educators that discussion about their artwork among students contributes to students' enthusiasm for creating and abilities to create.¹² Thirty-three percent of students were asked to do so at least once or twice a week, and 17 percent once or twice a month. Relatively few students (13 percent) were asked to make things out of clay or other materials at

least once or twice a week. One-quarter of students were asked to make things out of clay or other materials once or twice a month, and 62 percent were never or hardly ever asked to do so. The infrequency of working with three-dimensional media is consistent with the small percentages of students who scored above the Partial level on the three-dimensional Creating tasks in the assessment.

Of the activities shown in Table 4.4, writing about artwork was very infrequent. Seventy-nine percent of students were never or hardly ever asked to do so.

The pattern of results in Table 4.4 suggests a generally positive relationship between visual arts activities and student scores. Students who were asked to paint or draw at least once a week outperformed those who were asked to do so once a month and never or hardly ever. Further, those who were

asked to paint or draw once a month outperformed those who were never or hardly ever asked to do so. Students who were asked to make things out of clay or other materials at least once a week, and those who were asked to do so once a month, had higher average scores than did students who were never or hardly ever asked to do so. Also, students who were asked to talk with others about their own artwork or that of other students at least once a week had higher average scores than their peers who were never or hardly ever asked to do so. Finally, students who were asked to look at videotapes, filmstrips, slides, or television programs about art once a month outperformed students who were never or hardly ever asked to do so.

¹² Winner, Ellen, et. al. (1992). *Arts propel: A handbook for visual arts*. Educational Testing Service and the President and fellows of Harvard College (on behalf of Project Zero, Harvard Graduate School of Education).



Table 4.4

Percentages of Students and Average Creating Scores by Students' Reports on the Frequency With Which They Engage in Various Visual Art Activities

When you have art in school, does your teacher have you do the following things?	Average Creating Score (0-100%)	Make things out of clay or other materials	Average Creating Score (0-100%)
Paint or draw % Students At Least Once a Week 63 Once a Month 17 Never or Hardly Ever 20 0% 50% 100%	46 42 38	Make things out of clay or other materials % Students At Least Once a Week 13 Once a Month 25 Never or Hardly Ever 62 0% 50% 100%	46 46 42
Talk with others about your artwork or that of other students % Students At Least Once a Week 33 Once a Month 17 Never or Hardly Ever 50 0% 50% 100%	46 45 42	Write about your artwork % Students At Least Once a Week 10 Once a Month 11 Never or Hardly Ever 79 0% 50% 100%	42 43 44
Look at videotapes, filmstrips, slides, or television programs about art % Students At Least Once a Week 17 Once a Month 28 Never or Hardly Ever 55 0% 50% 100%	44 46 42	Work with a camera, computer, or Xerox to make artwork % Students At Least Once a Week 23 Once a Month 19 Never or Hardly Ever 58 0% 50% 100%	44 44 43

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.



Out-of-School Visual Arts Activities

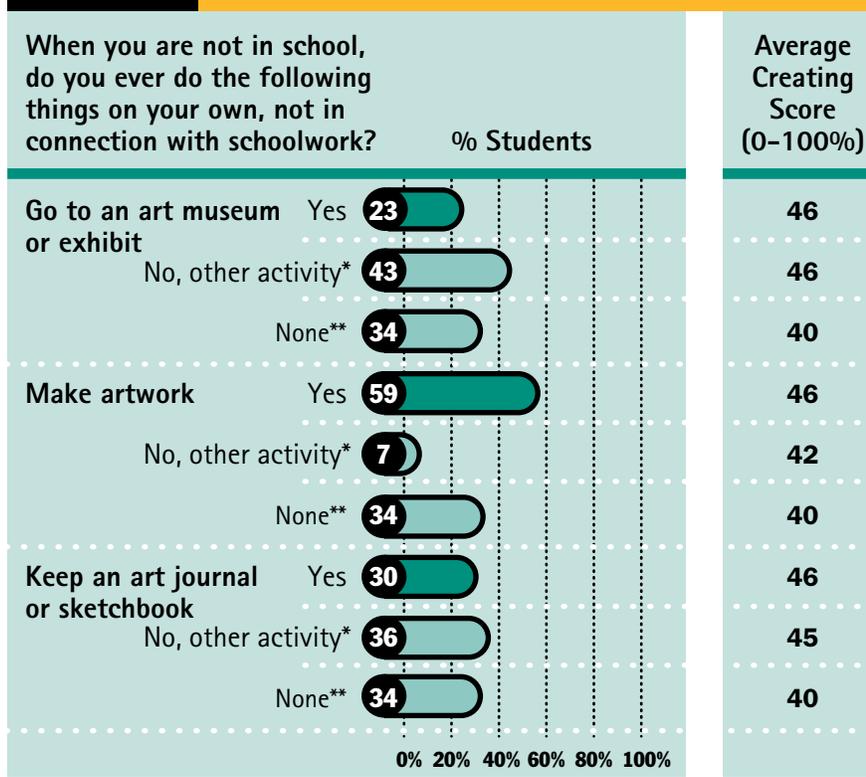
Table 4.5 features results on student involvement in visual arts activities outside of school. Results are presented for three activities: going to art museums or exhibits, making artwork, and keeping an art journal or sketchbook. For each activity the table presents the percentages of students who: (1) indicated engaging in that activity, (2) did not engage in that activity but did indicate engaging in one of the other activities listed and (3) did not engage in any of the listed activities.

As shown in the table, 59 percent of students indicated that they made artwork on their own outside of school. Twenty-three percent of students indicated that they went to art museums or exhibits on their own, and 30 percent that they kept an art journal or sketchbook on their own.

Involvement in out-of-school arts activities had a positive relationship to average Creating scores. For each of the three activities, students who reported engaging in the activity had higher average Creating scores than students who had not engaged in any of the activities. With the exception of making artwork, students who engaged in at least one of the other activities also had higher Creating scores than students who had not.

Table 4.5

Percentages of Students and Average Creating Scores by Students' Reports on Their Involvement in Various Out-of-School Art Activities



NOTES: * The percentage and score in this row are representative of that portion of the sample that did not respond "Yes" to this activity, but did indicate doing one or more of the other activities in Table 4.5. For this series of background questions respondents were to indicate only those statements that were applicable.

** The percentage and score in this row are representative of that portion of the sample that did not respond "Yes" to any of the activities.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.



Summary

The preceding sections of this chapter presented different kinds of information about students' knowledge and skills in visual arts, as well as students' arts educational experiences in (and out of) the classroom. Several points of interest emerged from this discussion.

Patterns of Student Performance¹³

Patterns of students' knowledge and skills in Responding and Creating varied. Some kinds of tasks seemed more accessible to students, and others more difficult for both Responding and Creating.

Responding

- Students were able to accurately describe some aspects of artworks. For example, 34 percent of students could identify two traits of charcoal in a Kollwitz self-portrait, and 49 percent could identify an accurate description of the composition of a Bearden collage. Similarly, 29 percent of students could describe three ways Raphael created a sense of near and far in a Madonna and Child painting, and 53 percent were able to identify two ways.
- Recognizing subtler aspects of composition seemed difficult for students. Twenty-two percent

could identify and describe the contribution of an unusual aspect of the Bearden collage to the whole work, and 14 percent of students could explain how Bearden created contrast between interior and exterior space in the collage.

- Students' abilities to place artworks in historical and cultural contexts varied. For example, while 55 percent of students could identify which of four works was a work of contemporary Western art, 25 percent could identify which of four works contributed to Cubism.
- Generally, linking aesthetic features of artworks explicitly with meaning seemed challenging to students. Four percent of students could write a brief essay linking a full analysis of aspects of a Schiele self-portrait to an interpretation, while 24 percent were able either to link sparser analyses to interpretations, or to analyze aspects of the self-portrait without an interpretation.
- Students showed some abilities to link form with function in design. In two instances, 32 percent of students were able to accurately infer and describe advantages of the designs of packages from a set of photographs.

Creating

- Creating specific, fully observed, and expressive two-dimensional artworks was challenging for students. Five percent created self-portraits that showed sensitive use of materials, details, and compositional awareness. One percent of students created expressive collages that showed a consistent awareness of qualities such as color, texture, and contrast. However, 40 percent of students were able to convey aspects of personality expressively and ably in parts of their self-portraits, and 42 percent of students were able to effectively use collage techniques in parts of their collages.
- Exploring the relationship between form and function in Creating yielded varied results. In a task asking students to design a package to safely transport a fish while riding a bicycle, 16 percent of students clearly conveyed in a drawn design how the package would protect the fish and retain water, and 27 percent of students clearly indicated how the package attached to the bike. (The best fish-package designs often featured more than one view and clear notes explaining relevant aspects of the design.) Results for a task

¹³ Some of the descriptions that follow refer to exercises and student responses found on the CD-ROM version of this report.

asking students to link form and function to create a package for a sound (a scream or whisper) were closer to those for non-design tasks. Seven percent of students were able to create “scream” or “whisper” packages that conveyed their contents clearly to a viewer and that utilized colors, patterns, and graphics to unify the three-dimensional space of a box into a whole package. Twenty-three percent of students were able to create less unified packages that communicated their contents more vaguely.

- Students seemed to find applying their knowledge and skills to three-dimensional tasks challenging. Approximately 10 percent of students were able to manipulate plasticine to create skillful and expressive sculptures showing the transformation of a man to a fish. Far more students (approximately a third to a half) created forms that were somewhat vague and that conveyed little movement or gesture.¹⁴
- Three percent of students were able to create freestanding sculptures out of plasticine and wire that skillfully combined shapes, details, and textures into an imaginative interpretation of kitchen utensils. Many more students (21 percent) created sculptures that were not freestanding or that showed some ability to realize an idea in an inventive, organized interpretation.

Self-Evaluation Responses

Chapter 4 also explored students' responses to self-evaluation questions about their own two- and three-dimensional works. Interestingly, relationships between students' abilities to express themselves in written form about their Creating, and the quality of their Creating work, were not predictable. There are many factors that could account for this. One could be a lack of time for students to focus on commenting upon their work after finishing a Creating task. Another could be varying levels of exposure to evaluating their own artworks. More research would be needed to explore fully the relationship between students' abilities to Create and their capacities to evaluate their creations in writing.

Variation was also seen in student sketches of ideas and the realization of those ideas in three dimensions for the Monument task and the Kitchen Sculpture task. While some students received high scores for both the 2-D and the 3-D components of these tasks, many others were stronger in one or the other. Again, more in-depth research would be needed to determine more accurately relationships between students' abilities to create in two and three dimensions.

Students' In-School Visual Arts Experiences

In order to create a context for students' Creating knowledge

and skills, students' reports of their in-school (and out-of-school) arts activities were explored in Chapter 4. For both Responding and Creating, in-school arts activity is often positively associated with arts achievement.

- Significantly larger percentages of students in the upper and middle levels of the Responding scale were currently taking visual arts than were their peers in the lower level. Similarly, significantly larger percentages of students in the upper level of the Responding scale painted or drew at least once a week, worked with clay once a month, and saved their artwork in portfolios than did percentages of their peers in the middle and lower levels.
- Students who indicated that they were currently taking or had taken an art class that year had higher average Creating scores than did students who indicated that they were not taking, or had not taken, such a course. Students who were asked to paint or draw, and those who were asked to make things out of clay or other materials at least once a week, outperformed those who were asked to do so once a month and never or hardly ever. Further, students who saved their artwork in a portfolio outperformed their peers who indicated that they did not do so.

¹⁴ These percentages are approximate because they summarize results for four scoring guides.

