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The   
Nation's  
Report Card

# Arts 2008

## Music & Visual Arts

NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS AT GRADE 8



## Contents

- 1 Executive Summary
- 4 Introduction
- 7 Music
- 19 Visual Arts
- 34 Technical Notes and Data Appendix



# What is The Nation's Report Card™?

The Nation's Report Card™ informs the public about the academic achievement of elementary and secondary students in the United States. Report cards communicate the findings of the National Assessment of Educational Progress (NAEP), a continuing and nationally representative measure of achievement in various subjects over time.

Since 1969, NAEP assessments have been conducted periodically in reading, mathematics, science, writing, U.S. history, civics, geography, the arts, and other subjects. NAEP collects and reports information on student performance at the national, state, and local levels,

making the assessment an integral part of our nation's evaluation of the condition and progress of education. Only academic achievement data and related background information are collected. The privacy of individual students and their families is protected.

NAEP is a congressionally authorized project of the National Center for Education Statistics (NCES) within the Institute of Education Sciences of the U.S. Department of Education. The Commissioner of Education Statistics is responsible for carrying out the NAEP project. The National Assessment Governing Board oversees and sets policy for NAEP.



# Executive Summary

This report presents the results of the 2008 National Assessment of Educational Progress (NAEP) in the arts, which was given to a nationally representative sample of 7,900 eighth-grade public and private school students. Approximately one-half of these students were assessed in music, and the other half were assessed in visual arts.

The **MUSIC** portion of the assessment measured students' ability to respond to music in various ways. Students were asked to analyze and describe aspects of music they heard, critique instrumental and vocal performances, and demonstrate their knowledge of standard musical notation and music's role in society. One question, for example, asked students to identify the instrument they heard in the beginning solo of "Rhapsody in Blue" that was played for them.

The average responding score for music was reported on a NAEP scale of 0 to 300. Scores ranged from 105 for the lowest-performing students to 194 for the highest-performing students.

The **VISUAL ARTS** portion of the assessment included questions that measured students' ability to respond to art as well as questions that measured their ability to create art. Responding questions asked students to analyze and describe works of art and design. For example, students were asked to describe specific differences in how certain parts of an artist's self-portrait were drawn. The average responding score for visual arts was reported on a NAEP scale of 0 to 300 with scores ranging from 104 for the lowest-performing students to 193 for the highest-performing students.

Creating questions, on the other hand, required students to create works of art and design of their own. For example, students were asked to create a self-portrait that was scored for identifying detail, compositional elements, and use of materials. The average creating task score for visual arts was reported separately as the average percentage of the maximum possible score from 0 to 100 with a national average of 52. In general, students who performed well on the responding questions also performed well on the creating questions.





## Racial/ethnic and gender gaps evident in both music and visual arts

Although the results for music and visual arts are reported separately and cannot be compared, some general patterns in differences between student groups were similar in the two disciplines.

- Average responding scores in both music and visual arts were 22 to 32 points higher for White and Asian/Pacific Islander students than for Black and Hispanic students. The creating task scores in visual arts were also higher for White and Asian/Pacific Islander students than for their Black and Hispanic peers.
- Average responding scores for female students were 10 points higher than for male students in music and 11 points higher in visual arts. Female students also outperformed male students in creating visual art.

## Frequency of arts instruction remains steady

In 2008, fifty-seven percent of eighth-graders attended schools where music instruction was offered at least three or four times a week, and 47 percent attended schools where visual arts

instruction was offered at least as often. There were no statistically significant changes since 1997 in the percentages of students attending schools offering instruction in music or visual arts with varying frequency.

There were also no significant differences found between the percentages of students in different racial/ethnic or gender groups attending schools with varying opportunities for instruction in either music or visual arts in 2008.

## COMPARISONS BETWEEN 1997 AND 2008

Although the questions in the 2008 assessment were taken from those administered in the 1997 arts assessment, some of the scoring procedures could not be replicated in 2008. Therefore, comparisons cannot be made between students' scores in those two years. However, comparisons can be made for the percentages of students who responded correctly to the multiple-choice questions in the assessment, and the percentages of students based on responses to background questions that were asked in both years.

# Examples of What Students Know and Can Do in the Arts

## Music

- 71%** correctly identified a symphony orchestra as the type of ensemble that played a piece of music
- 52%** were able to identify Africa as the region of origin for a musical excerpt and could describe a characteristic of the music's style
- 20%** were able to identify the name of a piano dynamic marking and explain its meaning

## Visual Arts

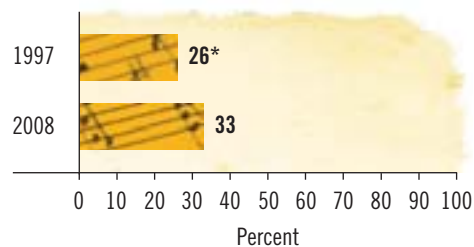
- 53%** were able to describe specific differences in how certain parts of an artist's self-portrait were drawn
- 34%** were able to describe two characteristics of the medium of charcoal as used in an artist's self-portrait
- 19%** were able to connect the formal characteristics of an artist's self-portrait with what the artist was trying to communicate

## More students writing down music and writing about their artwork in arts classes

The percentage of eighth-grade students who reported being asked by their teacher to write down music in music class showed an increase from 26 percent in 1997 to 33 percent in 2008 (figure A). However, the percentages of students who reported engaging in other activities such as listening to music, singing, playing instruments, working on group assignments, and making up their own music in 2008 were not found to be significantly different from the percentages of students in 1997.

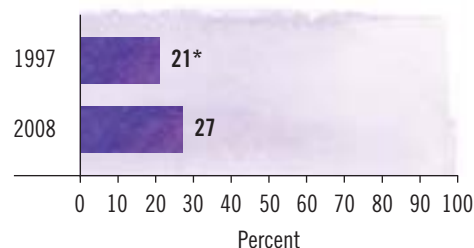
The percentage of eighth-grade students who were asked by their teacher to write about their artwork in visual arts class increased from 21 percent in 1997 to 27 percent in 2008 (figure B). The percentage of students whose teacher had them choose their own art project, on the other hand, decreased from 47 percent to 39 percent over the same period. Additionally, the percentage of students who reported visiting an art museum, gallery, or exhibit with their class decreased from 22 percent in 1997 to 16 percent in 2008. There were no significant changes for other activities such as painting or drawing, making things out of clay or other materials, or working in pairs or groups.

Figure A. Percentage of students at grade 8 who are asked to write down music at least once a month in music class: 1997 and 2008



\* Significantly different ( $p < .05$ ) from 2008.

Figure B. Percentage of students at grade 8 who are asked to write about their artwork at least once a month in art class: 1997 and 2008



\* Significantly different ( $p < .05$ ) from 2008.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 and 2008 Arts Assessments.



# Introduction

The 2008 NAEP arts assessment measured students' knowledge and skills in the arts by asking them to observe, describe, analyze, and evaluate existing works of music and visual art and to create original works of visual art.

## The Eighth-Grade Arts Assessment

### The Arts Framework

The NAEP arts framework serves as the blueprint for the assessment, describing the specific knowledge and skills that should be assessed in the arts disciplines. Developed under the guidance of the National Assessment Governing Board, the framework reflects the input of arts educators, artists, assessment specialists, policymakers, representatives from the business community, and members of the public. The *National Standards for Arts Education*<sup>1</sup> also served as an important reference in the development of the NAEP arts framework.

The framework specifies that students' arts knowledge and skills be measured in four *arts disciplines*: dance, music, theatre, and visual arts. Additionally, three *arts processes*—responding, creating, and performing—are central to students' experiences in these disciplines. While the responding process refers to observing, describing,

analyzing, and evaluating works of art, the creating process refers to expressing ideas and feelings in the form of an original work of art. Due to budget constraints, only the responding process in music and both the responding and creating processes in visual arts were assessed in 2008.

To learn more about the arts framework, visit <http://www.nagb.org/publications/frameworks/arts-framework08.pdf>.

### Assessment Design

Because of the breadth of content covered in the NAEP arts assessment, each student was assessed in only one arts discipline, either music or visual arts.

The responding process in music and visual arts was assessed with multiple-choice questions and constructed-response questions that required students to produce answers of a few words or sentences. The constructed-response questions that assessed the creating process included questions that required students to generate written answers and to create original works of visual art.

<sup>1</sup> *National Standards for Arts Education* (1994). Reston, Virginia: Music Educators National Conference.



## Scoring Students' Work in the Arts

One of the challenges of the arts assessment was scoring students' work. Specific scoring guides were developed for the responding questions in music and the responding and creating questions in visual arts. Scorers were then trained to apply these criteria appropriately when evaluating students' responses that demonstrated a wide range of skill levels in music and visual arts.

The scoring guides for the sample questions presented in this report, and other released questions from the assessment, are available in the NAEP Questions Tool at <http://nces.ed.gov/nationsreportcard/itmrls/>.

## Reporting Arts Results

The results in this report are based on a nationally representative sample of 7,900 eighth-grade students from 260 public and private schools. Approximately one-half of these students were assessed in music, and the other half were assessed in visual arts.

Because music and visual arts are two distinct disciplines, results are reported separately for

each area and cannot be compared. The average responding scores for music and visual arts are reported on two separate NAEP scales, each ranging from 0 to 300. The average creating task score for visual arts is reported as the average percentage of the maximum possible score ranging from 0 to 100. The arts assessment results cannot be reported in terms of the NAEP achievement levels (*Basic*, *Proficient*, and *Advanced*) given the complex and diverse nature of the assessment tasks both within and across the arts disciplines.

## Comparisons Between 1997 and 2008

Although the questions in the 2008 assessment were taken from those administered in the previous arts assessment in 1997, not all of the results can be compared between the two years (see the Technical Notes for more information). While comparisons across years cannot be made for the average responding and creating task scores, the percentages of students' correct responses to the multiple-choice questions in 2008 can be compared to those in 1997. These results are provided in appendix table A-3 for music and table A-4 for visual arts.

## Accommodations and Exclusions in NAEP

Testing accommodations (for example, providing students with extra testing time or administering the assessment to students individually rather than in a group) are made available for students with disabilities and for English language learners participating in NAEP. Even with the availability of accommodations, a portion of these students was excluded from the NAEP arts assessment by their schools. In the 2008 arts assessment, overall exclusion rates for students with disabilities and/or English language learners were 2 percent of all students for music and for visual arts (see appendix table A-6).

More information about NAEP's policy on the inclusion of special-needs students is available at <http://nces.ed.gov/nationsreportcard/about/inclusion.asp>.



## Interpreting Results

NAEP uses widely accepted statistical standards for presenting and discussing results. Findings are reported based on statistical significance at the .05 level using *t*-tests with appropriate adjustments for multiple comparisons (using the False Discovery Rate procedure). Results that are reported to be “higher” or “lower” have been found to be statistically significant.

In addition to the overall results for eighth-graders in the nation, performance is presented for different student groups. These results should not be used to establish a cause-and-effect relationship between background characteristics and achievement. A complex mix of education and socioeconomic factors may affect student performance.

For additional information about interpreting results, see the Technical Notes section of this report or visit <http://nces.ed.gov/nationsreportcard/tdw/analysis/infer.asp>.



# Music





# Music



The 2008 arts assessment in music measured students' ability to respond to music. There were a total of four music sections in the arts assessment, each of which contained between 8 and 16 multiple-choice and constructed-response (or open-ended) questions. Many of the music questions in the assessment included multiple parts. Each student who was assessed in music was presented with two of the four sections. Because the length of the recorded music that was played for students varied in each section, the amount of time provided for students to complete two music sections ranged from 58 minutes to 63 minutes.

Students were asked to analyze and describe aspects of music they heard, critique instrumental and vocal performances, and demonstrate their knowledge of standard musical notation and music's role in society. Examples of the different types of music questions are presented later in this section.

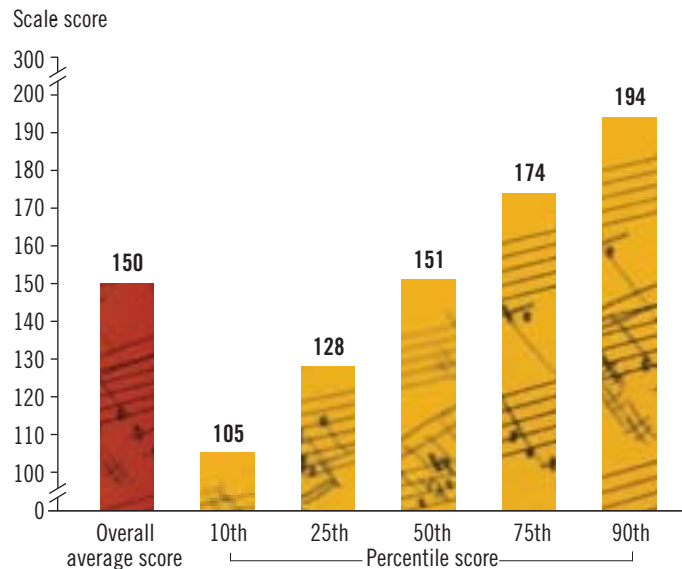
## Eighty-nine-point score gap between lowest- and highest-performing students in music

While the overall average responding score in music was set at 150 in 2008, students at grade 8 exhibited a wide range of responding scores (figure 1). For example, scores ranged from 105 for lower-performing students at the 10th percentile to 194 for higher-performing students at the 90th percentile. Students at the 50th percentile had a score of 151.

### Creating Music

A constructed-response question that asked students to write two measures of rhythmic music notation was included in one of the four music sections. Due to budget constraints, this was the only question in the assessment that asked students to create music; therefore, an average creating task score for music could not be reported. However, results for this question and other released questions from the 2008 arts assessment are available at <http://nces.ed.gov/nationsreportcard/itmrls/>.

Figure 1. Average responding scale score and percentile scores in NAEP music at grade 8: 2008



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.





## Racial/ethnic, gender, and socioeconomic gaps in music scores

In addition to the overall average responding score in music, results are also available based on student characteristics such as race/ethnicity, gender, and eligibility for the National School Lunch Program.

In general, the same patterns in score gaps seen in other NAEP subjects were also evident in the results for music (figure 2). The percentages of students in each student group can be found in appendix table A-5.

### Race/Ethnicity

In 2008, average responding scores in music for White and Asian/Pacific Islander students were 29 to 32 points higher than the scores for Black and Hispanic students. There were no significant differences between the average responding scores of White and Asian/Pacific Islander students or between the scores of Black and Hispanic students.

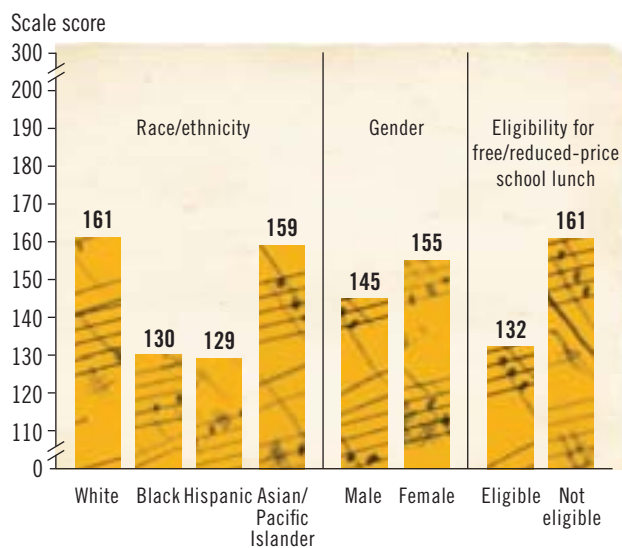
### Gender

On average, female students had a higher responding score in music than their male counterparts. There was a 10-point gap between the two groups in 2008.

### Eligibility for Free/Reduced-Price School Lunch

NAEP uses students' eligibility for the National School Lunch Program as an indicator of poverty. Students from lower-income families are typically eligible for free/reduced-price school lunch (see the Technical Notes at the end of this report for eligibility criteria), while students from higher-income families typically are not. On average, the responding score for students who were eligible was 28 points<sup>2</sup> lower than the score for students who were not eligible.

Figure 2. Average responding scale score in NAEP music at grade 8, by selected student characteristics: 2008



NOTE: Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin. Sample sizes were insufficient to permit reliable estimates for students whose race/ethnicity was American Indian/Alaska Native or unclassified. For the eligibility for free/reduced-price school lunch category, results are not shown for students whose eligibility status was not available.  
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.

<sup>2</sup> The score-point difference is based on the difference between the unrounded scores as opposed to the rounded scores shown in the figure.

## Music scores vary by type and location of schools

Results by selected school characteristics also show differences in average responding scores for music (figure 3). It is important to note that there may be many reasons students performed differently, on average,

based on the type of school or its location. Differences in access to arts instruction and quality curricula, socioeconomic status, and other factors not measured in NAEP may influence student achievement in the arts.

### Type of School

Public school students made up 93 percent of eighth-graders in the nation in 2008, while the other 7 percent of students attended private schools. The average responding score in music for eighth-graders in public schools was 14 points lower than the score for students in private schools.

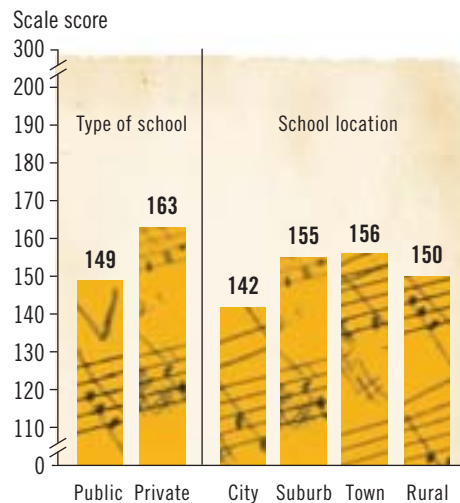
### School Location

Results are available for four school location categories: city, suburb, town, and rural. Descriptions of how these school location categories are defined are included in the Technical Notes section of this report.

In 2008, eighth-graders who attended city schools had a lower average responding score in music than students who attended suburban, town, and rural schools. There were no significant differences in the average scores among students in suburban, town, and rural school locations.



Figure 3. Average responding scale score in NAEP music at grade 8, by selected school characteristics: 2008



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.

## Context for Arts Education in Music

Information collected from school and student questionnaires helps to provide the context in which arts learning takes place. For the music portion of the assessment, school administrators provided information

on the availability and nature of music education in their schools. Students provided information on their participation in music activities.

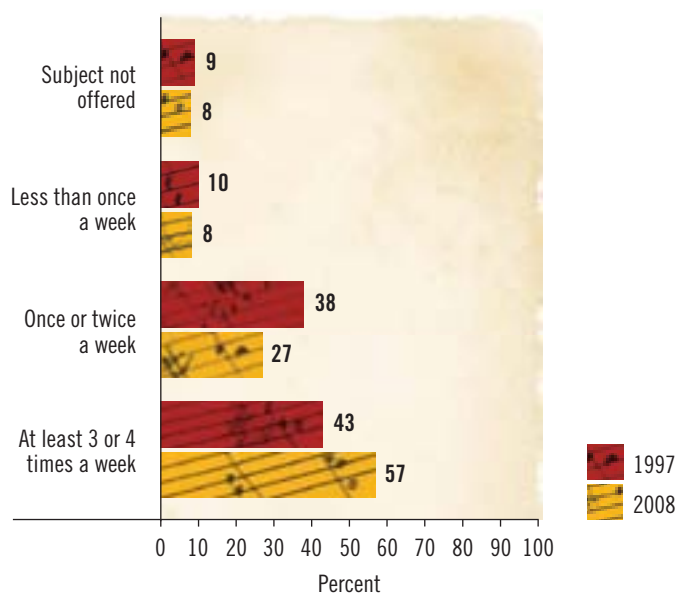
### Frequency of music instruction remains steady

School administrators were asked how often eighth-graders attending their schools might receive instruction in music. Fifty-seven percent of eighth-graders attended schools where students could have received music instruction at least three or four times a week in 2008 (figure 4). This was higher than the percentages of students attending schools where music was offered less frequently or not at all.

Although the data are not shown here, access to music instruction, as reported by school administrators, did not differ significantly by race/ethnicity, gender, or eligibility for free/reduced-price school lunch. For example, the percentage of Black students attending schools where music was offered at least 3 or 4 times a week was not significantly different from the percentage of White students.

The same question was asked of school administrators in 1997, making it possible to look for changes in the instruction patterns over time. The apparent increase between 1997 and 2008 in the percentage of students attending schools where music was available at least three or four times a week was not statistically significant, nor were there any significant changes in the percentages of students attending schools where music was offered once or twice a week, less than once a week, or not at all.

Figure 4. Percentage of students at grade 8, by school-reported frequency with which instruction in music is available: 1997 and 2008



NOTE: Detail may not sum to totals because of rounding.  
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 and 2008 Arts Assessments.

**71** percent of eighth-graders attended schools where administrators reported that their state or district had a curriculum in music in 2008.

**77** percent of students attended schools where music was taught by a full-time specialist.

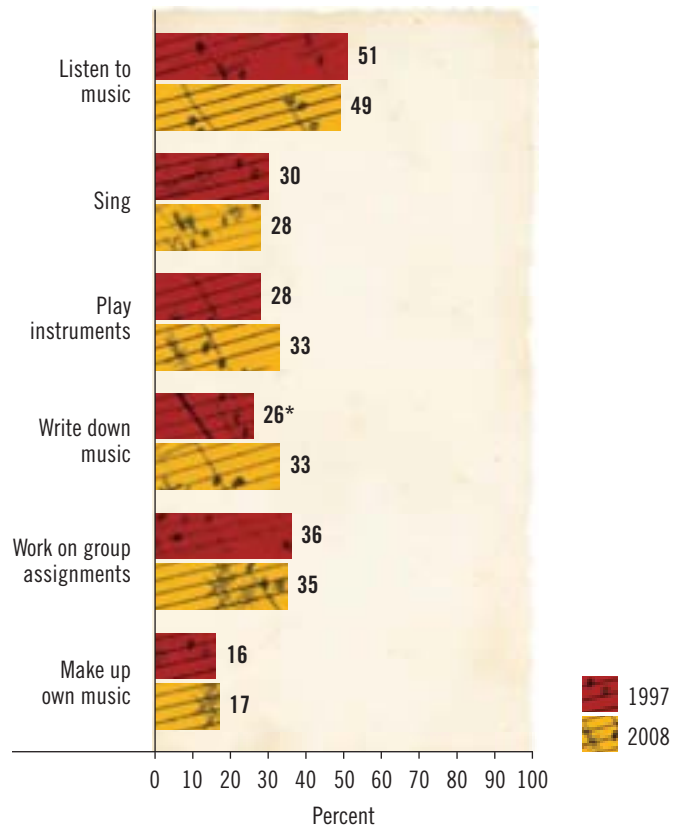


## More students writing down music in music class

Students responded to a series of questions about how often they did certain activities in music class. For each activity listed in figure 5, students indicated if they were asked by their teacher to do it almost every day, once or twice a week, once or twice a month, or never or hardly ever. Students were also given the option of indicating that they did not have music in school. The results summarized here show the combined percentages for all eighth-grade students who reported that they did various music-related activities at least once a month.

For the most part, students were as likely to be asked by their teachers to engage in these musical activities in 2008 as in 1997. There were no significant changes in the percentages of students who reported that teachers played music for them to listen to, or asked them to sing, play an instrument, work on group assignments, or make up their own music. Only the percentage of students who reported being asked to write down music showed a statistically significant increase from 26 percent in 1997 to 33 percent in 2008.

Figure 5. Percentage of students at grade 8, by student-reported in-school activities their teachers ask them to do in music class at least once a month: 1997 and 2008

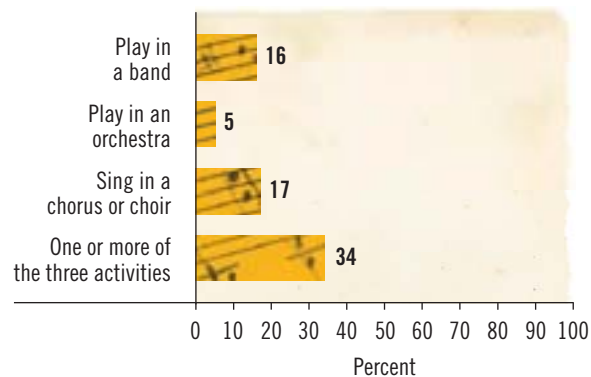


\* Significantly different ( $p < .05$ ) from 2008.

## About one-third of students participate in musical performance activities at school

Students were also asked several questions about their participation in musical performance activities at school. These included whether or not they played in a band, played in an orchestra, or sang in a chorus or choir. Overall, 34 percent of eighth-graders reported participating in one or more of these musical activities at school in 2008 (figure 6). Although questions about participation in these musical activities were also asked in 1997, changes in the format of the questions prohibit comparing results from the two years.

Figure 6. Percentage of students at grade 8, by student-reported participation in musical activities in school: 2008



NOTE: Students were permitted to select more than one musical activity. The percentage for the category "One or more of the three activities" was derived from students' responses to each of the other three categories and was not a separate option by itself.  
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 and 2008 Arts Assessments.

# What Eighth-Graders Know and Can Do in Music

The item map below is useful for understanding students’ performance at different points on the responding scale. The scale scores on the left represent the average scores for students who were likely to get the questions correct or partially correct. Scores for the 25th and 75th percentiles are also noted. The descriptions of selected assessment questions are listed on the right.

For example, the map shows that higher-performing eighth-graders in the upper range of the scale with an average score of 265 were likely to be able to identify one element of jazz present in “Rhapsody

in Blue.” Middle-performing students with an average score of 163 were likely to be able to describe one feature of a song that identifies it as a spiritual.

Constructed-response questions for which students could earn partial credit may appear on the map multiple times, once for each level of credit. For example, a question asking students to provide the name of a piano dynamic marking and to explain its meaning appears at the score of 192 for responses receiving full credit and at 183 for responses receiving partial credit.

## Grade 8 NAEP Music Responding Item Map

Scale score	Question description
300	
275	Identify piece of music as coming from twentieth century and provide limited justification why
265	Identify one element of jazz present in “Rhapsody in Blue”
239	Describe an emotion or mood created by a composition and describe two ways in which emotion or mood was created
237	Provide a partial identification and description of the errors in pitch in an instrumental solo
230	Describe a similarity and a difference between two written vocal parts
228	<i>Identify the solo instrument beginning “Rhapsody in Blue” (page 17)</i>
225	Provide a comparison between the tone color of two different singers
195	<i>Select a line drawing reflective of the texture of an example of music (page 15)</i>
195	<i>Identify the term for a fermata symbol</i>
192	Identify the name of a piano dynamic marking and explain its meaning (page 16)
183	Either identify the name of a piano dynamic marking or explain its meaning (page 16)
182	Provide a limited explanation of why spirituals were important in people’s lives
176	<i>Identify a correct time signature for a piece of music</i>
<b>174</b>	<b>75th percentile</b>
172	Identify region of origin of African musical excerpt and provide a description of a characteristic related to its style (page 18)
167	<i>Identify a bass clef symbol</i>
166	<i>Identify the type of instrumental ensemble performing an excerpt</i>
163	Describe one feature of a song that identifies it as a spiritual
151	Identify the length of the introduction of “Shalom My Friends”
136	<i>Identify directional contour of part of melodic phrase</i>
<b>128</b>	<b>25th percentile</b>
124	Identify region of origin of African musical excerpt and provide partial explanation of its style characteristics (page 18)
84	Describe an emotion or mood created by a composition
49	Identify region of origin of African musical excerpt (page 18)
0	

NOTE: Regular type denotes a constructed-response question. *Italic* type denotes a multiple-choice question. The position of a question on the scale represents the average scale score attained by students who had a 65 percent probability of obtaining credit at a specific level of a constructed-response question, or a 74 percent probability of correctly answering a four-option multiple-choice question. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.

## SAMPLE QUESTION: Identifying the Texture of a Musical Example

The sample question below asked students to identify the texture of a musical example that was played. (The term “texture” was defined for the students as the blend of various musical sounds and the ways in which the lines of music in a piece are related.)

The music played for this question came from the beginning of “Contrapunctus 4” from *The Art of the Fugue* by J.S. Bach. In the recording, the fugue was played by a brass quartet. The fugue begins with one instrument entering and playing the subject (the initial melody) of the fugue, followed by the other members of the quartet, each playing the melody. The audio for this question is available in the NAEP Questions Tool at <http://nces.ed.gov/nationsreportcard/itmrls/>.

Each of the four diagrams below illustrates an example of a texture that could occur in a piece of music. In 2008, fifty-two percent of eighth-graders selected the correct answer (choice A), which shows the general pattern of musical lines that occurred in the music that was played. This was not found to be significantly different from the 52 percent who answered correctly in 1997. The other three choices are incorrect because they show patterns of musical lines that did not match the music that was played. Choice B shows a group of three voices in alternation with a solo line, choice C shows an alternation of two lines with no accompanying lines or voices, and choice D shows a solo line with a block chord accompaniment.

Percentage of students in each response category at grade 8: 2008

Choice A	Choice B	Choice C	Choice D	Omitted
52	18	5	25	#

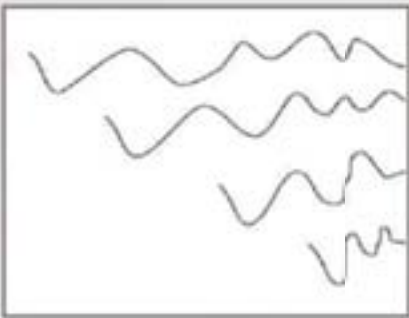
# Rounds to zero.

NOTE: Detail may not sum to totals because of rounding.

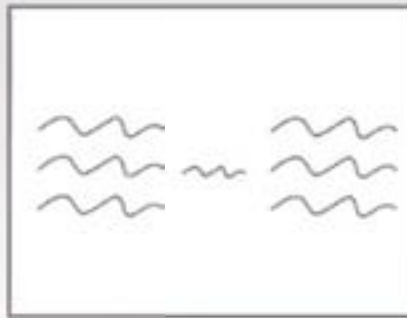
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.

Which diagram best illustrates the texture of the music?

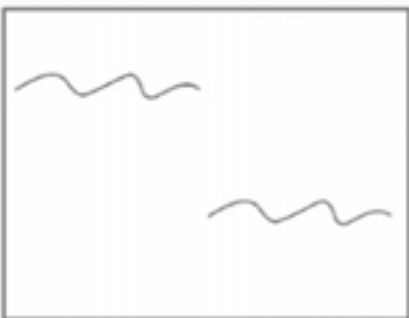
A



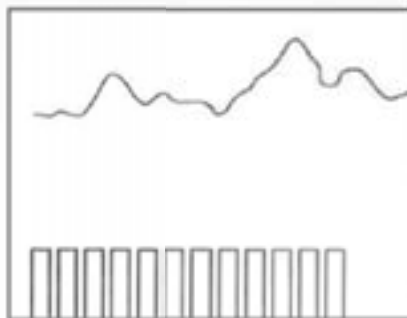
B



C



D





## SAMPLE QUESTION: Reading Musical Notation

This two-part sample question was taken from a set of questions that asked students to demonstrate knowledge of standard musical notation. In the question below, students were asked to provide the name and meaning of the symbol indicated in circle 1 in the music shown here. No recorded music was played for this question. The question that pertains to the symbol indicated in circle 2 is not

shown here but is available in the NAEP Questions Tool at <http://nces.ed.gov/nationsreportcard/itmrls/>.

Student responses for this two-part question were rated using three scoring levels: Adequate, Limited, and Inadequate. Examples of Adequate and Limited responses are shown here. Inadequate responses failed to provide correct information for either part of the question.



This sample response was rated “**Adequate**” because it provided the symbol’s meaning (that the music should be performed softly) and the symbol’s correct name (*piano*). Twenty percent of eighth-graders received a rating of “Adequate” on this question.

What does the symbol in circle 1 tell the performer to do?

Play or sing the music softly.

What is the musical (Italian) name for the symbol in circle 1?

Piano

This sample response was rated “**Limited**” because it provided the symbol’s meaning but not its correct name. (*Pianissimo* refers to the symbol *pp*, which indicates that music should be performed very softly.) Nine percent of students’ responses to this question were rated “Limited.”

What does the symbol in circle 1 tell the performer to do?

Play soft

What is the musical (Italian) name for the symbol in circle 1?

Pianissimo

### Percentage of students in each response category at grade 8: 2008

Adequate	Limited	Inadequate	Omitted
20	9	62	#

# Rounds to zero.

NOTE: Detail may not sum to totals because the percentage of responses rated as “Off-task” is not shown. Off-task responses are those that do not provide any information related to the assessment task.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.

## SAMPLE QUESTION: Identifying the Sound of an Instrument

The sample question below asked students to identify the sound of an instrument. The music played for this question comes from the opening of “Rhapsody in Blue” by American composer George Gershwin. The audio is available in the NAEP Questions Tool at <http://nces.ed.gov/nationsreportcard/itmrls/>.

At the beginning of the piece, a solo is played on

- A a flute
- B an oboe
- C a saxophone
- D a clarinet

In 2008, fifty percent of eighth-graders correctly identified the clarinet as the instrument on which the solo was played (choice D). This was not found to be significantly different from the 52 percent who answered correctly in 1997. Choices A, B, and C are also woodwind instruments like the clarinet but were not the instrument on which the solo at the beginning of the piece was played.

Percentage of students in each response category at grade 8: 2008

Choice A	Choice B	Choice C	Choice D	Omitted
12	15	22	50	#

# Rounds to zero.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.



## SAMPLE QUESTION: Identifying Origin of a Musical Style

The two-part sample question below asked students to identify music from a particular culture and to describe the features that help to characterize its style. The music played for this question came from an African song entitled “Drodope.” The audio is available in the NAEP Questions Tool at <http://nces.ed.gov/nationsreportcard/itmrls/>.

Student responses for this two-part question were rated using four scoring levels: Developed, Adequate, Limited, and Inadequate. Examples of Developed and Adequate responses are shown here. Responses rated as Limited only provided a correct response to the first part of the question. Responses rated as Inadequate failed to provide a correct response for either part of the question.

This sample response was rated **“Developed”** because it both indicated the correct region of origin of the music and cited the “call and response” feature of the music that is common among many types of African songs. Mentioning the use of specific percussion instruments such as drums also contributed to this response receiving a rating of “Developed.” Fifty-two percent of eighth-graders received a rating of “Developed” on this question.

From where does the music come?

- A North America
- B South America
- C Asia
- Africa

Other than the language used in the song, describe one feature of the music that helps to identify it as coming from the part of the world you selected. Be specific in your description.

The drums, also the call and response

This sample response was rated **“Adequate.”** Although it indicated the correct region of origin of the music, the description of a feature of the music was vague. Twenty-four percent of students’ responses to this question were rated “Adequate.”

From where does the music come?

- A North America
- B South America
- C Asia
- Africa

Other than the language used in the song, describe one feature of the music that helps to identify it as coming from the part of the world you selected. Be specific in your description.

The music features instruments that are traditional to that part of the world.

Percentage of students in each response category at grade 8: 2008

Developed	Adequate	Limited	Inadequate	Omitted
52	24	19	5	#

# Rounds to zero.

NOTE: Detail may not sum to totals because the percentage of responses rated as “Off-task” is not shown. Off-task responses are those that do not provide any information related to the assessment task.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.





# Visual Arts





# Visual Arts

The 2008 arts assessment included four sections in visual arts that measured students' ability to respond to and create visual art. Students were given two of the four sections, each of which contained between 7 and 11 multiple-choice and constructed-response questions. Many of the visual arts questions in the assessment contained multiple parts. The amount of time provided for students to complete two visual arts sections ranged from 75 minutes to 104 minutes.

Responding questions asked students to analyze and describe works of art and design, thereby demonstrating their knowledge of media and techniques, visual organization, the cultural contexts of artworks, how works of art convey meaning, and the relationship between form and function in design. Creating questions assessed students' ability to communicate in works of art, think of different solutions to visual problems, and generate ideas for and then create works of art and design. These creating questions represented approximately one-half of the total assessment time in visual arts. Some examples of the different types of visual arts questions are presented later in this section.

## Eighty-nine-point score gap between lowest- and highest-performing students in visual arts

The overall average responding score for visual arts was set at 150 in 2008 (figure 7). In addition to the overall average responding score, results are shown for students at selected percentiles on the responding scale. There was an 89-point gap between the scores for students at the 10th and 90th percentiles.

The assessment also included questions that asked students to create works of art and design. Results for these questions are presented as the average creating task score, which is expressed as the average percentage of the maximum possible score ranging from 0 to 100 (see the Technical Notes for an explanation of how the score was calculated). In 2008, the overall average creating task score for grade 8 students was 52 (figure 8).

## Responding and creating results related

Because the NAEP arts framework describes the integration among the arts processes, it is useful to explore the relationship between students' results on the responding and creating questions in visual arts. On average, students who performed well on the responding questions also performed well on the creating questions (figure 9). For example, students performing above the 75th percentile on the responding scale also had the highest average creating task score (62). Lower-performing students at or below the 25th percentile on the responding scale had the lowest average creating task score (40).



Figure 7. Average responding scale score and percentile scores in NAEP visual arts at grade 8: 2008

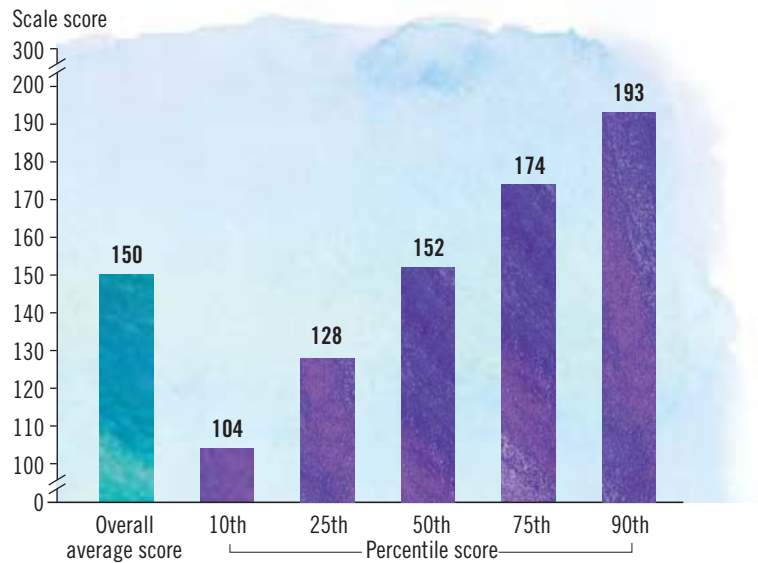


Figure 8. Average creating task score in NAEP visual arts at grade 8: 2008

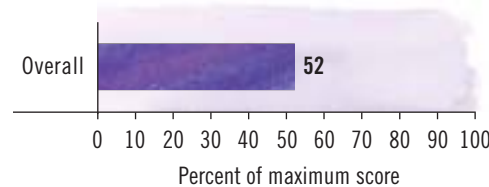
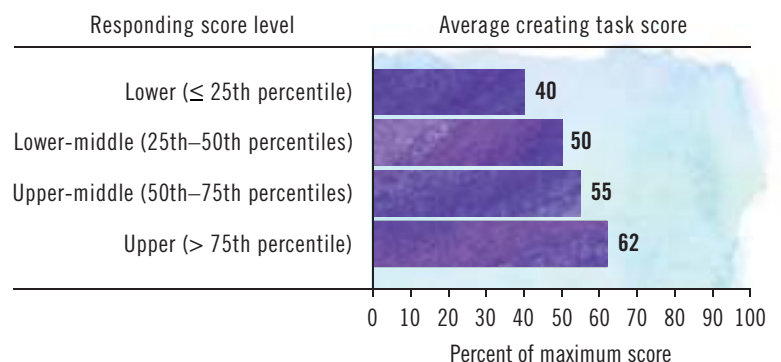


Figure 9. Average creating task score in NAEP visual arts at grade 8, by responding score level: 2008



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.



## Patterns in score gaps by student characteristics similar for responding to and creating visual arts

In general, patterns in score differences based on student characteristics were similar for results in both responding (figure 10) and creating (figure 11).

### Race/Ethnicity

In 2008, average responding scores in visual arts were 22 to 31 points higher for White and Asian/Pacific Islander students than for Black and Hispanic students. There were no significant differences between the average responding scores of White and Asian/Pacific Islander students or between the scores of Black and Hispanic students.

Similarly, the average creating task scores of White and Asian/Pacific Islander students were higher than the scores of Black and Hispanic students, but there were no significant differences between the scores of White and Asian/Pacific Islander students or between the scores of Black and Hispanic students.

### Gender

On average, female eighth-graders had a higher responding score in visual arts than their male counterparts. There was an 11-point<sup>3</sup> gap between the two groups in 2008. The average creating task score for female students was also 5 points higher than the score for male students.

### Eligibility for Free/Reduced-Price School Lunch

On average, eighth-graders who were eligible for free/reduced-price school lunch had a lower responding score in visual arts than those who were not eligible. There was a 29-point gap between the two groups in 2008. Students who were eligible also had an average creating task score that was 9 points lower than the score for students who were not eligible.

<sup>3</sup> The score-point gap is based on the difference between the unrounded scores as opposed to the rounded scores shown in the figure.

Figure 10. Average responding scale score in NAEP visual arts at grade 8, by selected student characteristics: 2008

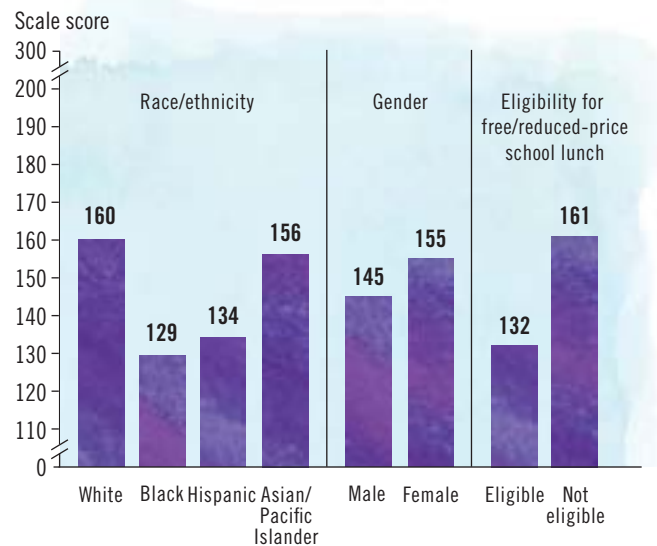
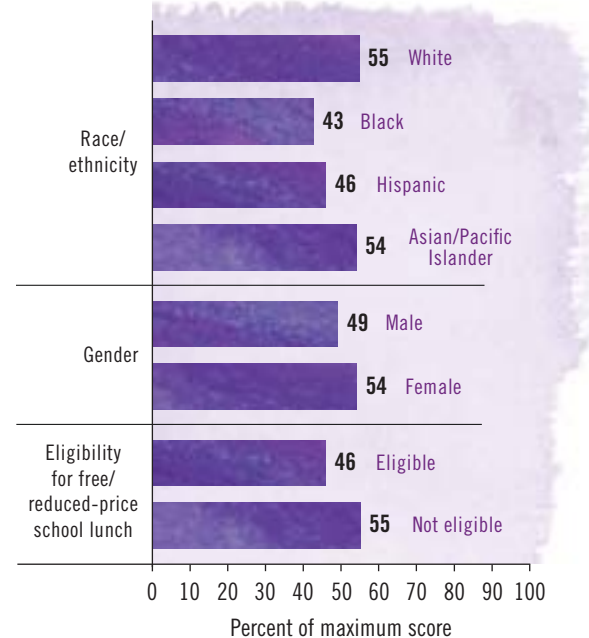


Figure 11. Average creating task score in NAEP visual arts at grade 8, by selected student characteristics: 2008



NOTE: Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin. Sample sizes were insufficient to permit reliable estimates for students whose race/ethnicity was American Indian/Alaska Native or unclassified. For the eligibility for free/reduced-price school lunch category, results are not shown for students whose eligibility status was not available. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.

## No significant difference in responding scores between public and private school students

While the general patterns in results for responding to and creating visual arts by selected school characteristics were similar (figures 12 and 13),

not all the apparent differences were found to be statistically significant.

### Type of School

The apparent difference in 2008 between the average responding scores in visual arts for eighth-graders in public and private schools was not found to be statistically significant. However, the average creating task score was lower for public school students than for private school students.

### School Location

Students attending suburban schools in 2008 had a higher average responding score in visual arts than students in city schools. There were no significant differences in the average responding scores between students from suburban schools and town or rural schools.

In the creating process of visual arts, students attending suburban schools had a higher average creating task score than students in both city and town schools. The average creating task score of students in suburban schools was not significantly different from the score of students in rural schools.

Because responding results are presented as scale scores and creating results are presented as average percentages, it is not possible to compare the magnitude of differences between these scores. For example, an 11-point difference on the 0–300 responding scale between students attending schools in city and suburban locations is not necessarily greater than a 5-point difference between the same two groups on the 0–100 creating task scale.

Figure 12. Average responding scale score in NAEP visual arts at grade 8, by selected school characteristics: 2008

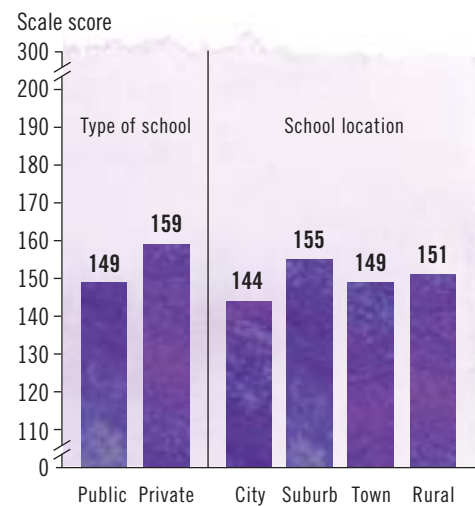
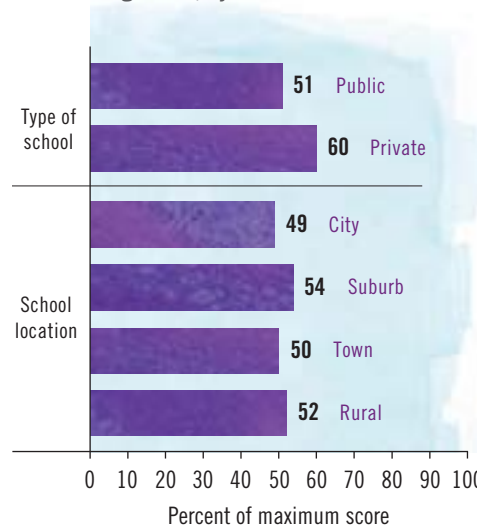


Figure 13. Average creating task score in NAEP visual arts at grade 8, by selected school characteristics: 2008



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.

## Context for Arts Education in Visual Arts

To provide the context in which arts learning takes place, results are presented here based on school administrators' responses related to the availability

and nature of visual arts education in their schools and students' responses about their participation in visual arts activities.

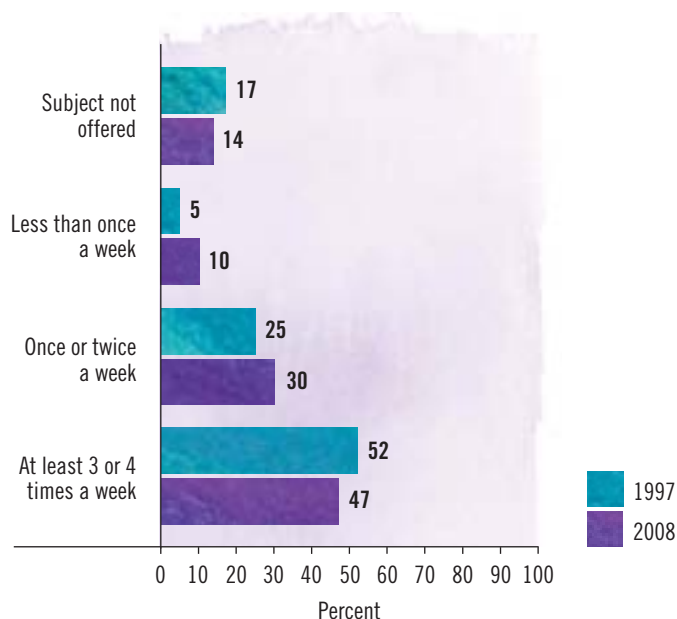
### Frequency of visual arts instruction remains steady

School administrators were asked how often eighth-graders attending their schools might receive instruction in visual arts. Forty-seven percent of eighth-graders attended schools where students could possibly receive visual arts instruction at least three or four times a week in 2008 (figure 14). This was higher than the percentages of students attending schools where visual arts were offered less frequently or not at all.

Although the data are not shown here, access to visual arts instruction did not differ significantly by race/ethnicity, gender, or eligibility for free/reduced-price school lunch. For example, the percentage of students who were eligible for free/reduced-price school lunch attending schools where visual arts were offered once or twice a week was not significantly different from the percentage of students who were not eligible.

The same question was asked of school administrators in 1997, making it possible to look for changes in the instruction patterns over time. The results showed no significant changes between 1997 and 2008 in the percentages of students who attended schools where visual arts were available at least three or four times a week, once or twice a week, less than once a week, or not at all.

Figure 14. Percentage of students at grade 8, by school-reported frequency with which instruction in visual arts is available: 1997 and 2008



NOTE: Detail may not sum to totals because of rounding.  
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 and 2008 Arts Assessments.

**77** percent of eighth-graders attended schools where administrators reported that visual arts were taught by a full-time specialist.

**69** percent of students attended schools that followed a state or district curriculum in visual arts.



## More students writing about their artwork

Students responded to a series of questions about how often they did certain activities in visual arts class. For each activity listed in figure 15, students indicated if their teacher had them do it every day, once a week, once a month, or never or hardly ever. The results summarized here show the combined percentages for students who reported that they did various art-related activities at least once a month.

The percentage of students who reported that their teacher had them write about their artwork increased from 21 percent in 1997 to 27 percent in 2008. However, the percentage of students whose teacher had them choose their own art project decreased from 47 percent in 1997 to 39 percent in 2008. There were no significant changes between 1997 and 2008 in the percentages of students who reported that their teachers had them paint or draw; make things out of clay or other materials; work in a pair or group on an art project; talk with others about their own or others' artwork; or look at videotapes, filmstrips, slides, or television programs about art.

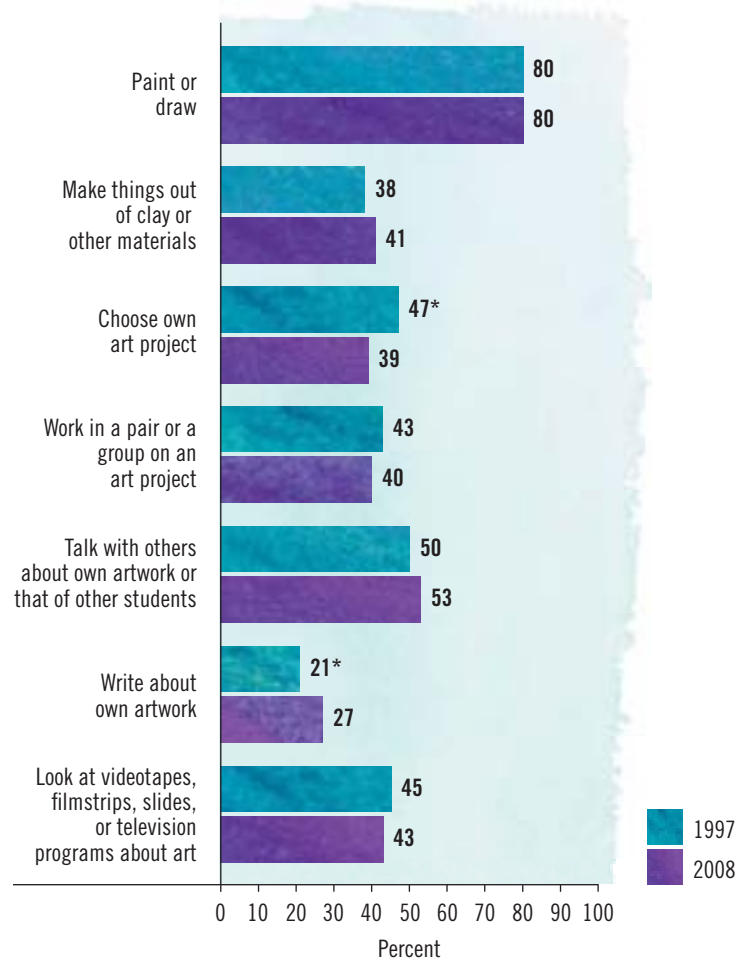
## Fewer students visit art museums with class in 2008

Exposure to art museums and exhibits outside of school may help students learn about and engage in visual arts. Sixteen percent of students in 2008 reported that they had gone with their class to an art museum, gallery, or exhibit at least once in the last year, which was smaller than the 22 percent in 1997 (figure 16).

### About half of students save artwork in a portfolio

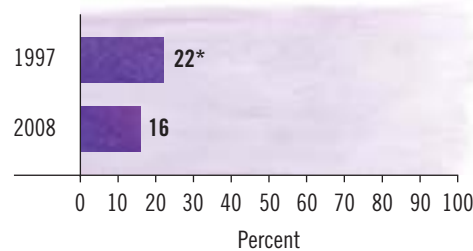
Although not presented here graphically, 54 percent of eighth-graders reported that they or their teacher saved their artwork in a portfolio in 2008, which was not significantly different from the 50 percent in 1997.

Figure 15. Percentage of students at grade 8, by student-reported in-school activities their teachers have them do in art at least once a month: 1997 and 2008



\* Significantly different ( $p < .05$ ) from 2008.

Figure 16. Percentage of students at grade 8 who reported visiting an art museum, gallery, or exhibit with their class at least once a year: 1997 and 2008



\* Significantly different ( $p < .05$ ) from 2008.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 and 2008 Arts Assessments.

## What Eighth-Graders Know and Can Do in Visual Arts

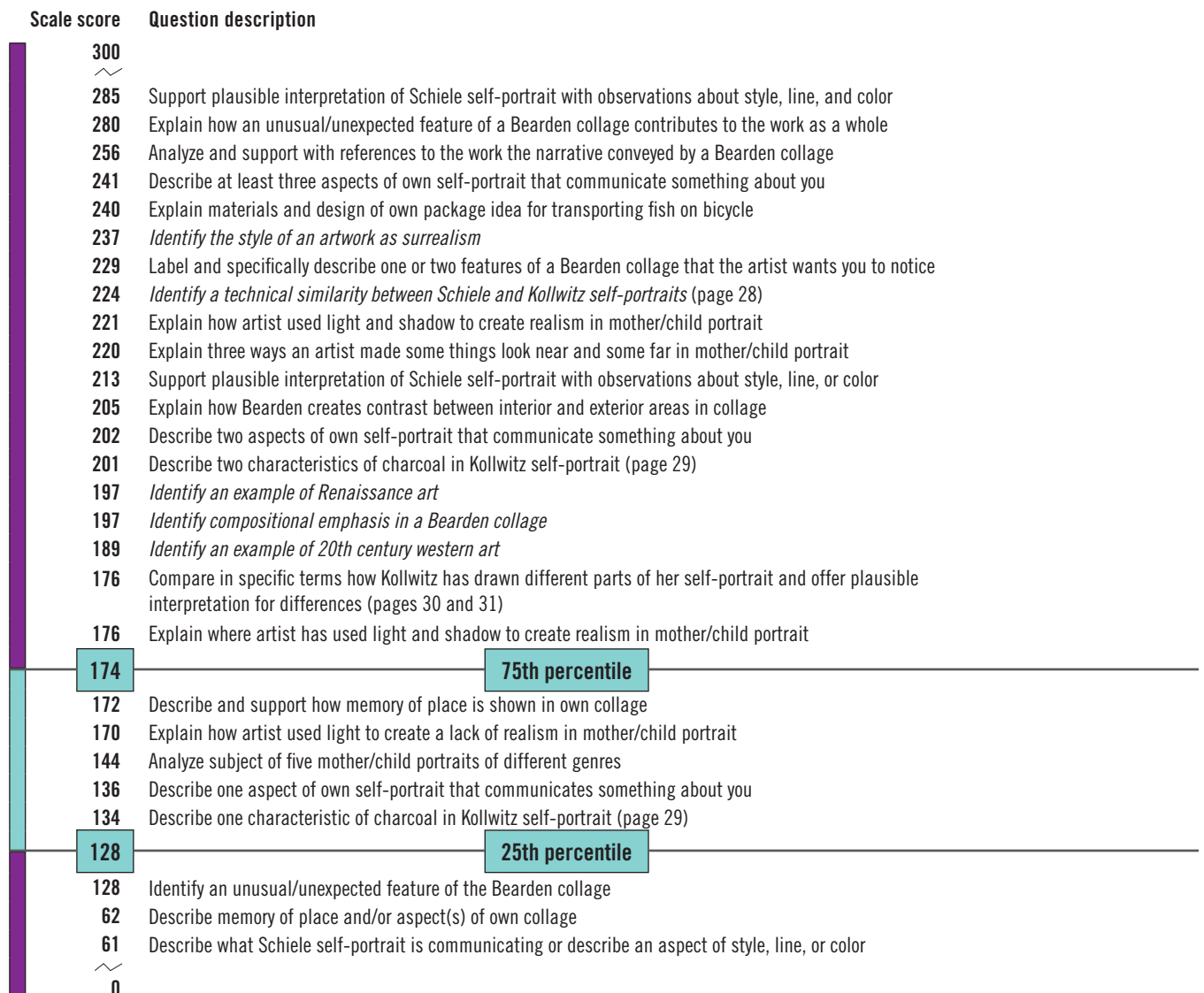
The item map below is useful for understanding students' performance at different points on the responding scale. The scale scores on the left represent the average scores for students who were likely to get the questions correct or partially correct. Scores for the 25th and 75th percentiles are also noted. The descriptions of selected assessment questions are listed on the right.

For example, the map shows that higher-performing eighth-graders in the upper range of the scale with an average score of 237 were likely to be able

to identify the style of an artwork as surrealism. Middle-performing students with an average score of 144 were likely to be able to analyze the subject of five mother/child portraits of different genres.

Constructed-response questions for which students could earn partial credit may appear on the map multiple times, once for each level of credit. For example, a question asking students to describe two characteristics of charcoal in a self-portrait appears at the score of 201 for responses receiving full credit and at 134 for responses receiving partial credit.

### Grade 8 NAEP Visual Arts Responding Item Map



NOTE: Regular type denotes a constructed-response question. *Italic* type denotes a multiple-choice question. The position of a question on the scale represents the average scale score attained by students who had a 65 percent probability of obtaining credit at a specific level of a constructed-response question, or a 74 percent probability of correctly answering a four-option multiple-choice question.  
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.



Self-portrait A: Kathe Kollwitz. Charcoal on brown laid paper. National Gallery of Art



Self-portrait B: Egon Schiele. Crayon and watercolor on buff paper. Galerie St. Etienne

## Sample Questions for Visual Arts

Students were asked a series of questions related to two self-portraits shown here, one by Kathe Kollwitz (A) and one by Egon Schiele (B). These questions required students to apply their knowledge of aesthetic properties to the two artworks and to consider the relationships between these properties and the expressive qualities of each work. Students were then asked to create a self-portrait of their own.







## SAMPLE QUESTION: Recognizing a Technical Similarity Between Two Self-Portraits

The sample question below asked students to recognize a technical similarity between the Kollwitz and Schiele self-portraits. In both works, expressive, loose lines are combined with precise drawing.

In 2008, thirty-seven percent of students correctly identified this common feature of the two artworks (choice B). This was not found to be significantly different from the 36 percent who answered correctly in 1997. Choices A, C, and D do not accurately describe technical similarities between the two works.

Which statement describes a technical similarity between self-portraits A and B?

- (A) The figure in each work is seen from the same point of view.
- (B) Both works combine loose gestural lines with careful drawing.
- (C) The compositions in both works are symmetrical.
- (D) Both works rely on light and shadow to emphasize depth.

Percentage of students in each response category at grade 8: 2008

Choice A	Choice B	Choice C	Choice D	Omitted
8	37	8	46	#

# Rounds to zero.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.

## SAMPLE QUESTION: Characteristics of Charcoal

The sample question below asked students to describe characteristics of the medium of charcoal visible in the Kollwitz self-portrait. Student responses for this question were rated using three scoring levels: Acceptable, Partial, and

Unacceptable. Examples of Acceptable and Partial responses are shown here. Responses rated as Unacceptable did not describe characteristics of the medium of charcoal evident in the self-portrait.

This sample response was rated **“Acceptable”** because it demonstrated the student’s knowledge of charcoal as a medium. The student expressed what Kollwitz was able to accomplish with charcoal in her self-portrait. Thirty-four percent of eighth-graders received a rating of “Acceptable” on this question.

Self-portrait A is a charcoal drawing. Describe two characteristics of charcoal that you see in self-portrait A.

1. Charcoal can get very dark when you press harder than normal.
2. It leaves little white specks because it doesn't fill in every little bump or spot on the page.

This sample response was rated **“Partial”** because it provided only one example of how charcoal was used in the self-portrait. The student recognized that pressing harder on charcoal results in a darker mark, as is evident in the Kollwitz self-portrait. However, the second part of the response did not describe another characteristic of charcoal as a medium. Thirty-eight percent of students’ responses to this question were rated “Partial.”

Self-portrait A is a charcoal drawing. Describe two characteristics of charcoal that you see in self-portrait A.

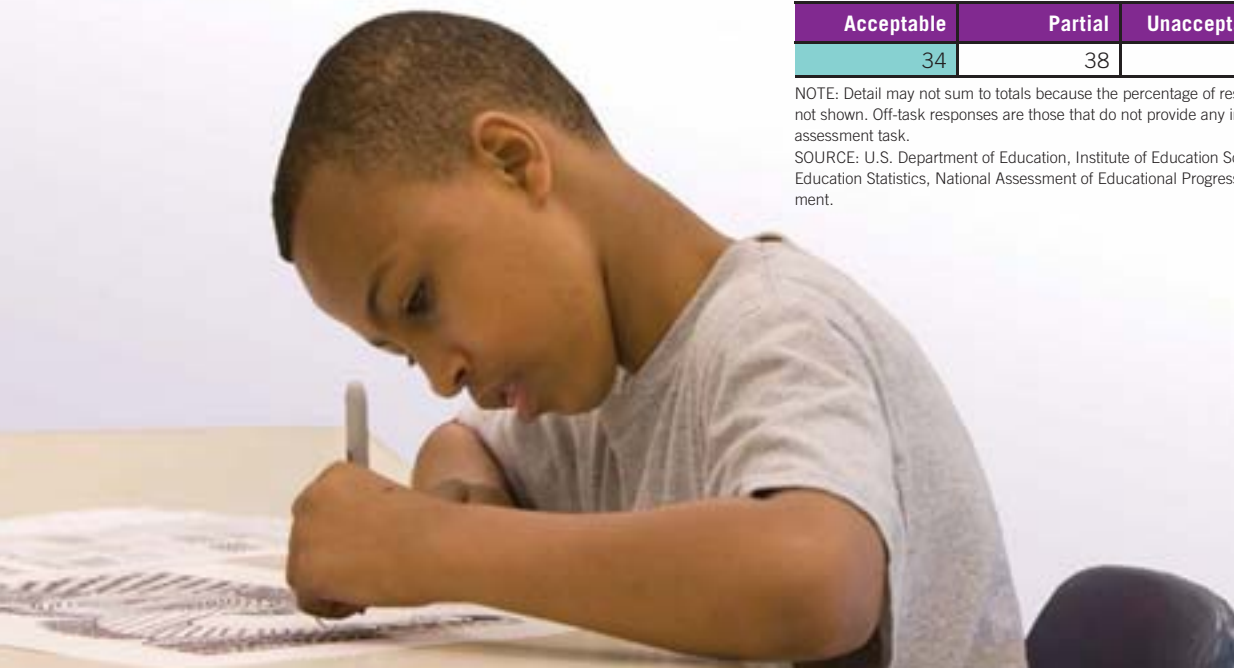
1. One is the harder the charcoal is pushed down, the darker the markings will be.
2. It is not drawn straight but, like it was colored in.

Percentage of students in each response category at grade 8: 2008

Acceptable	Partial	Unacceptable	Omitted
34	38	27	1

NOTE: Detail may not sum to totals because the percentage of responses rated as “Off-task” is not shown. Off-task responses are those that do not provide any information related to the assessment task.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.



## SAMPLE QUESTION: Relationship Between Technical Approach and Meaning

The two-part sample question below required students to analyze and interpret the Kollwitz self-portrait to explore relationships between technical approach and meaning. Part A of the question asked students about the work's formal characteristics, while part B asked them to connect those characteristics with what the artist was attempting to communicate. Student responses

to each of the two parts were rated separately using three scoring levels: Acceptable, Partial, and Unacceptable. Examples of Acceptable and Partial student responses for each part of this question are shown here. Unacceptable responses for the question neither addressed differences in the way the parts of the self-portrait are drawn nor offered interpretations linked to observations.

Both parts of this sample response were rated **“Acceptable.”** This response accurately described the differences between the parts of the drawing and then used these observations to offer an insightful and plausible interpretation of the reasons for those differences.

Fifty-three percent of students received a rating of “Acceptable” for part A, and 19 percent received an “Acceptable” rating for part B. Students who received the “Acceptable” rating were able to both comprehend the formal characteristics of the self-portrait and discuss the relationship between those characteristics and the artist’s possible expressive goals.

Look at self-portrait A. Compare how Kollwitz has drawn her head and hand with the way she has drawn her arm. Be specific.

A. Her head and hand are drawn carefully. They have shadings and fine details while her arm is a dark thick scribble.

Explain what you think Kollwitz may have been trying to communicate about herself by drawing these different parts of her self-portrait in different ways.

B. She was showing expressions on her face & that even though her body is weak, all she needs is her head & hands to keep drawing.







Both parts of this sample response received a **“Partial”** rating. This response accurately described the way the arm is drawn but did not specifically address the ways in which the head and hand are drawn differently from the arm. “Partial” credit was given for recognizing some characteristics of the artwork. While a few plausible interpretations about what Kollwitz was trying to communicate are provided in the second part of the response, none of these is clearly linked to the descriptions offered in the first part.

Fifteen percent of the student responses were rated “Partial” for part A, and 52 percent were rated “Partial” for part B.

Look at self-portrait A. Compare how Kollwitz has drawn her head and hand with the way she has drawn her arm. Be specific.

A. Her arm is darker and it looks like she just scribbled it in the portrait.

Explain what you think Kollwitz may have been trying to communicate about herself by drawing these different parts of her self-portrait in different ways.

B. Shes trying to say she old, and that she is a good artist, and concentrates very well when shes drawing.

#### Percentage of students in each response category at grade 8: 2008

##### Part A

Acceptable	Partial	Unacceptable	Omitted
53	15	31	2

##### Part B

Acceptable	Partial	Unacceptable	Omitted
19	52	25	3

NOTE: Detail may not sum to totals because the percentage of responses rated as “Off-task” is not shown. Off-task responses are those that do not provide any information related to the assessment task.

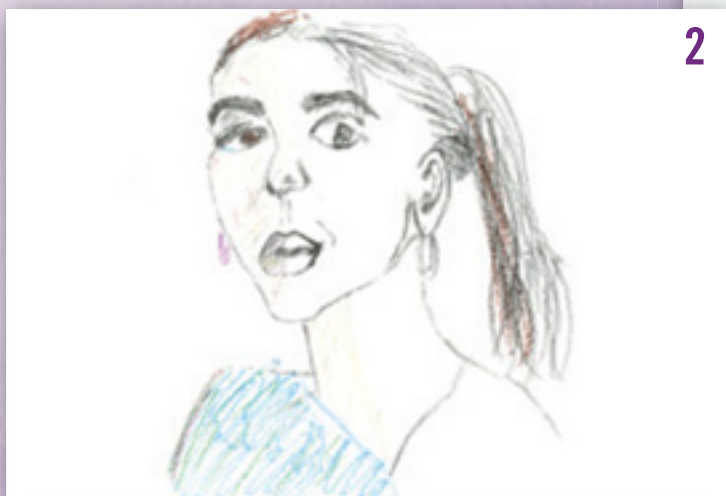
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.

## SAMPLE QUESTION: Creating a Self-Portrait

After students had observed the Kollwitz and Schiele self-portraits and studied relationships between the technical and expressive qualities of the two artworks, they were asked to create a self-portrait of their own. Students were given a set of 12 Cray-pas (colored oil pastels), a charcoal pencil,

a mirror, and a sheet of 12-inch by 18-inch white drawing paper and were asked to use these tools to create a self-portrait that would express something important about their personalities. These self-portraits were rated using four scoring levels: Sufficient, Uneven, Minimal, and Insufficient.

Characteristic of works rated “**Sufficient**,” both of the students’ responses presented here showed clear and specific observations that communicated something important about the artist. They incorporated identifying detail in terms of personal features and, in student response 1, an activity (art making). The self-portraits showed purposeful use of compositional elements and sophisticated use of materials. For example, in student response 1, the smudging of Cray-pas created an affinity among the head, arm, and hand, and loose, well-placed lines added definition to the body.



Both works also showed very good use of proportion, color, and line, and were fully developed and individualized. For example, in student response 2, the student skillfully used color to emphasize and create contrast between specific parts of her self-portrait. Both student responses 1 and 2 also showed evidence of the students having spent time observing the Kollwitz and Schiele self-portraits. Four percent of students’ self-portraits were rated “Sufficient.”

Percentage of students in each response category at grade 8: 2008

Sufficient	Uneven	Minimal	Insufficient	Omitted
4	25	57	14	#

# Rounds to zero.

NOTE: Detail may not sum to totals because the percentage of responses rated as “Off-task” is not shown. Off-task responses are those that do not provide any information related to the assessment task.

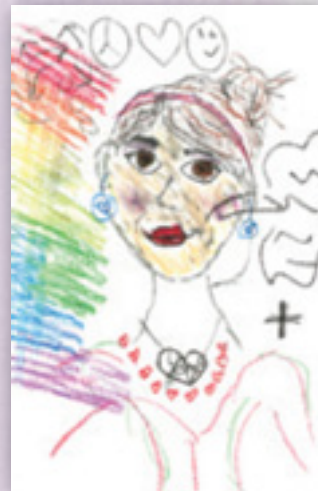
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.





Works at the “**Uneven**” level made some specific observations. They sometimes employed pertinent compositional elements, gave attention to details such as facial features to convey expression, and/or effectively used materials to communicate. However, “Uneven” works were typically inconsistent or incomplete in parts.

In the sample presented here, the student gave her work individuality by vivid use of color, facial expression, and the symbols incorporated in her jewelry and the background. However, elements of her work seem inconsistent and lacking in deliberation, such as the placement and rendering of the symbols and colors in the background. Twenty-five percent of students’ self-portraits were rated “Uneven.”



As with many works rated at the “**Minimal**” level, in the sample self-portrait shown here, efforts at specific observations were apparent but relatively minimal (the red lines in the eyes). Compositional successes may seem more accidental than deliberate, and use of materials was unskilled. For example, while this student may have been attempting to convey some sense of an individual person by emphasizing only his eyes and mouth with color, he lacked the skill to make this choice distinctive enough to convey his message. Fifty-seven percent of students’ self-portraits were rated “Minimal.”

Most self-portraits rated “**Insufficient**” were generally so schematic as to convey little or nothing about the student. Like the sample self-portrait shown here, they showed unspecific observation, little awareness of composition, and highly unskilled use of materials. In contrast to the “Minimal” response, there were no features in this self-portrait that conveyed anything specific about a person, and it remained at a general level. Fourteen percent of students’ self-portraits were rated “Insufficient.”





# Technical Notes and Data Appendix

## Sampling and Weighting

The schools and students who participate in NAEP assessments are selected to form a representative sample of the nation. The national sample of eighth-graders in the 2008 arts assessment was chosen using a multistage design that involved drawing students from the sampled public and private schools across the country. The results from the assessed students were combined to provide accurate estimates of the overall performance of students in the nation.

Each school that participated in the assessment, and each student assessed, represents a portion of the population of interest. Results are weighted to make appropriate inferences between the student samples and the respective populations from which they are drawn. Sampling weights are adjusted for the disproportionate representation of some groups in the selected sample. This includes the oversampling of schools with high concentrations of students from certain racial/ethnic groups and the lower sampling rates of students who attend very small schools.

## School and Student Participation Rates

The school and student participation rates for public and private schools in the 2008 arts assessment are provided in table A-1.

NCES statistical standards require that a nonresponse bias analysis be conducted for any school or student group with a participation rate that falls below 85 percent. The participation rates for the 2008 NAEP arts assessment indicated a need for a school nonresponse bias analysis for the private school sample. The results showed that school substitution and nonresponse adjustments were not effective in reducing nonresponse bias for the percentage of Hispanic students enrolled and type of private schools (Catholic and other private schools). The disproportionate nonresponse resulted

in an overestimation of the percentage of Hispanic students, an overestimation of the percentage of Catholic school students, and an underestimation of the percentage of other private school students.

**Table A-1. School and student participation rates in NAEP arts at grade 8, by subject and type of school: 2008**

Subject and type of school	School participation		Student participation	
	Number of schools participating	Weighted percent	Number of students assessed	Weighted percent
<b>Music</b>				
<b>Nation</b>	<b>260</b>	<b>97</b>	<b>4,000</b>	<b>93</b>
Public	220	99	3,400	93
Private	30	76	500	97
<b>Visual arts</b>				
<b>Nation</b>	<b>260</b>	<b>97</b>	<b>3,900</b>	<b>92</b>
Public	220	99	3,400	92
Private	30	76	500	94

NOTE: The numbers of schools are rounded to the nearest ten, and the numbers of students are rounded to the nearest hundred. Detail may not sum to totals because of rounding.  
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.

## Interpreting Statistical Significance

Comparisons over time or between groups in this report are based on statistical significance at the .05 level using *t*-tests with appropriate adjustments for multiple comparisons (using the False Discovery Rate procedure). These statistical tests consider both the size of the differences and standard errors of the two statistics being compared. Standard errors are margins of error, and estimates based on smaller groups are likely to have larger margins of error relative to estimates based on larger groups. Note, for example, that differences based on school-administrator-reported estimates have smaller sample sizes than differences based on student-reported estimates, resulting in smaller significant differences in the student-reported data than in the

school-administrator-reported data. The size of the standard errors may also be influenced by other factors such as how representative the students assessed are of the entire population.

When an estimate has a large standard error, a numerical difference that seems large may not be statistically significant. Differences of the same magnitude may or may not be statistically significant depending upon the size of the standard errors of the estimates. For example, a 10-point difference between male and female students may be statistically significant, while a 10-point difference between students attending public and private schools may not be. Standard errors for the estimates presented in this report are available at <http://nces.ed.gov/nationsreportcard/naepdata/> and on the 2008 arts results website at [http://nationsreportcard.gov/arts\\_2008/](http://nationsreportcard.gov/arts_2008/).

## National School Lunch Program

NAEP collects data on student eligibility for the National School Lunch Program (NSLP) as an indicator of poverty. Under the guidelines of NSLP, children from families with incomes below 130 percent of the poverty level are eligible for free meals. Those from families with incomes between 130 and 185 percent of the poverty level are eligible for reduced-price meals. (For the period July 1, 2007 through June 30, 2008, for a family of four, 130 percent of the poverty level was an annual income of \$27,000, and 185 percent was \$38,000.) For more information on NSLP, visit <http://www.fns.usda.gov/cnd/lunch/>.

## School Location

Results of the 2008 NAEP arts assessment were reported for four mutually exclusive categories of school location. These categories are based on standard definitions established by the Federal Office of Management and Budget using population and geographic information from the U.S. Census Bureau. The classification system is referred to as “urban-centric locale codes,” which classifies territory into four major types:

city, suburb, town, and rural. More details on the classification system can be found at [http://nces.ed.gov/ccd/rural\\_locales.asp](http://nces.ed.gov/ccd/rural_locales.asp).

## The Creating Task Score

Students’ performance on questions assessing the creating process in visual arts is presented as the average creating task score in this report. The creating task score for each creating question (task) is the sum of the percentage of students receiving full credit and a fraction of the percentage of students receiving partial credit. The individual scores are then averaged together to report an average creating task score for the entire set of the visual arts creating questions.

An example of computing the creating task score is provided below for a sample question in this report that asks eighth-graders to draw a self-portrait. Responses to this question were scored “Sufficient,” “Uneven,” “Minimal,” or “Insufficient.” The percentages of students falling into these four scoring levels are 4 percent, 25 percent, 57 percent, and 14 percent, respectively (table A-2). Responses at these four levels receive score weights of 1,  $\frac{2}{3}$ ,  $\frac{1}{3}$ , and 0, respectively. The creating task score for this question is computed as  $1(4) + \frac{2}{3}(25) + \frac{1}{3}(57) + 0(14) = 40$ .

**Table A-2. Example showing how the creating task score was computed for a sample question in NAEP visual arts at grade 8: 2008**

Scoring level	Percentage of students	Score weight	Percentage of students × score weight
Sufficient	4	1	4
Uneven	25	$\frac{2}{3}$	17
Minimal	57	$\frac{1}{3}$	19
Insufficient	14	0	0
<b>Creating task score (4 + 17 + 19 + 0) = 40</b>			

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.

## Comparing Results Between the 1997 and 2008 Assessments

Although the assessment questions administered in 2008 were selected from those used in the 1997 assessment, due to changes in scoring procedures and materials, the 2008 score results in music and visual arts could not be directly compared to the results in 1997.

In the 2008 arts assessment, the scoring guides for constructed-response questions, the sample questions and student responses used to train scorers, and the standardized training procedures were updated to reflect changes in training and scoring procedures that have been adapted for use across all NAEP assessments since 1997. In addition, because the student artwork used as training samples for visual arts in 1997 had degraded over time and because of differences in the availability of certain types of art supplies and tools between 1997 and 2008, new samples were developed for scoring students' responses to the creating questions in 2008.

However, since the scoring method for multiple-choice questions was the same in 1997 and 2008, direct comparisons could be made between the two years on results for these questions in music and visual arts (tables A-3 and A-4). Because multiple-choice questions were only a portion of the assessment and only assessed certain types of topics in the responding process of music and visual arts, the changes in students' performance between 1997 and 2008 on these questions did not represent the performance changes for the constructed-response questions or the entire assessment.

**Table A-3. Percentage correct for multiple-choice questions in NAEP music at grade 8: 1997 and 2008**

Question description	Percent correct	
	1997	2008
<b>Overall</b>	<b>53*</b>	<b>51</b>
Identify directional contour of part of melodic phrase	79	77
Identify form of vocal music in a recording (musical excerpt 1)	78	76
Identify the type of instrumental ensemble performing an excerpt	75	71
Identify form of musical examples as theme and variations	64	64
Identify a bass clef symbol	63	62
Identify pitch contour of melody in a recording	63*	56
Identify saxophone as instrument playing melody	66*	56
Identify a half note in printed music	52	56
Identify a correct time signature for a piece of printed music	55	52
Select a line drawing reflective of the texture of an example of music	52	52
Identify the solo instrument beginning "Rhapsody in Blue"	52	50
Identify form of vocal music in a recording (musical excerpt 2)	60*	49
Identify an appropriate texture drawing for a homophonic excerpt	51	48
Identify term best describing the texture	47	47
Identify an appropriate description of the texture of a recorded excerpt	50*	44
Identify correct time signature for recorded excerpt	42	43
Identify the name of a pitch shown in the treble clef	42	41
Identify an octave interval in a printed score	37	38
Identify the term for fermata symbol	38*	33
Identify which voices enter first in a choral excerpt	32	28
Identify the quality of a triad in a printed score	15*	21

\* Significantly different ( $p < .05$ ) from 2008.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 and 2008 Arts Assessments.

**Table A-4. Percentage correct for multiple-choice questions in NAEP visual arts at grade 8: 1997 and 2008**

Question description	Percent correct	
	1997	2008
<b>Overall</b>	<b>42</b>	<b>42</b>
Identify purpose of insulating package material	61	62
Identify an example of 20th-century western art	55	59
Infer from photograph advantages of shrink-wrap packaging	57	57
Identify an example of a Renaissance painting	48	50
Identify compositional emphasis in a Bearden collage	49	46
Identify genre of a Bearden collage	34	37
Identify a technical similarity between Schiele and Kollwitz self-portraits	36	37
Identify an important compositional aspect of a Kollwitz self-portrait	40	37
Identify a stylistic emphasis in a Bearden collage	29	35
Identify a compositional feature of a medieval artwork	39*	32
Identify the style of an artwork as surrealism	27	31
Identify an artistic style that influenced cubism	25	23

\* Significantly different ( $p < .05$ ) from 2008.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 and 2008 Arts Assessments.



**Table A-5. Percentage of students in NAEP arts assessment at grade 8, by selected student and school characteristics: 2008**

Student and school characteristics	Music	Visual arts
<b>Race/ethnicity</b>		
White	61	61
Black	15	14
Hispanic	18	17
Asian/Pacific Islander	5	5
American Indian/Alaska Native	1	2
Unclassified	1	1
<b>Gender</b>		
Male	50	51
Female	50	49
<b>Eligibility for free/reduced-price school lunch</b>		
Eligible	36	37
Not eligible	57	56
Information not available	7	8
<b>Type of school</b>		
Public	93	92
Private	7	8
<b>School location</b>		
City	29	29
Suburb	37	36
Town	12	13
Rural	22	22

NOTE: Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.

**Table A-6. Percentage of students with disabilities (SD) and/or English language learners (ELL) identified, excluded, and assessed in NAEP music and visual arts at grade 8, as a percentage of all students: 2008**

Student characteristics	Music	Visual arts
<b>SD and/or ELL</b>		
Identified	17	17
Excluded	2	2
Assessed	15	16
Without accommodations	6	6
With accommodations	8	10
<b>SD</b>		
Identified	12	12
Excluded	1	2
Assessed	10	11
Without accommodations	3	2
With accommodations	7	8
<b>ELL</b>		
Identified	6	6
Excluded	1	1
Assessed	5	6
Without accommodations	4	4
With accommodations	2	2

NOTE: Students identified as both SD and ELL were counted only once under the combined SD and/or ELL category, but were counted separately under the SD and ELL categories. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2008 Arts Assessment.



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