NAEP and Dance: Framework and Field Tests

Abstract: The NAEP Arts Education Framework set new standards for assessment of students' dance achievement. The dance framework, and the field testing of dance assessment tasks developed in response to the framework, provide significant new information for schools, dance organizations, and dance studios charged with developing their own dance education programs and assessments.

In 1992, the Arts Education Consensus Project, sponsored by the National Assessment Governing Board (NAGB), began an 18-month effort to establish objectives for assessing arts instruction in the nation’s elementary and secondary schools. The National Assessment of Educational Progress (NAEP) had assessed music in 1972 and 1978 and the visual arts in 1975 and 1978. The National Endowment for the Arts, in collaboration with the Getty Center for Education in the Arts, funded the Arts Education Consensus Project, designed to develop the NAEP Arts Education Framework.

The Consensus Project identified objectives for arts education in general and individually for dance, music, theatre, and the visual arts in the fourth, eighth, and twelfth grades. It also developed Assessment Specifications for each of the four arts, setting forth requirements for the content of the assessments in more detail. NAEP field-tested the dance assessment for the fourth and eighth grades in 1995 and for the twelfth grade in 1997. In the spring of 1999, NAEP will publish a Field Test Process Report, on the development, administration, and scoring of arts tasks for the three grades in all four arts, including dance.

In 1997, NAEP conducted an assessment of student performance in music, theatre, and the visual arts, for the eighth grade only. NAEP did not attempt an assessment of eighth-grade students in dance, because the number of schools offering comprehensive dance education programs in the eighth grade is not large enough to permit NAEP to obtain a sample of students consistent with its standards. While some schools offer very rich programs, many have limited programs or none at all. In the fall of 1998, NAEP will publish the examples of dance assessment tasks, along with assessment data for eighth-grade student achievement in music, theatre, and the visual arts, in the NAEP 1997 Arts Education Report Card.

The dance framework and field-test information form a unique resource for dance students, educators, instructors, and policymakers at the state and local levels. College dance programs and private studios, where most formal dance instruction takes place in the United States, will also find the framework of long-term use. This Focus on NAEP will give a

NOTE: For reasons of confidentiality, the students shown in this picture are not NAEP participants.

PHOTO BY JULIE NORA
summary of the dance framework set forth in the *Arts Education Assessment Framework* and describe the development and field testing of the dance assessment tasks.

**The Importance of Dance**

The NAEP Arts Education framework is founded on a vision of a society that believes the arts are essential for every child's complete development and education. The expectation is not that all children will become professional dancers, although some will. What is expected is that all students will experience the joy of creating and the self-confidence that comes from the development of skills and performance, that they will come to know the importance of discipline, practice, persistence, and self-criticism, and that they will apply these lessons to other aspects of their lives.

Through dance students can discover insights into themselves and into their social and cultural worlds. In addition, they can come to understand the importance of dance in their own culture and in cultures around the world, for today dance is remarkably international and draws inspiration from many cultures. The NAEP framework sets guidelines for assessment that will respect the diversity of today's dance world (see table 1).

**The Dance Assessment Framework: Content and Processes**

The dance assessment framework covers both content and processes. Content includes (1) knowledge and understanding of dance and (2) perceptual, technical, expressive, and intellectual/reflective skills. Processes include (1) creating, (2) performing, and (3) responding. While much of what students know, as well as what they can do, will be demonstrated through performance, the dance assessment framework includes a written portion as well. Table 2 sets forth the dance assessment framework in brief.

**Content**

Knowledge and understanding of dance are valuable in themselves. They can also increase students' ability to perform, and increase their ability to place dance in a more objective context than that offered by their own experiences. This context includes their own personal perspective, but goes beyond it to include social, cultural, and historical contexts as well. Students need a knowledge of aesthetics in order to understand the varied concepts and philosophies of dances from different cultures and periods. Students also need to understand the use of form and structure in dance, and the technical processes needed to create them.

The acquisition and application of skills determine the quality of the learning experience. Students apply a variety of cognitive, affective, and motor skills in dance. Perceptual skills are needed to collect and analyze the sensory stimuli of music, rhythm, and movement. Technical skills are needed to produce quality work. Expressive skills are needed to add a unique and personal nature to the work. Intellectual/reflective skills are needed to test different creative possibilities, solve artistic problems, refine work, and help students to consider dance in a thoughtful manner.

In dance, knowledge and skills are inextricably connected. Students combine both to express themselves through movement and to create dance works that exist within larger cultural contexts.

**Processes**

Creating refers to generating original art. This may include, but should not be limited to, the expression of a student's personal ideas, in the form of movement, choreography, or improvisation. To convey ideas and feelings, students make use of movement and elements of choreography. Through a knowledge of vocabulary, improvisation, and compositional structures, students are able to collaborate with others in the shared expression and the creation of dance.

Performing means performing existing works, a process that calls upon the interpretive skills of the student. Dance uses

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<tr>
<th>Table 1.—NAEP Guidelines for Dance Assessment</th>
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<tr>
<td><strong>Dance assessment shall</strong></td>
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<tr>
<td>• Affirm dance as a way of knowing with a unique capacity to integrate the intellect, emotions, and physical skills.</td>
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<tr>
<td>• Honor dance as a discrete art form, but also encourage students to see the artistic experience as a unified whole.</td>
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<tr>
<td>• Examine and report on developing abilities of students.</td>
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<tr>
<td>• Connect with students' real-life experiences of dance.</td>
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<td>• Evaluate students primarily through performance.</td>
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<tr>
<td>• Go beyond quantification to include critical judgment.</td>
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<td>• Use background variables to recognize differences and inequities in school resources (large-scale assessments only).</td>
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Source: NAEP 1997 Arts Education Assessment Framework, National Assessment Governing Board
the human body both as instrument and thinking medium. Students progressively develop dance knowledge, skills, techniques, and responses that allow them to use their bodies with confidence, success, and insight. Physical skills required in performing dance include coordination, agility, flexibility, balance, strength, and control of movement. Through dance, students gain spatial awareness, bodily awareness, musicality, and an increased ability to observe and refine movement. Dance also fosters an awareness of historical, cultural, and stylistic elements involved in the creation and performance of movement. In dance performance, thought, action, and emotion work together to achieve a single effect.

Responding to dance involves a level of perceptual or observational skill; a description, analysis or interpretation on the part of the respondent; and sometimes a judgment or evaluation based on criteria that may either be self-constructed or commonly held by a group or culture. Responding to dance must include the vital dimension of experiencing, knowing, and thoughtfully interpreting dance. Whether responding to one’s own dance or to the dance of others, students should develop new levels of understanding, insight, and perceptual acuity as a consequence of interacting with dance.

The Field Test Samples
The fourth- and eighth-grade NAEP dance field tests were conducted in February 1995. A general population of students participated. Students were not required to have taken any dance instruction. About 1,500–2,000 students participated in each of the two field tests. The field test for grade twelve, conducted in April 1997, called for a targeted population of students. Only students who had taken an in-school dance class during the 1996–97 school year were eligible. About 800 students in 68 public and private schools participated.

NAEP used a targeted sample for the twelfth-grade field test to fairly assess the students and obtain results that resembled the breadth of the dance standards. The twelfth-grade field tests were held to evaluate the validity of the dance tasks, even though NAEP had determined that it would not conduct an assessment for twelfth-grade students.

In all three field tests, the dance background of tested students varied widely. The designers of the assessment framework wanted to be as inclusive as possible. However, the experience with the fourth- and eighth-grade field tests suggested that only students with in-school dance education should participate. To fairly assess the students and obtain results that resembled the breadth of the dance standards, NAEP decided to sample only students who had had some instruction in dance for the twelfth-grade field test. Even so, students with a single dance course were assessed along with students with four years of intensive in-school training.

Dance Tasks
NAEP used two types of assessment tasks in the field tests to present an appropriate overview of dance: paper-and-pencil tasks and performance tasks. Assessment tasks were prepared by the Educational Testing Service, under the guidance of a committee of dance education experts. The fourth-grade field test devoted 50–60 minutes to the paper-and-pencil tasks and 20 minutes to the performance task, while the eighth- and twelfth-grade field tests devoted about 50–60 minutes to the paper-and-pencil tasks and 30 minutes to the performance task. In all cases, times are approximate only, depending on the specific tasks involved. The performance task assessed creating or performing, while the paper-and-pencil tasks assessed students’ abilities to respond to dance.

<table>
<thead>
<tr>
<th>Processes</th>
<th>Knowledge</th>
<th>Skills</th>
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<tbody>
<tr>
<td>Creating</td>
<td>Understanding of context (personal, social, cultural, and historical)</td>
<td>Perceptual</td>
</tr>
<tr>
<td></td>
<td>Aesthetics</td>
<td>Technical</td>
</tr>
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<td></td>
<td>Form and Structure</td>
<td>Expressive</td>
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<tr>
<td></td>
<td>Technical Processes</td>
<td>Intellectual/reflective</td>
</tr>
<tr>
<td>Performing</td>
<td>Accurately recall and reproduce movements.</td>
<td></td>
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<tr>
<td></td>
<td>Demonstrate physical technique.</td>
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<tr>
<td></td>
<td>Communicate through movement.</td>
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<tr>
<td>Responding</td>
<td>Identify compositional elements and notice details.</td>
<td></td>
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<tr>
<td></td>
<td>Identify contexts (stylistic, cultural, social, historical) of the dance.</td>
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<tr>
<td></td>
<td>Make informed critical observations about the dance’s and the dancer’s technical and artistic components.</td>
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Table 2.—Dance Assessment Framework*
The NAEP performance tasks are designed to be as authentic as time and resources permit. However, the tasks must also offer the same opportunities and the same challenges, in the same circumstances, for all the students assessed. No comparison across students is possible without such standardization. In the dance field test, such standardization necessitated limiting “choice” among tasks. For example, within a group of tasks about a series of dances, students were asked to analyze the same dance for a given question, rather than being able to choose to analyze a particular dance from the series. In the performance tasks, all students were asked to engage in the same dance task for the same period of time.

The dance performance tasks, especially the creating tasks, differentiate between students at both the low and high ends of the achievement spectrum. At the low end, it is possible to measure the difference between students with no training and those with a little training. At the high end, the tasks provide sufficient richness and depth so that those with greater skills can demonstrate the extent of their accomplishments. This discussion of dance tasks will refer to the twelfth-grade field test exclusively, since it is the most recent. NAEP plans to make available to the public all tasks, for all three grades, both paper-and-pencil and performance, that are not covered by copyright.

1. Paper-and-Pencil Tasks
The NAEP field test of students’ ability to respond to dance asked students to observe videotaped dance performances and answer written questions about them. Questions were multiple choice, short written response, and extended written response.

Twelfth-grade students were given four different pen-and-pencil tasks, or blocks. (Any individual student took two such blocks.) Each block consisted of approximately five or six multiple-choice questions and five to seven open-ended (“constructed-response”) questions.

NAEP allows both partial and full credit for answers to constructed-response tasks. For example, scoring guides for the field test might give the following criteria for evaluating answers to a short constructed-response question like the one given in table 3:

Unacceptable: Response provides no correct uses of the costumes.

Partial: Response provides either one specific use of the costumes or one or two general uses of the costumes.

Acceptable: Response provides two specific uses of the costumes.

2. Performance Tasks
The NAEP dance field test used separate tasks to measure creating and performing. For both tasks, students were led through an eight-minute warm-up. Warm-ups for the two tasks differed; the creating warm-up gave the students tasks emphasizing self-directed movement explorations (“move your body like a flag in the wind”). A special performance area was marked out, which allowed the students’ performance to be videotaped in its entirety. Performances were all taped twice. When four students were being taped (during the performing task), students switched positions for the second taping, to ensure visibility of each student’s performance, and to test students’ ability to remember the dance well enough to repeat it.

Creating. The creating task for the twelfth-grade field test gave paired students ten minutes to create a brief dance on the theme of metamorphosis. Samples of metamorphosis given to the students included a caterpillar changing to a butterfly, ice melting to water, fire burning to ashes, and (from films) depictions of humans changing to animals.

Students were asked to begin their dance in one particular section of the performance area and end it in another, in order to demonstrate movement that travels to different spots. They were also given the following additional requirements:

- **Begin** with a clear, still pose
- **Develop** using
  - Two different shapes (using the whole body)
  - Three different levels (high, middle, low)
  - Two different movement types (sharp and smooth)
- **End** in a clear, still pose

Students selected such examples of metamorphosis as seeds to grain, eggs to birds, and mother caring for child to child caring for mother.

Students who performed the creating task were evaluated on the following points:

- Did their dance demonstrate smooth or sharp qualities?
- Did their dance demonstrate fast or slow timing?
- Did the dance demonstrate two or more levels?

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**Table 3.— Twelfth-Grade Dance Field Test Scoring Guide for Paper-and-Pencil Task**

<table>
<thead>
<tr>
<th>Multiple Choice</th>
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<tbody>
<tr>
<td>The movements performed by the dancers in Dance 1 can best be described as: a) flowing; b) sharp; c) heavy; d) slow</td>
</tr>
<tr>
<td>Which of the following technical skills are most often demonstrated by the dancers in Dance 2?</td>
</tr>
<tr>
<td>a) abdominal control; b) fluidity of the spine; c) the use of muscular tension; d) high kicks.</td>
</tr>
</tbody>
</table>

**Short Constructed-Response**

Describe two specific ways in which costumes are an important part of Dance 1.

**Extended Constructed-Response**

Compare the way the feet of the dancers are used in Dance 1 and Dance 2.
• Did one movement travel at least halfway across the performance space?
• Did the dance have a clear beginning and a clear ending?
• Was the dance performed smoothly without interruptions?

**Performing.** The performing task was presented to students by professional dancers serving as demonstrators. Students were taught a brief jazz dance, taken at a moderate tempo. Students learned the dance in pieces, then performed it once through with the facilitator, and finally performed twice on their own. These two performances were videotaped.

The dance offered a variety of movements, some sharp and abrupt, and others extended and flowing. The dance offered rhythmic variety as well. The dance challenged students’ balance and extension with a sustained leg lift. Students were told to dance with “focus and expression” for both tasks.

Students’ performance of the dance was evaluated according to the following criteria:

• Did students reproduce the movement phrase accurately when the dance facilitator was not demonstrating the phrase?
• What was the level of students’ movement skills in the following areas:
  • Balance
  • Extension of limbs
  • Vertical alignment during leg extension
  • Clarity in body facings
  • Demonstration of movement qualities required in script
• Did students demonstrate awareness of rhythm of the phrase by moving on the pulse of the music?
• Did students demonstrate the concept of isolating body parts?
• Did students accurately repeat the sequence of the entire movement phrase, moving without hesitation?
• Were students able to connect the phrases and individual movements of the dance?

The creating task gave students the opportunity to use their own movement vocabulary, allowing students to display the full range of their movement ability. For example, in a creating task students can show the flexibility of their spine even though the task does not specifically call for it. The performing task, in contrast, tested students’ ability to learn and memorize movements that did not give a complete test of exceptional students’ abilities, even though beginning students found them demanding.

**Field Test Issues**

**Use of videotape in dance assessment.** There are two possible applications of video technology in assessing dance. First, videotape is a way to provide a stimulus for paper-and-pencil assessments. (The 1995 field test found video prompts to be ineffective as stimuli for performing tasks; students with live facilitators did significantly better than students trying to perform a dance from a video.) Second, videotape is a reasonably reliable and cost-effective means of recording student performances. However, certain problems must be addressed.

In the collection of data:

• the presence of the camera may change student responses.
• subtlety and nuance of behavior may be lost in the translation from three to two dimensions.
• it is difficult to position video cameras accurately enough to see and record every student throughout the entire task.

As a stimulus for student response, video prompts must be of good quality and the playback equipment must project an image large enough to be seen clearly by the students. If slides or color reproductions of various dance styles can be used, they would likewise need to be of appropriate size for individual examination.

**Privacy.** Precautions should be taken to ensure student privacy. In particular, videotapes of students should be secured to prevent their viewing by any unauthorized personnel.

**Space:** Dance assessments require a quiet space for watching and responding to videotapes. For the performance tasks, a gym or other spacious, well-lighted room free from obstructions is necessary.

**Performance Task Setup.** Students should be notified in advance so that they have time to prepare properly for tasks. In order to put students at ease, group size for movement activities should be no fewer than three students (although grade twelve dance-educated students were comfortable in pairs) and no more than six. Students should be arranged with adequate space to perform the tasks safely. The arrangement of students should be changed at least once to allow everyone to be observed and to assess student performance independently.

**Footnotes**

1. For details on the Arts Education Consensus Project, see the *Arts Education Assessment Framework for the 1997 National Assessment of Educational Progress* (1994), the National Assessment Governing Board.
2. In its survey, NAEP identified only nine schools in the nationally representative sample with significant dance programs at the eighth-grade level. At least 50 were needed for a statistically valid survey.

**For Further Information**

*Arts Education Assessment Framework for the 1997 National Assessment of Educational Progress.* Single copies are available free from the National Assessment Governing Board,
800 North Capitol Street, NW, Suite 825, Washington, DC 20002–4233. Copies may also be obtained at http://www.nagb.org/pub.html.


Arts Education in Public Elementary and Secondary Schools, NCES 95–082, provides data obtained from questionnaires sent to the principals of nationally representative samples of public schools. It is not in print, but is available over the NAEP web site at http://nces.ed.gov/NAEP/.

The following Focus on NAEP publications are also available free from the National Center for Education Statistics, U.S. Department of Education, Washington, DC 20208–5653. Copies may also be accessed over the World Wide Web at http://nces.ed.gov/NAEP/.

The NAEP Arts Education Framework, Field Test, and Assessment, NCES 98–527

NAEP and Music: Framework, Field Test, and Assessment, NCES 98–529

NAEP and Theatre: Framework, Field Test, and Assessment, NCES 98–528

NAEP and the Visual Arts: Framework, Field Test, and Assessment, NCES 98–526

The Focus on NAEP series briefly summarizes information about the ongoing development and implementation of the National Assessment of Educational Progress (NAEP). This series is a product of the National Center for Education Statistics (NCES), Pascal D. Forgione, Jr., Commissioner, and Gary W. Phillips, Associate Commissioner for Education Assessment. This issue was written by Sheida White, of Education Assessment, and Alan Vanneman, of the Education Statistics Services Institute. For more information, contact Sheida White at 202–219–1675. To order other NAEP publications, call Bob Clemons at 202–219–1690, or e-mail bob_clemons@ed.gov.

Information on NAEP may also be obtained over the World Wide Web at http://nces.ed.gov/NAEP/.