WRITING SPECIFICATIONS

For the

2011 National Assessment of Educational Progress

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2011 Writing Specifications for the National Assessment of Educational Progress

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Chapter One: Introduction

The purpose of this chapter is to present an introduction to the 2011 NAEP Writing Specifications. Key sections of the chapter are as follows:

- Need for a New Framework and Specifications
- Comparison of the 1998 and the 2011 NAEP Writing Frameworks
- Framework and Specifications Development Process
- Overview of the 2011 NAEP Writing Assessment

The National Assessment of Educational Progress (NAEP) has, since 1969, been an ongoing national indicator of what American students know and can do in major academic subjects, including Writing. NAEP administers writing assessments at regular intervals to grade 4, 8, and 12 students attending both public and nonpublic schools, collecting a significant, nationally representative sample of student writing at these grades.

Two documents explain the 2011 Writing assessment. The Writing Framework for the 2011 National Assessment of Educational Progress presents an overview of the content and design of the assessment and is intended for a general audience. Recommendations for the content and design of the assessment presented in the Framework were a result of extensive literature reviews; the discussion of many experts in writing instruction and assessment and representatives of other constituencies who were members of the project committees; and extensive commentary from various focus groups representing a wide variety of national organizations in education and business.

This document, the *Specifications for the 2011 NAEP Writing Assessment*, was developed for the National Center for Education Statistics (NCES), NAEP contractors, and other interested individuals to provide more specific information about task development, delivery of the assessment, evaluation of responses, and other aspects of test development. The Specifications document also provides key developmental considerations, requirements, recommendations, and parameters to NCES and future NAEP contractors. The content of the Specifications was derived from the Framework and was supported by additional research, extensive discussion by members of the project committees, and by reviews from a variety of groups representing other constituencies.

The NAEP Writing data will measure and report national, state, large urban district, and subgroup trends in writing achievement but will not target the performance of individual students or schools. Although the public will have full access to NAEP results and released tasks, NAEP does not seek to influence the curricula or assessments of any state.

Need for a New Framework and Specifications

The Framework and Specifications that guided the last three administrations of the NAEP Writing assessment (administered in 1998, 2002, and 2007) were developed more than a decade ago. Since then, several important developments have taken place that

necessitated a new Framework and Specifications for assessing writing in 2011 and beyond.

National and state standards for student achievement established new benchmarks for writing skills. In 1996, The National Council of Teachers of English (NCTE) and the International Reading Association (IRA) developed national content standards for the English Language Arts which included standards for student writing. Additionally, 49 of 50 states in the United States had, as of 2006, created content or performance standards for writing. The 2011 Writing Framework reflects the content of many state standards for writing.

State standards and studies such as Achieve's American Diploma Project call for alignment between high school standards and assessments and college/workplace expectations. The 2011 NAEP Writing assessment is designed to provide important information about the extent to which students at grade 12 are prepared to meet postsecondary expectations (e.g., college, workplace, or military settings) for writing. This includes evaluating their ability to write effectively in relation to a specified purpose and audience and to use word processing software with commonly available tools.

The new Writing Framework and Specifications reflect important changes in direct writing assessment and allow NAEP to continue to provide invaluable representative data on student writing proficiency at the national level. The increasing number and impact of large-scale direct writing assessments have changed the nature of and emphasis on writing instruction in K-12 classrooms. Although 48 out of 50 states ask students to complete at least one extended response writing task on state grade-level assessments, and both the ACT and the SAT college admissions tests added direct writing tasks in 2005, the kinds of writing tasks and evaluation of writing on such assessments vary widely. State direct writing assessments and college entrance exams are not able to provide the nationally representative information about student writing achievement that the NAEP Writing assessment offers.

Information technologies are changing how (and how often) students write. Computers play a significant role in the writing process in schools and the workplace. As the number of experienced technology users increases, so too will the impact technology has on student writing, writing instruction, and writing assessment. Computers have introduced new ways of generating, organizing and editing text. Word processing tools (e.g., editing, formatting, spelling, and reference tools) further facilitate revision and recursive writing processes. NAEP Writing has been redesigned to assess writing with word processing software using commonly available tools at grades 8 and 12, starting in 2011.

The 2011 NAEP Writing assessment will begin a new trend line for writing, which will continue for at least ten years. The results of the 2011 NAEP Writing assessment will offer new opportunities to examine students' ability to write effectively in relation to the purpose and audience for the writing and to understand the role and impact of computers on writing. A new component of reporting, the *Profile of Student Writing*, will provide additional data on student writing achievement.

The key differences between the 1998 and 2011 Writing Frameworks are outlined in Figure 1.1.

Figure 1.1 Comparison of 1998 and 2011 NAEP Writing Frameworks

	1998 Writing Framework			2011 Writing Framework				Explanation for Change	
Content of NAEP Writing Assessment	o Description communicate individual and imagined others o Analysis			reader's point ader's ned, in order to	 Purposes for writing are emphasized as a way of: Recognizing that most writing is influenced in significant ways by interaction between writer, purpose, audience, and topic. Focusing the writer's attention on the goal of the writing task and the needs of the audience. To Convey Experience is a broader representation of the kinds of writing students will be asked to do. In the 2011 Framework, "narrative" is viewed as an approach, not a purpose, and is a strategy also used in explanatory and persuasive writing. 				
On the 1998-2007 NAEP Writing Assessment, some writing tasks required students to write for a particular audience (e.g., a peer, school principal, or committee). For other writing tasks, an audience was not specified.		In 2011, a specific audience will be stated or clearly implied in all writing tasks at grades 4, 8, and 12.			clearly implied	The specification of audience on all prompts and at all grades will encourage students to make decisions about how to develop and organize ideas ("approaches to thinking and writing") and how to craft language that meets the needs of the specified audience.			
Design of NAEP Writing Assessment	Percentage of Writing Tasks for Each Writing Mode:			Mode: Percentage of Writing Tasks for Each Writing Purpose:		Purpose:	An increase in the percentage of tasks for the persuasive purpose at grade 4 reflects emerging pedagogical practices in elementary		
of N.		Grade 4	Grade 8	Grade 12		Grade 4	Grade 8	Grade 12	schools and complements expectations for postsecondary preparedness at grades 8 and 12. The distribution also reflects a
gn c y As	Persuasive	25%	33%	40%	To Persuade	30%	35%	40%	progression of emphasis on writing to explain and to persuade,
)esi itinç	Informative	35%	33%	35%	To Explain	35%	35%	40%	though many students in all three grades will also write to convey experience, real or imagined.
W	Narrative	40%	33%	25%	To Convey Experience	35%	30%	20%	, , , , , , , , , , , , , , , , , , , ,

	1998 Writing Framework	2011 Writing Framework	Explanation for Change
Design of NAEP Writing Assessment	Paper and pencil assessment for grades 4, 8, and 12.	Paper and pencil assessment for grade 4 (with recommendation to provide computer-based assessment at grade 4 by 2019). Computer-based assessment for grades 8 and 12.	 As grade 8 and 12 students have become accustomed to composing, revising, and editing on computers, a computer-based assessment will offer students an environment for writing that more accurately reflects how students compose. Students will also have the option of using commonly available editing, formatting, and text analysis tools to compose their response. A 2011 computer-based assessment at grades 8 and 12 offers students the opportunity to compose in an environment that is similar to that of many writing situations in postsecondary education and training.
Evaluating Responses on the NAEP Writing Assessment	On the 1998-2007 assessment, evaluation criteria are defined as "general characteristics of writing by mode"; some characteristics (e.g., "organization" and "mechanics") apply to all three modes, whereas others are mode-specific (e.g., "develops character" for the narrative mode).	The 2011 NAEP Writing Assessment will evaluate three broad domains of writing in all students' responses: Development of Ideas Organization of Ideas Language Facility and Use of Conventions	 The 2011 NAEP Writing assessment clearly and consistently defines criteria for the evaluation of effective writing across grades. Features of writing will be evaluated in relation to the purpose and audience specified in the writing task. Development and organization of ideas will be evaluated for writers' use of relevant and effective approaches to thinking and writing (e.g., analyzing, evaluating, narrating, etc.).
Reporting NAEP Writing Assessment Results	On the 1998-2007 assessments, student performance was reported in two ways: Scale scores Achievement level descriptions Average scale scores are derived from the overall level of performance of groups of students on NAEP assessment items. For Writing, average scale scores have been expressed on a 0–300 scale. Achievement levels are performance standards set by NAEP that provide a context for interpreting student performance. These performance standards are used to report what students should know and be able to do at the Basic, Proficient, and Advanced levels of performance in each subject area and at each grade assessed.	For the 2011 NAEP Writing Assessment, student performance will be reported in three ways: Scale scores Achievement levels Profile of Student Writing: A nationally representative sample of student responses at each grade will be closely analyzed in relation to the evaluative criteria used to score student writing. Utilizing both qualitative and quantitative methods, data will be analyzed in order to detect patterns between attributes of the responses and performance at the Basic, Proficient, and Advanced levels of achievement.	The Profile of Student Writing enhances the traditional NAEP reporting methods—scale scores and achievement levels—by providing information about various dimensions of writing and about the relationship between those attributes and achievement.

Framework and Specifications Development Process

To develop the 2011 NAEP Writing Framework, ACT, Inc., under contract to the National Assessment Governing Board, engaged in a comprehensive process that involved extensive research, outreach, and collaboration over the course of 18 months. The development process addressed numerous goals and issues, calling upon a multitude of resources to clarify and inform assessment development. While the Governing Board has not taken a formal position on whether the 2011 Writing Assessment will measure 12th grade student preparedness, a number of steps were taken to address the preparedness issue. These steps were pursued in anticipation of a possible future Board policy action to add writing to the list of preparedness subjects, which currently includes reading and mathematics. For example, the Writing Framework project committees had greater representation from higher education, workforce, and military professionals. ACT explored the issue of postsecondary preparedness through extensive research—including reviewing the American Diploma Project report (Achieve, 2006), ACT college readiness reports (ACT, 2007), military writing manuals (USAF, 2004), and other sources. ACT also developed a research brief on post-secondary writing expectations; and conducted forums with members of professional organizations relevant to postsecondary settings. Additional research and validity studies will need to be conducted if the Board decides to explore the applicability of this Framework for the assessment of 12th grade postsecondary preparedness.

In all, more than 500 individuals from across the nation participated in the Framework development process. Members of many key professional organizations reviewed elements of the Framework at various stages of development and provided their guidance at conference and focus group sessions. State testing and curriculum experts were consulted via in-person and online conference sessions held throughout the Framework project. In January 2007, a draft of the Framework was released for public comment and was also reviewed by an external panel of writing experts.

The Specifications were developed after the Framework was approved by the Governing Board in March, 2007. The Specifications provide a detailed presentation of the assessment content and design described in the Framework; they were developed for the contractors who will implement the Framework. Like the Framework, the Specifications were extensively discussed and reviewed by project committees and by experts in the development and scoring of direct writing assessments. A session was held at the CCSSO Large-Scale Assessment Conference in June 2007 to obtain feedback on the draft Specifications. More than 50 individuals representing states and other NAEP constituents participated in that session, providing valuable input on the draft Specifications, particularly on computer-based assessment considerations.

Both the Framework and Specifications reflect the perspectives of a diverse array of individuals and groups who collaborated on this project. These contributors included elementary, middle, secondary and postsecondary educators; coordinators of writing instruction and assessment; experts in communication technologies; policymakers at the district, state, and national levels; representatives of the military; and business professionals.

Overview of the 2011 NAEP Writing Assessment

The definition of writing that guides the 2011 NAEP Writing Framework reflects recent trends in composition theory, writing research, and the ideas of dozens of educators and writing experts. Writing, according to the 2011 NAEP Writing Framework, is a complex, multifaceted and purposeful act of communication that is accomplished in a variety of environments, under various constraints of time, and with a variety of language resources and technological tools.

The concepts presented in this definition are conveyed throughout the content, design, evaluation, and reporting statements contained in this document and relate to key writing principles in K-12 writing instruction and best practices in large-scale assessment. This definition is also reflected in the main goals for the assessment outlined in the Framework:

The 2011 NAEP Writing assessment will encourage student writers to move beyond prescriptive or formulaic approaches in their writing.

The 2011 NAEP Writing assessment will assess grade 8 and 12 students' writing using word processing software with commonly available tools.

The 2011 NAEP Writing assessment will measure students' ability to respond to a writing task in an on-demand scenario.

Key Issues Considered in Developing the Assessment Framework and Specifications

The development process of both the Framework and Specifications documents involved discussion of many key issues that define an assessment of this scope. As a result of these discussions, several key themes emerge in the Framework and Specifications:

Accessibility

Accessibility concerns influence almost every component of the assessment, from task instructions to accommodations for diverse student populations. The assessment should be designed so that all students eligible to participate are able to demonstrate what they know and can do. The design of tasks should also encourage a diversity of approaches to responding. Finally, the design and delivery of the assessment, particularly the delivery of the assessment at grades 8 and 12 via computer, should be developed to minimize potential interferences with students' ability to compose.

Choice

Choice refers to students' ability to develop, organize, and compose their ideas in the ways they think are most appropriate to completing the task. Choices of approaches to thinking and writing, of details and examples, and, in certain cases, of form, encourage student engagement and motivation while allowing NAEP a more accurate and representative sample of student writing achievement.

Complexity

Complexity in the context of the 2011 NAEP Writing assessment refers to progression in both the difficulty of tasks across grade levels and increasing expectations for the sophistication of responses to tasks across grades 4, 8, and 12. While students at all three grades will be assessed for their ability to respond to three communicative purposes, task topics and audiences will differ depending on the grade. Because NAEP assessments measure what students should know and be able to do, tasks at each grade will reflect increasing expectations of elementary, middle, and high school students.

Validity

Validity is a characteristic of the measure and the appropriateness of decisions or interpretations of those measures. In the case of the 2011 NAEP Writing assessment, data derived from students' scores will be used to represent trends over time in the writing achievement of students at the three grade levels assessed. The 2011 NAEP Writing assessment is designed to measure how students compose in a variety of writing contexts relevant to common writing situations in the K-12 curriculum and in postsecondary settings. These include considerations such as common purposes for writing, the awareness of audience in writing, the ability to craft the development and organization of ideas, and the use of language that is appropriate to the purpose and audience for a piece of writing.

To help ensure interpretable assessment results, each participant completes two writing tasks. Based on responses to two tasks, a variety of data collection methods are used to offer a nationally representative 'snapshot' of student writing achievement.

For a Glossary of Terms used in this document, see Appendix A.

Chapter Two: Task Considerations and Development Procedures

This chapter provides an overview of recommended developmental practices contractors should follow when developing tasks for the 2011 NAEP Writing assessment. For the corresponding NAEP Item Development and Review Policy Statement, see Appendix B. Key sections of the chapter are as follows:

- Principles of Task Development
- Clear Measurement Intent
- Accessibility
 - o Enhanced Design Considerations for Special Populations (New)
- Contextual Information
- General Task Specifications
 - o Enhanced Task Specifications (New)
 - o Revised Specifications for Visual Stimuli and Reading Passages (New)
- Development Procedures

Principles of Task Development

The principle of good task writing, first and foremost, is to create assessment tasks that prompt *all* students, regardless of background, to respond in ways that convey their abilities to communicate ideas in writing (Thompson, Johnstone, & Thurlow, 2002). To ensure that all students have the opportunity to demonstrate their knowledge of the concepts and ideas that the NAEP Writing Assessment is intended to measure, fairness must be confronted throughout the interconnected phases of test design and development (National Research Council, 1999). Included in this section are three components that define good task development: clear measurement intent, accessibility, and the use of appropriate contextual information.

Clear Measurement Intent

Good task writing ensures that tasks are constructed to evaluate what the assessment is designed to measure—in other words, the tasks developed for the 2011 NAEP assessment must be consistent with the purpose for administering the assessment. *Clear measurement intent* involves thinking about and designing assessments that are appropriate for the widest range of students; further, it involves very precise and explicit descriptions of what the assessment intends to measure, so that it is possible to avoid measuring unintended factors (NCEO; 2003). Tasks that are clear and consistent with the measurement goals ensure that the assessment results represent what students know and can do and are relevant to important elements of writing achievement. Clear measurement intent facilitates the classification of tasks according to assessment specifications, helps reduce confusion in task reviews, and provides evidence of the degree of alignment of the task to the specifications (Thompson, Johnstone, & Thurlow, 2002).

Accessibility

By considering of the variety of student characteristics throughout the stages of task development, contractors can construct assessment items that support the needs of the greatest proportion of learners and reduce the need for external accommodations (Tindal & Crawford, 2003). The central requirement of NAEP writing assessments is that the same writing performance expectations be measured across diverse groups of students and that the tasks do not unfairly advantage or disadvantage certain groups of the population. To this end, the assessment should maintain the rigor of the writing expectations in the Framework and Specifications while providing the means for all students to demonstrate what they know and can do in writing.

Plain Language

To ensure comprehension of any writing task by all student populations, careful attention must be paid to the level of vocabulary used in the task (Carlson & Bridgeman, 1986). Tasks should be developed with straightforward, concise language; common words should be used to convey meaning. Using plain language reduces the linguistic demands placed on students and minimizes the effect of reading proficiency on students' writing performance and assessment scores. Additionally, it helps ensure that the assessment fairly and appropriately assesses writing, not reading performance.

For specifications and recommendations for using plain language, see page 20.

Considerations for Special Populations

Because NAEP is designed to measure the educational progress of a diverse, nationally-representative sample of student populations, careful consideration will be required by assessment developers to provide as fair a context as possible for all students. Therefore, to ensure that the assessment is accessible to all students, including students with disabilities and English language learners, assessment developers should consider the following guidelines when designing tasks:

Task Design Considerations for Students with Disabilities

Writing task developers should adhere to the following principles to make the 2011 NAEP Writing assessment accessible to students who have a wide range of physical and mental abilities:

- Avoid layout and design features that could interfere with students' ability to understand the requirements and expectations of the task.
- Develop tasks compatible with allowed accommodations, such as text enlargement.
- Develop visual stimuli that can be read and interpreted without confusion.
- Provide a written description and/or clearly label all components of visual stimuli (e.g., in graphical images, graphs, and charts). Visual stimuli should be produced with sufficient contrast of color (minimum use of grey) for students with limited visual abilities.

• Minimize task components and words that are difficult to translate into Braille or sign language.

(Olson & Goldstein, 1997)

Task Design Considerations for English Language Learners (ELL)

Writing task developers should address the following principles to minimize the possibility of ELL students misinterpreting the tasks:

- Tasks should be free of topics and vocabulary that rely heavily on cultural knowledge for a successful response.
- All visual stimuli should be culturally sensitive and should not rely heavily on cultural knowledge for a successful response.
- To allow more sophisticated tasks to be included without disadvantaging students who
 have limited English language proficiency, tasks on the 2011 NAEP Writing assessment
 should be as fully and clearly explained as possible. Developers can minimize potential
 problems with task comprehension by being mindful of the following task development
 strategies:
 - o Use straightforward word choice, word order, and syntax.
 - Utilize repetition or rephrasing in the presentation of the writing tasks, when helpful.
 - o Avoid colloquialisms or confusing idioms.
 - Avoid words with dual meanings (cognates) in English and in the student's native language, or clearly define such words so they are understood.

(Oakland & Lane, 2004; Kopriva, 2000)

To ensure that tasks are accessible to all students, field tests should sample every type of student expected to participate in the final assessment administration, including students with a wide range of disabilities, English language learners, and students across racial, ethnic, and socioeconomic lines. Field testing of all writing tasks with a broad range of students should help identify any tasks that are unclear, misleading, or inaccessible to students.

The task development considerations described in this section are not intended to imply that tasks should be written differently for specific student populations. Rather they are intended to ensure that tasks are accessible to all students participating in the assessment.

Writing Tasks with Multiple Access Points

Multiple access points refers to the principle that writing tasks be designed to allow students from all demographics, backgrounds, and cultures to demonstrate what they know and can do by means of their knowledge, experiences, and observations—both in and outside of school (Wolcott, 1998). Opening writing tasks to a variety of response approaches can improve NAEP's ability to elicit responses from students across a wide achievement range without affecting the communicative purpose being assessed.

Contextual Information

Contextual information is text and/or graphics provided in a task that gives the writer an understanding of the situation or topic he or she is asked to address in the response. Context is commonly presented in NAEP tasks as visual stimuli, brief reading passages or quotations, scenarios, explanations, or background text. This information is vital to the successful completion of a NAEP Writing task and should be accessible to all students, not an obstacle to the demonstration of writing skills.

To incorporate contextual information appropriately and effectively, task developers should follow the following guidelines:

- Use contexts that are meaningful for the communicative purpose being assessed.
- Use contexts that are appropriate for the grade level assessed; if necessary, provide brief background information to help students connect to the topic or situation.
- Use familiar contexts; avoid contexts that may be confusing or unfamiliar to students.
- Use clear and concise language.
- Use graphics to increase clarity, when appropriate.
- Avoid contextual information that could interfere with construct validity.

The information below provides further discussion of the two most common forms of contextual information that will occur in NAEP Writing tasks: visual stimuli and reading passages.

Visual Stimuli

Visual stimuli refer to graphics and images incorporated into 2011 NAEP Writing tasks to stimulate student response. At all three grades, age- and grade-appropriate visual stimuli should be included in some writing tasks. Developers of writing tasks are encouraged to utilize appropriate visuals—especially at grade 4—whenever visuals can help encourage student engagement and offer students more opportunities to draw upon their knowledge, experiences, and observations.

Examples of grade-appropriate visual stimuli include:

- Pictures or illustrations used as story starters (4 and 8)
- Photographs and artwork (4, 8, and 12)
- Billboards, advertisements, or brochures (8 and 12)
- Graphs, tables, and simple representations of data (8 and 12)
- Editorial cartoons (12)

This distribution of visual stimuli types reflects classroom practices and the goal of a achieving a progression of complexity in the tasks and expectations for response across the grades.

Certain principles must apply to the use of all visual stimuli:

• Visual stimuli should be graphically simple and easy for students to comprehend.

- A visual stimulus should have a clear relationship or connection to the topic of the task.
- Visual stimuli should provide information or ideas students can use in their response.
- A correct interpretation of the visual stimulus should not be required for successful completion of the task.
- Tasks should encourage but generally not require students to use information or ideas from the stimulus in their writing (e.g., "you may want to consider the information in the table in your response."). However, some tasks (e.g., those that ask students to create a story based on an illustration) may require students to reference or discuss the contextual information provided.
- Any and all components of visual stimuli should be clearly labeled.
- Extraneous information should not be a part of any visual stimulus.
- Images should be adjusted for clarity and scale so that they are accessible to all students (see page 54 for frequently used accommodations for students with disabilities.).

For examples of tasks with visual stimuli, see Appendix C.

Reading Passages

The inclusion of additional written material in a task—such as a short excerpt from a longer text or a quotation—can also stimulate student response when asked to explain concepts, argue a position, compose stories, and so on. At all three grades, age- and grade-appropriate reading passages should be incorporated as resources in some writing tasks.

Examples of grade-appropriate reading passages include:

- Story starters (4 and 8)
- Excerpts from nonfiction or fictional sources (4, 8, and 12)
- Poems (4, 8, and 12)
- Text from billboards, advertisements, or brochures (8 and 12)
- Quotations (8 and 12)

This distribution of reading passage types reflects classroom practices and the goal of a achieving a progression of complexity in the tasks and expectations for response across the grades.

Certain principles apply to the use of all reading passages:

- Reading passages should be brief so that they do not consume extensive time for students to read and understand them. (Recommended passage lengths at each grade are specified in Figure 2.1.)
- A clear relationship between the reading passage and task topic should be present.
- Reading passages should provide information or ideas that stimulate student response.

- A correct interpretation of the passage should not be required for successful completion of the task.
- Tasks should encourage but generally not require students to use information or ideas from the passage in their writing (e.g., "you may want to consider the information in the passage in your response."). However, some tasks (e.g., those that ask students to respond to a quotation) may require students to reference or discuss the contextual information provided.
- The readability of the passage should be at or below the reading level for the grade given the passage.*
- Reading passages should be free from idioms and regional phrases, as well as technical language or jargon.
- Reading passages should be concise and contextualized. They should not include extraneous information.
- Reading passages should be accessible to all students (see page 54 for frequently used accommodations for students with disabilities).

Additional specifications for reading passages are included in Figure 2.1.

^{*} Reading level will be determined by using data from the judgment of experts (e.g., the Writing Development Panel), from small-scale pilot testing, and from a range of commonly used readability formulas.

Figure 2.1 Specifications for Reading Passages at Grades 4, 8, and 12

4 th Grade	8 th Grade	12 th Grade	
Task developers should consider short passages from culturally inclusive children's literature and magazines (e.g., Cricket, Ranger Rick, National Geographic World, Cobblestone, Highlights).	Task developers should consider short passages from culturally inclusive young adult literature and magazines (e.g., Teen Voices, National Geographic World, Cicada) and from textbook/nonfiction sources.	Task developers should consider short passages from national newspapers and magazines (e.g., New York Times, USA Today, Wired) and from diverse textbook/nonfiction sources.	
The word count of the entire task (including the reading passage and directions) should be limited to 50-100 words.	The word count of the entire task (including the reading passage and directions) should be limited to 100-150 words.	The word count of the entire task (including the reading passage and directions) should be limited to 150-250 words.	
Brief poems or lines from a poem are acceptable if their readability is at or below grade level.	Brief poems or lines from a poem are acceptable if their readability is at or below grade level.	Brief poems or lines from a poem are acceptable if their readability is at or below grade level.	
Story starters should be brief and construct scenarios or imaginary situations of interest to the age group.	 Story starters should be brief and construct scenarios of interest to the age group. Quotations should be limited to 1-2 sentences. Pro and con debate statements are acceptable (e.g., brief 	 Quotations should be limited to 1-3 sentences. Pro and con debate statements are acceptable (e.g., brief position statements that students can respond to). Text from billboards, ads, or brochures is 	
	position statements that students can respond to). • Text from billboards, ads, or brochures is acceptable.	acceptable.	

For examples of tasks with reading passages, see Appendix C.

General Task Specifications

The following specifications should be considered for all tasks developed for the 2011 NAEP Writing assessment.

Tasks will be designed for either a 30-minute computer-based assessment at grades 8 and 12, or a 25-minute paper and pencil assessment at grade 4.

The 2011 NAEP Writing assessment will be administered as two 30-minute computer-based writing tasks at grades 8 and 12, and two 25-minute paper and pencil writing tasks at grade 4. Time for a tutorial on the computer-based platform may also be given to students at grades 8 and 12 prior to the start of the assessment, depending on the design of the platform or other procedural issues. Writing tasks should be developed to give all students—those using the traditional paper and pencil and those using the computer-based platform—time to read the task and directions and respond by doing their best work within the allotted time frame. To ensure that students can read the task and respond in the allotted time, writing tasks should be designed to align with the parameters for word limits; topics should not be too broad or too general; and topics should not require information that could be obtained only through prior research or study.

Tasks should be age- and grade-appropriate and should provide appropriate scaffolding to support students' ability to respond to tasks within the time allowed.

Writing tasks for the 2011 NAEP Writing assessment should include realistic, age- and grade-appropriate topics that are familiar and accessible to students and encourage engagement with the task. These issues and topics are likely to progress from interests or opinions at grade 4 to broader societal topics by grade 12, but no task at any grade should elicit material sensitive or inappropriate to the age group participating. If hypothetical situations are used to create a context for a task, they should be realistic and representative of experiences or activities of the age group.

The presentation of tasks should also clearly indicate what students are expected to do and directions for how to do it. Assessment developers should be careful, however, not to overwrite tasks by providing students with too much contextual information or direction, which can limit students' thinking and stifle more complex approaches to the writing situation. Task and task directions should be clear enough so that students are not confused about what is expected of them without being overly prescriptive about what writers should consider or what responses should include.

Tasks should not be overly controversial.

Task developers must be careful to provide accessible and engaging writing topics and to ensure that students are comfortable responding to tasks. Controversial subjects should be avoided, as should those that elicit sensitive material; antagonize moral, political, cultural, or religious values; or denigrate any population or age group. Topics that may inadvertently encourage inappropriate responses should also be avoided.

Tasks should direct students to make key rhetorical choices in response to the contextual information and directions provided by writing tasks.

Writing tasks on the 2011 NAEP Writing assessment will dictate certain elements of the response to participants (e.g., the audience to whom the student is writing), but decisions about the development, organization, and language in response to the task's specified purpose and audience will be left to the writer's discretion. Writers will be assigned a topic, issue, or experience in the instructions (e.g., "Write a response to a parent or guardian about a favorite memory from your childhood"). However, writers should be free to make decisions about several elements of their response, such as the subject(s) they choose to write about, the details and support they use to develop ideas, and the text structures they use to organize their ideas. Tasks should thus be designed with the potential for broad engagement and to encourage a variety of potential response approaches (and, potentially, in the case of grades 8 and 12, response forms). Additionally, tasks should not imply a preference for or privilege certain answers or response types over others.

Tasks should draw upon students' experiences and observations.

Unlike other NAEP subject-area assessments, tasks on the 2011 NAEP Writing assessment are designed to assess ability, not knowledge of certain content areas or concepts. Thus, tasks should not be subject-area specific or require application of specific areas of knowledge that some students may not have. Instead, NAEP writing tasks should encourage students to include information and ideas from their own knowledge, reading, observations, and experiences. Task developers should create contexts in tasks that are accessible to students based on their age and on common experiences and situations in and outside of school. If they choose, students should be able to respond with ideas from areas outside of English language arts, such as history and science—but this should not be a requirement for successful response.

Tasks should be designed to encourage the use of a variety of approaches to thinking and writing to support the development and organization of ideas.

Effective writing tasks engage students in a series of cognitive processes that transform knowledge, experience, and/or observation into deeper thinking and writing (NWP & Nagin, 2003). These *approaches to thinking and writing* are thus used by a writer to support the development and organization of ideas—common approaches used by writers at all levels to various degrees and in various combinations include analyzing, describing, evaluating, arguing, narrating, reflecting, summarizing, and synthesizing. Approaches to thinking and writing should not be specified in the assessment writing tasks; however, writers at all three grade levels will be expected to use relevant and effective approaches when developing and organizing their ideas. Task developers can help foster the use of effective thinking and writing strategies by:

- Choosing topics that engage students at each grade and that reflect their interests and/or concerns.
- Shaping task instructions that encourage strategies connected to storytelling (e.g., narrating, describing), logical reasoning (e.g., analyzing, synthesizing, arguing), or critiquing (e.g., evaluating, interpreting). Chapter Three provides additional information

- about how to encourage the use of effective approaches to thinking and writing for each of the three communicative purposes.
- Field testing each task to ensure it promotes appropriate and effective approaches to thinking and writing.

For more discussion of how to encourage approaches to thinking and writing for each communicative purpose, see Chapter Three.

Task language should be clear and free from specialized or technical language and from complex sentence structures.

To ensure student comprehension of all writing tasks, task developers should follow these guidelines:

- Use brief, clear, and concise sentences in task instructions.
- As often as possible, use the same paragraph structure for task instructions.
- Use present tense and active voice.
- Use high-frequency words as much as possible.
- Use format features to clarify text (e.g., space between pieces of text, bullets, boxes and lines).
- Minimize paraphrasing.
- Avoid using pronouns; if pronouns are necessary, be sure that pronoun references are clear.
- Avoid using complex logical connectors, such as conditional and adverbial clauses, long noun phrases, and relative clauses, especially if these occur before question words, between the subject and the verb, or in strings.
- Avoid double negatives (e.g., it is *not unusual*).
- Avoid colloquialisms, idioms, and contextual situations that are more familiar to certain socio-economic groups. Avoid stereotyping and racial, cultural, gender, and regional bias.
- Avoid using words with multiple meanings (cognates). If it is necessary to use words with multiple meanings, make sure the intended meaning is clear or is defined in the task.
- Avoid extraneous descriptive information unless it is related to the intent of the task.

Development Procedures

To ensure the development of tasks that adequately represent the content domain and exhibit proper psychometric characteristics, and to construct a task pool that will adequately measure the skills described at the three achievement levels, it is important to incorporate review by educators and experts in writing instruction and assessment at several points during the development process. Therefore, the development, field testing, and selection of operational tasks should be monitored by an Assessment Development Panel. A minimum of 20% of the membership of the Framework and Specifications development committees should serve on this panel, as specified by National Assessment Governing Board policy. Panelists chosen should

have expertise working with diverse student populations, including English language learners and students with disabilities.

After writing tasks have been developed, the panel should review the pool at each grade and judge the tasks for congruence with all task specifications. The tasks should be judged on the following criteria:

- Grade-level appropriateness
- Technical accuracy
- Accessibility
- Clear and relevant communicative purpose and audience

In addition to these criteria, panel members should ensure the pool at each grade is balanced so that the distribution of tasks by communicative purpose conforms to the distribution recommended by the Writing Framework and the Specifications. Potential tasks should be reviewed by the contractor after field testing to determine their operational merit; any task that statistical evaluation reveals to be technically flawed should be eliminated.

The task development process is iterative and includes many steps to develop tasks consistent with the assessment specifications. Task developers should begin with a thorough review of the task specifications in this document and then proceed to develop a *Task Writers Guide* or similar document for each grade. The guides should provide detailed guidelines about the required and optional components of the writing tasks, the time students have to complete the task, the means by which to make all components of the assessment accessible to all student populations, and the criteria that will be used to evaluate responses. The guides should include scoring rubrics and at least one prototype task for each communicative purpose, and prototype tasks to illustrate the inclusion of a reading passage and a visual stimulus. The guides for grades 8 and 12 should also include information about components of computer-based assessment relevant to the content of the tasks—such as the use of certain computer-based tools (e.g., thesaurus, dictionary).

Developers should recruit task writers with expertise in the areas of writing instruction and assessment from a broad range of professions related to the grade they will develop tasks for: classroom teachers, state English language arts coordinators, teachers of writing, researchers, etc. After task writers have completed and submitted the tasks they have been contracted to develop, the development contractor should carefully review all tasks and prepare the tasks for bias and content/technical reviews.

Guidelines for Bias Review of Tasks

All writing tasks should be reviewed by linguistic and cultural experts for evidence of bias (e.g., cultural, gender, regional) and for topic sensitivity according to Governing Board policy and professional standards for test development. The accessibility of tasks to special populations should also be an integral consideration throughout task development.

Tasks should be reviewed for the appropriateness of their content and for their consistency with technical specifications for the tasks (e.g., for consistency with specifications for the use of

reading passages or visual stimuli, for language use, etc.). Commentary from all reviewers should be collated and summarized for consideration by the Assessment Development Panel, which will determine the tasks that will proceed to field testing.

Guidelines for Field Testing Tasks

Writing tasks chosen for field testing will follow standard NAEP procedures for field testing tasks. Tasks will be field tested with a diverse group of students, including those who use accommodations during testing (NCEO, 2003).

Data gathered from field testing should be analyzed by task developers to determine which tasks are most consistent with assessment specifications. All writing tasks and field testing data will be presented to the Assessment Development Panel with recommendations for tasks that seem best suited for use in the operational assessment.

Chapter Three: Assessment Content

The discussion that follows addresses the content of the 2011 NAEP Writing assessment and the guidelines specific to the assessment that will impact development of the writing tasks. In addition to providing task specifications, this section provides detailed guidance on how purpose, audience, and form will impact the content and format of the writing tasks. ¹ Kev sections of the chapter are as follows:

- Communicative Purposes for Writing (New)
 - **Revised Distribution of Communicative Purposes** (New)
- Specification of Audience (*New*)
- Student Choice of Form (New)
- Summary of Content Specifications

Communicative Purposes for Writing

Communicative purpose refers to the objective or aim of a piece of writing, what the writer hopes to accomplish. Purpose shapes the composing process (Claggett, 2005). The 2011 NAEP Writing will assess students' responses to three communicative purposes: To Persuade, To Explain, and To Convey Experience, real or imagined. The sections that follow explain the percentage of tasks to be developed for each purpose at each grade, how tasks for each purpose should be developed, and how to ensure that the communicative purposes are clearly distinguished from one another when developing tasks.

Distribution of Communicative Purposes

Figure 3.1 shows the distribution of communicative purposes on the 2011 NAEP Writing assessment. The percentages represent the proportion of tasks for a particular purpose out of the total number of tasks developed for each grade.

Figure 3.1 Percentage Distribution of Communicative Purposes by Grade

Purpose	Grade 4	Grade 8	Grade 12
To Persuade	30%	35%	40%
To Explain	35%	35%	40%
To Convey	35%	30%	20%
Experience			

¹ Sample tasks provided in this chapter were reviewed by teachers at each grade level and were reviewed for bias.

To Persuade

Types of *To Persuade* tasks

To Persuade tasks are those that will ask writers to change an audience's viewpoint or convince an audience to take action on a variety of important topics. Writing tasks designed to assess this purpose should be developed to encompass a broad range of potential task types: e.g., selection tasks, where students are asked to choose a specific subject and convince others of its merit (e.g., an activity they want others to participate in); debate tasks, where students may be presented with a scenario that requires them to take a position and argue for it (e.g., allowing cellular phones in high school classrooms); or critique tasks, where students may be asked to review hypothetical arguments and to convince others about the relevance or validity of such a call to action (e.g., arguing for or against a proposed plan for a local community youth center). These kinds of tasks allow students to make key rhetorical choices in the development and organization of their ideas while also allowing a progression in the complexity of tasks—particularly an increase of debate and critique tasks—at grades 8 and 12.

Approaches to Thinking and Writing in *To Persuade* Tasks

To Persuade tasks should be designed to encourage critical thinking processes like analyzing, arguing, evaluating, and synthesizing. Task developers can enhance the potential for students to demonstrate depth and complexity by following the following guidelines for development of *To Persuade* tasks:

- Create topics and issues open to a variety of approaches and perspectives and present these topics and issues as complex controversies (e.g., asking about high schools' responsibility for promoting healthy eating habits rather than simply asking whether junk food should be banned).
- Provide realistic persuasive scenarios that will enrich the writing situation and heighten the writer's awareness of audience.
- Use "cue words" appropriate for the age and grade that promote argumentative strategies (e.g., "propose," "consider how others...") rather than merely asking for an opinion (e.g., "Do you agree?").
- Include additional instructions that remind students of the criteria for good persuasive response (e.g., "Support your opinion with specific examples") or which encourage them to focus on a specific component or problem of the task topic (Keech, 1982).

Specifying the *To Persuade* Purpose

The 2011 NAEP Writing assessment should clearly identify the *To Persuade* purpose for writing in the instructions for tasks of this communicative purpose. Moreover, developers should explicitly use the cue word "persuade ____" (an audience) in the instructions for *To Persuade*

tasks at all three grades. The words "convince" or "argue" (at grade 12) can also be used in conjunction with the term "persuade."

Additional Specifications for To Persuade Writing Tasks

Figure 3.2 provides further specifications for *To Persuade* tasks for grades 4, 8, and 12.

Figure 3.2 Additional Content Specifications for *To Persuade* Tasks at Grades 4, 8, and 12

Grade 4	Grade 8	Grade 12
 Tasks should ask students to express an opinion or preference in order to convince others of its merit. Topic areas such as leisure activities, school experiences, and common hobbies or interests are acceptable. Tasks designed to elicit recommendations of books, movies, etc. are acceptable. Instructions for these kinds of tasks should guide students to examine multiple dimensions of the text, not just plot summary. Task instructions that include language encouraging students to consider other perspectives are acceptable (e.g., "How would your classmates react to?"). The letter is the preferred form for grade 4 To Persuade tasks. 	 Tasks should ask students to respond to proposals related to school issues and extracurricular or out-of-school interests (e.g., cafeteria food, games). Topic areas such as local or community issues that affect middle school students are acceptable. Tasks that ask students to move others to act are acceptable (e.g., "Convince your peers to get involved with your school's"). Tasks designed to elicit reviews of books, movies, etc. are acceptable. Instructions for these kinds of tasks should guide students to examine multiple dimensions of the text, not just plot summary. Task instructions may include language that encourages students to recognize other viewpoints (e.g., "Consider how others might view"). 	 Tasks should ask students to formulate arguments on debatable school or community issues (e.g., cell phones in school, curfews, etc.). Topic areas such as national or world issues are appropriate. Tasks asking students to evaluate the value or implications of some actions are acceptable (e.g., "Convince your principal whether or not a proposal requiring high school students to complete some community service in order to graduate has merit."). Persuasive tasks at grade 12 should ask for argument over opinion. Ways of encouraging this may include asking students to: Recognize counterarguments (e.g., "Defend your opinion against"), Evaluate other perspectives ("Consider"), Create solutions ("Propose a")

Progression of Complexity across Grades for To Persuade Tasks

At all three grades, writers should be expected to explain a topic to an audience by drawing upon approaches to thinking and writing that help them clearly present their ideas and by using language that helps the audience fully understand the topic or subject being explained. The difficulty of persuasive tasks and expectations for performance on these tasks should progress across the grades; in particular, grade 12 tasks should be designed to reflect expectations of writers in postsecondary settings, where argumentative writing involves logical reasoning and an understanding of the complexity of debatable issues. Students at grade 4 should be expected to express and support their own viewpoints with reasons and/or evidence. Grade 8 students should be expected to do everything grade 4 students demonstrate and be able to respond to other arguments and information (e.g., a simple display of data or reading passage); likewise, it should also be expected that students will, to some degree, acknowledge other perspectives in their responses. Grade 12 students should be able to demonstrate the same grade 4 and grade 8 skills, and in addition, should be able to demonstrate a more sophisticated ability to address the complexity of a debatable issue—such as noting the implications of their views and/or evaluating potential solutions.

Figure 3.3 provides an example of the progression of complexity across 2011 NAEP Writing *To Persuade* tasks by showing different configurations of the same topic (healthy eating) with increasing complexity at each grade.

Figure 3.3 To Persuade Task Progression

Grade 4:

Your teacher has asked you and your classmates for ideas about how to make students more aware of the importance of healthy eating. Some students have suggested a "healthy lunch" day or an after-school cooking class.

Write a letter to your teacher convincing him or her to accept your idea about how to make other students aware of the importance of healthy eating. You may choose to write about the suggestions presented in the first paragraph, or you may suggest your own idea. Be sure to include reasons and examples in your letter that will be persuasive to your teacher.

Grade 8:

Your principal is considering a proposal to replace all the junk food in your school's vending machines with healthier options. If this were to happen, all cookies, chips, and candy would be removed by the end of the month and replaced by items low in fat and sugar, such as yogurt or carrot sticks.

Write a response for your school newspaper convincing your classmates to support or reject the proposal to replace all the junk food in your school's vending machines with healthier options. Be sure to include reasons and examples that will persuade other students to agree with your point of view.

Grade 12:

Highschoolissues.org, a website where students and School Board members discuss common issues for high school students, is sponsoring an online forum about the role high schools should play in promoting healthy habits such as eating well or exercising. The objective of this forum is to discuss the following question: "Are high schools responsible for students' physical health and nutrition?"

Write a response to other students and School Board members who are participating in this online forum that argues your position on whether high schools have a responsibility for students' physical health and nutrition. Be sure to include persuasive reasons and examples in your response.

To Explain

Types of *To Explain* Tasks

Writers who compose to explain seek to present information and ideas to others in a manner that aids understanding of a topic. This communicative purpose encompasses a broad range of potential tasks: e.g., reaction tasks, in which students explain their thoughts on a specified topic (e.g., what they think America will be like in the future); informative tasks, in which students explain ideas or concepts they are familiar with but that an audience may not understand (e.g., what their school is like to a new student); and definition and analysis tasks, in which students clarify a concept with many possible perspectives or definitions (e.g., explain what "community" means). These kinds of tasks allow students to make key rhetorical choices in the development and organization of their ideas while also allowing a progression in the complexity of tasks across grades, particularly for definition and analysis tasks.

Approaches to Thinking and Writing on To Explain Tasks

To Explain tasks should be designed to encourage critical thinking processes such as analyzing, describing, defining, evaluating, and interpreting. Developers can enhance the potential for students to demonstrate depth and complexity by following these guidelines for the development of *To Explain* tasks:

- Choose topics or processes at grades 8 and 12 that require more in-depth reasoning and self-awareness (e.g., asking students to explain a study skill they use and how they use it effectively) rather than eliciting a simple explanation of a process (e.g., describe the steps involved in writing an essay).
- Prompt students to address the significance of the topic, function, or process being explained.
- Expand task instructions with particular cue words—e.g., "define," "evaluate," and "apply"— to encourage students to incorporate additional critical thinking approaches in their response (Flower, 1993).
- Include additional instructions that remind students of the criteria for a good explanatory response (e.g., "Support your opinion with specific examples") or that encourage them to focus on a specific component or problem of the task topic (Keech, 1982).

Specifying the *To Explain* Purpose

The 2011 NAEP Writing assessment will clearly identify the *To Explain* purpose in the instructions for tasks of this communicative purpose. For *To Explain* tasks, instructions will clearly indicate that writers should "explain ____" (the topic). The terms "discuss," "describe," or "define" may also be used in conjunction with the term "explain."

Figure 3.4 provides further specifications for *To Explain* tasks for each grade.

Figure 3.4 Additional Content Specifications for *To Explain* Tasks at Grades 4, 8, and 12

Grade 4	Grade 8	Grade 12
• Tasks should address simple procedures or explanations:	• Tasks should include a mix of informative and response-oriented tasks: • Comparison and contrast (e.g., "In a response for your school newspaper, compare and contrast two of your favorite music groups or artists and explain why you like both music groups or artists.") • Description (e.g., "Describe a place you know well and explain its significance to someone who has never been there before.") • Definition or evaluation (e.g., "Compose a response for your yearbook that explains what makes a good friend.") • In addition to encouraging elaboration on the topic, tasks should ask students to explain the importance of the topic. • Tasks asking students to make predictions are appropriate (e.g., "Contribute to a time capsule by explaining your prediction of what America will be like 2050.") • Tasks asking students to explain a concept or process to a younger audience are appropriate.	• Tasks should include analytic and informative tasks: • Cause and effect (e.g., "Explain to leaders of your community why you think many eighteen year-olds do not vote – and what effect that might have on your country or community.") • Problem/Solution (e.g., "In a writing for a local or community newspaper, explain a problem in your community and how you think it could be solved.") • Definition (e.g., "Define and explain 'freedom' for a new citizen of this country.") • In addition to encouraging elaboration on the topic, tasks should ask students to explain the importance of the topic. • Tasks asking students to apply concepts or ideas are appropriate (e.g., "Explain to your principal how laptop computers for every student could be used to improve learning.")

Progression of Complexity Across To Explain Tasks

As is the case with *To Persuade* tasks, writers at all three grades should be expected to explain a topic to an audience by drawing upon approaches to thinking and writing that help them clearly

present their ideas and by using language that helps the audience fully understand the topic or subject being explained. At grade 4, tasks might call for a basic explanation of a topic students have knowledge of or for a description of a process or sequence elementary students are familiar with. At grade 8, students should be able to expand on the grade 4 skills by analyzing a process or comparing and contrasting ideas. At grade 12, students will be expected to demonstrate those skills assessed on grade 4 and 8 tasks, and in addition, may also be asked to identify the causes of a problem, compare similarities and differences between two events, or respond to data in a simple figure.

Figure 3.5 provides an example of the progression of complexity across the three grades by showing different configurations of the same topic (computers and learning).

Figure 3.5 *To Explain* Task Progression

Grade 4:

Imagine that your local library is redesigning its children's section and wants to add new computers to encourage students' reading and learning. A librarian visits your school to find out how fourth graders use computers. She asks students in your class to write letters to her explaining the different ways they use computers to learn at school and at home.

Write a letter to the librarian explaining how you use a computer to learn at school and at home. Be sure to include details and examples in your letter that will help the librarian understand how you use a computer.

Grade 8:

TechED, a computer software company, is developing new educational software for middle school students. The company is surveying eighth grade students to learn about the impact computers have on the way students learn. In the survey, the company has asked eighth grade students to provide a written response to this question: "How have computers affected you as a student?"

Write a response to the survey question explaining how using a computer has affected you as a student. Be sure to explain your ideas by using details and examples.

Grade 12:

Your school has received funding that would provide all students at your high school with laptop computers. Before the school gives the laptops to students next fall, your principal asks graduating twelfth grade students for advice about how having laptops for every student could be used to enhance learning.

Write a response to your principal explaining how laptop computers could be used to support the education of students at your school. In your response, be sure to use examples and details to explain ways a laptop for every student could benefit the learning of individual students or entire classrooms.

To Convey Experience, Real or Imagined

Types of *To Convey Experience* Tasks

In conveying experience, writers seek to bring real or imagined experience to life for their readers through descriptive details, voice, style, reflection on the significance of events and actions, and the evocation of aesthetic or emotional responses. This communicative purpose encompasses a broad range of potential tasks: imagined stories, where students create a fictional experience (e.g., telling about an adventure in space); narrative essays, where students recount a specific incident or experience (e.g., relating an important memory from childhood); and reflective pieces, where students convey the significance of an event or experience to their understanding of themselves and/or the world (e.g., school experiences that illustrated the value of learning). These kinds of tasks allow students to make key rhetorical choices in the development and organization of their ideas while also allowing a progression in the complexity of tasks—particularly in an increase of reflective tasks—in the later grades.

To Convey Experience Tasks and Approaches to Thinking and Writing

To Convey Experience tasks should be designed to encourage the use of such strategies as describing, narrating, and reflecting/questioning. Developers can enhance the potential for students to demonstrate depth and complexity by following these guidelines for the development of To Convey Experience, real or imagined tasks.

- When form is specified on certain grade 8 and 12 tasks, tasks should explicitly call for students to utilize a common approach or feature of the form (e.g., "sensory details" with an imagined story) in their response (Claggett, 2005).
- Provide contextual information appropriate and engaging to the type of task—creative situations for imaginative responses, realistic scenarios for responses about real experiences.
- Provide age- and situation-appropriate 'cue words' that promote metacognitive awareness
 (e.g., "reflect on your progress" or "how did it affect others?") over asking students to
 merely recount an event (e.g., "retell the story"). Reflective, metacognitive writing is best
 encouraged by prompting students to relate the self to knowledge; to find personal
 meaning in experiences, ideas, and objects; and to communicate internal truths to an
 audience (White, 1985).

Specifying the *To Convey Experience* Purpose

The 2011 NAEP Writing assessment will clearly identify the *To Convey Experience* purpose in the instructions for the task. However, the term *To Convey Experience* may be somewhat difficult to communicate to writers, particularly those at grades 4 and 8. When appropriate, and when absolutely clear to the writer what is being asked for, task developers can use the phrase "convey the experience" at grades 8 and 12. At grade 4, tasks should direct students to "create a

story" or "describe an event." A more generic term, such as "write about" or "tell about," should also be considered at any grade.

Figure 3.6 provides further specifications for *To Convey Experience* tasks for each grade.

Figure 3.6 Additional Content Specifications for *To Convey Experience* Tasks at Grades 4, 8, and 12

Grade 4	Grade 8	Grade 12
• Tasks should focus on: o Imagined stories (e.g., "Imagine it's a wet and rainy day outside. Write a story for your teacher about an adventure that takes place in such weather.") o Narrative accounts (e.g., "Your principal is sponsoring a writing contest called 'A Memorable Day at Our School.' Write a narrative describing the most memorable day you've experienced at your school.") o Response connected to a visual stimulus (illustration, art, etc.) • Imaginative topics (e.g., about the future, or about fantasy worlds) are acceptable. • Task instructions specifying imagined stories may begin by saying "Imagine"	 Tasks should focus on: Imagined stories Narrative essays (e.g., "Tell a teacher about the first time you met someone who later became important to you.") Response to a sequence or series of visual stimuli (e.g., story boards, picture frames or strips, etc.) Imaginative topics (e.g., about the future, or about fantasy worlds) can be used occasionally. Tasks that ask students to create a story or relate an experience that addresses a specified theme are appropriate. Tasks calling for non-fiction experiences should encourage thinking about any of the following: The effect the experience had on the writer or others. The reasons why the writer acted as he/she did or the reasons why a particular experience had an effect on the writer. Hypothetical alternatives (e.g., what would have happened had the writer done something differently.) Some To Convey Experience tasks should be specifically designed to elicit an imaginative response by specifying "story" as the required form for completion of the task. 	• Tasks should focus on: • Memoir (e.g., "Food Magazine wants to hear about memories people have about food and its role in their family celebrations. Describe a tradition centered on food in your family and what part it plays in your memory of family celebrations.") • Reflective Essay (e.g., "Relate to a potential employer an experience at a job, school activity, or community service that has affected your plans for the future.") • Tasks may ask for or encourage imagined stories as long as the instructions call for stories situated in contexts that are realistic and relevant to high school students. • Topics should ask students to relate experiences with maturity/adulthood and their interactions with adult society (e.g., jobs, education, etc.) • Tasks calling for nonfiction experiences should encourage (and ask for) any of the following kinds of thinking: • Reflection on the formation of and/or influences on a belief or point of view. • How the writer's specific views compare to the general views of broader society. • Connections to broader themes or issues. • Some To Convey Experience tasks should be specifically designed to elicit an imaginative response by specifying "story" as the required form for completion of the task.

Progression of Complexity Across To Convey Experience Tasks

Tasks designed to assess writing to convey experience on the 2011 NAEP Writing assessment will encourage flexibility in thinking and form, allowing writers to organize complex reflective or imaginative responses. Grade 4 students will be expected to craft short stories and provide accounts of real experiences. Grade 8 students will also be asked to create imaginary responses, as well as to write narrative accounts of personal experience. Grade 12 students will be expected to use writing to explore and reflect on aspects of their character or growth as a person, using extended examples to enhance the reflection.

Figure 3.7 provides an example of the progression of complexity across grades by showing different configurations of the same topic (experiences with books or other popular arts) with increasing expectations at grades 4, 8, and 12.

Figure 3.7 To Convey Experience Task Progression

Grade 4:

Imagine you were able to live for one day in the world of your favorite book or movie. What would happen to you in this world? What would you do?

Write a story for your classmates about your experience in this world. Be sure to include details in your story that convey your experience to your readers.

Grade 8:

Many young students can recall an artistic experience that inspired them, such as attending a concert or visiting a museum. Think of an artistic experience that inspired you. This experience could be a performance you attended, such as a concert or play, or it could be an experience you had at home or school, such as reading a book or listening to music.

Describe your experience in a response written directly to the artist, author, or performer who created or performed the work that inspired you. Be sure to include details in your response that clearly convey the artistic experience and its effect on you.

Grade 12:

The New York Times is encouraging its young readers to contribute to the Arts section of the newspaper by writing about how art—such as stories in movies or books—often imitates life. The newspaper has asked high school students to think about experiences in their lives that are similar to those of characters in books or movies and convey to the newspaper's readers a similar experience and its significance.

Write about an important experience you had that was similar to the experience of a character in a book or a movie. Be sure to use details to convey the significance of your experience to readers of *The New York Times*.

Purposes Should be Clearly Differentiated

Tasks in almost all writing situations may have several different purposes implied in their instructions—in some cases, more than one of the purposes assessed on the 2011 NAEP Writing. In the context of NAEP, however, each writing task should have one overarching purpose; that is, the task and the instructions should clearly be focused on eliciting writing for one purpose. While it is likely that some students will draw upon approaches commonly connected to purposes other than the one specified in the writing task, it should be clear to students what text structures and features are appropriate given the purpose and audience stated in the task. Confusion about the assigned purpose can be minimized by limiting the use of terms describing a purpose for writing to tasks that address that communicative purpose (thus the word "explain" would only appear in *To Explain* tasks); by using additional verbs or "cue" words to further clarify the purpose (e.g., "convince" in a *To Persuade* task); by providing an audience whose needs would be met by the stated purpose (e.g., a new student in a *To Explain* task); and, in general, by constructing clear and accessible directions to students.

Figure 3.8 provides an example of how a grade 12 topic—looking back on one's high school experience—can be applied to all three communicative purposes NAEP assesses and illustrates how tasks should clearly direct students to respond to a specific communicative purpose. Note that while language can be easily modified to alter the purpose of the task, the task must focus on a single purpose. A *To Convey Experience* task, for example, should not be designed to elicit a persuasive or explanatory response.

Figure 3.8 Example Tasks Illustrating Differentiation of Communicative Purposes (Grade 12)

To Convey Experience, Real or Imagined (original)

As part of an application for a job or college, you have been asked to consider how the following quotation is related to your high school experience.

"Experience is not what happens to you; it is what you do with what happens to you."
—Aldous Huxley

Write a response to this quotation in which you **relate a high school experience that shows how you have grown as a student since starting high school.** Be sure to use details that convey the experience to readers of your application.

To Explain

As part of an application for a job or college, you have been asked to consider how the following quotation is related to your high school experience.

"Experience is not what happens to you; it is what you do with what happens to you."

—Aldous Huxlev

Write a response to this quotation in which you **explain the relevance of the quotation to your experiences in high school.** Be sure to use details and examples in your response to explain your experience.

To Persuade

As part of an application for a job or college, you have been asked to consider how the following quotation is related to your high school experience.

"Experience is not what happens to you; it is what you do with what happens to you."

—Aldous Huxley

Write a response to this quotation in which you **convince either a potential employer or members of a college admissions committee that the experience and insight you gained while in high school has prepared you for work or college.** Be sure to use reasons and examples that will be persuasive to an employer or to a college admissions committee.

In the first task, the writer is clearly instructed to relate a single moment of significance ("a high school experience"); in the second, the writer is asked to connect the quotation to his or her own ideas and experience ("explain the relevance of the quotation to…"); and, finally, in the third, the writer is asked to influence the audience's point of view and move them to action ("convince…").

Audience

Audience, the intended reader(s) of a piece of writing, is an essential component of communication, and the relationship between a writer and his or her audience is an important feature of tasks on the 2011 NAEP Writing assessment. An appropriate and genuine audience is a hallmark of an effective task (NWP and Nagin, 2003).

The following sections outline the role of audience in assessment tasks and the specifications for integrating this component into the assessment.

Audience will be specified or clearly implied in every writing task

In most writing tasks on the 2011 NAEP Writing assessment, the intended audience should be explicitly stated. This stated audience should be as specific as possible for the benefit of student writers—for example, "principal" is preferred to "school official."

Figure 3.9 provides an example of a NAEP Writing task with a specified audience. The specified audience is identified in bold.

Figure 3.9 Example Task Illustrating a Specified Audience (Grade 8)

Your school wants to persuade **new eighth grade students** to participate in school or community activities, sports, or clubs by publishing a brochure about the school's extracurricular offerings. Current students have been asked to write about a particular sport, club, or activity they participate in or about some other activity they think **new eighth grade students** should get involved in.

Compose a piece of writing to persuade **new eighth grade students** to participate in the sport, club, or activity you have chosen. Be sure to include reasons and examples that will persuade new eighth grade students to participate in the activity you have chosen to write about.

There may be situations where a specific person or group is not necessarily relevant to completing the task or where the audience is obvious based on the context of the writing task. In these situations, the audience will be implied and will not require specification. Any implied audience must be clear to all students and should be supported by relevant contextual information throughout the task and instructions so writers can respond to the intended audience. If there is doubt about students' ability to identify the implied audience, the intended audience should be explicitly stated for the writer.

Figure 3.10 provides an example of a grade 4 NAEP Writing task with a clearly implied audience. Cues identifying the implied audience are in bold.

Figure 3.10 Example Task Illustrating an Implied Audience (Grade 4)

Your school would like to help students think about how a person's actions can make a difference to others. The **school newspaper** is planning to publish stories about times when students helped someone or when someone else helped them.

Write a story for the **school newspaper** about a time when you helped someone or a time when someone helped you. Be sure to include details in your story that convey your experience to your readers.

In this example, it is clearly implied by identifying the publication ("the school newspaper") that the audience is the writer's fellow students, teachers, and parents of students who attend the school.

Audience should be familiar and age- and grade-appropriate to students

Given the short time period for responding to each writing task and the brevity of task instructions, students must be able to readily identify assigned audiences and be able to respond in writing to them. While in many cases it will not be necessary for students to personally know their intended audience (e.g., a government official or an employer), the audience chosen for a task should be a type of person or group with which the students have some background or prior knowledge. An audience should not be so specific that only certain student populations may be familiar with it; however, the specified or implied audience should not be so general as to prevent students from making key rhetorical choices in their writing. Ultimately, students should have enough familiarity with the audience that they can make conscious decisions about the kinds of support they offer (e.g., logical, emotional, or character arguments), the formality of their voice, and the word choice and syntax.

Age- and grade- appropriateness refers to the audiences most logical for the students participating in the NAEP Writing assessment. These are audiences that are familiar to an age group and common recipients of the writing of these students, both in and outside of school. For example, it is common for elementary school students to write for peers and family members. They may occasionally write to experts or officials—such as in a letter asking for advice—but the best context to measure elementary level writing achievement is with audiences most familiar to grade 4 students. Likewise, while grade 12 students may write to share with peers, it is most appropriate that they be assessed for their ability to write for official and authoritative audiences (e.g., those in professional, civic, or political life) in preparation for adult life and writing for postsecondary settings.

Figure 3.11 includes some potential audiences for students in each of the three grades assessed by the 2011 NAEP Writing assessment.

Figure 3.11 Possible Audiences for Grades 4, 8, and 12

Grade 4	Grade 8	Grade 12
School Audiences	School Audiences	School Audiences
Principal	Principal	Principal or dean
Teachers	Teachers	School board
 Classmates 	Student council	Teachers
<u>Publications</u>	Classmates and peers	Student council
School newspaper or	Publications	<u>Publications</u>
newsletter	School newspaper	School newspaper
Authors of texts students	Local or community newspaper	Local or community newspaper
have read	Magazines	Magazines
Contests or competitions Familial or Book	 Authors of texts students have read or of familiar genres (e.g., 	Websites (non-entertainment)
Familial or Peer Audiences Peers	children's books) Informational brochures	Business and Workplace Audiences
Parents, siblings, and other	n	CEOs and other business leaders
family members	Business and Workplace Audiences	Company product representative
	Company product representative	Not-for-profit agencies/charitable organizations
	Vendors of school-related products (e.g., textbooks, food,	Prospective employers
	etc.)	Government Audiences
	Government Audiences	Mayor
	Mayor	Governor
	Governor	State or community leaders
	President	City council
		Higher Education Audiences
		Admissions committee
		College officials
		• Educators
		Experts or scholars

Audiences should be consistent with the purpose identified in the writing

In order for writing tasks to more accurately reflect real world conditions for writing, it is important that purpose and audience be realistic and consistent with one another. The audiences listed in Figure 3.11 play different roles in the lives of elementary, middle school, and high school writers; likewise, the purposes a writer might have for communicating with these audiences also differ. Therefore, it is not the case that every audience recommended here is appropriate for every purpose; in fact, there are many audiences that may only be relevant to one or two purposes. *To Convey Experience* tasks in particular should be limited to audiences familiar with or interested in the events of young people's lives—for example, other students or

people involved in postsecondary settings (e.g., college, work, and the military). Members of professional organizations or others who hold positions that influence and affect policymaking may more often be relevant audiences for persuasive or explanatory tasks.

Types of audiences should vary depending on task complexity at each grade

The audiences listed in Figure 3.11 are people or groups both familiar and appropriate to students at each grade and are common audiences for student writing. While several audiences are appropriate for more than one grade, the relationship between these audiences and the writer should increase in complexity at grades 8 and 12. Audiences selected for writing tasks at grades 8 and 12 should be those that encourage students to think deeply about how they will develop and organize ideas and use language in response to the intended recipient(s) of their response. Whereas younger students should be asked to respond to audiences they commonly encounter in their everyday experiences (e.g., peers, teachers, etc.), older students should compose for more distant and authoritative audiences of those involved in postsecondary settings and leadership roles. Audience types at grade 8 should balance familiar audiences with more authoritative figures (such as principals or governors).

Students at all grades should not be asked to write for any kind of audience that might encourage the use of informal language or cause them to disregard correct use of grammar, usage, and mechanics.

Student Choice of Form

Form refers to the organizational features customarily required by a particular kind of writing, such as a story, letter, essay, and so on. This section provides an overview of the role of form on the 2011 NAEP Writing assessment, including information about how field testing may impact the specification of form on the NAEP assessment writing tasks.

Specification of Form at Grade 4

NAEP writing tasks at grade 4 should clearly state the form the writer is to use. These forms should be limited to those text types familiar to grade 4 students: letters; stories; and common forms of persuasive, expository, and narrative writing. Task developers may also want to consider, when appropriate, providing explicit instructions on which components of the form students should include—e.g., telling students to start a letter with a salutation such as 'Dear...'—in order to expedite the writing process.

Figure 3.12 shows an example grade 4 task with the form specified. The specified form is identified in bold.

Figure 3.12 Example Task with Form Specified (Grade 4)

Imagine your teacher has chosen you to help a new student who will soon be attending your school. To prepare the new student, your teacher has asked you to write a letter to the new student explaining what your school is like so that he will know what to expect on his first day.

Write a letter to your future classmate explaining what your school is like. Be sure to include details and examples in your letter that will help him learn about your school.

Specification of Form at Grades 8 and 12

Because form is so often socially situated and influenced by the purpose and audience of the writing situation, Framework developers believe grade 8 and 12 students should be allowed to compose in the form they believe best addresses the demands of a writing task. However, Framework developers also recognize that it is necessary to make writing tasks accessible within the time allotted for writing, so it may be necessary for some or all tasks to explicitly state which form a writer will use. To determine how form will be specified at grades 8 and 12, NAEP will field test three types of tasks with varying degrees of form specification at grades 8 and 12:

- Tasks that specify a text type, or form (e.g., "Write a **letter** to persuade the principal of your school to")
- Tasks that do not specify a text type (e.g., "Persuade the principal of your school to")
- Tasks that recommend several possible text types (e.g., "Write a **letter**, **editorial**, or **essay** to persuade the principal of your school to")

The results of field testing will be used to determine which approach to the specification of form is most effective for which types of tasks.

Situations Requiring Specification of Form at Grades 8 and 12

There are certain situations at grades 8 and 12 where the topic, purpose, or contextual information in a writing task will require students to use a specific form. In particular, those *To Convey Experience* tasks that ask for or encourage an imaginative response will need to specify the use of a story to complete the task because other common forms of imaginative writing—e.g., poetry, scripts, illustrated writing—are inappropriate or irrelevant to the writing skills the NAEP Writing assessment is designed to measure. Task developers should therefore determine how many tasks in the *To Convey Experience* task pool should call for an imaginative response—with more for grades 4 and 8 and fewer for grade 12. Those tasks designed to elicit responses based on real experience may not require the specification of form because several possible forms (e.g., letters, essays, etc.) will be appropriate to what the assessment is designed to measure.

Potential Forms at Grades 8 and 12

If, as a result of field testing, form on grade 8 and 12 tasks is to be merely suggested or not specified at all, tasks should be designed to allow students to choose the most appropriate form for the task. If form is not specified, tasks should be designed so that, whenever possible, students are free to use a wide variety of forms; in these situations, any one form should not be privileged over another—though given the parameters of the task (e.g., the subject, purpose, audience, etc.), some forms may be less appropriate than others. If several forms are suggested in task instructions, task developers should encourage a variety of appropriate and familiar forms so that students can engage with the task and be motivated to call upon effective approaches to thinking and writing in their response. In both situations, clear instructions for the topic, purpose, and audience of the task are required.

The following is a list of common discourse forms for grade 8 and grade 12 students that are appropriate for the 2011 NAEP Writing assessment:

- Articles
- Autobiographical/Biographical anecdotes
- Editorials/Commentaries
- Essays
- Process analysis/Directions
- Letters
- Reports
- Reviews
- Stories

Summary of Content Specifications

Figure 3.13 provides an overview of the content specifications discussed in this chapter.

Figure 3.13 Summary of Key Content Specifications

		Key Characteristics	
Guidelines for Content Development	Tasks	 Tasks should: Address real-world, age, and grade-appropriate issues. Be familiar and accessible to students, and not controversial in nature. Allow choices within parameters provided by the writing task. Draw upon students' experiences and observations. Encourage the use of effective approaches to thinking and writing. Occasionally include an external stimulus, such as a brief reading passage or an illustration, photograph, table, chart, or other visual representation. 	
s for Conten	Purpose	Purpose should be: Clearly stated in the writing task. Consistent with the audience identified in the writing task.	
Guideline	Audience	Audience should be:	
	Form	Students should: Choose the form most suitable to their purpose and audience at grades 8 and 12 (to be field tested prior to the 2011 assessment). Be asked to use a specified form at grade 4.	

Chapter Four: Assessment Design and Delivery

This chapter provides specifications for the design and delivery of the 2011 NAEP Writing assessment, with particular attention to considerations involved in administering the assessment by means of computers. Key sections of the chapter are as follows:

- Introduction
- General Considerations
- Design Considerations
- Delivery Considerations: Administration, Security, and Reporting
- Computer-Based Testing at Grade 4
- Special Study

All considerations in this chapter are designed to support development of a new computer-based NAEP Writing assessment for grades 8 and 12.

Introduction

At grades 8 and 12, the 2011 NAEP Writing assessment will be delivered using a computer-based platform: students at these grades will complete two NAEP Writing tasks by using a word-processing application to compose their responses. It is the responsibility of the contractor, therefore, to plan the delivery of the assessment on multiple levels, including the design, administration, security, and collection components affected by the mode of the assessment.

Computerized testing creates additional opportunities to develop assessments that allow students to demonstrate what they know and can do in writing, but requires considerable resources and cooperation to be administered successfully. Further research, study, and field testing will be necessary before implementing the components of a computerized NAEP Writing assessment—final decisions about the design and delivery of the assessment may not be made until at least 2009. For this reason, the design and delivery parameters detailed in this chapter serve to provide an *overview* of the decisions NAEP and its contractors must make to properly implement a computer-based assessment—they are questions, areas of concern, and technical considerations to be addressed by developers to ensure alignment with the intent of the assessment.

The considerations presented in this chapter are the result of discussions with assessment experts and representatives of states implementing computer-based testing. Technical manuals and assessment reviews of computer-based direct writing assessment testing produced by states (including Minnesota, Massachusetts, and West Virginia) and assessment contractors experienced with computer-based testing (ACT, CTB/McGraw-Hill, etc.) were also consulted to determine the issues that will need to be addressed when determining the design and delivery of the 2011 NAEP Writing Assessment on computer for grades 8 and 12.

Using computers in the assessment of writing has a significant impact on the environment in which the assessment is delivered, how content is delivered to students, how the assessment is administered, and how responses are collected. These four areas involve important components

that must be carefully considered and implemented in order to produce an appropriate and accessible platform. Each is discussed in the sections that follow below.

General Considerations

Standardization

A major factor in determining the design and delivery of the 2011 NAEP Writing assessment at grades 8 and 12 will be determining the level of standardization—that is, what the platform will look like, how it will function, and how responses will be transmitted for all grade 8 and 12 students. NAEP and its contractors will first need to determine which platform design will be constructed to deliver the 2011 NAEP Writing assessment on computers: standardized delivery or non-standardized delivery.

Standardized Delivery

In a standardized delivery method, all students would complete the 2011 NAEP Writing assessment using a common platform provided by NAEP and created specifically for the assessment. If a standardized platform is chosen, NAEP could deliver this platform as an online application, with students completing the tasks using Internet-based word processing software (and likely submitting their results to a data-encrypted server or website). The platform could also be delivered as a software package that NAEP would bring to a school, either as installed software or on laptop computers also provided by NAEP. To develop a standardized platform, NAEP would use data gathered in observational studies and field testing to design a universal word processing application familiar and accessible to students.

Non-standardized Delivery

In a non-standardized delivery method, students would complete the 2011 NAEP Writing assessment using the existing word processing applications their school has installed on student computers. NAEP would not provide its own platform or require all schools to use one specific platform or application. This means that students might use a variety of word processing applications—from simple text editors to advanced publishing suites—and that access to word processing tools might differ across schools (though the recommended tools list in Figure 4.1 would still be used to determine what tools were recommended and permissible). Rather than specifying a specific set of tools, NAEP would specify the minimum set of tools that must be available to participate in the assessment, as well as any specific tools that must be disabled (e.g., Internet access). Though a disparity between applications (and schools) may arise, this method favors allowing schools jurisdiction over how students will complete the computer-based assessment.

Design Considerations

Interface

An immediate design concern is determining the physical layout of the word processing application that students will use—that is, what the composing window should look like and how students should interact with it. The Framework recommends that the word processing software used for the assessment resemble and function in the same ways as software commonly used by grade 8 and 12 students in 2011. Should a standardized platform be constructed to deliver the 2011 assessment, software developers should analyze the features of common word processing software applications and conduct observational studies to learn how students actually use these applications. These data should be utilized when designing a word processing application that is accessible to students and that provides an accurate composing environment for student writers.

When developing the layout of a standardized interface, developers should consider the following questions in order to create an accessible design:

- How will the composing window appear to students? What aspects of the design or layout, if any, will be adjustable? What formatting decisions will the program automatically set up for students?
- Will the interface utilize a series of pull-down menus, icons, and/or toolbars to alert participants to the word processing features enabled? How will these components be designed so that they are universally identifiable to students?
- What sort of "Help" features will need to be built into the application design?

Impact of Delivery on Design

Certain design considerations are dependent on how the assessment will be tangibly delivered. One potential method for both standardized and non-standardized models is the use of standalone software that is either installed onto school computers or delivered via portable storage devices (e.g., flash drives or external hard drives). Whether students would use existing school software or a NAEP-designed application, the mechanism should be a fully-functioning composing application reflective of the common features students are familiar with when writing on computers.

Historically, however, direct writing assessments administered via computer have used a web-based composing window or application in which users submit their completed responses electronically. This is one possibility for NAEP: rather than creating an application to be installed on individual computers, NAEP participants would be directed to a single site online where they would complete two NAEP Writing tasks and submit them electronically.

If an online writing assessment is proposed, developers should consider the following additional questions in order to create an accessible design:

• Will task directions be delivered electronically or in a separate printed booklet distributed at the beginning of the assessment period?

- Will students be able to navigate forwards and backwards (like a website), or would the composing window be static?
- Will the software or online site communicate to students about errors or issues (e.g., if no response is detected or if it is entered incorrectly) that need correction before students are allowed to submit responses?

Finally, both standardized and non-standardized design must address how the interface—whether as a stand-alone or online application—should function to limit distractions. Regardless of the method of standardization, there are external applications (e.g., Internet browsers) and certain components of word processing software (e.g., clip art) already installed on school computers whose access may need to be restricted because their functions compromise the measurement intent. At the same time, however, contractors may need to develop or utilize additional windows or displays in order to help students compose or to collect their responses.

Developers must be mindful of the following considerations if hardware functionality is standardized during the assessment period:

- Will the student interface be fixed in size?
- Will additional windows or applications be necessary for pre-writing or submitting a response electronically? How will these additional components be integrated into the delivery method?
- Will pop-up supplemental materials (e.g., grammar or spell check windows) be allowed, or will these tools need to be built into the main composing window?
- How, in a non-standardized platform, will computers be set up to enable the recommend tools while prohibiting use of those features of word processing applications deemed irrelevant or distracting to the assessment?

Recommended Tools

Another important component of the delivery of the computer platform is the enabling of specific tools in the word processing environment. In the context of NAEP, "tools" refers to the extensions built into word processing software that help writers modify or revise their text documents. These tools—such as paragraph formatting; copy, cut, and paste, or thesaurus—are often used by students when composing on computers.

The 2011 NAEP Writing Framework recommends that a *rich* set of word processing tools be enabled. That is, the tools allowed on the assessment should be common and familiar to students; they should be the same kinds of tools available to students when they use word processing programs to compose in other academic writing contexts. Not all tools or applications are recommended, however: composing tools considered distracting to students—including such tools as clip art, font color, and the Internet—will be prohibited on the 2011 NAEP Writing assessment.

Figure 4.1 includes tools that are commonly available to writers in 2007 and gives examples of the kinds of tools that should be considered for the 2011 NAEP Writing assessment, pending the nature of tools available in 2011 and beyond.

Figure 4.1
Preliminary Recommendations for Enabled Word Processing Tools

Tool Types	Recommended	Prohibited
Prewriting/Planning	notepad windowscratch paper	 any additional application or window students could open
Editing	 copy cut paste, undo-redo, highlight command keys (e.g., select all) and command icon clipboard find/replace 	
Formatting	 automatic paragraph formatting indent/tab font emphasis (e.g., bold, italics, underline) auto-detect capitalization 	 font type font size* font color line spacing alignment templates bullets and numbering
Text Analysis	spell checkgrammar check	
Reference & Applications	thesaurusdictionary**	Internetonline encyclopediasgraphics or visual images

^{*}Font size will be considered as an accommodation to those students with special needs who may require an alternate font size to complete the assessment.

The Specifications document can only provide preliminary recommendations for enabling word processing tools: the final decisions will be made closer to the 2011 administration, likely in 2009 or 2010. NAEP will investigate composing practices at schools and monitor developments in word processing software before determining which tools to enable.

Impact of Design on Assessment Construct

Software interface characteristics run the risk of affecting student achievement if the interface creates construct-irrelevant challenges. Developers of the computer-based assessment at grades 8

^{**}Dictionaries are generally not included in word processing software; students commonly access either a hard copy or an online version when in need of a word reference. It is still undecided whether a dictionary would be included among the tools allowed.

and 12 must therefore design the delivery of the assessment in ways that minimize any impact on examinees' abilities to respond to the assessment. For example, if any components of design or administration are unfamiliar or complex in ways that cannot adequately be addressed by a tutorial, then these elements may impact examinees' abilities to demonstrate their best writing skills. Furthermore, if the construct of the 2011 NAEP Writing assessment is broadly described, at grades 8 and 12, as an assessment of computer-based writing using commonly-available tools, then the design and administration of the assessment should be consistent with that description. For these reasons, careful consideration is necessary of the guidance given to schools with regard to what tools can be enabled, particularly if the delivery of the assessment is based on software available in schools.

Delivery Considerations: Administration, Security, and Reporting

Using computers in the assessment of writing has a significant impact on the environment in which the assessment is delivered, how content is delivered to students, how the assessment is administered, and how responses are collected. The use of computers as the mode of delivery requires different procedural elements than traditional paper and pencil delivery and involves important components that must be carefully considered and implemented in order to produce an accurate and accessible platform. Each is discussed in the sections that follow below.

Preparation for Assessment

To prepare for a computer-based assessment in 2011, NAEP and its contractors will need to work with states, districts, and schools to verify that infrastructure at these levels will support the assessment. It will also be critical for developers of the assessment design to provide the requisite materials and to train personnel to distribute, collect, score, and analyze results. Thus, the responsibilities of NAEP and the design contractors extend to the administration of the assessment and beyond:

- Working with schools to establish minimal technical requirements and to ensure alignment with those requirements.
- Preparing readiness checklists or certification forms to verify that all required components are functional and ready for assessment.
- Helping schools prepare for the assessment by testing hardware and software and by practicing administration and collection procedures under assessment conditions.
- Helping contractors train for assessment administration (e.g., workshops or information sessions).
- Helping students familiarize themselves with the testing environment and response mode through clear instructions and a practical tutorial. This tutorial should be made available to schools in advance of the assessment.
- Creating an assessment coordinator's manual to provide complete and concise information for contractors to support a computer-based assessment.
- Developing technical support for all computer-based products and services.

Compatibility

Any additional design components required to implement a computer-based NAEP assessment—from word processing software to the ability to transmit responses electronically—must meet the technical capabilities present in all schools. Given the wide range of access levels among schools, the technical requirements necessary to deliver the assessment should be minimal: no unrealistic hardware or procedural demands that may prohibit participation in the assessment should be placed on any school. The NAEP platform should be usable on Macintosh, Windows-, or Linux-based computers and should permit earlier versions of operating systems (e.g., Mac 9.x, Windows 98) for these types of computers. Should the assessment be delivered online and/or require electronic transmission of responses, the platform must be designed to accept a variety of connection methods (modems, local area networks [LANs], etc.) and connection speeds. Additionally, no component of the computer-based assessment should require plug-ins that may either compromise school computer policies or require video/audio demands some schools might not be capable of handling. It is recommended that components of the delivery design—whether as instructional windows, tutorials, etc.—be text-based to ensure there are no technical complications.

Tutorial

A certain portion of time will be needed before the assessment period commences to familiarize students with the computer interface for the assessment. The design and function of such a tutorial is dependent on further standardization specifications: it may be delivered orally by the instructor to the students; it may be given to students in a handout or test booklet; or it may be built into a standardized platform as a "tour" and/or a series of practice exercises. Given the wide range of computer resources in American schools, it is recommended that any tutorial built into an application not include video or audio components which may tax the hard drive space or computing power of some schools' computers.

The Role of Paper Documents

Traditionally, paper and pencil writing assessments require several physical documents to be distributed to participants, including instructional packets, response booklets, and so on. In implementing a computer-based writing assessment, there is the potential for increased administrative efficiency by eliminating many of these documents and incorporating them into the platform itself. Contractors, however, should first carefully consider each potential component before deciding how they will be presented to students. Should the task instructions be embedded into the composing window, or should they be provided on a separate sheet of paper? The addition of a word processing tutorial raises similar questions: should it be embedded into the application or provided separately as a printed guide or as instructions from the administrator? If responses are submitted electronically, the handling of student work must also shift from physical collection to electronic transfer.

Paper should be made available to students for prewriting and planning activities.

Administrative Functions and Instructions

To assure consistent administration of the writing assessment across the entire NAEP assessment population, developers should consider ways in which additional administrative functions and instructions for test administration may be incorporated into the computer-based design. Certain administrative functions, such as setting up workstations or test launch functions, may be made more efficient if additional software focused on the management of the testing environment is developed; other administrative functions, such as preparing the physical layout of a classroom or computer lab for the assessment, would be better explained in a procedural manual or pre-assessment training workshop. Additionally, instructions will need to include steps for administering the assessment and handling irregularities, steps for post-test processing, and provisions for receipt and storage of secure material if required—these could be provided in a printed booklet or accessed electronically at a website or distributed as a digital document.

Levels of Access

The use of a computer to implement a writing assessment introduces a number of complexities because computers provide other capabilities that may not be consistent with the measurement intent (i.e. to measure writing achievement). Whether designing a standardized platform or modifying existing school resources, developers will need to determine the nature and level of interaction the student should have with these capabilities—and whether that interaction is consistent with the measurement intent and the standard operating use of a school computer. Some questions developers will have to address include:

- What access to hardware (e.g., the monitor or hard drive) will students be allowed to have?
- Will the desktop be locked—in other words, will no other operation be possible on the computer except for the assessment interface?
- Will access to other applications be denied, or will minimal access to other software components outside of common word processing applications be required (e.g., an electronic dictionary or interface to transfer documents electronically)?
- If the assessment is delivered online, how will hardware be set up to maintain a connection to the online testing site while denying access to other websites?
- Will students be able to return to their work if they have completed and submitted (whether electronically or by hard copy) their response before the end of the testing period?

Identification

There is the additional issue of how students will verify their identity and whether identity verification will be used as a security measure. On a paper and pencil assessment, test booklets either have generated identification numbers or a unique code given to the students. On a computer-based assessment, the question becomes how to implement equivalent security measures to verify identity. In other words, developers will need to decide whether students should be required to "log in" to begin the response process and/or if there will be identification

measures during the submission of responses. Additional paper documents with the identification measures may be required even though the assessment is delivered via computer.

Monitoring

NAEP and its contractors will need to decide what sort of tracking systems should be in place to monitor assessment activities. Tracking can be implemented on numerous levels:

- Software can be created so that educators or administrators can oversee testing sessions during the assessment period, allowing them to monitor activity and computer usage on all computers used for the assessment.
- An electronic "footprint" can be created that will allow NAEP researchers to collect and analyze students' composing processes on computers (e.g., what tools are used, extent and nature of revision, etc.).
- Additional levels of monitoring software can be created to allow schools, contractors, or NAEP to track who accesses software, hardware, and data prior to, during, and after the assessment administration.

These levels of monitoring can be used to increase efficiency and maintain accountability, but will require additional levels of development and oversight.

Data Protection

Maintaining security of student data is critical with a large-scale computer-based assessment and affects all delivery, administration, and collection components. Data protection should be focused primarily on two concerns: security for students and for computers, and overall security for administering the exam and processing responses. For individual students and computers, it will be necessary to secure the workstation environment through encryption and identification measures so that no individual's work is compromised and so that no participant can use a workstation to compromise other participants' work.

Global security measures for the assessment delivery as a whole will require encryption measures across many components, including encrypting any software installed in school computers or on an online portal, securing this content and/or these applications prior to administration, and encrypting responses during the assessment. Should data be electronically submitted, contractors will need to develop processes (e.g., Secure Socket Layer protection [SSL]) to provide security for the server that is storing collected information and the collected information itself. Contractors will also need to coordinate regular back-ups and provide expertise on system redundancy.

Submission of Responses

Developers will need to determine the best way for NAEP to collect student responses at the end of the assessment period, and they will need to consider the security implications related to this collection method. One possible collection method is to require students to print out their responses at the end of the testing period and assign each student a unique bar code or

identification number; the physical documents would then be processed and shipped to a scoring center. Another possibility is one common to web-based assessment: students would submit their responses electronically, either as a file transfer to a server or as an email message to a specified locale. Yet another possible method is to have students submit their responses locally to a server or removable storage device at their school—the collected content could then be delivered electronically, or the storage device could be physically transferred to a scoring center.

Computer-Based Testing at Grade 4

In 2011, students in grade 4 will complete the NAEP Writing assessment using a handwritten, paper and pencil format. However, the grade 4 assessment may become computer-based at some point during the tenure of the 2011 NAEP Writing Framework, potentially by 2019.

Special Study

Prior to any implementation of a computer-based writing assessment at grade 4, NAEP would benefit from additional research on elementary students' computer use, particularly on early instruction of keyboarding, levels of computer literacy among elementary students, and the use of computers for composing. Exploration of these issues will inform the discussion of when a computer-based writing assessment at grade 4 might be warranted and will provide a research base for decisions regarding the implementation of a computer-based assessment at grade 4. Appendix D provides more specific information about the special study.

Appropriate word processing tools for grade 4 students will be determined after the special study is conducted.

Chapter Five: Accommodations

This chapter provides information about NAEP's inclusion policies for students with special needs and specifies the accommodations that should be permitted on the 2011 NAEP Writing assessment. Key sections of the chapter are as follows:

- Accommodating Students with Special Needs
- Accommodations
- Accessibility and Accommodations for Computer-based Writing Test (New)

Accommodating Students with Special Needs

The NAEP Writing assessment is designed to measure the academic achievement of all test takers. Students with a range of backgrounds and experiences are included in the assessment, including English language learners (ELL) and students with disabilities (SD) who, based on inclusion criteria provided by NAEP, are capable of participating. Care must be taken to ensure that all student populations have an equal opportunity to demonstrate what they know and are able to do on the 2011 NAEP Writing assessment.

Students with special needs are selected for inclusion as follows: a sample of students is first selected at each grade being tested. Students are selected for participation in the NAEP assessments without regard to English language learner or disability status. Once the students are selected, the schools identify which students are English language learners or students with disabilities. School staff who are familiar with these students are asked a series of questions to help them decide whether each student should participate in the assessment and whether the student needs accommodations.

Inclusion Criteria for Students with Disabilities

A student identified as having a disability—that is, a student with an Individualized Education Program (IEP), a Section 504 Plan, or equivalent classification—will be included in the 2011 NAEP Writing assessment unless it has been determined that:

- The student cannot participate in assessments such as NAEP; or
- The student's cognitive functioning is so severely impaired that he or she cannot complete the assessment; *or*
- The student's IEP requires that the student be provided accommodations that are not permitted for the NAEP Writing assessment.

(NCES, 2005)

Inclusion Criteria for English Language Learners

The NAEP program has established procedures to include and accommodate as many English language learners as possible in NAEP assessments. School staff make the decisions about whether to include ELL students in the NAEP assessments, and which testing accommodations,

if any, they should receive. The NAEP program furnishes tools to assist school personnel in making those decisions.

A sample of students is first selected at each grade level being tested. Students are selected for participation in the NAEP assessments without regard to English language learner (or disability) status. Once the students are selected, the schools identify which students are English language learners. School staff who are familiar with these students are asked a series of questions to help them decide whether each student should participate in the assessment and whether the student needs accommodations.

Inclusion of an ELL student in NAEP is encouraged if that student:

- Participated in the regular state academic assessment in the subject being tested, and
- If that student can participate in NAEP with the accommodations NAEP allows. (NCES, 2005)

A student may still be able to participate in the assessment even if the student did not participate in the regular state assessment, or even if he/she generally uses accommodations NAEP does not allow. In either instance, school staff would be asked whether that student could participate in NAEP with the allowable accommodations.

Accommodations

For many students with disabilities and students with a first language other than English, the standard administration of the NAEP assessment will be most appropriate. However, for some students with disabilities and some English language learners, the use of one or more accommodations may be suitable.

Every effort should be made to offer students the same accommodations they are allowed in school and on their state assessment(s), including offering accommodations in combination as needed (e.g., the assessment is administered in a one-on-one setting and extended time is allowed). To ensure consistency in administering the assessment, accommodations will be standardized to as great an extent as possible for the NAEP Writing assessment.

Most accommodations that schools routinely provide in their own assessment programs are allowed on the 2011 NAEP Writing assessment, as long as they do not affect the measurement intent (Koretz & Barton, 2003-2004). However, depending on the particular disability or the nature of the language difference, it may not be possible to assess all students in a manner that both accommodates their disability or language difficulty and tests the same construct across such individual differences (Koretz & Barton, 2003-2004; NRC, 1997a). Given a trade-off between access for *all* students and adequate coverage of the writing performance expectations in the Framework and Specifications, preference will be given to coverage of the writing performance expectations, whether assessed through computer-based tasks or paper and pencil tasks.

Figures 5.1 and 5.2 outline the accommodations that should be offered on the 2011 NAEP Writing assessment.

Figure 5.1 2011 NAEP Writing Assessment Recommended Accommodations for Students with Disabilities¹

presentation of the Assessment to Students Directions read aloud (by person, audio recording, or computer software); Expeat directions Directions read aloud (by person, audio recording, or computer software); Expeat directions Directions Directions read aloud (by person, audio recording, or computer software); Expeat directions	mitted for ades 4, 8, and 12
Pirections read aloud (by person, audio recording, or computer software); epeat directions ² Vriting tasks, reading passages, and other stimulus materials read aloud or resented by audiotape ign directions, writing tasks, reading passages, or other stimuli to student assist with interpretation of directions inlarge visual images; provide description of the visual image for the sight-inpaired, color translation for color-blind students Is a magnifying equipment (i.e., large screen or font magnifiers) Idministration of large-print edition of test Idministration of Braille edition of test Is a sessment Setting The erson familiar to student administers test Test in small group or individually Idminister test in separate room Treferential seating, special lighting or furniture Tudent Response Format The espond in Braille The Braille keyboards The espond in sign language The espond in sign language The espond of a response and transcription of student's response The espond with paper-and-pencil (grades 8 and 12)	
Virting tasks, reading passages, and other stimulus materials read aloud or resented by audiotape ign directions, writing tasks, reading passages, or other stimuli to student assist with interpretation of directions and arge visual images; provide description of the visual image for the sight-impaired, color translation for color-blind students are magnifying equipment (i.e., large screen or font magnifiers) administration of large-print edition of test administration of Braille edition of test assessment Setting erson familiar to student administers test after in small group or individually administer test in separate room referential seating, special lighting or furniture attacent Response Format are spond in Braille assessment in sign language and in a scribe alectronic recording of a response and transcription of student's response assessment are spond with paper-and-pencil (grades 8 and 12)	Yes
ign directions, writing tasks, reading passages, or other stimuli to student assist with interpretation of directions inlarge visual images; provide description of the visual image for the sight-impaired, color translation for color-blind students less magnifying equipment (i.e., large screen or font magnifiers) administration of large-print edition of test administration of Braille edition of test dest in small group or individually administer test in separate room referential seating, special lighting or furniture trudent Response Format lessond in Braille less Braille keyboards lessond in sign language dictation to a scribe lectronic recording of a response and transcription of student's response less template to respond less large marking pen or special writing tool lessond with paper-and-pencil (grades 8 and 12)	Yes
Assist with interpretation of directions Inlarge visual images; provide description of the visual image for the sight- Inpaired, color translation for color-blind students Ise magnifying equipment (i.e., large screen or font magnifiers) Ise magnifying equipment (i.e., large screen or font magnifiers) Ise magnifying equipment (i.e., large screen or font magnifiers) Ise magnifying equipment (i.e., large screen or font magnifiers) Ise magnifying equipment (i.e., large screen or font magnifiers) Ise magnifying equipment (i.e., large screen or font magnifiers) Ise sessment Setting Ise erson familiar to student administers test Ise in small group or individually Ise and in separate room Interest in separate room Int	Yes ³
Inpaired, color translation for color-blind students Ise magnifying equipment (i.e., large screen or font magnifiers) Is administration of large-print edition of test Is administration of Braille edition of test Is assessment Setting Is a serior familiar to student administers test It is small group or individually Is administer test in separate room Is a serior familie Is a Braille keyboards Is a Braille keyboards Is a scribe Is a transcription of student's response Is a template to respond Is a large marking pen or special writing tool Is a large marking pen or special writing tool Is a large marking pen or special writing tool Is a large marking pen or special writing tool Is a large marking pen or special writing tool Is a large marking pen or special writing tool Is a large marking pen or special writing tool Is a large marking pen or special writing tool Is a large marking pen or special writing tool	Yes
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Administration of large-print edition of test Administration of Braille group or individually Administer test in separate room Areferential seating, special lighting or furniture Administration of individually Administration o	Yes ³
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referential seating, special lighting or furniture tudent Response Format Lespond in Braille Jese Braille keyboards Lespond in sign language Dictation to a scribe Lectronic recording of a response and transcription of student's response Jese template to respond Jese large marking pen or special writing tool Lespond with paper-and-pencil (grades 8 and 12)	Yes
tudent Response Format Lespond in Braille Use Braille keyboards Lespond in sign language Dictation to a scribe Lectronic recording of a response and transcription of student's response Use template to respond Use large marking pen or special writing tool Lespond with paper-and-pencil (grades 8 and 12)	Yes
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Lespond in sign language Dictation to a scribe Lectronic recording of a response and transcription of student's response Use template to respond Use large marking pen or special writing tool Lespond with paper-and-pencil (grades 8 and 12)	Yes ³
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Ise large marking pen or special writing tool Lespond with paper-and-pencil (grades 8 and 12)	No
Lespond with paper-and-pencil (grades 8 and 12)	Yes
espond with paper-and-pencil (grades 8 and 12)	Yes
	Yes
Ise input device accommodations (eye-tracking, voice recognition)	Yes
Other Accommodations	
xtended time	Yes
reaks during test	Yes
est administered over several days	No

¹ According to NAEP's 2005 Assessment Administrator Manual
² Standard NAEP practice. Not considered an accommodation.
³ Not provided by NAEP, but a school, district, or state may provide after fulfilling NAEP security requirements.

Figure 5.2
2011 NAEP Writing Assessment Recommended Accommodations for English Language
Learners¹

Accommodation	Permitted for grades 4, 8, and 12
Presentation of the Assessment to Students	
Bilingual dictionary without definitions	Yes ³
Directions read aloud or presented by audiotape in English ²	Yes
Writing tasks, reading passages, and other stimulus materials read aloud or presented by audiotape in English	Yes
Directions, writing tasks, reading passages, and other stimulus materials translated aloud or presented by audiotape in native language	No
Student's oral or written responses translated into written English	No
Native language version of test	No
Bilingual version of test	No
Bilingual word lists or glossaries	No
Assessment Setting	
Administered in small group or individually	Yes
Other Accommodations	
Extended time	Yes
Preferential seating	Yes
Administered by person familiar to student	Yes

According to NAEP's 2005 Assessment Administrator Manual

For current information about standard NAEP accommodations, see http://nces.ed.gov/nationsreportcard/about/inclusion.asp#current

Accessibility and Accommodations for Computer-Based Writing Tasks

A computer-based assessment at grades 8 and 12 affects many of the accessibility recommendations listed above, yet it also offers some additional accommodations that are not available in a paper and pencil format and the opportunity to embed some accommodations into the mode for the response.

The readability of text on a computer screen is critical because of the variations in the number of pixels that can represent letters in different font styles, sizes, and on monitors of differing resolutions (Nielsen, 2000). In general, the same fonts and sizes of acceptable legibility on paper apply equally to text on computer screens; however, additional variables with visual displays and word processing applications, including the contrast between background colors and fonts, can affect readability. Black text on a white background, known as "positive text," provides optimal legibility.

² Standard NAEP practice. Not considered an accommodation.

³ Not provided by NAEP, but a school, district, or state may provide after fulfilling NAEP security requirements.

Ease of reading and comprehension may also be affected by the layout of text on the screen. Should task instructions be delivered electronically (e.g., as a pop-up window or in the word processing application used by students to compose their responses) instead of in a test booklet, contractors should make certain that the text of these instructions fits onto one screen. Scrolling should not be required.

While computer screens present some extra challenges for legibility of text, computers also provide opportunities to embed features and tools that will improve the accessibility of texts for students with disabilities and English language learners. Allowing students to enlarge the font size or change the background/text colors can improve the readability for students with visual impairments, as would embedding an option to allow the size or color contrast ratio of visual stimuli to be modified. Students with more severe visual impairment or English language learners whose understanding of spoken English is stronger than their comprehension of written English may benefit from oral presentation of task and assessment instructions, either by a text-reading program or by means of pre-recorded readings of the text.

Decisions about the exact nature of computer-based accommodations will be finalized after more specific determinations about the computer-based delivery platform are made. However, the National Center on Educational Outcomes (Thompson, Thurlow, & Moore, 2003) provides some general advice on developing computer-based assessments that are inclusive of students with disabilities. The following development steps are adapted from their work and included for consideration:

- <u>Step 1.</u> Assemble a group of special needs population experts to guide the development of the mode of computer-based delivery. Consider including experts on assessment design, accessible Web design, and assistive technology, along with state and local assessment and special education personnel and parents.
- <u>Step 2.</u> When developing the computer-based assessment, consider the accommodations that must be made available to students with disabilities.
- <u>Step 3.</u> Consider each accommodation or assessment feature in light of measurement intent.
- <u>Step 4.</u> Decide how each accommodation will be incorporated into the computer-based assessment.
- <u>Step 5.</u> Consider the feasibility of incorporating the accommodation into computer-based assessment. Construct a specific plan for building in features that are not immediately available and conduct pilot tests with a variety of equipment scenarios and accessibility features.
- <u>Step 6.</u> Consider training implications for contractors and students. Careful consideration should be given to the computer literacy of students and their experience using enabled features (e.g., screen readers).

If the delivery platform for the Writing assessment is not standardized, usability testing should include trying tasks with visual stimuli on a range of different computers that are typical of the variety found in schools, since platforms, operating systems, processor speeds, and software varying educational settings.

Chapter Six: Evaluation of Responses

This chapter presents an overview of what criteria will be used to evaluate students' responses to writing tasks on the assessment and how the criteria should be interpreted and applied in scoring. The chapter also includes an overview of how training materials should be developed and how scorers should be trained. Key sections of the chapter are as follows:

- Evaluation of Responses Using Holistic Rubrics
 - o Purpose-specific Rubrics (New)
- Training Readers to Score Responses

Evaluation of Responses Using Holistic Rubrics

To score responses for the 2011 NAEP Writing assessment, a holistic rubric unique to each communicative purpose will be used. The holistic approach to scoring focuses on an evaluation of the whole response rather than on its individual parts (Myers, 1980). That is, a response will not be evaluated with a separate score for each writing feature, and an overall score will not be derived by adding together scores for each separate feature. Instead, a response will be scored by assessing performance across multiple criteria—development of ideas, organization of ideas, language facility and conventions—to evaluate overall performance. These criteria reflect the major benchmarks and standards that almost all states have set for writing objectives at various grade and school levels (ACT Research Brief, 2006). Holistic scoring guides are the most common means of assessing writing on college admission exams (e.g., ACT, SAT). Seventy percent of states that assess writing do so with a holistic rubric, and holistic rubrics can be reliably implemented to meet the standards of face validity and authenticity (ACT Research Brief, 2006; Espin, Weissenburger, Benson, 2004). Furthermore, holistic scoring methods accurately reflect NAEP's goals of assessing all aspects of writing performance (White, 1985; Wolcott, 1998).

The 2011 NAEP Writing assessment will be scored on a six-point scale, with 1 being low and 6 being high. While four-point evaluative scales are common for some state writing assessments, the extent of evaluative criteria on the NAEP Writing assessment and the wide range of potential responses to the tasks require the clearest possible distinction among achievement levels and the most explicit operational definitions and scoring criteria (Wolcott, 1998). A six-point scale is the more common and logical approach when finer distinctions are sought and a continuum or range of performance needs to be imparted (Wolcott, 1998).

A holistic scoring approach will result in the use of three rubrics, one for each of the communicative purposes assessed by NAEP: *To Explain, To Persuade*, and *To Convey Experience, real or imagined*. The preliminary Scoring Rubrics for the three communicative purposes are included in Appendix E. The reason for using a single rubric for each communicative purpose is twofold: 1) it provides criteria that articulate common features of development, organization, and language use across the three grades assessed by NAEP; and 2) it qualifies the performance of these features at multiple levels in order to distinguish student writing achievement across a 6-point scale. Each scoring rubric contains all the features to be evaluated and descriptions of performance expected at each of the six score points.

Using student responses once they are available, the preliminary rubrics will be evaluated for the appropriateness of the level of the expectations expressed at each score point. While the basic scoring criteria themselves will not change ("Development of Ideas," "Organization of Ideas," "Language Facility and Conventions"), analysis of performance in the responses may result in some adjustment of the expectations currently articulated at each score point. For example, an expectation for "specific, precise, and evaluative" word choice that "supports the clarity of the explanation (score point 6, *To Explain*) might be determined, based on the evidence of the responses, to be too high an expectation for writing on a timed assessment.

The refinement of the preliminary scoring rubrics should take place prior to the development of training materials used to train scorers to evaluate "live" responses. The contractor should determine the most appropriate method of using responses to inform revision of the scoring rubrics.

In addition to refining the rubrics' articulation of expectations, as needed, based on student responses, the contractor should work with student responses to develop the application of expectations for each grade level. Although the same scoring rubric will be used for each communicative purpose across grades 4, 8, and 12, the application of the rubric will be different at each grade because expectations for responses will increase across the grade levels. After the application of each scoring rubric for each grade level has been established, the contractor should identify examples of responses at each score point for each grade that can be used to train readers how to apply the scoring rubrics.

Applying Evaluation Criteria across Grade Levels

For the 2011 NAEP Writing assessment, three broad domains will be evaluated at each score point for each communicative purpose:

- Development of Ideas
- Organization of Ideas
- Language Facility and Use of Conventions

These criteria describe the features of writing that will be evaluated when responses are scored; they are constant across score points. Having well-defined scoring criteria is critical to support the ability to train raters to correctly interpret the scoring criteria, and correct and consistent application of scoring criteria is critical to assessment reliability and to the minimization of scoring bias (Fitzpatrick et al., 1998; Hobson & Steele, 1992; White, 1993; Masters, 1992).

Figure 6.1 presents these broad domains in more detail.

Figure 6.1 Criteria for Evaluating Responses

Development of ideas is effective in relation to the writer's purpose and audience.

- The depth and complexity of ideas are effective in relation to the writer's purpose and audience.
- Approaches to thinking and writing (e.g., analyzing, synthesizing) are used effectively in relation to the writer's purpose and audience.
- The details and examples used to develop ideas are specific and effective in relation to the purpose and audience.

Organization is logical in relation to the writer's purpose and audience.

- Text structure is logical and effective in relation to the writer's purpose and to the writer's use of approaches to thinking and writing.
- Coherence is maintained within and between paragraphs.
- Focus is maintained throughout the response.

Language facility and conventions support clarity of expression and the effectiveness of the writing in relation to the writer's purpose and audience.

- Sentence structure is well controlled and sentence variety is appropriate for the writer's purpose and audience.
- Precise and appropriate word choice supports clarity of expression and enhances the presentation of the writer's ideas.
- Voice and tone are effective in relation to the writer's purpose and audience.
- Grammar, usage, and mechanics (capitalization, punctuation, and spelling) support clarity of expression and enhance the presentation of the writer's ideas.

A thorough understanding of scoring criteria is necessary for assessing the overall performance of student writing (Wolcott, 1998). The following section presents a detailed explanation of the scoring criteria and some examples of how these criteria may be interpreted and applied in scoring responses at each grade level.

Development of Ideas

• *Depth and Complexity*

Successful writers show depth and complexity by demonstrating insight, knowledge, and/or understanding that allows them to move beyond superficial development of a topic and establish credibility with their readers. Some of the most common means of creating substance include examining the relationships between a topic and related concepts, examining the topic from a global or "big picture" perspective, and/or demonstrating a broad understanding of how a topic might be perceived by the writer's audience.

Although the articulation of this concept will remain constant in the rubrics at each grade level, responses at each grade will be used to represent different approaches and levels of achievement in relation to those criteria. At grade 4, for example, depth and complexity may be apparent through the use of some persuasive examples, while at grade 12, depth and complexity may be apparent through a student's analysis, construction of arguments (e.g., concession/rebuttal), reflective thinking, and so on.

• Approaches to Thinking and Writing

The 2011 Writing Framework emphasizes that a number of approaches to thinking and writing (e.g., describing, evaluating, reflecting/questioning) may be used effectively to support the development of ideas and to connect with a specified audience. Successful writers draw upon relevant approaches to thinking and writing that enhance their communicative purpose, or they extend the development of their ideas by weaving multiple approaches into a successful written response. Approaches to thinking and writing will not be specified on NAEP tasks, but responses will be evaluated for students' effective use of whatever approaches to developing and organizing ideas they have selected.

The scoring rubrics for the 2011 NAEP Writing assessment will be designed to guide evaluation of the effective use of approaches to thinking and writing in relation to both the development and organization of ideas in the response. Increasing levels of complexity in the use of approaches to thinking and writing are likely to be reflected in increasing sophistication and effective integration of approaches across grades. For example, a response at grade 4 might effectively explain by analyzing similarities and differences between the features of two illustrations or of two objects. A response at grade 12 might integrate narration, description, analysis, and evaluation in writing to explain the relationships among ideas.

• Details and Examples

Successful writers develop responses by selecting specific, relevant details and effective examples that illustrate, elaborate, and refine the writer's points and expand the reader's understanding. For example, on a task asking students to explain to a curious new student what to expect on his first day of class, students might discuss their school's recess and lunchtime rules, describe the way the cafeteria smells at lunchtime, and/or recount an incident illustrating how kind the teachers are to the students. For the 2011 NAEP Writing assessment, students will be able to develop their ideas with details and examples taken from their own experiences or observations, or, in some cases, from brief reading passages or visual stimuli.

At grade 4, student responses may include several short examples used to develop ideas; responses at grade 8 may include more fully extended and specific presentation of examples; and at grade 12, responses may demonstrate a greater degree of detailed and extended examples, or in some cases, the judicious presentation of brief examples used to illustrate discussion of abstract concepts.

Organization of Ideas

Organization refers to the logical arrangement of sentences and paragraphs in order to coherently express ideas that readers can understand and follow. Organization is thus a fundamental component of effective writing—no matter the purpose, the form, or the audience—because the order and presentation of ideas compels readers to be convinced, enlightened, or affected in some way. If writing is poorly organized, the writer's ideas will not be clearly conveyed and readers are likely to become confused or frustrated. Good organization requires the writer to remain focused on the writing topic by establishing a clear progression and presentation of ideas.

The following text features will be used to evaluate Organization of Ideas:

• Logical Text Structure

Tasks on the 2011 NAEP Writing assessment will be designed to encourage rhetorical flexibility, which will impact how students construct responses and arrange and organize their ideas. Students may respond to the specified topic, purpose, and audience by organizing their content in any number of different ways to best accomplish the demands of the writing task, leading to many kinds of effective text structures. For example, the use of analysis to explain might result in comparing and contrasting two or more ideas or objects, or an evaluation intended to persuade might address potential solutions to a problem in some order of priority. In a text written to convey experience, writers might use a basic chronological approach to telling a story, or they might use other narrative techniques (e.g., flashbacks). Writers will be evaluated for the way their approach to organization supports a text structure relevant to the purpose and audience for the task.

Students at all three grades will also be asked to draw upon their knowledge of form to structure their texts, and at grades 8 and 12, writers may, depending on the outcome of field tests, select a form appropriate to the topic, purpose, and audience. For example, when asked to persuade a state representative to support a particular position about drilling for oil in a protected state park, a student might effectively structure her ideas in the form of a newspaper editorial which addresses and refutes points of opposition to her beliefs, or she might write a letter to a state representative to persuade this government official to take a certain position on the matter. Depending on the purpose and audience for the task, potential forms grade 8 and 12 students may use include letters, different kinds of essays, articles, reports, and so on.

The scoring rubrics are designed to guide evaluation of the efficacy of text structure in relation to the purpose and audience for the writing. If, for example, a writer at grade 8 has chosen to use a text structure like compare and contrast in a response to a *To Explain* task, scorers would evaluate the relevance of this approach to the topic, purpose, and audience and its effectiveness in supporting the presentation of the writer's ideas. Writers at each successive grade will also be expected to make more effective use of approaches to thinking and writing.

• Coherence and Focus

Successful writers maintain focus by ensuring that ideas, details, and examples are relevant to the purpose, topic, and audience for the text. A written text is coherent if its ideas are clearly connected within and between paragraphs. Similarly, a text is coherent if the sentences within paragraphs and the paragraphs themselves are presented in a clear and logical order. Strong use of transitions helps to ensure that the reader perceives the relationship among parts of the writing and the relationship of the parts to the whole.

The scoring rubrics are designed to guide evaluation of coherence and focus at each score point by addressing whether the response begins with a clear focus and maintains that focus throughout. Scorers will also be trained to make judgments about the extent to which writers convey their points by using transitions to clearly connect and separate ideas throughout the writing. Increasing complexity across grade levels may be demonstrated through the use of more integrated transitional elements across the grades. Increasing complexity may also be evident in better logical progression of ideas in responses across the grades. For example, responses at grades 4 and 8 may display logical groupings of ideas in paragraphs, while responses at grade 12 may show a greater degree of logical progression of ideas throughout the writing.

Language Facility and Conventions

Language facility refers to stylistic effectiveness and grammatical clarity in the ways writers express ideas to an audience. Good writers make many conscious choices about language use. They decide what kinds of sentences to use and how to construct sentences to clearly convey relationships among ideas. They choose particular words and alter tone and voice to clearly and effectively communicate meaning—and to maintain the audience's interest. They adhere to established rules of communication to ensure understanding and avoid distractions.

The following text features will be used to evaluate students' language facility and use of conventions:

• Sentence Structure and Sentence Variety

Good writers craft the structure and variety of their sentences to illuminate their topic, to effectively accomplish the purpose of the task, and to engage the audience. Effective sentence structure can also enhance the development and organization of ideas by emphasizing ideas within a sentence. For example, writers on the 2011 NAEP Writing assessment might use parallel sentence structure to demonstrate the comparability of points when explaining similarities or differences, or they might combine clauses with colons or semicolons in order to persuade an audience that their ideas are connected and logical—and thereby worth believing. Alternating the length and kinds of sentences used can also make a text easier to follow and more interesting to read. Successful writers achieve sentence variety by strategically crafting shorter and longer sentences, by varying the ways sentences begin, and by using a variety of sentence types (e.g., simple, compound, complex). These stylistic choices are made in order to best express or develop ideas that help the writer achieve the communicative purpose of the task.

The scoring rubrics are designed to support evaluation of the effectiveness of sentence structures and the variety of sentences used in the response—and whether sentence variety is relevant to the task's communicative purpose and the specified audience. Responses across grades may also demonstrate increasing sophistication with regard to kinds of sentences and sentence variety. At grade 4, for example, responses may demonstrate the use of shorter simple sentences with only a few more complex sentence structures, while responses at grades 8 and 12 may contain more complex sentence structures and greater use of sentence variety for rhetorical effect.

• Word Choice, Voice, and Tone

Successful writers are able to decide what words will most precisely and clearly express their ideas, and what words will support their purpose for writing. Successful writers also consider their relationship with the audience, choosing words that encourage readers to connect to their ideas and intentions. When conveying experience, for example, writers often choose evocative words that appeal to the audience's senses and give the sensation of experiencing the event.

Effective writing also involves adapting word choice, voice, and tone depending on the purpose, audience, and/or topic of a writing task. In other words, the most successful writers recognize the context of the writing situation—what they are writing about, who their audience is—and deliberately alter their style and language to achieve a purpose. Two ways this is achieved are through voice, the writer's ability to convey a personality or attitude in language, and tone, the writer's attitude toward the topic or audience. Writers alter their manner of expression (e.g., their word choice, sentence structures, etc.) as a means of demonstrating their attitudes towards a topic or an audience. For example, a writer composing a satirical essay may express a tone of mockery or disgust for a topic by altering his or her voice to include common elements of sarcasm such as exaggeration or rhetorical questions.

The scoring rubrics are designed to guide evaluation of the writer's word choice, voice, and tone by directing scorers to make judgments about the appropriateness of these elements in relation to purpose and audience. Increasing expectations for complexity across grades may involve greater expectations for the use of more precise vocabulary and greater control of all elements (e.g., word choice, sentence style and length, the extent of development of ideas, text structure, etc.) that support voice and tone.

• Grammar, Usage, and Mechanics

Grammar is the system through which a given language is ordered according to an agreed-upon set of internal rules; usage refers to established conventions of written language commonly used in forms of communication; and mechanics refers to conventions of capitalization, punctuation, and spelling. Good writers have a command of grammar, usage, and mechanics so that only minimal errors, if any, are present in their writing. Just as the variety, severity, and pervasiveness of errors in grammar, usage, and mechanics can distract readers and make it difficult to understand the writer's meaning, correct use of language can facilitate understanding by allowing the reader to focus on the writer's thoughts and ideas.

The scoring rubrics are designed to support judgments about the nature and impact of any language errors on an audience's ability to understand meaning. Because responses will be developed within time constraints, writers have a limited opportunity to revise or edit responses, so the scoring rubrics distinguish between minor errors that have little or no impact on understanding and severe or pervasive errors that interfere with understanding. Increasing levels of expectation across grades will likely be related to control of language use demonstrated in responses and the extent to which writers are able to employ language strategies that support clarity, provide interest, and present complex ideas and relationships among ideas.

Training Readers to Score Responses

In a large-scale assessment like the 2011 NAEP Writing, evaluators of student writing are taught to use a scoring rubric through extensive training with many examples of scored responses at each score point. Scorers should be required to demonstrate their ability to score accurately by passing a qualification test. Responses to writing tasks on the 2011 NAEP Writing assessment will likely vary widely, so scorers should be carefully trained to evaluate the effectiveness of responses that may look very different from one another. Therefore, the example responses used to train scorers should be selected to demonstrate the use of different forms, different approaches to thinking and writing, and different ways of organizing and developing ideas in response to a writing task.

In addition, scorers should be trained to evaluate students' responses as on-demand writing. Scorers should be trained to assess responses based on all of the features included in the scoring rubric, but they should also be trained to take into consideration that the time limit for writing does not allow writers to pursue all possibilities for revision and editing of their initial draft. The consideration of the time limit for writing does not alter expectations for students' performance of what they know and can do in writing; however, scorers should be trained to view the responses as not as thoroughly revised and edited as they might be if more time were permitted.

While activities related to training scorers are the responsibility of the National Center for Education Statistics, the following information is offered as a brief set of guidelines pertaining to the 2011 NAEP Framework content and design parameters.

Identifying Responses for Possible Use in Training Sets

Because the quality of the training materials is essential to the accurate and consistent scoring of responses over time, the development of training materials must be carefully conducted. Rangefinders should read an extensive number of student responses, enough to identify useful examples at each score point that will exemplify different approaches that writers have used to respond to the writing task. Rangefinders should also read to identify responses that display ELL characteristics of development, organization, and language use and so that the training materials will include a useful representation of ELL responses at all score points.

During this process of developing training materials, rangefinders should independently score responses and report their scores so that no bias is introduced. Trainers should evaluate the scores for each response to find those that received a high consensus in scoring—in most cases,

these responses should be considered the best candidates for use in training sets. However, rangefinders should be asked to share comments to help establish a rationale for the correct score for the response and a common understanding of how certain kinds of responses should be scored.

Preparing Training Sets

The rangefinding process should result in the identification of effective responses to be used in training sets. Training materials should include example responses demonstrating a variety of approaches to the writing tasks at each score point and ample representation of ELL responses at all score points.

Example responses used for training should be prepared with annotations that provide a brief but detailed rationale for the correct score point for each response. Because responses to writing tasks on the 2011 NAEP Writing assessment may be more varied in form and approaches used than is common for a large-scale writing assessment, annotations for responses should also include a rationale for the appropriateness (or, in some cases, the inappropriateness) of the form and approach used in the response to the task.

Training Scorers

Trainers should determine the most effective and efficient method of training, recognizing that training procedures may vary depending on whether training is done in-person or online.

Throughout training, the trainers should stress the rhetorical flexibility encouraged by the 2011 NAEP Writing assessment and employ strategies designed to help scorers recognize the appropriateness of a variety of approaches to each writing task.

Scoring Responses

After scorers have been trained and certified, scoring managers should determine what strategies will be used to maintain scoring accuracy and consistency over time. Such strategies often include the use of recalibration sets, validity papers, backreading, inter-rater reliability data, and other strategies. Although training materials should be designed to represent different kinds of approaches to writing tasks at each score point, it is possible that during scoring, additional instructional examples may be found and presented to scorers.

Chapter Seven: Reporting Results

This chapter provides an overview of how NAEP results are reported and of a new component of NAEP reporting, a Profile of Student Writing, that will provide more detailed information about dimensions of writing for a national sample of responses. Key sections of the chapter are as follows:

- How NAEP Results are Reported
- Reporting Background Variables
- Reporting Scale Scores and Achievement Levels
- 2011 NAEP Writing Preliminary Achievement Level Descriptions (New)
- New Component of NAEP Reporting: *Profile of Student Writing (New)*
- Methodology and Reporting of the Profile of Student Writing

How NAEP Results are Reported

The National Assessment of Educational Progress provides the only national report on student achievement in a variety of subjects. NAEP administers writing assessments at regular intervals to grade 4, 8, and 12 students attending both public and nonpublic schools, collecting a significant, representative sample of student writing at these grades.

The primary means for public release of NAEP Writing assessment results will be a printed summary report known as *The Nation's Report Card*. TM This report will also be available on a dedicated website: http://nationsreportcard.gov. Both resources will provide detailed information on the nature of the assessment, the students who participate, and the assessment results.

The Nation's Report CardTM includes information on the performance of various subgroups of students at the national, state, and trial urban district levels. Subgroups for NAEP include:

- Gender
- Race/Ethnicity (White, Black or African American, Asian, American Indian/Alaska Native, Native Hawaiian or other Pacific Islander, Hispanic)
- Eligibility for Free/Reduced-Price Lunch
- Students with Disabilities
- English Language Learners

The Nation's Report Card™ also reports performance for public schools in states and jurisdictions and the ten NAEP Trial Urban Districts (Atlanta, Chicago, Houston, Los Angeles, New York, Boston, Charlotte-Mecklenburg, Cleveland, San Diego, and Austin).

Reporting Background Variables

Subject specific background variables for the 2011 NAEP Writing assessment reflect two primary interests: the role of technology in writing and the number and kinds of opportunities students have to write. NAEP's ability to show similarities and differences among various

subgroups in relation to writing achievement has the potential to inform educational policy at the national level as well as in states and school districts. For example, data from a question about students' use of computers might show that students who score in the "Proficient" range on the NAEP Writing assessment compose on the computer more often than those who score in the "Basic" range.

Recommendations for background variables for the 2011 NAEP Writing assessment are presented in a separate document.

Reporting Scale Scores and Achievement Levels

NAEP Writing results are reported in two ways: as scale scores and as percentages of students attaining achievement levels. Scale scores, which are derived from student responses to NAEP assessment items, summarize the overall level of performance attained by a group of students. For the 1998, 2002, and 2007 administrations of the NAEP Writing assessment, scale scores were presented as average scale scores on a 0-300 scale and as scale scores at selected percentiles. The scale score range for 2011 will be determined as the administration of the assessment nears.

Reporting on achievement levels is the primary way in which NAEP results reach the general public and policymakers. Achievement level results indicate the degree to which student performance meets the standards set for what students *should know and be able to do* at the *Basic, Proficient,* and *Advanced* levels. Descriptions of achievement levels articulate expectations of performance at each grade. They are reported as percentages of students within each achievement level range, as well as the percentage of students at or above the *Basic* and at or above *Proficient* ranges. Results for students not reaching the *Basic* achievement level are reported as below *Basic*. Results are also reported for subgroups of students using demographic data and background variables specific to the NAEP Writing assessment. An individual student's performance cannot be reported based on NAEP results.

Figure 5.1 displays the Governing Board's generic policy definitions for *Basic*, *Proficient*, and *Advanced* achievement that pertain to all NAEP subjects and grades.

Figure 7.1
Generic Achievement Level Policy Definitions for NAEP

Achievement Level	Definition
Advanced	This level signifies superior performance.
Proficient	This level represents solid academic performance for each grade assessed. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.
Basic	This level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.

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There are three components to the NAEP achievement levels:

- Achievement level descriptions
- Cut scores
- Examples of students' responses

Achievement Level Descriptions

The achievement level descriptions represent an informed judgment of *how good is good enough* in writing achievement at each grade. Achievement level descriptions for the 2011 NAEP Writing assessment will provide characteristics of student performance in relation to the criteria—e.g., development of ideas, organization, language facility and use of conventions—used to evaluate performance in responses to writing tasks on the 2011 NAEP Writing assessment.

Cut Scores

Cut scores, the second component of reporting on achievement levels, represent the minimum score required for performance at each NAEP achievement level. Cut scores are reported along with the percentage of students who scored at or above the cut score.

Examples of Students' Responses

The third component of achievement level reporting includes examples of student responses on released writing tasks. These examples provide illustrations of student skills within each level of achievement. In addition to examples of responses at each achievement level, the 2011 NAEP Writing assessment will provide examples to demonstrate each achievement level for each communicative purpose at grades 4, 8, and 12. Example responses should be annotated to explain the score for the response and salient features of development, organization, and language use in relation to the writer's purpose and audience. Significant strengths and weaknesses of the response should be addressed in annotations as well.

Overview of How Achievement Level Descriptions Will be Finalized

The preliminary achievement level descriptions included on the following pages will be revised prior to the standards setting activity. These preliminary descriptions are included in the Specifications to guide the development of writing tasks of increasing complexity across grade levels and to support the initial stages of standard setting.

After decisions about the implementation of the assessment have been finalized (i.e., standard versus non-standard platform, what word processing tools will be enabled, etc.), the Governing Board will convene panels of experts to examine the preliminary achievement level descriptions and to recommend final achievement level descriptions for each grade level. A broadly representative panel of exceptional teachers, educators, and professionals will then be convened to engage in a standard setting process to determine the cut scores that correspond to these achievement level descriptions. The panelists will be trained and will engage in a series of discussions designed to ensure informed judgments about mapping cut scores to the assessment.

2011 NAEP Writing Preliminary Achievement Level Descriptions

NAEP Achievement Level Descriptors define *what students should know and be able to do* at three levels: *Basic*, *Proficient*, and *Advanced*. The matrix in Figure 7.2 below correlates these three Achievement Levels to expectations of performance on important components of writing. *Basic*, *Proficient*, and *Advanced* levels apply to all students assessed at grades 4, 8, and 12; however, writing achievement at each of these levels will differ at each grade and cannot be compared across grades. To support understanding of the achievement level descriptions, student responses should be used to define the expectations expressed at each grade level (e.g., "adequate" or "well-developed"), and should also function as a demonstration of increasing levels of achievement across the grades.

Figure 7.2: Basic Achievement Level Descriptions

Grade 4	Grade 8	Grade 12		
Students performing at the basic level should	Students performing at the basic level should be able to:			
Create a somewhat appropriate response to the topic, purpose, audience, and specified form	Create a response that is mostly appropriate for the topic, purpose, and audience	Create an appropriate response to the topic, purpose and audience		
Present a few ideas relevant to the topic, purpose, and audience and show some evidence of thinking and writing approaches that support development of ideas	Present some ideas relevant to the topic, purpose, and audience and show some evidence of thinking and writing approaches that support development of ideas	Present ideas that are relevant to the topic, purpose, and audience and show evidence of thinking and writing approaches that support development of ideas		
Use a few supporting details relevant to the topic, purpose, and audience	Use some supporting details that are mostly relevant to the topic, purpose, and audience	Use supporting details relevant to the topic, purpose, and audience		
Create a response whose organizational structure shows a little evidence of appropriate thinking and writing approaches	Create a response whose organizational structure shows some evidence of appropriate thinking and writing approaches	Create a response that usually focuses on the topic and whose organizational structure shows some evidence of appropriate thinking and writing approaches		
Some sentences are correct and the response uses a little sentence variety	Most sentences are correct and the response uses some sentence variety	Sentences are correct and the response uses some sentence variety as appropriate to communicate relationships among ideas		

^{*}Note: The term "thinking and writing approaches" in the descriptions below refers to evidence of relevant approaches for development and organization (e.g., analyzing, evaluating, narrating, describing, etc.).

Figure 7.2: Basic Achievement Level Descriptions (cont'd.)

Grade 4	Grade 8	Grade 12
Use word choice that is mostly clear and appropriate for the topic, purpose, and audience	Use word choice that is usually clear and appropriate for the topic, purpose, and audience	Use word choice that is clear and appropriate for the topic, purpose, and audience
Use voice and tone that show some understanding of what is appropriate for the topic, purpose, and audience	Use voice and tone that are mostly appropriate for the topic, purpose, and audience	Use voice and tone that are appropriate for the topic, purpose, and audience
Use grammar, usage, and mechanics that are mostly correct but with distracting errors that may occasionally impede understanding	Use grammar, usage, and mechanics that are mostly correct but with some distracting errors that may occasionally impede understanding	Use grammar, usage, and mechanics that are mostly correct but with a few distracting errors that may occasionally impede understanding

Figure 7.3: Proficient Achievement Level Descriptions

Grade 4	Grade 8	Grade 12	
Students performing at the proficient level should be able to:			
Create a somewhat competent response to the	Create a mostly competent response to the topic,	Create a competent response to the topic, purpose,	
topic, purpose, audience, and specified form	purpose, and audience	and audience	
Present some ideas that are relevant to the	Present ideas that support the topic, purpose, and	Present some ideas that support the topic, purpose,	
topic, purpose, and audience and show some	audience and show evidence of effective thinking	and audience and show consistent evidence of	
evidence of effective thinking and writing	and writing approaches that support development	effective thinking and writing approaches that	
approaches that support development of ideas	of ideas	support development of ideas	
Use supporting details that are mostly relevant	Use supporting details that are relevant and	Use specific and relevant supporting details to	
and effective to develop ideas	effective to develop ideas	develop ideas	
Create a response using logical grouping of	Create a response using logical grouping of ideas	Create a response that is organized logically,	
ideas and with some thinking and writing	and thinking and writing approaches that are	using effective and relevant thinking and writing	
approaches that are relevant for the topic,	relevant to the topic, purpose, and audience	approaches to support a logical progression of	
purpose, and audience		ideas	
Most sentences are controlled and there is	Use sentences that are usually controlled and that	Use sentences that are controlled and that are	
some sentence variety, as appropriate, for the	are varied, as appropriate, for the topic, purpose,	varied, as appropriate, for the topic, purpose, and	
topic, purpose, and audience	and audience	audience	
Use word choice that is sometimes specific and	Use word choice that is mostly specific and that	Use some specific and precise word choice that is	
that is appropriate to communicate	is appropriate to communicate relationships	appropriate to communicate relationships among	
relationships among ideas	among ideas	ideas	
Use voice and tone that are mostly controlled	Use voice and tone that are usually controlled	Use voice and tone that are controlled and	
and appropriate for the topic, purpose, and	and appropriate for the topic, purpose, and	appropriate for the topic, purpose, and audience	
audience	audience		
Use grammar, usage, and mechanics that are	Use grammar, usage, and mechanics that are	Use grammar, usage, and mechanics that are	
mostly correct but with some distracting errors	mostly correct but with some distracting errors	mostly correct but with a few distracting errors	

Figure 7.4: Advanced Achievement Level Descriptions

Grade 4	Grade 8	Grade 12		
Students performing at the advanced level sho	Students performing at the advanced level should be able to:			
Create an effective response to the topic,	Create a thoughtful and effective response to	Create an insightful response to the topic,		
purpose, audience, and specified form	topic, purpose, and audience	purpose, and audience		
Present clear ideas that are relevant to the	Present clear and effective ideas to support the	Present thoughtful and complex ideas to support		
topic, purpose, and audience, and show	topic, purpose, and audience, and provide clear	the topic and effectively use approaches for		
evidence of relevant thinking and writing	evidence of relevant and effective thinking and	thinking and writing that support development of		
approaches that support development of ideas	writing approaches that support development of	ideas		
	ideas			
Create a response that is organized effectively	Create a response that is organized effectively to	Create a response with an organizational structure		
to show a somewhat logical progression of	show a mostly logical progression of ideas and	that has a clear and effective logical progression		
ideas and some evidence of relevant	evidence of relevant approaches for thinking and	of ideas and that reflects effective use of relevant		
approaches for thinking and writing	writing	thinking and writing approaches		
Most sentences are well controlled and varied,	Sentences are well controlled and varied, as	Use sentences that are well controlled and varied,		
as appropriate, to communicate relationships	appropriate, to communicate relationships among	as appropriate, to communicate relationships		
among ideas	ideas	among ideas		
Use word choice that is specific and	Use specific and mostly precise word choice	Use specific and precise word choice appropriate		
appropriate for the topic, purpose, and	appropriate for the topic, purpose, and audience	for the topic, purpose, and audience		
audience				
Use voice and tone that are usually controlled	Use voice and tone that are well controlled for	Use voice and tone that are well controlled for the		
for the topic, purpose, and audience	the topic, purpose, and audience	topic, purpose, and audience		
Demonstrate good control of grammar, usage,	Demonstrate good control of grammar, usage,	Demonstrate strong command of grammar, usage,		
and mechanics to communicate to the reader	and mechanics and use some of these elements to	and mechanics and use these elements to enhance		
	enhance the presentation of ideas	the presentation of ideas		

New Component of NAEP Reporting: Profile of Student Writing

The 2011 Writing Framework recommends that a subset of student responses at grades 4, 8, and 12 be selected and examined to obtain more in-depth information about what students do in relation to the three domains of writing assessed by NAEP—development of ideas, organization of ideas, and language facility and conventions. The analyses in the *Profile of Student Writing* will be reported at the national level only and will provide the public, policymakers, and educators with data about important features of student writing. The Profile will also include a considerable number of student responses that model qualities of the text features and language facility, along with detailed annotations describing particular features of the response.

The Profile will include four components. The first three will address each of the three broad domains in the holistic scoring rubric ("Development of Ideas," "Organization of Ideas," and "Language Facility and Use of Conventions") and will include the results of studies of a variety of characteristics of student writing within those broad domains, with the exact dimensions to be studied determined when student responses are available. These three analyses are intended to provide observations of what students do in their responses, independent of how the responses were scored. For example, one analysis might be designed to investigate how the communicative purposes for the tasks impact the choices students make in their approaches to developing and organizing ideas and to uses of language.

The fourth component of the Profile will then link the results of these analyses to achievement. In this section of the Profile, data derived from analyses of rhetorical features of the responses will be correlated with performance reflected in the achievement levels (*Basic, Proficient,* and *Advanced*). For example, this component might report on achievement levels in relation to students' selection of form (at grades 8 and 12) for *To Persuade* tasks, or on achievement levels in relation to students' use of certain sentence structures and how these vary across writing for the three purposes.

The four components of the Profile are described in more detail below:

Analysis of Development of Ideas

This component of the Profile will report on the ways students develop ideas in their writing. Analysis of how students develop ideas in their responses will provide information about such characteristics as the approaches to thinking and writing students use (e.g., analyzing, narrating, summarizing, and so on) and the level and kinds of support they provide. Findings about these characteristics of the responses can be correlated to many dimensions of the tasks (e.g., the communicative purpose, audience, and form). The specific dimensions to be analyzed will be determined after student responses are available.

Analysis of Organization of Ideas

This component of the Profile will report on patterns in text structure and the coherence of sentences and paragraphs. Again, the specific dimensions to be analyzed will be determined after student responses are available. As an example, analysis of how students approach the organization of ideas could provide information about how students structure their texts and the strategies they use to create coherence. This analysis would also provide information about how text structures vary in relation to the form of the response. Again, findings about different characteristics of organization and coherence can be correlated to many dimensions of the tasks (e.g., communicative purpose, etc.).

Analysis of Language Facility and Conventions

This component of the Profile will present information about such dimensions as the choices students make in their use of language (e.g., the kinds and variety of sentences students use in their responses), as well as the nature and extent of errors in students' responses. Computer-based analysis may be used to examine some dimensions of language use (e.g., syntactic complexity) and to identify the rate of incidence of common errors (e.g., lack of subject-verb agreement, inconsistency of verb tense, lack of pronounantecedent agreement, common spelling and punctuation errors, and so on). Information about characteristics of language use can also be correlated to various dimensions of the tasks.

Analysis of How Features of Student Writing Relate to Performance

The fourth component of the Profile will relate features of development, organization, and language use to overall performance (based on achievement at the *Basic*, *Proficient*, and *Advanced* levels) and to relevant background variables. Data collected from analysis of various dimensions of text structure and language use will be synthesized to support understanding of how these various dimensions of students' responses are connected to overall performance on the assessment.

Methodology and Reporting of the Profile of Student Writing

Sampling

By selecting a nationally representative sample, the results of the analyses can be generalized to the whole population, supporting external validity of the conclusions. To produce stable estimates of statistical results for the Profile and to enable sound conclusions from the data, several guidelines should be addressed in designing the sample of responses to be analyzed:

• Responses should sufficiently reflect a range of approaches to developing and organizing ideas and approaches to language use.

- The sample should be drawn from operational administrations of the Writing assessment and should include responses to several writing tasks for each communicative purpose at each grade level.
- Responses should be selected from strata to include a representative proportion of all responses by using dimensions such as geographic region, public vs. private schools, school size, etc., depending on future determinations about which variables will produce the most valuable information.
- Since responses will have been scored prior to the analyses conducted for the Profile, scoring data should be used in selecting the sample so that it includes a distribution of scores.

Methodology for Rhetorical Analyses

Analyses of the responses for the first three components of the Profile will be done in two stages. In the first stage, an observational study should be conducted to determine what specific dimensions of the responses will be studied, and key questions should be developed to guide further investigation. In the second stage, evidence drawn from the responses should be quantified in relation to the key questions. Contractors should determine the most appropriate and effective methods of conducting the two phases of the rhetorical analyses. The following discussion of methodology is intended to provide only some broad outlines of how the analyses might be accomplished.

Some specific dimensions for further analysis that may emerge from the first stage—the observational study—might include:

- What are the range and variation of students' choices in relation to development and organization of ideas and to language use—for the same task and across tasks for the same communicative purpose?
- How does communicative purpose influence the choices students make about their approach to developing ideas? To organizing ideas? To language use (e.g., kinds and variety of sentences, vocabulary)?
- How does audience impact the kinds of approaches students use in their responses to developing and organizing ideas and to language use?
- What choices of form do grade 8 and grade 12 students make when selecting a form—for the same task and across tasks for the same communicative purpose? How does form impact the choices students make in their approaches to developing and organizing ideas and to language use?
- What are the differences across tasks at each grade with regard to how students craft language in their responses? For example, are there differences in the nature

and extent of errors in grammar and usage conventions in relation to topic, purpose, or audience?

After the key questions have been developed from the observational study in the first stage, the contractor should determine how best to quantify evidence of (or the degree of) the presence of the dimensions being analyzed and develop training materials to support consistent judgments about the features of writing to be examined. After analysis of the responses in relation to the key questions is completed, data should be tabulated and analyzed.

In some cases, computer software will be utilized to support analysis of responses at grades 8 and 12. It is expected that this approach will be particularly useful in supporting analyses of some language features. For example, if types and variety of sentences are analyzed, computer software can be used to efficiently identify and count types of sentences (e.g., simple, compound, complex, periodic, etc.). Additionally, if the nature and extent of errors are analyzed, computer software can be used to identify and count most kinds of language errors that may occur in the responses.

Reporting Results of Rhetorical Analyses

Because NAEP will have collected information about a variety of demographic factors and about students' writing experiences, including those related to composing on the computer, data drawn from analyses of the responses can be aggregated and disaggregated in many different ways in order to illuminate how students approach the writing tasks. In most cases, the key questions for the rhetorical analyses will be answered by combining data for several dimensions of the responses. For example, if one key question were to address how students develop ideas in relation to each communicative purpose, responses to several writing tasks for each purpose might be analyzed for several dimensions of development (e.g., approaches to thinking and writing, the extent and nature of details and examples) in relation to certain demographic factors. Because the development of ideas has many components, it is only by combining findings for a number of features that such a question may be answered.

Background variables relevant to key questions should also be analyzed to learn what information about the students may be related to findings from the quantitative analyses of dimensions of writing. For example, background variables might be used to better understand how students from different demographic groups or how students who report different kinds of writing experiences respond to each communicative purpose across tasks at their grade level.

Contractors should determine the most accessible and informative means of presenting data from the rhetorical analyses to the public.

Reporting Results of Rhetorical Analyses in Relation to Achievement

The fourth component of the *Profile of Student Writing* will include information relating the findings from the analyses of development and organization of ideas and from analysis of language use to performance based on achievement levels. In this section of the Profile, observations about various dimensions of writing analyzed should be correlated with performance at the *Basic, Proficient*, and *Advanced levels*. Thus, for example, if one component of rhetorical analysis were to address what forms students at grades 8 and 12 choose (for tasks where a choice is given), this section of the Profile could report what kinds of forms students at each achievement level choose; whether responses at different achievement levels tend to display a greater variety of choices; and whether form impacts text structures differently at each achievement level. Similarly, if a component of the rhetorical analyses were to produce data on the nature and extent of grammar and usage errors, this section of the report could correlate these data to achievement levels in order to determine whether and how the nature and extent of errors varies by achievement level.

In all components of the Profile, and in particular in this section linking characteristics of students' texts to performance, care should be taken to avoid reporting results that might appear to prescribe specific instructional practices. All results reported should be appropriately contextualized in relation to the parameters of the 2011 NAEP Writing assessment with regard to the time allowed for composing and the nature of the writing tasks.

2011 NAEP Writing Specifications Glossary of Terms

Term	Definition
Accessibility	Content and design considerations that ensure
	all student populations can demonstrate what
	they know and can do on the 2011 NAEP
	Writing assessment.
Achievement level descriptions	Statements established by the National
	Assessment Governing Board that define what
	students know and can do at each achievement
	level of writing (Basic, Proficient, and
	Advanced).
Accommodations	Changes to test materials or procedures (e.g.,
	large print booklets, extended time) that allow
	students with disabilities and English language
	learners an equal opportunity to demonstrate
	what they know and can do.
Analyzing	An approach to thinking and writing that breaks
	down a large topic into logical parts, which can
	then be extensively examined individually or in
	relation to a broad subject as a whole.
Anchor paper	A written response that best conveys a score
	point of a scoring rubric. These compositions
	serve as models to evaluators when scoring
	writing tasks.
Approaches to thinking and	Methods used on a writing task (e.g., analyzing,
writing	describing, narrating, synthesizing, and so on)
	to support the development and organization of
	ideas in relation to the purpose and audience
	specified.
Arguing	An approach to thinking and writing that
	attempts to prove or disprove by using a range
	of strategies, such as giving reasons, supporting
	and organizing evidence (e.g., analogies,
	illustrations), and/or by considering pros and
	cons on a subject.
Assessment	The evaluation of students' academic skills to
	determine what they know and can do.
	Assessment data can be used to determine how
A	best to support student learning and progress.
Assessment Framework	For each NAEP subject, a Framework is
	developed to describe the design of the
	assessment, the content to be assessed by
	NAEP, how that content will be measured, and

	how results will be reported.
Assessment Specifications	The document that specifies how Framework
Assessment Specifications	guidelines are to be implemented in relation to
	the content, design, evaluation, and reporting of
	a NAEP subject assessment.
Audience	The specified or clearly implied person(s) on a
Audience	2011 NAEP Writing task to whom writers
	address their responses.
Doolsmooding	<u> </u>
Backreading	The review of a percentage of scored responses
	by trainers used to check consistency of scoring across tasks and over time.
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Background variables	Student, teacher, and school background
	questionnaires used to collect data that may
	support analysis of student performance on an
5 :	assessment.
Bias review	A review of writing tasks, prior to field testing,
	for any evidence of cultural bias that would
	need to be addressed in the development of the
	task.
Coherence	The consistent relationship of parts and ideas in
	a piece of writing, helping the reader understand
	the writer's purpose and his or her argument.
Communicative purposes	The aim or goal of a writing task. In the context
	of NAEP, three communicative purposes are
	assessed: to persuade; to explain; and to convey
	experience, real or imagined.
Complexity	Refers to a) the level with which writing
	addresses the implications, complications, and
	multiple dimensions of a topic or issue, and b)
	the increase in difficulty of tasks and
	expectations for writing across grades.
Computer-based testing	The administration of any assessment on
	computers.
Construct (noun)	The articulation of all components of the
	assessment as they relate to what the assessment
	is designed to measure.
Contextual information	Information provided in the task that supports
	understanding of the situation or topic to be
	addressed in a response. Contextual information
	on some NAEP Writing tasks will also include
	visual stimuli and reading passages.
Constructed response	A type of assessment task that requires students
F	to produce their own answer rather than
	selecting from a given list (e.g., multiple
	choice). On the 2011 NAEP Writing, the
	method of constructed response is the

	completion of written composition.
Conventions	Commonly accepted rules and guidelines for formal written language concerning grammar and usage, as well as mechanics (e.g., punctuation, capitalization, and spelling).
Convey experience, real or imagined	A communicative purpose in which students engage the reader in an event or perspective, real or imagined.
Cut score	The minimum score required to attain a NAEP achievement level (e.g., <i>Basic</i> , <i>Proficient</i>).
Describing	An approach to thinking and writing that depicts a person, object, or idea in ways that appeal to the senses of the writer's audience.
Development of ideas	The use of evidence, support, and approaches in expressing a purpose so that an audience can comprehend the writer's understanding of a topic or issue.
Direct writing assessment	The measurement of students' writing abilities by their performance on a writing task.
Distracting errors	Mistakes in language conventions and/or usage that prevent a reader from fully understanding the writer's ideas or message.
Domain	A broad feature of all writing (e.g., language facility), comprised of specific and important components that can be used to assess student performance within this feature.
English language learner	A student who is not a native English speaker and is still in the process of English language acquisition.
Evaluating	An approach to thinking and writing that defines and justifies the significance, value, or quality of an object or idea.
Explain	A communicative purpose in which a writer's aim is to make a subject, issue, or concept understandable to the reader.
Field testing	The process by which tasks under consideration for an assessment are determined to be accessible, comparable, and effective in discriminating among various levels of achievement or ability. Field tests are designed to simulate an actual assessment.
Focus	The emphasis on and/or consistent development of a main point, controlling idea, or theme.
Form	Types of text readily identifiable because of common organizational patterns or language features.

Grammar	A set of rules that define how a language is
	structured and communicated, thereby creating
	a standard language that writers commonly
	follow.
Holistic scoring rubric	A guide for readers to evaluate writing
	performance that focuses on assessing
	performance across multiple domains—e.g.,
	development of ideas, organization of ideas,
	language facility and conventions—to evaluate
	overall performance. Readers evaluating
	responses on the 2011 NAEP Writing
	assessment will use a holistic rubric with a scale
	of 1-6.
Inclusion criteria	The parameters used to determine whether a
	student with special needs or an English
	language learner is eligible for participation on
	a NAEP assessment.
Individual education program	The document that outlines an appropriate
(IEP)	instructional program and relevant
	accommodations for a student with special
	needs.
Interpreting	An approach to thinking and writing that
	explains the meaning or significance of an idea
	not readily apparent from initial reading,
	discussion, or common understanding.
Inter-rater reliability	The degree of agreement among scorers.
Large-scale assessment	A standardized assessment program designed to
	evaluate the achievement of large groups of
	students.
Mechanics	Conventions of spelling, capitalization, and
	punctuation.
Multiple access points	Writing tasks designed to encourage a variety of
	approaches in students' responses and that
	invite writers to draw upon their own
	experience, reading, and observations.
NAEP special study	Research conducted by the National
	Assessment of Educational Progress that
	provides new information on NAEP
	assessments or a subject matter NAEP assesses.
Narrating	An approach to thinking and writing that
	presents events in a meaningful order—often
	chronological—that imparts experience,
	knowledge, or description.
On-demand writing	The assessment of students' writing abilities in
	a limited time frame.

Persuade	A communicative purpose in which a writer
	attempts to convince an audience of one's point
	of view or to move them to action.
Positive text	The use of dark text on a light background—
	thereby creating the highest visible contrast—to
	achieve optimal font legibility.
Rangefinders	Expert readers who identify and score example
	responses that will be used to train scorers to
	apply the scoring rubric accurately and
	consistently.
Reading passages	Text (e.g., such as a quotation or short excerpt
reading passages	from a book or article) included in a writing
	task to stimulate and support the writer's
Recalibration	response. A set of responses used during scoring to test
Recalibration	scorers' ability to accurately score responses.
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	Recalibration sets may be designed to address
	particular issues and challenges that have
D-fl-4:/Oti-::-	emerged during scoring.
Reflecting/Questioning	An approach to thinking and writing in which a
	writer demonstrates self-examination or
	contemplation in his or her response.
Rhetorical flexibility	The writer's ability to adapt his or her ideas,
	organization, syntax, word choice, and other
	conventions of writing depending upon the
	purpose and audience of the writing task.
Rubric	A scoring guide that notes what specific
	features of student learning will be assessed and
	the expected level of performance at each score
	point. A rubric is used to guide evaluators'
	assignment of numerical scores to different
	levels of performance.
Scaffolding	In a writing task, the clarity and quality of
	contextual information provided to support and
	guide the writer's response.
Scale score	A score derived from student responses to
	NAEP assessment items that summarizes the
	overall level of performance attained by a group
	of students. This score—presented as a number
	on a set scale—provides information about what
	a particular aggregate of students (e.g., grade 4
	students) know and can do in writing.
Scorers	The evaluators or raters of responses to NAEP
Scorers	writing tasks.
Section 504 plan	
Section 504 plan	The document that outlines a program of
	instructional services to assist students with

	special needs who are in mainstream
	educational settings.
Sentence structure	The ways in which sentences are organized and
	composed.
Sentence variety	The use of different lengths and kinds of
•	sentence structures to engage an audience and
	support the clear expression of ideas.
Standardized/non-standardized	Potential methods of constructing a delivery
delivery	platform for the NAEP Writing assessment. A
	standardized platform would involve the
	construction of a single delivery model that
	would be provided to all participants. A non-
	standardized delivery would allow participating
	schools to use available resources, which may
	result in variances in word processing software,
	enabled tools, and so on.
Students with disabilities	Those students identified as having a disability,
	specified in an Individualized Education
	Program or a Section 504 Plan, and potentially
	in need of accommodations to complete the
	2011 NAEP Writing assessment.
Style	Elements of language (e.g., word choice,
	sentence variety) that the writer utilizes to
	produce the most effective presentation of ideas
g · ·	in relation to his or her purpose and audience.
Summarizing	An approach to thinking and writing that
	expresses the main points of one or several
	resources, including readings, research findings,
C4	events, the writer's own ideas, and so on.
Syntax	The order of words, phrases, and clauses within
Cymthasiaina	a sentence. An approach to thinking and writing that
Synthesizing	combines different ideas or information into a
	coherent whole so a new understanding of a subject or issue is conveyed.
Task writers guide	A document that provides specifications
Task writers guide	requirements and example tasks to guide
	developers of writing tasks.
Text	A piece of writing.
Text structure	The organizational arrangement of written
TOAT BUILDING	information to convey the purpose of a piece of
	writing to an audience (e.g., directions,
	problem-solution).
Tone	The writer's attitude toward the subject matter
	of the writing and/or the audience reading his or
	her work.
	IIVI 11 VIII.

Trend line	For the purposes of NAEP, a long-term
	movement of student achievement as it
	corresponds to other factors (e.g., time,
	demographics, etc.)
Usage	Established conventions of word choice and
Osage	phrasing.
Validity papers	Responses that have already been assigned
variatey papers	correct scores and that are randomly inserted
	into the pool of responses being scored. Scorers
	are not able to distinguish these responses from
	unscored responses so that the scores they
	assign can be compared to correct scores as a
	means of checking scoring accuracy.
Visual stimuli (in a writing task)	Pictures, drawings, charts, graphs, or other
Visual Stillian (in a writing task)	images used in a writing task to stimulate and
	support the writer's response.
***	11
Voice	A writer's ability to convey attitude,
	personality, and/or character appropriate to the
XX 1 1 ' (1' (')	writing situation.
Word choice (diction)	The use of vocabulary appropriate for the
XX 1	purpose and audience of a writing task.
Word processing software with	Computer applications that allow users to write,
commonly available tools	edit, and produce texts. "Commonly available
	tools" refers to the extensions built into this
	software that help writers modify or revise their
XX :	text documents.
Writing process	A series of overlapping and recursive processes
	(e.g., prewriting, drafting, revising, and editing)
	a writer often moves among when developing a
777.11	piece of writing
Writing task	Assessment item designed to elicit extended
	written response that can be evaluated using
	specified criteria.

Adopted: May 18, 2002



National Assessment Governing Board

NAEP Item Development and Review Policy Statement

It is the policy of the National Assessment Governing Board to require the highest standards of fairness, accuracy, and technical quality in the design, construction, and final approval of all test questions and assessments developed and administered under the National Assessment of Educational Progress (NAEP). All NAEP test questions or items must be designed and constructed to reflect carefully the assessment objectives approved by the National Assessment Governing Board. The final assessments shall adhere to the requirements outlined in the following Guiding Principles, Policies and Procedures for NAEP Item Development and Review.

The Governing Board's Assessment Development Committee, with assistance from other Board members as needed, shall be responsible for reviewing and approving NAEP test questions at several stages during the development cycle. In so doing, the Guiding Principles, Policies and Procedures must be adhered to rigorously.

Introduction

The No Child Left Behind Act of 2001 (P.L. 107-110) contains a number of important provisions regarding item development and review for the National Assessment of Educational Progress (NAEP). The legislation requires that:

- "the purpose [of NAEP] is to provide...a fair and accurate measurement of student academic achievement"
- "[NAEP shall]...use widely accepted professional testing standards, objectively measure academic achievement, knowledge, and skills, and ensure that any academic assessment authorized....be tests that do not evaluate or assess personal or family beliefs and attitudes or publicly disclose personally identifiable information;"
- "[NAEP shall]...only collect information that is directly related to the appraisal of academic achievement, and to the fair and accurate presentation of such information;"

- "the Board shall develop assessment objectives consistent with the requirements of this section and test specifications that produce an assessment that is valid and reliable, and are based on relevant widely accepted professional standards;"
- "the Board shall have final authority on the appropriateness of all assessment items;"
- "the Board shall take steps to ensure that all items selected for use in the National Assessment are free from racial, cultural, gender, or regional bias and are secular, neutral, and non-ideological;" and
- "The Board shall develop a process for review of the assessment which includes the active participation of teachers, curriculum specialists, local school administrators, parents, and concerned members of the public."

Given the importance of these mandates, it is incumbent upon the Board to ensure that the highest standards of test fairness and technical quality are employed in the design, construction, and final approval of all test questions for the National Assessment. The validity of educational inferences made using NAEP data could be seriously impaired without high standards and rigorous procedures for test item development, review, and selection.

Test questions used in the National Assessment must yield assessment data that are both valid and reliable in order to be appropriate. Consequently, technical acceptability is a necessary, but not a sufficient condition, for judging the appropriateness of items. In addition, the process for item development must be thorough and accurate, with sufficient reviews and checkpoints to ensure that accuracy. The Guiding Principles, Policies, and Procedures governing item development, if fully implemented throughout the development cycle, will result in items that are fair and of the highest technical quality, and which will yield valid and reliable assessment data.

Each of the following Guiding Principles is accompanied by Policies and Procedures. Full implementation of this policy will require supporting documentation from the National Center for Education Statistics (NCES) regarding all aspects of the Policies and Procedures for which they are responsible.

This policy complies with the documents listed below which express acceptable technical and professional standards for item development and use. These standards reflect the current agreement of recognized experts in the field, as well as the policy positions of major professional and technical associations concerned with educational testing.

<u>Standards for educational and psychological testing</u>. (1999). Washington, DC: American Educational Research Association (AERA), American Psychological Association (APA), and National Council on Measurement in Education (NCME).

<u>Code of fair testing practices in education</u>. (1988). Washington, DC: Joint Committee on Testing Practices.

National Center for Education Statistics (NCES) Statistical Standards, DRAFT, February 2002.

Guiding Principles – Item Development and Review Policy

Principle 1

NAEP test questions selected for a given content area shall be representative of the content domain to which inferences will be made and shall match the NAEP assessment framework and specifications for a particular assessment.

Principle 2

The achievement level descriptions for basic, proficient, and advanced performance shall be an important consideration in all phases of NAEP development and review.

Principle 3

The Governing Board shall have final authority over all NAEP test questions. This authority includes, but is not limited to, the development of items, establishing the criteria for reviewing items, and the process for review.

Principle 4

The Governing Board shall review all NAEP test questions that are to be administered in conjunction with a pilot test, field test, operational assessment, or special study administered as part of NAEP.

Principle 5

NAEP test questions will be accurate in their presentation and free from error. Scoring criteria will be accurate, clear, and explicit.

Principle 6

All NAEP test questions will be free from racial, cultural, gender, or regional bias, and must be secular, neutral, and non-ideological. NAEP will not evaluate or assess personal or family beliefs, feelings, and attitudes, or publicly disclose personally identifiable information.

Policies and Procedures for Guiding Principles

Principle 1

NAEP test questions selected for a given content area shall be representative of the content domain to which inferences will be made and shall match the NAEP assessment framework and specifications for a particular assessment.

- 1. Under the direction of the Board, the framework for each assessment will be developed in a manner that defines the content to be assessed, consistent with NAEP's purpose and the context of a large-scale assessment. The framework development process shall result in a rationale for each NAEP assessment, which delineates the scope of the assessment relative to the content domain. The framework will consist of a statement of purpose, assessment objectives, format requirements, and other guidelines for developing the assessment and items.
- 2. In addition to the framework, the Board shall develop assessment and item specifications to define the: a) content and process dimensions for the assessment; b) distribution of items across content and process dimensions at each grade level; c) stimulus and response attributes (or what the test question provides to students and the format for answering the item); d) types of scoring procedures; e) test administration conditions; and f) other specifications pertaining to the particular subject area assessment.
- 3. The Board will forward the framework and specifications to NCES, in accordance with an appropriate timeline, so that NCES may carry out its responsibilities for assessment development and administration.
- 4. In order to ensure that valid inferences can be made from the assessment, it is critical that the pool of test questions measures the construct as defined in the framework. Demonstrating that the items selected for the assessment are representative of the subject matter to which inferences will be made is a major type of validity evidence needed to establish the appropriateness of items.
- 5. A second type of validity evidence is needed to ensure that NAEP test items match the specific objectives of a given assessment. The items must reflect the objectives, and the item pool must match the percentage distribution for the content and cognitive dimensions at each grade level, as stated in the framework. Minor deviations, if any, from the content domain as defined by the framework will be explained in supporting materials.
- 6. Supporting material submitted with the NAEP items will provide a description of procedures followed by item writers during development of NAEP test questions. This description will include the expertise, training, and demographic characteristics of the groups. This supporting material must show that all item writing and review groups have

the required expertise and training in the subject matter, bias, fairness, and assessment development.

- 7. In submitting items for review by the Board, NCES will provide information on the relationship of the specifications and the content/process elements of the pool of NAEP items. This will include procedures used in classifying each item.
- 8. The item types used in an assessment must match the content requirements as stated in the framework and specifications, to the extent possible. The match between an objective and the item format must be informed by specifications pertaining to the content, knowledge or skill to be measured, cognitive complexity, overall appropriateness, and efficiency of the item type. NAEP assessments shall use a variety of item types as best fit the requirements stated in the framework and specifications.
- 9. In order to ensure consistency between the framework and specifications documents and the item pools, NCES will ensure that the development contractor engages a minimum of 20% of the membership of the framework project committees in each subject area to serve on the item writing and review groups as the NAEP test questions are being developed. This overlap between the framework development committees and the item developers will provide stability throughout the NAEP development process, and ensure that the framework and specifications approved by the Board have been faithfully executed in developing NAEP test questions.

Principle 2

The achievement level descriptions for basic, proficient, and advanced performance shall be an important consideration in all phases of NAEP development and review.

- 1. During the framework development process, the project committees shall draft preliminary descriptions of the achievement levels for each grade to be assessed. These preliminary descriptions will define what students should know and be able to do at each grade, in terms of the content and process dimensions of the framework at the basic, proficient, and advanced levels. Subsequent to Board adoption, the final achievement level descriptions shall be an important consideration in all future test item development for a given subject area framework.
- 2. The achievement level descriptions will be used to ensure a match between the descriptions and the resulting NAEP items. The achievement level descriptions will be examined, and appropriate instruction provided to item writers to ensure that the items represent the stated descriptions, while adhering to the content and process requirements of the framework and specifications. The descriptions will be used to evaluate the test questions to make certain that the pool of questions encompasses the range of content and process demands specified in the achievement level descriptions, including items within each achievement level interval, and items that scale below basic.

- 3. As the NAEP item pool is being constructed, additional questions may need to be written for certain content/skill areas if there appear to be any gaps in the pool, relative to the achievement level descriptions.
- 4. Supporting materials will show the relationship between the achievement levels descriptions and the pool of NAEP test questions.

Principle 3

The Governing Board shall have final authority over all NAEP test questions. This authority includes, but is not limited to, the development of items, establishing the criteria for reviewing items, and the process for review.

Policies and Procedures

- 1. Under the No Child Left Behind Act, a primary duty of the Governing Board pertains to "All Cognitive and Noncognitive Assessment Items." Specifically, the statute states that, "The Board shall have final authority on the appropriateness of all assessment items." Under the law, the Board is therefore responsible for all NAEP test questions as well as all NAEP background questions administered as part of the assessment.
- 2. To meet this statutory requirement, the Board's Policy on NAEP Item Development and Review shall be adhered to during all phases of NAEP item writing, reviewing, editing, and assessment construction. The National Center for Education Statistic (NCES), which oversees the operational aspects of NAEP, shall ensure that all internal and external groups involved in NAEP item development activities follow the Guiding Principles, Policies and Procedures as set forth in this Board policy.
- 3. Final review of all NAEP test questions for bias and appropriateness shall be performed by the Board, after all other review procedures have been completed, and prior to administration of the items to students.

Principle 4

The Governing Board shall review all NAEP test questions that are to be administered in conjunction with a pilot test, field test, operational assessment, or special study administered as part of NAEP.

- 1. To fulfill its statutory responsibility for NAEP item review, the Board shall receive, in a timely manner and with appropriate documentation, all test questions that will be administered to students under the auspices of a NAEP assessment. These items include those slated for pilot testing, field testing, and operational administration.
- 2. The Board shall review all test items developed for special studies, where the purpose of the special study is to investigate alternate item formats or new technologies for possible future inclusion as part of main NAEP, or as part of a special study to augment main NAEP data collection.

- 3. The Board shall <u>not</u> review items being administered as part of test development activities, such as small-scale, informal try-outs with limited groups of students designed to refine items prior to large-scale pilot, field, or operational assessment.
- 4. NCES shall submit NAEP items to the Board for review in accordance with a mutually agreeable timeline. Items will be accompanied by appropriate documentation as required in this policy. Such information shall consist of procedures and personnel involved in item development and review, the match between the item pool and the framework content and process dimensions, and other related information.
- 5. For its first review, the Board will examine all items prior to the pilot test or field test stage. In the case of the NAEP reading assessment, all reading passages will be reviewed by the Board prior to item development. For each reading passage, NCES will provide the source, author, publication date, passage length, rationale for minor editing to the passage (if any), and notation of such editing applied to the original passage. NCES will provide information and explanatory material on passages deleted in its fairness review procedures.
- 6. For its second review, the Board will examine items following pilot or field testing. The items will be accompanied by statistics obtained during the pilot test or field test stage. These statistics shall be provided in a clear format, with definitions for each item analysis statistic collected. Such statistics shall include, but shall not be limited to: p-values for multiple-choice items, number and percentage of students selecting each option for a multiple-choice item, number and percentage not reaching or omitting the item (for multiple-choice and open-ended), number and percentage of students receiving various score points for open-ended questions, mean score point value for open-ended items, appropriate biserial statistics, and other relevant data.
- 7. At a <u>third stage</u>, for some assessments, the Board will receive a report from the calibration field test stage, which occurs prior to the operational administration. This "exceptions report" will contain information pertaining to any items that were dropped due to differential item functioning (DIF) analysis for bias, other items to be deleted from the operational assessment and the rationale for this decision, and the final match between the framework distribution and the item pool. If the technology becomes available to perform statistically sound item-level substitutions at this point in the cycle (from the initial field test pool), the Board shall be informed of this process as well.
- 8. All NAEP test items will be reviewed by the Board in a secure manner via inperson meetings, teleconference or videoconference settings, or on-line via a password-protected Internet site. The Board's Assessment Development Committee shall have primary responsibility for item review and approval. However, the Assessment Development Committee, in consultation with the Board Chair, may involve other NAGB members in the item review process on an *ad hoc* basis. The Board may also submit items to external experts, identified by the Board for their subject area expertise,

to assist in various duties related to item review. Such experts will follow strict procedures to maintain item security, including signing a Nondisclosure Agreement.

- 9. Items that are edited between assessments by NCES and/or its item review committees, for potential use in a subsequent assessment, shall be re-examined by the Board prior to a second round of pilot or field testing.
- 10. Documentation of the Board's final written decision on editing and deleting NAEP items shall be provided to NCES within 10 business days following completion of Board review at each stage in the process.

Principle 5

NAEP test questions will be accurate in their presentation, and free from error. Scoring criteria will be accurate, clear, and explicit.

- 1. NCES, through its subject area content experts, trained item writers, and item review panels, will examine each item carefully to ensure its accuracy. All materials taken from published sources must be carefully documented by the item writer. Graphics that accompany test items must be clear, correctly labeled, and include the data source where appropriate. Items will be clear, grammatically correct, succinct, and unambiguous, using language appropriate to the grade level being assessed. Item writers will adhere to the specifications document regarding appropriate and inappropriate stimulus materials, terminology, answer choices or distracters, and other requirements for a given subject area. Items will not contain extraneous or irrelevant information that may differentially distract or disadvantage various subgroups of students from the main task of the item.
- 2. Scoring criteria will accompany each constructed-response item. Such criteria will be clear, accurate, and explicit. Carefully constructed scoring criteria will ensure valid and reliable use of those criteria to evaluate student responses to maximize the accuracy and efficiency of scoring.
- 3. Constructed-response scoring criteria will be developed initially by the item writers, refined during item review, and finalized during pilot or field test scoring. During pilot or field test scoring, the scoring guides will be expanded to include examples of actual student responses to illustrate each score point. Actual student responses will be used as well, to inform scorers of unacceptable answers.
- 4. Procedures used to train scorers and to conduct scoring of constructed-response items must be provided to the Board, along with information regarding the reliability and validity of such scoring. If the technology becomes available to score student responses electronically, the Board must be informed of the reliability and validity of such scoring protocol, as compared to human scoring.

Principle 6

All NAEP test questions will be free from racial, cultural, gender, or regional bias, and must be secular, neutral, and non-ideological. NAEP will not evaluate or assess personal or family beliefs, feelings, and attitudes, or publicly disclose personally identifiable information.

Policies and Procedures

- 1. An item is considered <u>biased</u> if it unfairly disadvantages a particular subgroup of students by requiring knowledge of obscure information unrelated to the construct being assessed. A test question or passage is biased if it contains material derisive or derogatory toward a particular group. For example, a geometry item requiring prior knowledge of the specific dimensions of a basketball court would result in lower scores for students unfamiliar with that sport, even if those students know the geometric concept being measured. Use of a regional term for a soft drink in an item context may provide an unfair advantage to students from that area of the country. Also, an item that refers to a low-achieving student as "slow" would be unacceptable.
- 2. In conducting bias reviews, steps should be taken to rid the item pool of questions that, because of their content or format, either appear biased on their face, or yield biased estimates of performance for certain subpopulations based on gender, race, ethnicity, or regional culture. A statistical finding of differential item functioning (DIF) will result in a review aimed at identifying possible explanations for the finding. However, such an item will not automatically be deleted if it is deemed valid for measuring what was intended, based on the NAEP assessment framework. Items in which clear bias is found will be eliminated. This policy acknowledges that there may be real and substantial differences in performance among subgroups of students. Learning about such differences, so that performance may be improved, is part of the value of the National Assessment.
- 3. Items shall be secular, neutral, and non-ideological. Neither NAEP nor its questions shall advocate a particular religious belief or political stance. Where appropriate, NAEP questions may deal with religious and political issues in a fair and objective way.

The following definitions shall apply to the review of all NAEP test questions, reading passages, and supplementary materials used in the assessment of various subject areas:

<u>Secular</u> – NAEP questions will not contain language that advocates or opposes any particular religious views or beliefs, nor will items compare one religion unfavorably to another. However, items may contain references to religions, religious symbolism, or members of religious groups where appropriate.

Examples: The following phrases would be acceptable: "shaped like a Christmas tree", "religious tolerance is one of the key aspects of a free society," "Dr. Martin Luther King, Jr. was a Baptist minister," or "Hinduism is the predominant religion in India."

• Neutral and Non-ideological - Items will not advocate for a particular political party or partisan issue, for any specific legislative or electoral result, or for a single perspective on a controversial issue. An item may ask students to explain both sides of a debate, or it may ask them to analyze an issue, or to explain the arguments of proponents or opponents, without requiring students to endorse personally the position they are describing. Item writers should have the flexibility to develop questions that measure important knowledge and skills without requiring both pro and con responses to every item.

Examples: Students may be asked to compare and contrast positions on states rights, based on excerpts from speeches by X and Y; to analyze the themes of Franklin D. Roosevelt's first and second inaugural addresses; to identify the purpose of the Monroe Doctrine; or to select a position on the issue of suburban growth and cite evidence to support this position. Or, students may be asked to provide arguments either for or against Woodrow Wilson's decision to enter World War I. A NAEP question could ask students to summarize the dissenting opinion in a landmark Supreme Court case.

The criteria of neutral and non-ideological also pertain to decisions about the pool of test questions in a subject area, taken as a whole. The Board shall review the entire item pool for a subject area to ensure that it is balanced in terms of the perspectives and issues presented.

- 4. The Board shall review both stimulus materials and test items to ensure adherence to the NAEP statute and the policies in this statement. Stimulus materials include reading passages, articles, documents, graphs, maps, photographs, quotations, and all other information provided to students in a NAEP test question.
- 5. NAEP questions will not ask a student to reveal personal or family beliefs, feelings, or attitudes, or publicly disclose personally identifiable information.

2011 NAEP Writing Assessment Example Tasks

Grade 4 Examples

To Persuade



Imagine that students at your school are going to select a new school mascot. A mascot is an animal or object used to represent a group. For example, many sports teams have mascots.

Four choices are being considered as your school's mascot: Tigers, Rising Stars, Dolphins, and Rockets. You have been asked to choose one of the four mascots and to support your choice in a letter to the school principal.

Write a letter to your principal convincing him or her that your choice should be the school mascot. Be sure to include reasons and examples in your letter.

To Explain

Imagine your teacher has chosen you to help a new student who will soon be attending your school. To prepare the new student, your teacher has asked you to write a letter to the new student explaining what your school is like so that he will know what to expect on his first day.

Write a letter to your future classmate explaining what your school is like. Be sure to include details and examples in your letter that will help him learn about your school.

To Convey Experience

Your school would like to help students think about how a person's actions can make a difference to others. The school newspaper is planning to publish stories about times when students helped someone or when someone else helped them.

Write a story for the school newspaper about a time when you helped someone or a time when someone helped you. Be sure to include details in your story that convey your experience to your readers.

Grade 8 Examples

To Persuade

Your school wants to persuade new eighth grade students to participate in school or community activities, sports, or clubs by publishing a brochure about the school's extracurricular offerings. Current students have been asked to write about a particular sport, club, or activity they participate in or about some other activity they think new eighth students should get involved in.

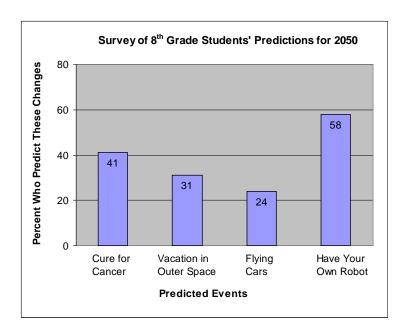
Compose a piece of writing to persuade new eighth grade students to participate in the sport, club, or activity you have chosen. Be sure to include reasons and examples that will persuade new eighth grade students to participate in the activity you have chosen to write about.

To Explain

Your school is creating a "time capsule," a box containing objects and writings from the current year that will opened by eighth graders in the year 2050. All current eighth graders have been asked to add to the time capsule by writing about what they think life in the United States might be like in 2050.

Compose a piece of writing for the time capsule explaining to future students what you think life in the United States will be like in 2050. Be sure to explain your ideas by using details and examples. The information below shows predictions about the future that you may consider using in your writing.

A monthly magazine for young adults published the following survey results:



The following chart appeared in the Careers section of your local newspaper:

Predicted Job Trends	
<u>Increase</u>	<u>Decrease</u>
TeacherComputer TechnicianScientist	FarmerSalespersonLawyer

To Convey Experience

Teen Life, a magazine for young adults, has announced a writing contest for middle school students. The theme of the contest is "Achieving Goals." The magazine has published the following contest instructions:

Teen Life wants to hear about the experiences of young people who have achieved goals. To enter, write about a memorable moment in your life when you achieved a goal you set for yourself. All successful responses will need to clearly convey the experience of achieving a goal so that the reader can fully understand the experience and its importance. The staff of Teen Life will select a winner, which will be published in next month's issue.

Write a response for the contest, describing an experience of achieving a goal and the importance of that experience to your life. Be sure to include details in your response that help readers understand your experience and its importance.

Grade 12 Examples

To Persuade

Scientists recently announced that a state park in your state contains large amounts of oil—a substance that can be converted into gasoline for cars or used to heat homes. Your state legislature is now debating whether to allow energy companies access to the protected land in this park in order to drill for the oil. In a speech to residents of the state, one of the state legislators identifies two sides of the debate:

"The debate over whether the state should allow energy companies to drill for petroleum on protected land is important to this state's future. Some in the state legislature believe that allowing access to lands currently protected would benefit our economy, creating thousands of jobs and lowering the costs of goods and services. Others, however, believe it is more important to protect our natural environment and support a high quality of life for citizens of this state.

The state legislature has called on citizens of the state to express their opinions about this issue. Take a position and write a response persuading members of your state legislature to support your position on whether or not protected land in your state should be opened to energy companies for drilling.

To Explain

Members of your community, including local leaders and the mayor, are concerned about civic awareness and town pride. In order to open a dialogue with area residents, your local newspaper is inviting residents to respond to a question civic leaders have debated: "What makes a good community?" The newspaper wants those who respond to define a good community and to explain what elements are needed to create a good community. Responses to this question will be read by members of the city council, including the mayor, and used to support their efforts to improve civic awareness and town pride.

Write a response for the newspaper in which you define a good community and explain what elements make a good community. Be sure to use specific examples and details to explain your ideas.

To Convey Experience

As part of an application for a job or college, you have been asked to consider how the following quotation is related to your high school experience.

"Experience is not what happens to you; it is what you do with what happens to you."
—Aldous Huxley

Write a response to this quotation in which you relate a high school experience that shows how you have grown as a student since starting high school. Be sure to use details that convey the experience to readers of your application.

NAEP Writing Special Study

To improve the quality of the NAEP assessment, and to gain maximum information on student achievement, NAEP coordinates special studies on Framework topics and issues. For the 2011 NAEP Writing, one special study has been proposed.

STUDY: GRADE 4 COMPUTER-BASED WRITING

Purpose

This special study seeks to frame trends in computer support—both in the accessibility of computers in all schools and instruction on the computers—in order to achieve a greater understanding of how grade 4 students compose on computers. The study will also address the expectations for computer proficiency and the role of computers in instruction at the middle school level. This information will provide a clearer research base for future computer-based assessment practices by NAEP.

Rationale

The 2011 NAEP Writing will assess computer-based writing with some commonly available tools at grades 8 and 12. The 2011 Writing Framework recommends that a computer-based platform also be implemented at grade 4 during the tenure of this framework—by 2019, if feasible. For 2011, however, the writing tasks at grade 4 will be completed by hand because of constraints on classroom time available for computer instruction at the elementary level and many elementary school students' limited keyboarding proficiency.

Thus, prior to any implementation of a computer-based writing assessment at grade 4, NAEP would benefit from additional research on the computer use of elementary students, particularly on keyboarding pedagogy, levels of computer literacy among elementary students, and computer use within the composition process. Exploration of these issues will inform the discussion of when a computer-based writing assessment at grade 4 will be warranted.

Research interests for this study comprise five categories: keyboarding experience, writing instruction and computers, computer tools and applications, assessment validity, and computer proficiency needed when students reach middle school.

Research Questions

1. Opportunities for computer-based writing

- How frequently do grade 4 students use computers and for what purposes?
- How often and in what ways does writing instruction at grade 4 involve computers?
- What parts of the writing process are computer-based?

2. Keyboarding experience

- Are there significant differences among groups with regard to keyboarding proficiency (e.g., gender, race/ethnicity, socio-economic status, type of school [e.g., large urban/suburban/rural, etc.])?
- What factors impact differences in keyboarding proficiency (e.g., access to computers, when instruction in keyboarding begins)?
- When are keyboarding skills first taught? When do elementary students have the finger size, manual dexterity, attention span, and hand-eye coordination skills needed to begin keyboarding instruction? What is the interaction between keyboarding instruction and developing cursive handwriting skills?
- How many words per minute do students need to type in order to successfully compose on the computer for a time-limited writing?
- In what ways is access to computers outside of schools a factor in grade 4 students' proficiency with computers?

3. Platform for computer-based writing at grade 4

• What applications and tools are most commonly available to grade 4 students for computer-based writing? Which tools are most commonly used? Are tools a positive or negative influence on the development of ideas, organization of ideas, and/or language facility?

4. Proficiency grade 4 students should have

• What proficiency should grade 4 students have with computer-based writing? What is expected on states' grade level assessments? What skills are needed for success in middle school?

5. Accuracy of assessment

• What mode (handwritten or computer-based) is most likely to support an accurate assessment of grade 4 students' writing ability?

2011 NAEP Writing Assessment Preliminary Holistic Scoring Guide for *To Persuade*

Score = 6 Responses in this range demonstrate effective skill in responding to the writing task. All elements of the response are well controlled and effectively support the writer's purpose, audience, and form.

- The response formulates a clear position that recognizes and acknowledges multiple significant aspects of the issue and insightfully addresses the complexities of the issue. The response demonstrates insight by fully addressing other perspectives, by fully evaluating implications of the writer's position, and/or by using affective arguments that are consistently persuasive.
- The response provides strong persuasive reasons and evidence to support the writer's position. Approaches to the development of ideas (e.g., summarizing, narrating, etc.) are used skillfully to support the persuasive purpose.
- Ideas are clearly focused on the topic throughout the response. Organization demonstrates a logical, well-executed progression of ideas that effectively supports the persuasive purpose and is relevant to the writer's approaches to organization (e.g., analyzing, evaluating, narrating, etc.). Transitions effectively convey relationships among ideas.
- Sentence structure is well controlled and varied to communicate relationships among
 ideas. Word choice is precise and evaluative and supports the persuasive purpose. Voice
 and tone are well controlled and effective for the writer's purpose and audience.
- Though there may be a few minor errors in grammar, usage, and mechanics, meaning is clear throughout the response.

Score = 5 Responses in this range demonstrate competent skill in responding to the writing task. Elements are usually well controlled and clearly support the writer's purpose, audience, and form.

- The response formulates a position that usually recognizes and acknowledges multiple significant aspects of the issue but may not fully address some of the complexities of the issue. The response demonstrates some insight by acknowledging and partially addressing other perspectives, by evaluating some implications of the writer's position, and/or by using affective arguments that are usually persuasive.
- The response usually provides persuasive reasons and evidence to support the writer's position. Approaches to the development of ideas are usually used skillfully to support the persuasive purpose.
- Ideas are usually focused on the topic. Organization is clear and may demonstrate a
 logical progression of ideas that supports the persuasive purpose and is relevant to the
 writer's approaches to organization. Transitions clearly convey relationships among
 ideas.
- Sentence structure is well controlled to communicate relationships among ideas and varied as appropriate for the writer's purpose. Word choice is usually precise and

evaluative and usually supports the persuasive purpose. Voice and tone are usually controlled and effective for the writer's purpose and audience.

• Grammar, usage, and mechanics are usually correct with a few distracting errors, but meaning is clear.

Score = 4 Responses in this range demonstrate adequate skill in responding to the writing task. Most elements are controlled and support the writer's purpose, audience, and form.

- The response takes a position and may acknowledge significant aspects of the issue. The
 response demonstrates some understanding of other perspectives and may evaluate some
 implications of the writer's position. If affective arguments or examples are used they are
 persuasive.
- While details and examples provide adequate evidence to support the writer's position, their development may be somewhat uneven. Approaches to the development of ideas are adequate, but their relevance to the persuasive purpose may not always be clear.
- Ideas are usually focused on the topic, and an organizational structure is evident. Ideas are logically grouped and adequately reflect the writer's use of relevant approaches to organization. Relationships among ideas are mostly clear.
- Sentence structure is adequately controlled and somewhat varied to communicate relationships among ideas. Word choice is clear, often evaluative, and adequately supports the persuasive purpose. Voice and tone are mostly controlled and usually effective for the writer's purpose and audience.
- Grammar, usage, and mechanics are mostly correct with some distracting errors, but meaning is clear.

Score = 3 Responses in this range demonstrate developing skill in responding to the writing task. Some elements are controlled and provide some support for the writer's purpose, audience, and form.

- The response states a position but addresses only some of the aspects of the issue. The response shows little understanding of other perspectives, although most ideas are relevant to the persuasive purpose.
- Some relevant reasons and evidence for the writer's position are used, but they are not
 developed enough to be convincing, or they may be unevenly developed. Approaches to
 development of ideas are evident, but they may not be clearly relevant to the persuasive
 purpose.
- Most ideas are focused on the topic. The response uses a simple organizational structure, and, for the most part, ideas are logically grouped. There is some evidence of the writer's use of approaches to organization, but they may not be clearly relevant, or they may be confusing. Relationships among ideas are sometimes unclear.
- Sentence structure is usually correct and there may be a little sentence variety to communicate relationships among ideas. Word choice is usually clear and sometimes

evaluative but at times may not be appropriate for the writer's purpose. Voice and tone show some understanding of what is appropriate for the writer's purpose and audience.

• Grammar, usage, and mechanics are mostly correct but with some distracting errors that may occasionally impede understanding.

Score = 2 Responses in this range demonstrate marginal skill in responding to the writing task. Elements are sometimes controlled but provide weak support for the writer's purpose, audience, and form.

- The response states a position and provides a few reasons to support the writer's position.
- A few reasons may be given, but they are not developed enough to be convincing. If
 details and examples are present, they are brief, general, or inadequately developed, and
 they may not be clearly relevant to the persuasive purpose. There may be minimal
 evidence of relevant approaches to the development of ideas.
- Some ideas may not be clearly focused on the topic. The response shows an attempt to
 organize thoughts by grouping ideas, and there may be minimal evidence of relevant
 approaches to organization. However, relationships among ideas are often illogical or
 unclear.
- Sentence structure is sometimes correct, but there is little, if any, sentence variety. Word choice is rarely specific and does little to support the persuasive purpose. Voice and tone show little understanding of what is appropriate for the writer's purpose and audience.
- Grammar, usage, and mechanics are usually correct but with many distracting errors that impede understanding.

Score = 1 Responses in this range demonstrate little or no skill in responding to the writing task. Elements are seldom controlled and provide almost no support for the writer's purpose, audience, and form.

- The response may state a position and may give a few simplistic reasons to support the writer's position.
- If any details or examples are present, they are brief, general, undeveloped, or not relevant to the persuasive purpose.
- The response shows an attempt to organize thoughts by grouping ideas, but groupings are illogical and there is little or no evidence of relevant approaches to organization. Relationships among ideas are mostly unclear.
- Sentence structure is often incorrect; word choice is often unclear and inappropriate; and there is little or no control of appropriate voice and tone.
- Grammar, usage, and mechanics are sometimes correct but with frequent distracting errors that often impede understanding.

• The response may be too brief to support a sound judgment about the development of ideas, organization, or language facility and conventions.

Score = 0 Unscorable: Response is too brief to score; not written in English; off topic; or illegible.

2011 NAEP Writing Assessment Preliminary Holistic Scoring Guide for *To Explain*

Score = 6 Responses in this range demonstrate effective skill in responding to the writing task. All elements of the response are well controlled and effectively support the writer's purpose, audience, and form.

- The response provides a thoughtful and insightful explanation of the subject by fully examining the topic as a whole, by identifying and fully discussing significant parts of the subject, and/or by evaluating and fully discussing the importance of the parts.
- The explanation maintains an effective balance between broad assertions and well chosen general and specific details and examples to fully support understanding. Approaches to the development of ideas (e.g., analyzing, evaluating, narrating, etc.) are used skillfully to support the clarity of the explanation.
- Ideas are clearly focused on the topic throughout the response. Organization demonstrates a logical, well-executed progression of ideas that supports the clarity of the explanation and is relevant to the writer's approaches to organization (e.g., summarizing, narrating, etc.). Transitions effectively convey relationships among ideas.
- Sentence structure is well controlled and varied to communicate relationships among
 ideas. Word choice is specific, precise, and evaluative and supports the clarity of the
 explanation. Voice and tone are well controlled and effective for the writer's purpose and
 audience.
- Though there may be a few minor errors in grammar, usage, and mechanics, meaning is clear throughout the response.

Score = 5 Responses in this range demonstrate competent skill in responding to the writing task. Elements are usually well controlled and clearly support the writer's purpose, audience, and form.

- The response provides a clear explanation of the subject by examining the topic as a whole, identifying and discussing various parts of the subject, and/or by evaluating and discussing the importance of those parts.
- The explanation usually maintains an effective balance between broad assertions and general and specific details and examples to support the clarity of the explanation.
 Approaches to the development of ideas are usually used skillfully to support the clarity of the explanation.
- Ideas are usually focused on the topic. Organization is clear and may demonstrate a logical progression of ideas that supports the clarity of the explanation and is relevant to the writer's approaches to organization. Transitions clearly convey relationships among ideas.
- Sentence structure is well controlled to communicate relationships among ideas and varied as appropriate for the writer's purpose. Word choice is usually specific and

precise, and it usually supports the clarity of the explanation. Voice and tone are usually controlled and effective for the writer's purpose and audience.

• Grammar, usage, and mechanics are usually correct with a few distracting errors, but meaning is clear.

Score = 4 Responses in this range demonstrate adequate skill in responding to the writing task. Most elements are controlled and support the writer's purpose, audience, and form.

- The response provides an explanation by addressing most parts of the subject and may include an evaluation of the importance of some of these parts.
- The explanation maintains an adequate balance between broad assertions and specific examples and details. While details and examples adequately support the clarity of the explanation, their development may be somewhat uneven. Approaches to the development of ideas are adequate, but their relevance to the explanation may not always be clear.
- Ideas are usually focused on the topic and an organizational structure is evident. Ideas are logically grouped and adequately reflect the writer's use of relevant approaches to organization. Relationships among ideas are mostly clear.
- Sentence structure is adequately controlled and somewhat varied to communicate relationships among ideas. Word choice is sometimes specific and adequately supports the clarity of the explanation. Voice and tone are mostly controlled and usually effective for the writer's purpose and audience.
- Grammar, usage, and mechanics are mostly correct with some distracting errors, but meaning is clear.

Score = 3 Responses in this range demonstrate developing skill in responding to the writing task. Some elements are controlled and provide some support for the writer's purpose, audience, and form.

- The response provides some explanation of the subject.
- The explanation may provide both broad assertions and general and specific examples, but the balance may be uneven and only somewhat controlled. Some relevant details and examples are used, but they are not developed enough to support the explanation, or they may be unevenly developed. Approaches to the development of ideas are evident, but they may not be clearly relevant to the explanation.
- Most ideas are focused on the topic. The response uses a simple organizational structure, and for the most part, ideas are logically grouped. There may be some evidence of approaches to organization, but they may not be clearly relevant, or they may be confusing. Relationships among ideas are sometimes unclear.
- Sentence structure is usually correct and there may be a little sentence variety to communicate relationships among ideas. Word choice is usually clear and sometimes

specific, but at times it may not be appropriate for the writer's purpose. Voice and tone show some understanding of what is appropriate for the writer's purpose and audience.

• Grammar, usage, and mechanics are mostly correct but with some distracting errors that may occasionally impede understanding.

Score = 2 Responses in this range demonstrate marginal skill in responding to the writing task. Elements are sometimes controlled but provide weak support for the writer's purpose, audience, and form.

- The response provides a little explanation of the subject.
- A balance between broad assertions and general and specific examples may not be
 evident. If details and examples are present, they are brief, general, or inadequately
 developed, and they may not be clearly relevant to the explanation. There may be
 minimal evidence of relevant approaches to the development of ideas.
- Some ideas may not be clearly focused on the topic. The response shows an attempt to organize thoughts by grouping ideas, and there may be minimal evidence of approaches to organization. However, relationships among ideas are often illogical or unclear.
- Sentence structure is sometimes correct, but there is little, if any, sentence variety. Word
 choice is rarely specific and does little to support the clarity of the explanation. Voice and
 tone show little understanding of what is appropriate for the writer's purpose and
 audience.
- Grammar, usage, and mechanics are usually correct but with many distracting errors that impede understanding.

Score = 1 Responses in this range demonstrate little or no skill in responding to the writing task. Elements are seldom controlled and provide almost no support for the writer's purpose, audience, and form.

- The response may provide little or no explanation of the subject.
- If any details or examples are present, they are brief, general, undeveloped, or not relevant to the explanation.
- The response shows an attempt to organize thoughts by grouping ideas, but groupings are illogical and there is little or no evidence of relevant approaches to organization. Relationships among ideas are mostly unclear.
- Sentence structure is often incorrect; word choice is often unclear and inappropriate; and there is little or no control of appropriate voice and tone.
- Grammar, usage, and mechanics are sometimes correct but with frequent distracting errors that often impede understanding.
- The response may be too brief to support a sound judgment about the development of ideas, organization, or language facility and conventions.



2011 NAEP Writing Assessment Preliminary Holistic Scoring Guide for *To Convey Experience, Real or Imagined*

Score = 6 Responses in this range demonstrate effective skill in responding to the writing task. All elements of the response are well controlled and effectively support the writer's purpose, audience, and form.

- The response effectively conveys the significance of the experience, either explicitly or implicitly, and conveys the complexities of the experience, whether real or imagined.
- Well chosen examples and sensory details, if appropriate, are effectively used to illustrate and recreate the experience for the audience. Approaches to the development of ideas (e.g., narrating, describing, analyzing, etc.) are used skillfully to convey the experience.
- Ideas are clearly focused on the topic throughout the response. Organization demonstrates a logical, well-executed progression of ideas that effectively conveys the experience and is relevant to the writer's approaches to organization (e.g., summarizing, narrating, etc.). Transitions effectively convey relationships among ideas.
- Sentence structure is well controlled and varied to communicate relationships among
 ideas. Word choice is connotative, specific, and precise and effectively conveys the
 experience. Voice and tone are well controlled and effective for the writer's purpose and
 audience.
- Though there may be a few minor errors in grammar, usage, and mechanics, meaning is clear throughout the response.

Score = 5 Responses in this range demonstrate competent skill in responding to the writing task. Elements are usually well controlled and clearly support the purpose, audience, and form.

- The response clearly conveys the significance of the experience, either explicitly or implicitly, and conveys some complexities of the experience, whether real or imagined.
- Effective examples and sensory details, if appropriate, usually illustrate and recreate the
 experience for the audience. Approaches to the development of ideas are usually used
 skillfully to convey the experience.
- Ideas are usually focused on the topic. Organization is clear and may demonstrate a
 logical progression of ideas that supports the writer's purpose and is relevant to the
 writer's approaches to organization. Transitions clearly convey relationships among
 elements of the experience.
- Sentence structure is well controlled to communicate relationships among ideas and varied as appropriate for the writer's purpose. Word choice is usually connotative, specific, and precise, and it usually supports the writer's purpose. Voice and tone are usually controlled and effective for the writer's purpose and audience.

• Grammar, usage, and mechanics are usually correct with a few distracting errors, but meaning is clear.

Score = 4 Responses in this range demonstrate adequate skill in responding to the writing task. Most elements are controlled and support the intended purpose, audience, and form.

- The response adequately conveys the significance of the experience, either explicitly or implicitly, and may convey some complexities of the experience, whether real or imagined.
- Some examples and sensory details, if appropriate, are used to illustrate experience, but they may need to be more developed or more may be needed to support the writer's purpose. Approaches to the development of ideas are adequate, but their relevance to the writer's purpose may not always be clear.
- Ideas are usually focused on the topic and an organizational structure is evident. Elements are logically grouped and adequately reflect the writer's use of relevant approaches to organization. Relationships among elements of the experience are mostly clear.
- Sentence structure is adequately controlled and somewhat varied to communicate relationships among ideas. Word choice is often connotative and specific, and it adequately supports the experience being conveyed. Voice and tone are mostly controlled and usually effective for the writer's purpose.
- Grammar, usage, and mechanics are mostly correct with some distracting errors, but meaning is clear.

Score = 3 Responses in this range demonstrate developing skill in responding to the writing task. Some elements are controlled and provide some support for the writer's purpose, audience, and form.

- The response conveys some elements of the significance of the experience and may demonstrate a little awareness of the complexities of the experience.
- Some examples and sensory details, if appropriate, are used, but they are not developed enough to support the writer's purpose, or they may be unevenly developed. Approaches to the development of ideas are evident, but they may not be clearly relevant to the writer's purpose.
- Most ideas are focused on the topic. The response uses a simple organizational structure
 and for the most part elements of the experience are logically grouped. There may be
 some evidence of approaches to organization, but they may not be clearly relevant, or
 they may be confusing. Relationships among elements of the experience are sometimes
 unclear.
- Sentence structure is usually correct and there may be a little sentence variety to communicate relationships among ideas. Word choice is usually clear and sometimes connotative and specific, but at times it may not be appropriate for the writer's purpose.

Voice and tone show some understanding of what is appropriate for the writer's purpose and audience.

• Grammar, usage, and mechanics are mostly correct but with some distracting errors that may occasionally impede understanding.

Score = 2 Responses in this range demonstrate marginal skill in responding to the writing task. Elements are sometimes controlled but provide weak support for the writer's purpose, audience, and form.

- The response conveys a few elements of the experience.
- If details and examples are present, they are brief, general, or inadequately developed, and they may not be clearly relevant to the writer's purpose. There may be minimal evidence of the use of relevant approaches to the development of ideas.
- Some ideas may not be clearly focused on the topic. The response shows an attempt to
 organize the elements of the experience, and there may be minimal evidence of relevant
 approaches to organization. However, relationships among ideas are often illogical or
 unclear.
- Sentence structure is sometimes correct, but there is little, if any, sentence variety. Word choice is rarely specific and does little to convey the experience. Voice and tone show little understanding of what is appropriate for the writer's purpose and audience.
- Grammar, usage, and mechanics are usually correct but with many distracting errors that impede understanding.

Score = 1 Responses in this range demonstrate little or no skill in responding to the writing task. Elements are seldom controlled and provide almost no support for the purpose, audience, and form.

- The response conveys few elements of the experience.
- If any details or examples are present, they are brief, general, undeveloped, or not relevant to the writer's purpose.
- The response shows an attempt to organize thoughts by grouping ideas, but groupings are illogical and there is little or no evidence of relevant approaches to organization. Relationships among elements are mostly unclear.
- Sentence structure is often incorrect; word choice is often unclear and inappropriate; and there is little or no control of appropriate voice and tone.
- Grammar, usage, and mechanics are sometimes correct but with frequent distracting errors that often impede understanding.
- The response may be too brief to support a sound judgment about the development of ideas, organization, or language facility and conventions.



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