



Final Report on the Study to Draft Achievement-Level Descriptions for Reporting Results of the 2009 National Assessment of Educational Progress in Reading for Grades 4, 8, and 12

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the National Assessment Governing Board**

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This report has been redacted by the National Assessment Governing Board to remove panelist names (Appendix A) and secure item-level data (Appendix C)

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Introduction

A new framework for the National Assessment of Educational Progress (NAEP) in reading has been developed and published, and the first assessment implemented under the new framework was administered in 2009. The framework was developed after the National Assessment Governing Board, through extensive evaluation of the reading framework first implemented in 1992, determined that a new framework was needed to bring the assessment of reading in line with research on reading pedagogy and the development of reading comprehension skills.

Subsequent to the development of the new assessment, but prior to the 2008 field test, attention turned to the possibility of maintaining the NAEP reading trend line. Efforts to determine the technical feasibility resulted in the decision to maintain trend; thus, the 2009 results for reading at grades 4, 8, and 12 will be reported on the same scale as have results from past assessments since 1992. Therefore, the trend started in 1992 will go forward with the results of the new assessment in 2009 and continue with results for subsequent assessment years.

Achievement levels are the primary means of reporting student performance for NAEP. As trend is to be maintained, the Committee on Standards, Design, and Methodology (COSDAM) recommended that the achievement-level cut scores set for reading in 1992 be used for reporting results for the 2009 NAEP reading.

The need for some changes in the achievement-level descriptions has been acknowledged. The current achievement-level descriptions refer to features of the 1992 framework that have been eliminated from the 2009 framework, and they do not reference some new features of the 2009 framework. For example, the 2009 framework does not have a Task subscale as in the 1992 framework, nor does it require students to make connections between what they read and their own experiences. Furthermore, the 2009 framework introduces poetry at grade 4 and calls for the systematic measurement of vocabulary at all three grades.

The study described here was focused on determining the extent to which the achievement-level descriptions provided for the 1992 framework would need to be revised to reflect the 2009 framework. The descriptions were then revised at the meeting to reflect any discrepancies, circulated for public comment, and revised for approval by the Governing Board.

Anchoring Approach

The current anchoring study used a model-based approach¹ in which individual students are grouped in a particular achievement-level interval. After individuals are assigned to an achievement level (based on their NAEP “plausible values”), data analysts then compute the probability of each student in that achievement level answering each item correctly (or, for an open-ended question, reaching a given score level). The probabilities for students across a given level are then averaged to yield the anchoring probability used in the study for that item or score level. Each item or score level thus has four probabilities: one each for below *Basic*, *Basic*, *Proficient*, and *Advanced*.

Using these processes and criteria, ETS Research staff analyzed all items from the 2009 NAEP reading assessment at grades 4, 8, and 12 and determined which items mapped into given achievement-level ranges.² Tables 1, 2, and 3 show the number of items (or score points on open-ended questions) that anchored in each range. Based on their anchoring probability, items were placed into one of three anchoring categories or into the Do-Not-Anchor category.

The items that did not anchor in one of the regions defined by the three achievement-level cut scores (those in the second set of rows in Table 1) were statistically classified based on either of two other criteria: “did not discriminate” and “did not anchor”. These items either did not meet the first criterion of an anchoring probability greater than .67 for a range, or did not discriminate adequately with lower levels.

An item is viewed as being sufficiently discriminating if the difference in the item’s anchoring probability at the anchor level and at the lower achievement level is greater than or equal to the 40th percentile of differences for that level. In note 9 for Figure A, the discrimination criterion is described for the item presented.

One general caveat should be offered about the data in Tables 1, 2, and 3. We often discuss whether or not “items” anchor in a given range. This is an apt depiction of any item (such as a multiple-choice question) that is scored right or wrong (i.e., a dichotomously scored item). However, items with partial credit scoring may anchor in several places. For example, for an open-ended item scored with a four-point scoring guide (scored as 1, 2, 3, or 4), there are three possible dichotomizations, score 1 vs. score 2 and above, score 2 and below vs. score 3 and above, and score 3 and below vs. score 4. In other words, an item with a four-point guide will appear to be three (dichotomous) items in the anchoring process analysis. Clearly, these three-score-level items have quite different difficulty levels. Therefore, it is very possible that, for example, the low-

¹ The model-based approach is described in detail in Appendix C of Stephen Lazer, John Mazzeo, and Andrew Weiss, *Final Report on Enhanced Achievement-Level Reporting and Scale-Anchoring Activities* (2000).

² The vocabulary-only blocks were not included in this study.

score-level response to an item anchors at the *Basic* level, the middle-score-level response at the *Proficient* level, and the high-score-level response at the *Advanced* level. Similarly, an item with a three-point guide will appear to be two (dichotomous) items in the anchoring process analysis. For this reason, the total number of items (called items/score levels) in any of the columns in Tables 1, 2, and 3 is greater than the number of discrete items on the assessment.

Also, because the statistical analysis used for scale anchoring is dependent upon the analysis used in NAEP scaling, items that failed to scale were not included in the anchoring study. For the 2009 scaling, one grade 4 item was dropped; no items were dropped in the scaling of grade 8 or grade 12.

Table 1. Numbers and percentages of NAEP reading items anchoring across categories: Grade 4

Category	Description	2009 Assessment					
		All items*		Grade 4 only		Grade 4/8	
		N	%	N	%	N	%
Below the <i>Basic</i> level	Anchors below <i>Basic</i> (discrimination criterion does not apply)	4	2.9	4	4.8	0	0.0
<i>Basic</i>	Anchors at <i>Basic</i> level	33	23.7	25	29.8	8	14.5
<i>Proficient</i>	Anchors at <i>Proficient</i> level	43	30.9	19	22.6	24	43.6
<i>Advanced</i>	Anchors at <i>Advanced</i> level	21	15.1	13	15.5	8	14.5
Did not anchor	Did not anchor	38	27.3	23	27.4	15	27.3
	<i>TOTALS</i>	139	100%	84	100%	55	100%

*The vocabulary-only blocks were not included in this study.

NOTE: Because responses to some items were scored at multiple levels, column totals may be greater than the number of items in the assessment. Detail may not sum to totals because of rounding.

Table 2. Numbers and percentages of NAEP reading items anchoring across categories: Grade 8

Category	Description	2009 Assessment							
		All items*		Grade 4/8		Grade 8 only		Grade 8/12	
		N	%	N	%	N	%	N	%
Below the <i>Basic</i> level	Anchors below <i>Basic</i> (discrimination does not apply)	17	9.3	9	16.7	7	9.2	1	1.9
<i>Basic</i>	Anchors at <i>Basic</i> level	64	35.0	27	50.0	23	30.3	14	26.4
<i>Proficient</i>	Anchors at <i>Proficient</i> level	45	24.6	4	7.4	21	27.6	20	37.7
<i>Advanced</i>	Anchors at <i>Advanced</i> level	27	14.8	9	16.7	10	13.2	8	15.1
Did not anchor	Did not anchor	30	16.4	5	9.3	15	19.7	10	18.9
	TOTALS	183	100%	54	100%	76	100%	53	100%

*The vocabulary-only blocks were not included in this study.

NOTE: Because responses to some items were scored at multiple levels, column totals may be greater than the number of items in the assessment. Detail may not sum to totals because of rounding.

Table 3. Numbers and percentages of NAEP reading items anchoring across categories: Grade 12

Category	Description	2009 Assessment					
		All items*		Grade 12 only		Grade 8/12	
		N	%	N	%	N	%
Below the <i>Basic</i> level	Anchors below <i>Basic</i> (discrimination criterion does not apply)	12	6.5	7	5.3	5	9.4
<i>Basic</i>	Anchors at <i>Basic</i> level	62	33.3	44	33.1	18	34.0
<i>Proficient</i>	Anchors at <i>Proficient</i> level	55	29.6	41	30.8	14	26.4
<i>Advanced</i>	Anchors at <i>Advanced</i> level	24	12.9	21	15.8	3	5.7
Did not anchor	Did not anchor	33	17.7	20	15.0	13	24.5
	TOTALS	186	100%	133	100%	53	100%

*The vocabulary-only blocks were not included in this study.

NOTE: Because responses to some items were scored at multiple levels, column totals may be greater than the number of items in the assessment. Detail may not sum to totals because of rounding.

Review and Description of Items by Anchor Panel

The Anchor Panel

Three panels of reading experts (one panel per grade) met from January 11 to January 14, 2010, to review the results of the scale-anchoring analysis at each grade and to produce written descriptions of the knowledge and skills displayed by students within each achievement-level range. Each panel included at least two university-level reading faculty members and at least two reading classroom teachers at the grade level. A total of 16 panelists participated: 5 at fourth-grade, 5 at eighth-grade, and 6 at twelfth-grade. (One panelist each at grades 4 and 8 had agreed to participate but were unable to do so.)

Of the 16 panelists, 2 had served on the Steering Committee for the NAEP reading framework and 5 had served on the Planning Committee for the NAEP reading framework. Also, 7 of the panelists are currently serving on the NAEP Reading Standing Committee, 1 panelist had previously served on the NAEP Reading Standing Committee, 6 panelists participated in the 2009 anchor study, 1 panelist had worked on NAEP reading development and scoring, and 2 panelists were new to NAEP. Appendix A provides additional biographical information about the panelists and identifies the other attendees at the anchoring meeting.

Text Complexity Ratings

The reading assessment is based on passages that have a set of items linked to them. To standardize the language used to reference the passages in item descriptions, passages were classified according to their complexity level by grade prior to the study. The steps for this part of the process were as follows:

- Two content experts developed a complexity-coding rubric appropriate to the grade levels and passages represented in the NAEP reading framework. One of the content experts was a panelist from the anchoring study; the other was a former NAEP Reading Standing Committee member with extensive experience with the assessment. The following criteria were used within the rubric:
 - Vocabulary
 - Sentence structure
 - Text structure/author's craft
 - Background knowledge
 - Cognitive demand
 - Density of ideas

- Four content experts, also panelists from the anchoring study, participated in the actual coding of the passages. The following activities took place:
 - The text complexity coding participants were sent the passages, rubric, and instructions for independent classification.
 - Participants returned their ratings to ETS. Passages were rated as “Below Average Difficulty for the Grade Level,” “Average Difficulty for the Grade Level,” and “Above Average Difficulty for the Grade Level.”
 - ETS summarized the classifications and flagged passages for which at least three of the four participants did not agree, and for ratings that were nonadjacent (e.g., at least one participant rated a passage as “Below Average Difficulty” while another rated it as “Above Average Difficulty”).
 - ETS organized and facilitated a web meeting during which passage classifications were discussed, with a focus on those flagged passages. The content experts came to an agreement on a final complexity rating for each passage.
 - Those text complexity ratings were provided to panelists at the anchor meeting.

Table 4 shows the number of passages that were placed into each difficulty level.

Table 4. Numbers and percentages of NAEP reading passages classified into text complexity levels

Grade	Text Complexity Level					
	1 Below Average Difficulty		2 Average Difficulty		3 Above Average Difficulty	
	N	%	N	%	N	%
4	3	7%	4	9%	1	2%
4/8 (4)	0	0%	4	9%	0	0%
4/8 (8)	4	9%	0	0%	0	0%
8	3	7%	4	9%	0	0%
8/12 (8)	0	0%	2	4%	3	7%
8/12 (12)	3	7%	2	4%	0	0%
12	3	7%	8	18%	1	2%
Total	16	36%	24	53%	5	11%

Note. Some passages appear in two assessments (i.e., grades 4 and 8, and grades 8 and 12). For those passages, ratings are provided separately for each grade.

Anchor Panel Activities

The scale anchoring meeting was held January 11–14, 2010, in Atlanta. An agenda is provided in Appendix B. The meeting began with an overview of the goals of the meeting presented by Susan Loomis of the National Assessment Governing Board. There followed a general training session by Patricia Donahue, from ETS, outlining the following procedures the panelists would follow in their grade-level work of describing the assessment content:

- Review items and scoring guides.
- Discuss skills demonstrated by students responding correctly or at different levels of the scoring rubric.
- Write a descriptor of performance for each item.
- Summarize student performance at each subscale for each achievement-level range.
- Sequentially evaluate their summaries of student performance in relation to three other documents:
 - NAEP policy-level definitions
 - 1992 reading achievement-level descriptions
 - 2009 reading preliminary achievement-level descriptions
- For each of these three documents, the panelists:
 - Provide an initial rating of the alignment between the document and the summaries of student performance
 - Discuss their ratings
 - Enter a second rating, which is submitted without further discussion
- Draft achievement-level descriptions
- Review draft achievement-level descriptions and share terminology from all grade-level groups.
- Finalize achievement-level descriptions in grade-level groups; then meet to refine drafts for terminology and progression of skills.

Following the orientation session, the panelists separated into groups by grade and began writing individual item descriptors. Once each item and score level had been described, they wrote summary descriptions of what students know and can do in each of the three achievement-level ranges (*Basic*, *Proficient*, and *Advanced*). Each group was facilitated by a member of the ETS NAEP reading staff.

The panelists worked from two notebooks prepared by ETS staff. One notebook contained the assessment reading passages distributed prior to the meeting to

give panelists time to familiarize themselves with its contents. The other book contained the grade-level assessment items, scoring guides, and scale-anchoring statistics. Structured to help direct the flow of work, the items were sorted within subscale by achievement-level range (from *Basic* through *Advanced*). Within each achievement-level range, the items were arranged from easiest to most difficult. In this way, as the panelists reviewed the item pool, they could see a progression in what the students knew and were able to do.

Figure A provides an example of how the scale-anchoring data were presented for each item in the panelists' notebooks. Panelists were also given two spreadsheets for each grade: the first listed all of the items by anchor level, following the order of the items as presented in the notebook (see Appendix C); and the second listed all of the items by block to allow panelists to see where items anchored for particular blocks. The spreadsheets also included other relevant classification information, including cognitive targets and whether the items were assessing vocabulary.

Figure A. Explanation of scale-anchoring statistics

1

2

3

Anchor	Scale	Cognitive Target
PROF	Literary	Integrate/Interpret

4

5

6

7

8

Item Type	# Cat	Level	Statistic	Below Basic	Basic	Proficient	Advanced	Overall
SCR	2	2	Pct	18.6	42.5	61.0	77.3	42.0
			Discrim	-	23.8	18.5	16.3	-

1. This field shows the anchoring category for the item. An item anchors at an achievement level when the estimated probability of students answering the item correctly in that level (calculated using the IRT model) is .67 or greater—and it meets the discrimination criterion (see note 9 for a description of the discrimination criterion). There are four anchoring categories presented in the notebook:
 - Basic—These items anchor at the *Basic* level.
 - Proficient—These items anchor at the *Proficient* level.
 - Advanced—These items anchor at the *Advanced* level.
 - DNA (Did Not Anchor)—These items did not meet the anchoring criteria, i.e., the probability of students in that level answering the item correctly did not reach .67, and/or students at that level did not meet the discrimination criteria in relation to students at the next lower level.
2. This field shows the reading subscale for the item. There are two subscales for the 2009 Reading Assessment: Literary and Informational.
3. This field shows the cognitive target for each item. There are three cognitive targets for the 2009 Reading Assessment: Locate/Recall, Integrate/Interpret, and Critique/Evaluate.
4. This field shows the item type:
 - MC = Multiple choice
 - SCR = Short constructed response
 - ECR = Extended constructed response
5. This field shows the number of score categories or levels for the item.

6. This field shows the item score level. All multiple-choice and right/wrong constructed-response items show level 1. Multi-level constructed-response items range from 1 to 3, and should be used in conjunction with the supplied scoring guide in which they correspond to levels 2 to 4. Thus the score level on the data strip, 2, corresponds to level 3 on the scoring guide.
7. The percent—PCT—for dichotomous items is the estimated probability of students answering the item correctly or reaching a given score level in that achievement level, calculated using the IRT model.

Each score category for polytomous items is anchored separately by forming a dichotomization of the lower score levels vs. the score level and above. (For example, there are three dichotomizations for a four-point polytomous item: 1 vs. 2+3+4; 1+2 vs. 3+4; and 1+2+3 vs. 4.) PCT for these score levels refer to the probability of students at the ANCHOR level who obtain a score at the SCORE level or above.

For this item, the average probability of students classified into the *Proficient* level reaching a score level of 2 is 61.0%.

8. This field gives the average percent correct overall.
9. DISCRIM is the discrimination, which is the difference in probability of a correct response between each achievement level and the next lower level. Discrimination is one of the criteria used for evaluating whether an item anchors at a given level. An item is sufficiently discriminating if the difference in probability of a correct response at the anchor level and the previous anchor level is greater than or equal to the 40th percentile of differences for that level.

For this item, the discrimination at the *Proficient* level is 18.5 (77.3 minus 61.0). The value of 18.5 is above the 40th percentile value of discrimination for all items at *Proficient*, which is 8.94. (The 40th percentile value is different for each achievement level. The 40th percentile values were as follows: For grade 4—*Basic*, 20.19; *Proficient*, 13.52; and *Advanced*, 11.06. For grade 8—*Basic*, 21.25; *Proficient*, 14.23; and *Advanced*, 7.27. For grade 12—*Basic*, 21.86; *Proficient*, 16.68; and *Advanced*, 8.03.)

Panelists began by reviewing an item, its associated anchoring data, and the scoring key or the level on the scoring guide achieved by students at the particular anchor level (i.e. *Basic*). Then, after some discussion, they described the knowledge and skills demonstrated by students who answered the question correctly. In the case of constructed-response questions, the descriptors referred to the knowledge and skills demonstrated by students receiving the particular score—for example, “partial comprehension” or “full comprehension”—that anchored in the achievement-level range being reviewed. Generally, different levels of performance on constructed-response questions anchored at different achievement levels, but when more than one score point anchored at the same level, the panelists would describe the knowledge and skills associated with the higher score point. They wrote descriptions for each credited score level for constructed-response items when the constructed-response item was first encountered, and the descriptions for each score level were placed in the appropriate level and sequence. The item-level descriptors created at the meeting are not included in this report since they contain specific information about item content.

After writing the individual descriptors for items that anchored within an achievement-level range, the panelists distilled and summarized student performance in that range for both of the subscales (literary and informational). To accomplish this task, they reviewed the item descriptors, grouping together those that described similar skills or knowledge.

Depending on the weight of the evidence, the panelists did or did not include the topic in the summary. For example, if a number of questions measuring an understanding of character motivation anchored at a particular level, the panelists concluded that students performing at that level could solve problems involving character motivation. If, on the other hand, students had answered only one or two questions on a topic, then panelists would omit the topic when describing what students know and can do.

The summary anchor descriptions developed by the panelists, which served as a basis for their evaluations and the drafting of achievement levels, are provided in Appendix D.

Comparisons and Ratings by Anchor Panel

After completing the summary anchor descriptions, each grade-level panel was asked to make a series of comparisons between the anchor descriptions and the following descriptions of performance expectations: (1) policy-level definitions, (2) 1992 achievement-level descriptions, (3) 2009 preliminary achievement-level descriptions.

For each comparison, panelists were asked to indicate for each of the three achievement levels (*Basic*, *Proficient*, and *Advanced*) whether the degree of

alignment was “weak,” “moderate,” or “strong,” and to provide comments about the degree of alignment. Panelists completed their ratings individually and then, after each comparison, they discussed their ratings, providing additional comments during the discussion about the areas in which they saw alignment and lack of alignment. After the discussion of each comparison, they were asked to complete a second round of ratings. Copies of the rating forms can be found in Appendix E.

Comparison to Policy-Level Definitions

Panelists first compared the 2009 anchor descriptions to the policy-level definitions presented in the 1992 framework. The policy-level definitions, contained in Appendix F, are set across subject areas in NAEP and describe in very general terms what students at each grade level should know and be able to do on the assessment. This comparison is intended to indicate whether performance on the new assessment, as demarcated by the cut scores, is calibrated to the policy definitions.

Table 5 provides a summary of the ratings provided for each grade. For each achievement level, the table shows the panelists’ ratings for the comparison of the 2009 anchor descriptions to the policy-level definitions. At grades 4, 8, and 12, for alignment to *Basic* level, seven of the panelists found evidence of moderate alignment, eight panelists found evidence of strong alignment, and one panelist rated the alignment as weak. At the *Proficient* level, nine of the panelists found evidence of moderate alignment, and seven panelists rated the alignment as strong. At the *Advanced* level, ten panelists found evidence of moderate alignment, while four panelists found evidence of strong alignment, and two panelists rated the alignment as weak.

Table 5. Comparison of 2009 anchor descriptions to policy-level definitions (number of panelists' ratings)

Achievement Levels	Grade	Number of Panelists' Ratings		
		Weak	Moderate	Strong
<i>Basic</i>	4	–	5	–
	8	1	1	3
	12	–	1	5
<i>Proficient</i>	4	–	3	2
	8	–	2	3
	12	–	4	2
<i>Advanced</i>	4	–	5	–
	8	–	2	3
	12	2	3	1

Note. For some comparisons, panelists provided partial ratings; ratings of 1.5, 2.5, 2.75 and “2–3” were rounded up.

At grade 8 *Basic*, 3 Moderate ratings were 2.5.

At grade 8 *Proficient*, 3 Moderate ratings were 2.5.

At grade 8 *Advanced*, 2 Moderate ratings were 2.5, and one Weak rating was 1.5.

At grade 12 *Proficient*, 1 Moderate rating was 2.5.

At grade 12 *Advanced*, 1 Moderate rating was 2.5.

Comparison to 1992 Achievement-Level Descriptions

Next, panelists compared the 2009 anchor descriptions to the 1992 achievement-level descriptions for reading developed for the 1992 framework. The achievement-level descriptions, contained in Appendix G, elaborate on the generic policy definitions in describing what students at each grade level should know and be able to do on the reading assessment.³ Panelists considered whether there was evidence that students performing within an achievement-level range have knowledge and skills that are not included in the achievement-level descriptions; or, conversely, whether there was evidence that students performing within an achievement-level range lack a specific knowledge or skill factor that is included in the achievement-level descriptions. The evaluation was intended to identify the overlap and non-overlap in knowledge and skills between the anchor descriptions for the 2009 assessment and the achievement-level descriptions for the assessments starting in 1992.

Table 6 presents panelists' comparisons of the 2009 anchor descriptions to the 1992 achievement-level descriptions. Across all three grades, the alignment for each achievement level was rated primarily as moderate. At the *Basic* level, 9 panelists found evidence of moderate alignment, and 7 rated the alignment as weak. At the *Proficient* level, 15 panelists found evidence of moderate alignment, and 1 rated the alignment as weak. At the *Advanced* level, 11 panelists found evidence of moderate alignment, while 4 panelists rated the alignment as weak,

³ National Assessment Governing Board (2009). *Reading Framework for the 2009 National Assessment of Educational Progress*, Washington, DC: Author.

and 1 panelist rated the alignment as strong (this was the only rating of strong for any level or grade.)

Table 6. Comparison of 2009 anchor descriptions to 1992 achievement-level descriptions (number of panelists' ratings)

Achievement Levels	Grade	Number of Panelists' Ratings		
		Weak	Moderate	Strong
<i>Basic</i>	4	5	–	–
	8	–	5	–
	12	2	4	–
<i>Proficient</i>	4	1	4	–
	8	–	5	–
	12	–	6	–
<i>Advanced</i>	4	3	2	–
	8	1	4	–
	12	–	5	1

Note. For some comparisons, panelists provided partial ratings; ratings of 1.5 were rounded up.
 For Grade 4 *Basic*, one Weak rating was 1+.
 For Grade 4 *Proficient*, one Weak rating was 1+, and two ratings were 2-.
 For Grade 4 *Advanced*, two Weak ratings were 1+, and one rating was 2-.
 For Grade 8 *Proficient*, one Weak rating was 1.5.
 For Grade 8 *Advanced*, one Weak rating was 1.5.

Comparison to 2009 Preliminary Achievement-Level Descriptions

The third comparison panelists made was between the anchor descriptions and the preliminary achievement-level descriptions in the 2009 framework, which were provided to guide item development (these preliminary descriptions are contained in Appendix H). This comparison contributed to the next phase of the meeting, in which the achievement-level descriptions were drafted.

Table 7 presents panelists' comparisons of the 2009 anchor descriptions to the 2009 preliminary achievement-level descriptions. At grades 4, 8, and 12, at the *Basic* level, 11 panelists found evidence of moderate alignment, while 5 panelists rated the alignment as strong. At the *Proficient* level, 7 of the 16 panelists found evidence for moderate alignment, while 3 rated the alignment as weak, and 6 panelists rated the alignment as strong. In considering alignment for the *Advanced* level, 5 panelists found evidence of moderate alignment, while 4 panelists rated the alignment as weak, and 7 panelists rated alignment as strong.

Table 7. Comparison of 2009 anchor descriptions to 2009 preliminary achievement-level definitions (number of panelists' ratings)

2009 Preliminary Achievement-Level Descriptions				
Achievement Levels	Grade	Number of Panelists' Ratings		
		Weak	Moderate	Strong
<i>Basic</i>	4	–	5	–
	8	–	1	4
	12	–	5	1
<i>Proficient</i>	4	3	2	–
	8	–	–	5
	12	–	5	1
<i>Advanced</i>	4	4	1	–
	8	–	–	5
	12	–	4	2

Note. For some comparisons, panelists provided partial ratings; ratings of 1.5, 2.5, and 2.75 were rounded up.

For Grade 4 *Basic*, one Moderate rating was 2+.

For Grade 4 *Advanced*, one Weak rating was 1+.

For Grade 8 *Basic*, 4 Moderate ratings were 2.5.

For Grade 8 *Proficient*, 5 Moderate ratings were 2.5.

For Grade 8 *Advanced*, 4 Moderate ratings were 2.5, and 1 Moderate rating was 2.75.

Drafting of Achievement-Level Descriptions

Following the comparisons described above, the panelists developed draft achievement-level descriptions for reporting results of the 2009 assessments. Descriptions were shared across grade group panels, and further modifications were made in the groups to ensure appropriate alignment and comparability across grades.

It became apparent in the cross-grade review that describing the progression of skills across grades was difficult to clearly delineate, as the same reading skills demonstrate comprehension at all grade levels but in relation to different texts. The panelists discussed the interaction of text difficulty with the item as inseparable from the skill. This led to the idea of a preamble, a kind of introductory preface to the achievement levels that would posit the “situatedness of cognition,” an idea that met with unanimous consensus by the panelists. In addition to the difficulty of the text, the panelists also concurred that there was a progression from the *Basic* to the *Advanced* levels in the variety of text types and tasks with which students could interact. For example, students performing at the *Basic* level would interact with a more narrow range of text types and tasks than students performing at the higher levels.

Panelist Evaluations

The panelists were asked about their satisfaction with the various products resulting from the meeting. Tables 8, 9, and 10 summarize the number of panelists rating their satisfaction at each level. The evaluation form is included in Appendix I.

Panelist satisfaction varied across the grades and by outcomes. At grade 4, the majority of the panelists were very satisfied or satisfied with the outcomes. However, there were three ratings of neutral and one of dissatisfied, the latter in relation to achievement-level descriptions. At grade 8, each of the five panelists rated his or her satisfaction with all three outcomes as very satisfied. At grade 12, all but two of the ratings were very satisfied or satisfied; the remaining ratings were neutral.

Table 8. Panelists' Satisfaction with Item-Level Descriptors

Grade	Number of Panelists' Ratings				
	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
4	2	2	1		
8	5				
12	1	4	1		

Table 9. Panelists' Satisfaction with descriptor-based summaries for the achievement levels

Grade	Number of Panelists' Ratings				
	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
4	1	2	2		
8	5				
12		6			

Table 10. Panelists' Satisfaction with Achievement-Level Descriptions

Grade	Number of Panelists' Ratings				
	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
4		2	2	1	
8	5				
12	1	4	1		

Meeting Summary

In summary, the scale-anchoring process proceeded in four stages. First, statistical analyses were conducted to determine the items that anchored in different achievement-level ranges. Second, the three grade-level panels of reading experts were convened. They reviewed all items that anchored in the three different ranges and wrote individual descriptions of the reading skills measured by those items. These panels then created summary anchor descriptions of what students in different achievement-level ranges knew and could do. Third, the panels evaluated the alignment of the summary descriptions to the policy-level definitions, the 1992 achievement-level descriptions, and the 2009 preliminary achievement-level descriptions. Fourth, the panelists drafted achievement-level descriptions.

The panelists' ratings reflected the consensus that the existing achievement-level descriptions could be used if revised to include skills demonstrated on the 2009 assessment, and if revised to remove skills that students are no longer expected to demonstrate. Overall, the panelists seemed comfortable that the skills observed in the 2009 assessment were falling appropriately within the existing cut points.

As described above, in general the panelists felt satisfied with the outcomes of the meeting, including the achievement-level descriptions.

Finalization of Achievement-Level Descriptions

Solicitation of Comments

After the conclusion of the meeting, the National Assessment Governing Board staff posted the draft achievement-level descriptions on their web site for public comment. The notice was posted on January 27, 2010, and feedback was requested by February 10, 2010. Appendix J contains a description of the feedback requested on the web site. Comments were received from 8 individuals through the general public web posting.

In addition to the posting for public comment, the Governing board solicited comments from individuals in the Reading field. Comments were received from 23 individuals through this targeted solicitation.

Review of Comments

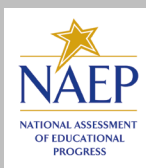
Governing Board staff forwarded the comments to ETS staff, who then sent them on to a subpanel of those who participated in the anchor meetings (two representatives from each grade group). In addition to a version of the comments that was identical to that received on the web site (which were

grouped by respondent), ETS staff provided a Word file with all responses to each question grouped together. Columns were provided for panelists to indicate whether action should be taken on the comment, and to record notes on their thoughts about the comment.

A web meeting was then held on February 18, 2010 to discuss panelists' recommendations on the comments. Following the web meeting, several panelists undertook the task of revising the ALDs to take into account the comments that the subpanel had deemed worth pursuing. The revised ALDs were then circulated to the subpanel, with many rounds of revisions going back and forth among members. Once the ALDs were considered final, they were circulated to the full panel.

The proposed final achievement-level descriptions were brought before the Committee on Standards, Design, and Methodology of the Governing Board at their March meeting, where they were approved. The final descriptions are contained in Appendix K.

Appendix B:
Meeting Agenda



NAEP Reading Scale- Anchoring Meeting
January 11–14, 2010
Hyatt Regency Hotel
256 Peachtree Street NE
Atlanta, Georgia
(404) 577–1234

AGENDA

Monday, January 11

- 9:00 a.m.** Welcome and introductions *Patricia Donahue, ETS*
Overview of meeting goals *Susan Loomis, Governing Board*
Description of anchor item review
- 9:30** General training session
- 10:30** Grade-level groups: Begin item review and descriptors
- 12:00 p.m.** Lunch/break time *(on your own)*
- 1:00** Grade-level groups: Continue item review and descriptors/summaries
- 4:30** **Large Group Session** Debriefing
- 5:00 p.m.** Adjourn

Tuesday, January 12

- 8:30 a.m.** Grade-level groups: Continue item review and descriptors/summaries
- 12:00 p.m.** Lunch/break time *(on your own)*
- 1:00** Grade-level groups: Continue item review and descriptors/summaries
- 6:00 p.m.** Grade-level groups: Complete item descriptors and summaries for all anchored items
Adjourn

Wednesday, January 13

- 8:30 a.m.** Grade-level groups: Evaluate summaries in relation to Achievement-Level Policy Definitions
- 9:15** Grade-level groups: Evaluate summaries in relation to the 1992 Achievement-Level Descriptions
- 11:00** Grade-level groups: Evaluate summaries in relation to 2009 Preliminary Achievement-Level Descriptions
- 12:00 p.m.** Lunch/break time (*on your own*)
- 1:00** Grade-level groups: Continue evaluation of summaries in relation to the 2009 Preliminary Achievement-Level Descriptions
- 1:30** Grade-level groups: Draft Achievement-Level Descriptions
- 4:00** **Large Group Session** Review and discuss draft Achievement-Level Descriptions and share terminology
- 5:00 p.m.** Adjourn

Thursday, January 14

- 8:30 a.m.** Grade level groups: Finalize draft Achievement-Level Descriptions
- 10:45** **Large group session** Review draft Achievement-Level Descriptions for all grades. Compare skills across grades and refine draft descriptions.
- 11:45** Checkout and Lunch (*on your own*)
- 1:00 p.m.** **Large group session** Continue review of draft Achievement-Level Descriptions for all grades
- 3:30** **Large group session** Debriefing/Evaluation of Process
- 4:00 p.m.** Meeting Adjourns

Appendix D:
Summary Anchor Descriptions

Grade 4 Anchor Summaries	
<i>Basic</i>	
Literary	<p>Students reading literary text at a Basic achievement level in 4th grade demonstrate a range of behaviors that contribute to the construction of meaning and use of this meaning. When reading stories, readers can describe characters' actions and feelings, compare and contrast two different characters, and [provide an opinion about a character] evaluate characters based on their actions or behaviors. Readers are capable of making simple inferences about characters and events.</p> <p>Students can identify relevant information that supports an interpretation of the text. They can identify the specific sections or lines in simple poems that support a given interpretation.</p> <p>Students can determine the meanings of words as these words are encountered in the text.</p>
Informational	<p>Students reading text at a Basic achievement level in 4th grade demonstrate a range of behaviors that indicate their understanding of informational texts. Students can make inferences, identify the main purpose of an article, and can locate and provide relevant details.</p> <p>Students can find and describe evidence that supports a given claim and can also combine information across a single text. They can determine the meaning of a word as it is used in the text.</p>

Grade 4 Anchor Summaries	
<i>Proficient</i>	
Literary	<p>Students reading literary text at a Proficient achievement level in 4th grade demonstrate a range of behaviors that contribute to the construction of meaning and use of this meaning. Students can evaluate the primary importance of a character to the story and describe character's actions and how a character's feelings change over time. When reading challenging literary texts, students can locate and recognize relevant details.</p> <p>Students can determine the meaning of a word in text, as well as identify implicit main ideas in literary texts. These readers can recognize the contribution of part of a text to its theme. They can identify and provide information in support of a claim in a story. They can evaluate the manner in which an author presents information.</p> <p>Students can evaluate the tone of a poem and support such evaluation with examples from the poem.</p>
Informational	<p>Students reading at a Proficient achievement level in 4th grade demonstrate a range of behaviors that indicate their understanding of informational texts. They can read texts of varying difficulty, including those with complex structures.</p> <p>Students can locate, recognize, and provide relevant details, gathering and integrating information across texts. They can determine the meaning of a word as it is used in the text. They can provide information to support a claim, explain a simple cause-and-effect relationship, and make complex inferences. They can recognize the main problem or purpose of an expository text.</p> <p>Students can explain the purpose of text features, such as headings, text boxes, photographs, illustrations and their captions to support their understanding of a passage. They can provide an opinion that conveys a general understanding of parts of a text such as an introduction.</p>

Grade 4 Anchor Summaries	
<i>Advanced</i>	
Literary	<p>Students reading literary text at an Advanced achievement level in 4th grade demonstrate a range of behaviors that contribute to the understanding of more difficult text and using this understanding of stories.</p> <p>Students can identify the meaning of single words as the words are encountered in text. They can locate and recognize details in texts with difficult story structure.</p> <p>Students can make inferences about the challenges faced by a character and can support descriptions about character traits with information from the story. In addition, students can compare character feelings across a story and a poem. Students can evaluate how the author reveals characters' feelings. Students can identify a section of a story that reflects the story theme.</p>
Informational	<p>Students reading at an Advanced achievement level in 4th grade demonstrate a range of behaviors that indicate their understanding of informational texts. They can identify the meaning of a word as it is used in texts of increasing difficulty.</p> <p>Students can locate, recognize, and provide relevant details from difficult texts, at times from information contradictory to the rest of the article. Given an effect, they are able to locate information to explain a cause. They are able to infer motivation for a person's action and describe the connection between a person and a historical movement in a challenging article.</p> <p>Students can provide an opinion and support it with information from a challenging article. They are able to evaluate text features and provide an opinion with statements of general support about the appropriateness of such features.</p>

Grade 8 Anchor Summaries	
<i>Basic</i>	
Literary	<ul style="list-style-type: none"> • Describe a character trait or experience in difficult text • Compare character's feelings across different parts of the text • Identify, describe or make simple inferences about character's motivations, traits and experiences • Identify word meanings within the local context • Locate or recognize facts or details • Recognize main topic or theme • Recognize or state an opinion about author's craft or characters motivation with general or limited support
Informational	<ul style="list-style-type: none"> • Make a comparison between two texts with limited support (grade level) • Make a determination about author's use of evidence in simple informational text • Identify word meanings (simple/average text) • Locate/provide facts, details or general statements (simple/average text) • Provide opinion with general or limited support about the content or the presentation of that content in simple or average informational text • Recognize simple inferences in simple or average text

Grade 8 Anchor Summaries	
<i>Proficient</i>	
Literary	<ul style="list-style-type: none"> • Identify a word's meaning in difficult text. • Infer and support character feelings in difficult text. • Make and support a connection about characters between two parts of text. • Recognize a character's actions in a difficult literary text or poem. • State and support an opinion in difficult or multiple texts about character motivation. • Identify how figurative language is used in a poem. • Interpret excerpts in difficult texts.
Informational	<ul style="list-style-type: none"> • Locate or provide fact or detail in an informational text. • Identify a word meaning within a global context. • Recognize and state main purpose in simple or average text. • State and support an opinion about author's argument or stance • Make an inference about a given concept, excerpt or text.

Grade 8 Anchor Summaries	
<i>Advanced</i>	
Literary	<ul style="list-style-type: none"> • Make complex inferences about characters' feelings or experiences in difficult or multiple texts. • Describe events and explain their effects in a poem or text. • Make connections between a character in a story and the theme of a poem.
Informational	<ul style="list-style-type: none"> • State and justify an opinion about author's use of evidence, choices about content, and text features within and across texts. • Infer and explain a connection between a detail and the main idea or topic of a text.

Grade 12 Anchor Summaries	
<i>Basic</i>	
Literary	<p>Students reading literary text at a Basic achievement level in 12th grade demonstrate a range of skills in constructing meaning.</p> <p>They can provide a text-based description of a character's feelings, thoughts, and actions in a story.</p> <p>They can describe a story even or central conflict.</p> <p>They can generalize about a character's perspective in a story.</p> <p>They can recognize a description of the plot.</p> <p>They can use examples to illustrate how an author develops an element in the story, for example, setting, for a specific effect.</p> <p>They can identify explicitly stated information in a literary nonfiction text.</p> <p>They can provide partial interpretation of figurative language.</p> <p>They can recognize the meaning of a word as used in the context of a literary text.</p>
Informational	<p>Students reading informational text at a <i>Basic</i> achievement level in 12th grade demonstrate a range of skills in constructing meaning.</p> <p>They can locate and provide information stated directly in a text.</p> <p>They can generalize about information in a persuasive text.</p> <p>They can interpret and provide a main point of a paragraph in a persuasive essay.</p> <p>They can recognize a generalization about the author's purpose in including information in a speech or informational text.</p> <p>They can integrate information to recognize author's main point of the argument.</p> <p>They can form an unsubstantiated opinion about the effectiveness of contrasting arguments in two paired texts.</p> <p>They can interpret a literary device to form an opinion about the effectiveness of the author's support for an argument.</p> <p>They can identify the organization of an article</p> <p>They can recognize an inference about a major idea in an article.</p> <p>They can recognize a generalization of the author's purpose for including information in a speech or informational text.</p> <p>They can provide a generalization about supporting details in expository text.</p> <p>They can distinguish and provide the main point of two paired texts.</p> <p>They can provide an opinion about a comparison within the text.</p>

	<p>They can interpret a literary device to form an opinion about the effectiveness of the author's support for an argument.</p> <p>They can provide information about how a document is organized. They can infer and partially explain why specific information, including supporting idea, is provided in a document.</p> <p>They can explain why information in one of two paired documents is important.</p> <p>They can form an opinion about the effectiveness of a document in achieving its purpose.</p> <p>They can recognize the meaning of a word as used in the context of a passage.</p>
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Grade 12 Anchor Summaries	
<i>Proficient</i>	
Literary	<p>Students reading literary text at the <i>Proficient</i> achievement level in 12th grade demonstrate a range of skills in constructing meaning.</p> <p>They can comprehend many aspects of stories, especially with characterization.</p> <p>They can integrate information from an entire story to provide descriptions or explanations of character motivation, actions, thoughts or feelings.</p> <p>They can connect an event or character's feeling to a larger theme of the story and can make and compare generalizations about different characters' perspectives.</p> <p>In addition to understanding characterization, they can evaluate stories to provide a generalization about a setting, integrate details from a story to make text-based generalizations, and provide a statement of the theme of a story (although they can't always support the statement).</p> <p>They understand various elements of author's craft. They can synthesize information to recognize generalizations about author's craft.</p> <p>They can evaluate stories to form an opinion about the effectiveness of the author's craft in establishing mood.</p> <p>They can recognize simple inferences about major ideas, ideas, or generalizations about sections of literary nonfiction text.</p> <p>They can locate and integrate details of a poem to recognize a description.</p> <p>They can synthesize details of a poem to provide a theme.</p>

	<p>Students at this level demonstrate some ability to work with paired texts [fiction/poetry] by analyzing and comparing characters to make inferences and judgments about common characteristics; however, they are not able to integrate information across both texts to support their understanding.</p>
Informational	<p>Students reading informational text at a <i>Proficient</i> achievement level in 12th grade demonstrate a range of skills in constructing meaning.</p> <p><i>With Exposition, they can</i></p> <ul style="list-style-type: none"> -recognize paraphrase of information/statement -provide main idea with support -interpret text to provide explanation or generalization for portion of text -evaluate text to form opinion about a claim about author's perspective, relative strengths of claims (incomplete), effectiveness of author's perspective or effectiveness of comparison <p><i>With Persuasive/Argument,</i></p> <p>They can recognize a supporting detail in an argument.</p> <p>They can recognize a generalization about main idea of paragraph.</p> <p>Integrate info to recognize generalization about supporting idea.</p> <p>They can interpret challenging text (e.g., a speech) to explain main idea.</p> <p>They can interpret the meaning of paragraph in the context of a challenging text to understand some of the author's intent (with partial explanation).</p> <p>They can evaluate information to form an opinion with general reference to the text.</p> <p>They can evaluate contrasting arguments in two texts to provide an explanation for an opinion about the effectiveness of those arguments (with partial justification).</p> <p><i>With Document,</i></p> <p>They can locate and provide explicitly stated information from a document.</p> <p>They can locate and provide relevant information from a section of document text to support generalization.</p> <p>They can recognize explicitly stated information in a document.</p> <p>They can provide complete information about textually explicit details.</p> <p><i>Author's craft</i></p> <p>They can paraphrase and elaborate on meaning of figurative language.</p> <p>They can analyze text to recognize description about how author presents ideas.</p> <p>They can interpret a literary device and evaluate text to form opinion about the effectiveness of author's support for argument with evidence.</p>

	<p>They can evaluate text to provide an example of a persuasive strategy.</p> <p><i>Vocab—7 items across all types of informational texts</i></p>
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Grade 12 Anchor Summaries	
<i>Advanced</i>	
Literary	<p>Students reading literary text at the <i>Advanced</i> achievement level in 12th grade demonstrate a range of skills in constructing meaning.</p> <p>They can substantiate and support generalizations, opinions about story elements, and conclusions with specific reference to elements of the text.</p> <p>They can synthesize details of literary texts to determine and provide a theme.</p> <p>They can identify and explain character development.</p> <p>They can use complex text structures and literary devices to facilitate comprehension.</p>
Informational	<p>Students reading informational text at a <i>Advanced</i> achievement level in 12th grade demonstrate a range of skills in constructing meaning.</p> <p>They can use evidence from the text to validate conclusions or implications.</p> <p>They can recognize and identify generalizations across texts.</p> <p>They can recognize a paraphrase of explicit information in a historical text.</p> <p>They can identify information required in a document.</p> <p>They can integrate information within and between documents and texts.</p> <p>They can determine the effectiveness of organization of a document.</p> <p>They can form an opinion about effectiveness of an argument.</p> <p>They can paraphrase and elaborate meaning of figurative language.</p> <p>They can generalize a text-based inference .</p>

Appendix E:
Panelist Rating Forms

Panelist #: _____

**2010 NAEP Reading Scale Anchoring Meeting
Panelist Rating Form**

Policy-Level Definitions
Round 1

Please indicate below your rating for each achievement level in regard to the following statement.

*The degree of alignment between the content of the 2010 summary anchor descriptions and the **Policy-Level Definitions** is:*

Weak
1

Moderate
2

Strong
3

Achievement Level		
Basic	Proficient	Advanced

Comments:

Panelist #: _____

**2010 NAEP Reading Scale Anchoring Meeting
Panelist Rating Form**

Policy-Level Definitions
Round 2

Please indicate below your rating for each achievement level in regard to the following statement.

*The degree of alignment between the content of the 2010 summary anchor descriptions and the **Policy-Level Definitions** is:*

Weak
1

Moderate
2

Strong
3

Achievement Level		
Basic	Proficient	Advanced

Comments:

Panelist #: _____

**2010 NAEP Reading Scale Anchoring Meeting
Panelist Rating Form**

1992 Achievement-Level Descriptions
Round 1

Please indicate below your rating for each achievement level in regard to the following statement.

*The degree of alignment between the content of the 2010 summary anchor descriptions and the **1992 Achievement-Level Descriptions** is:*

Weak
1

Moderate
2

Strong
3

Achievement Level		
Basic	Proficient	Advanced

Comments:

Panelist #: _____

**2010 NAEP Reading Scale Anchoring Meeting
Panelist Rating Form**

1992 Achievement-Level Descriptions
Round 2

Please indicate below your rating for each achievement level in regard to the following statement.

*The degree of alignment between the content of the 2010 summary anchor descriptions and the **1992 Achievement-Level Descriptions** is:*

Weak
1

Moderate
2

Strong
3

Achievement Level		
Basic	Proficient	Advanced

Comments:

Panelist #: _____

**2010 NAEP Reading Scale Anchoring Meeting
Panelist Rating Form**

***2009 Preliminary Achievement-Level Descriptions
Round 1***

Please indicate below your rating for each achievement level in regard to the following statement.

*The degree of alignment between the content of the 2010 summary anchor descriptions and the **2009 Preliminary Achievement-Level Descriptions** is:*

Weak
1

Moderate
2

Strong
3

Achievement Level		
Basic	Proficient	Advanced

Comments:

Panelist #: _____

**2010 NAEP Reading Scale Anchoring Meeting
Panelist Rating Form**

***2009 Preliminary Achievement-Level Descriptions
Round 2***

Please indicate below your rating for each achievement level in regard to the following statement.

*The degree of alignment between the content of the 2010 summary anchor descriptions and the **2009 Preliminary Achievement-Level Descriptions** is:*

Weak
1

Moderate
2

Strong
3

Achievement Level		
Basic	Proficient	Advanced

Comments:

Appendix F:
NAEP Policy-Level Definitions

NAEP Policy-Level Definitions

Achievement Level	Policy Definition
<i>Advanced</i>	This level signifies superior performance.
<i>Proficient</i>	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 <i>Proficient</i> work at each grade.

Appendix G:
NAEP Reading
1992 Achievement Level Descriptions

1992 NAEP Reading Achievement Levels: Grade 4

Reading Achievement Level	Description
<i>Advanced</i>	<p>Fourth-grade students performing at the <i>Advanced</i> level should be able to generalize about topics in the reading selection and demonstrate an awareness of how authors compose and use literary devices. When reading text appropriate to fourth grade, they should be able to judge texts critically and, in general, give thorough answers that indicate careful thought.</p> <p>For example, when reading literary text, <i>Advanced</i>-level students should be able to make generalizations about the point of the story and extend its meaning by integrating personal experiences and other readings with ideas suggested by the text. They should be able to identify literary devices such as figurative language.</p> <p>When reading informational text, <i>Advanced</i>-level fourth graders should be able to explain the author's intent by using supporting material from the text. They should be able to make critical judgments of the form and content of the text and explain their judgments clearly.</p>
<i>Proficient</i>	<p>Fourth-grade students performing at the <i>Proficient</i> level should be able to demonstrate an overall understanding of the text, providing inferential as well as literal information. When reading text appropriate to fourth grade, they should be able to extend the ideas in the text by making inferences, drawing conclusions, and making connections to their own experiences. The connections between the text and what the student infers should be clear.</p> <p>For example, when reading literary text, <i>Proficient</i>-level fourth graders should be able to summarize the story, draw conclusions about the characters or plot, and recognize relationships such as cause and effect.</p> <p>When reading informational text, <i>Proficient</i>-level students should be able to summarize the information and identify the author's intent or purpose. They should be able to draw reasonable conclusions from the text, recognize relationships such as cause and effect or similarities and differences, and identify the meaning of the selection's key concepts.</p>
<i>Basic</i>	<p>Fourth-grade students performing at the <i>Basic</i> level should demonstrate an understanding of the overall meaning of what they read. When reading text appropriate for fourth graders, they should be able to make relatively obvious connections between the text and their own experiences and extend the ideas in the text by making simple inferences.</p> <p>For example, when reading literary text, they should be able to tell what the story is generally about—providing details to support their understanding—and be able to connect aspects of the stories to their own experiences.</p> <p>When reading informational text, <i>Basic</i>-level fourth graders should be able to tell what the selection is generally about or identify the purpose for reading it, provide details to support their understanding, and connect ideas from the text to their background knowledge and experiences.</p>

1992 NAEP Reading Achievement Levels: Grade 8

Reading Achievement Level	Description
<i>Advanced</i>	<p>Eighth-grade students performing at the <i>Advanced</i> level should be able to describe the more abstract themes and ideas of the overall text. When reading text appropriate to eighth grade, they should be able to analyze both meaning and form and support their analyses explicitly with examples from the text, and they should be able to extend text information by relating it to their experiences and to world events. At this level, student responses should be thorough, thoughtful, and extensive.</p> <p>For example, when reading literary text, <i>Advanced</i>-level eighth graders should be able to make complex, abstract summaries and theme statements. They should be able to describe the interactions of various literary elements (e.g., setting, plot, characters, and theme) and explain how the use of literary devices affects both the meaning of the text and their response to the author's style. They should be able to critically analyze and evaluate the composition of the text.</p> <p>When reading informational text, they should be able to analyze the author's purpose and point of view. They should be able to use cultural and historical background information to develop perspectives on the text and be able to apply text information to broad issues and world situations.</p> <p>When reading practical text, <i>Advanced</i>-level students should be able to synthesize information that will guide their performance, apply text information to new situations, and critique the usefulness of the form and content.</p>
<i>Proficient</i>	<p>Eighth-grade students performing at the <i>Proficient</i> level should be able to show an overall understanding of the text, including inferential as well as literal information. When reading text appropriate to eighth grade, they should be able to extend the ideas in the text by making clear inferences from it, by drawing conclusions, and by making connections to their own experiences—including other reading experiences. Proficient eighth graders should be able to identify some of the devices authors use in composing text.</p> <p>For example, when reading literary text, students at the <i>Proficient</i> level should be able to give details and examples to support themes that they identify. They should be able to use implied as well as explicit information in articulating themes; to interpret the actions, behaviors, and motives of characters; and to identify the use of literary devices such as personification and foreshadowing.</p> <p>When reading informational text, they should be able to summarize the text using explicit and implied information and support conclusions with inferences based on the text.</p> <p>When reading practical text, <i>Proficient</i>-level students should be able to describe its purpose and support their views with examples and details. They should be able to judge the importance of certain steps and procedures.</p>

1992 NAEP Reading Achievement Levels: Grade 8 (continued)

Reading Achievement Level	Description
<i>Basic</i>	<p>Eighth-grade students performing at the <i>Basic</i> level should demonstrate a literal understanding of what they read and be able to make some interpretations. When reading text appropriate to eighth grade, they should be able to identify specific aspects of the text that reflect the overall meaning, extend the ideas in the text by making simple inferences, recognize and relate interpretations and connections among ideas in the text to personal experience, and draw conclusions based on the text.</p> <p>For example, when reading literary text, <i>Basic</i>-level eighth graders should be able to identify themes and make inferences and logical predictions about aspects such as plot and characters.</p> <p>When reading informational text, they should be able to identify the main idea and the author's purpose. They should make inferences and draw conclusions supported by information in the text. They should recognize the relationships among the facts, ideas, events, and concepts of the text (e.g., cause and effect, order).</p> <p>When reading practical text, they should be able to identify the main purpose and make predictions about the relatively obvious outcomes of procedures in the text.</p>

1992 NAEP Reading Achievement Levels: Grade 12

Reading Achievement Level	Description
<i>Advanced</i>	<p>Twelfth-grade students performing at the <i>Advanced</i> level should be able to describe more abstract themes and ideas in the overall text. When reading text appropriate to twelfth grade, they should be able to analyze both the meaning and the form of the text and explicitly support their analyses with specific examples from the text. They should be able to extend the information from the text by relating it to their experiences and to the world. Their responses should be thorough, thoughtful, and extensive.</p> <p>For example, when reading literary text, <i>Advanced</i>-level twelfth graders should be able to produce complex, abstract summaries and theme statements. They should be able to use cultural, historical, and personal information to develop and explain text perspectives and conclusions. They should be able to evaluate the text, applying knowledge gained from other texts.</p> <p>When reading informational text, they should be able to analyze, synthesize, and evaluate points of view. They should be able to identify the relationship between the author's stance and elements of the text. They should be able to apply text information to new situations and to the process of forming new responses to problems or issues.</p> <p>When reading practical text, <i>Advanced</i>-level twelfth graders should be able to make critical evaluation of the usefulness of the text and apply directions from the text to new situations.</p>
<i>Proficient</i>	<p>Twelfth-grade students performing at the <i>Proficient</i> level should be able to show an overall understanding of the text, which includes inferential as well as literal information. When reading text appropriate to twelfth grade, they should be able to extend the ideas of the text by making inferences, drawing conclusions, and making connections to their own personal experiences and other readings. Connections between inferences and the text should be clear, even when implicit. These students should be able to analyze the author's use of literary devices.</p> <p>When reading literary text, <i>Proficient</i>-level twelfth graders should be able to integrate their personal experiences with ideas in the text to draw and support conclusions. They should be able to explain the author's use of literary devices such as irony and symbolism.</p> <p>When reading informative text, they should be able to apply text information appropriately to specific situations and integrate their background information with ideas in the text to draw and support conclusions.</p> <p>When reading practical text, they should be able to apply information or directions appropriately. They should be able to use personal experiences to evaluate the usefulness of text information.</p>

1992 NAEP Reading Achievement Levels: Grade 12 (continued)

<i>Basic</i>	<p>Fourth-grade students performing at the <i>Basic</i> level should demonstrate an understanding of the overall meaning of what they read. When reading text appropriate for fourth graders, they should be able to make relatively obvious connections between the text and their own experiences and extend the ideas in the text by making simple inferences.</p> <p>For example, when reading literary text, they should be able to tell what the story is generally about—providing details to support their understanding—and be able to connect aspects of the stories to their own experiences.</p> <p>When reading informational text, <i>Basic</i>-level fourth graders should be able to tell what the selection is generally about or identify the purpose for reading it, provide details to support their understanding, and connect ideas from the text to their background knowledge and experiences.</p> <p>When reading practical text, they should be able to apply information or directions appropriately. They should be able to use personal experiences to evaluate the usefulness of text information.</p>
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Appendix H:
NAEP Reading
2009 Preliminary Achievement Level Descriptions

Achievement Level	Literary	Informational
Grade 4		
Advanced	<p>Grade 4 students at the <i>Advanced</i> level should be able to:</p> <ul style="list-style-type: none"> • Interpret figurative language. • Make complex inferences. • Identify point of view. • Evaluate character motivation. • Describe thematic connections across literary texts. 	<p>Grade 4 students at the <i>Advanced</i> level should be able to:</p> <ul style="list-style-type: none"> • Make complex inferences. • Evaluate the coherence of a text. • Explain author's point of view. • Compare ideas across texts.
Proficient	<p>Grade 4 students at the <i>Proficient</i> level should be able to:</p> <ul style="list-style-type: none"> • Infer character motivation. • Interpret mood or tone. • Explain theme. • Identify similarities across texts. • Identify elements of author's craft. 	<p>Grade 4 students at the <i>Proficient</i> level should be able to:</p> <ul style="list-style-type: none"> • Identify author's implicitly stated purpose. • Summarize major ideas. • Find evidence in support of an argument. • Distinguish between fact and opinion. • Draw conclusions.
Basic	<p>Grade 4 students at the <i>Basic</i> level should be able to:</p> <ul style="list-style-type: none"> • Locate textually explicit information, such as plot, setting, and character. • Make simple inferences. • Identify supporting details. • Describe character's motivation. • Describe the problem. • Identify mood. 	<p>Grade 4 students at the <i>Basic</i> level should be able to:</p> <ul style="list-style-type: none"> • Find the topic sentence or main idea. • Identify supporting details. • Identify author's explicitly stated purpose. • Make simple inferences.

Grade 8		
Advanced	<p>Grade 8 students at the <i>Advanced</i> level should be able to:</p> <ul style="list-style-type: none"> • Make complex inferences. • Critique point of view. • Evaluate character motivation. • Describe thematic connections across literary texts. • Evaluate how an author uses literary devices to convey meaning. 	<p>Grade 8 students at the <i>Advanced</i> level should be able to:</p> <ul style="list-style-type: none"> • Make complex inferences. • Evaluate author's purpose. • Evaluate strength and quality of supporting evidence. • Compare and contrast ideas across texts. • Critique causal relations.
Proficient	<p>Grade 8 students at the <i>Proficient</i> level should be able to:</p> <ul style="list-style-type: none"> • Make inferences that describe problem and solution, cause and effect. • Analyze character motivation. • Interpret mood or tone. • Explain theme. • Identify similarities and differences across texts. • Analyze how an author uses literary devices to convey meaning. • Interpret figurative language. 	<p>Grade 8 students at the <i>Proficient</i> level should be able to:</p> <ul style="list-style-type: none"> • Summarize major ideas. • Draw conclusions. • Provide evidence in support of an argument. • Describe author's purpose. • Analyze and interpret implicit causal relations.
Basic	<p>Grade 8 students at the <i>Basic</i> level should be able to:</p> <ul style="list-style-type: none"> • Interpret textually explicit information. • Make inferences. • Identify supporting details. • Identify character's motivation. • Describe the problem. • Identify mood. 	<p>Grade 8 students at the <i>Basic</i> level should be able to:</p> <ul style="list-style-type: none"> • Locate the main idea. • Distinguish between fact and opinion. • Make inferences. • Identify author's explicitly stated purpose. • Recognize explicit causal relations.

Grade 12		
Advanced	<p>Grade 12 students at the <i>Advanced</i> level should be able to:</p> <ul style="list-style-type: none"> • Make complex inferences. • Critique point of view. • Evaluate character motivation. • Explain thematic connections across literary texts. • Analyze and evaluate how an author uses literary devices to convey meaning. 	<p>Grade 12 students at the <i>Advanced</i> level should be able to:</p> <ul style="list-style-type: none"> • Evaluate the quality of supporting evidence. • Critique point of view. • Analyze causal relations. • Critique the presentation of information. • Evaluate the quality of counterarguments within and across texts.
Proficient	<p>Grade 12 students at the <i>Proficient</i> level should be able to:</p> <ul style="list-style-type: none"> • Examine relations between theme, setting, or character. • Make inferences that describe problem and solution, cause and effect. • Analyze character motivation. • Interpret mood or tone. • Integrate ideas to determine theme. • Analyze how an author uses literary devices to convey meaning. 	<p>Grade 12 students at the <i>Proficient</i> level should be able to:</p> <ul style="list-style-type: none"> • Find evidence in support of an argument. • Integrate information from a variety of sources. • Determine unstated assumptions. • Analyze point of view. • Judge the logic, coherence, or credibility of an argument.
Basic	<p>Grade 12 students at the <i>Basic</i> level should be able to:</p> <ul style="list-style-type: none"> • Interpret textually explicit information. • Make inferences. • Describe character's motivation. • Recognize alternative interpretations or point of view. • Explain the theme. • Explain how the message is affected by the genre. • Identify elements of an author's style. 	<p>Grade 12 students at the <i>Basic</i> level should be able to:</p> <ul style="list-style-type: none"> • Summarize the main idea. • Identify key details. • Identify author's purpose. • Identify causal relations. • Draw conclusions.

Appendix I:
Panelist Evaluation Form

Grade Group: _____

NAEP 2010 Reading Scale Anchoring/Achievement Level Meeting

Panelist Feedback Form

Your anonymous answers to the questions below will be used to evaluate the scale anchoring process. Thank you for completing this feedback form.

1. How satisfied are you with the item-level descriptors written at this meeting?
 - a. Very Satisfied
 - b. Satisfied
 - c. Neutral
 - d. Dissatisfied
 - e. Very Dissatisfied

2. How satisfied are you with the descriptor-based summaries for the achievement levels written at this meeting?
 - a. Very Satisfied
 - b. Satisfied
 - c. Neutral
 - d. Dissatisfied
 - e. Very Dissatisfied

3. How satisfied are you with the achievement level definitions drafted at this meeting?
 - a. Very Satisfied
 - b. Satisfied
 - c. Neutral
 - d. Dissatisfied
 - e. Very Dissatisfied

(over)

4. Please provide any comments you may have on the scale anchoring process.

Appendix J:

Feedback Requested on Achievement-Level Descriptions on National Assessment Governing Board Web Site

General Instructions

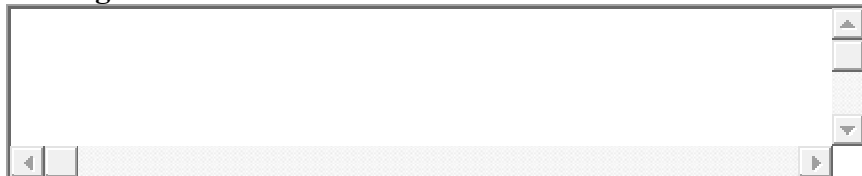
Your voluntary response to the following questions will help us to finalize the achievement levels descriptions for reporting the results of the 2009 and subsequent administrations of the National Assessment of Educational Progress (NAEP) for reading. Please provide comments to each question below. Your recommendations for ways to clarify or improve the achievement levels descriptions are especially appreciated. When finished, select the 'Submit' button to send in your comments.

Please take a few minutes first to review Chapter 2, pages 15-41, of the Reading Framework for the 2009 National Assessment of Educational Progress (PDF).

1. How well do the reading ALDs for each grade and level represent the policy definitions overall? You may want to address each grade level separately.



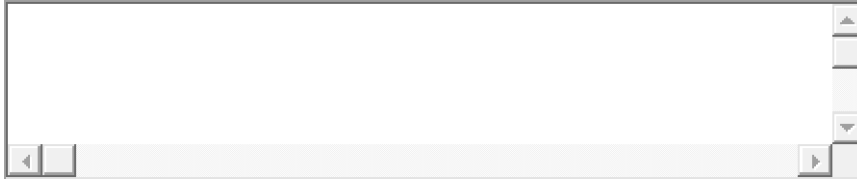
2. Does the progression within each grade from Basic to Proficient to Advanced in the reading skills that students should demonstrate seem reasonable?



3. Does the progression across the three grade levels of reading skills required for performance within each achievement level (Basic/Proficient/Advanced) seem reasonable?



4. The framework specifies the relative emphasis of cognitive targets for each grade level, and those are given in the chart below. Do the achievement levels descriptions appropriately represent the cognitive targets for each grade?



Grade	% Locate/Recall Items	%Integrate/Interpret Items	% Critique/Evaluate Items
4th	30	50	20
8th	20	50	30
12th	20	45	35

5. Finally, are the achievement definitions useful, i.e., do they convey an understanding of what students should be able to do in reading at the different grade levels?



6. Which best describes your role in relation to the Reading NAEP?

- ☐ State reading/language arts curriculum director
- ☐ Other state-level officer
- ☐ District reading/language arts curriculum director
- ☐ Other district-level officer
- ☐ Member of NAEP Reading Framework development group
- ☐ Member of NAEP Reading item development group
- ☐ Member of national reading/language arts organization
- ☐ Other reading/language arts professional
- ☐ Interested citizen

7. Email

Appendix K:
Final NAEP Reading 2009 Achievement Level Definitions

Final NAEP 2009 Reading Achievement Level Definitions

NAEP reading achievement-level descriptions present expectations of student performance in relation to a range of text types and text difficulty and in response to a variety of assessment questions intended to elicit different cognitive processes and reading behaviors. The specific processes and reading behaviors mentioned in the achievement-level descriptions are illustrative of those judged as central to students' successful comprehension of texts. These processes and reading behaviors involve different and increasing cognitive demands from one grade and performance level to the next as they are applied within more challenging contexts and with more complex information. While similar reading behaviors are included at the different performance levels and grades, it should be understood that these skills are being described in relation to texts and assessment questions of varying difficulty.

Grade 4

Basic

Fourth-grade students performing at the Basic level should be able to locate relevant information, make simple inferences, and use their understanding of the text to identify details that support a given interpretation or conclusion. Students should be able to interpret the meaning of a word as it is used in the text.

When reading literary texts such as fiction, poetry, and literary nonfiction, fourth-grade students performing at the *Basic* level should be able to make simple inferences about characters, events, plot, and setting. They should be able to identify a problem in a story and relevant information that supports an interpretation of a text.

When reading informational texts such as articles and excerpts from books, fourth-grade students performing at the *Basic* level should be able to identify the main purpose and an explicitly stated main idea, as well as gather information from various parts of a text to provide supporting information.

Proficient

Fourth-grade students performing at the Proficient level should be able to integrate and interpret texts and apply their understanding of the text to draw conclusions and make evaluations.

When reading literary texts such as fiction, poetry, and literary nonfiction, fourth-grade students performing at the *Proficient* level should be able to identify implicit main ideas and recognize relevant information that supports them. Students should be able to judge elements of an author's craft and provide some support for their judgment. They should be able to analyze character roles, actions, feelings, and motivations.

When reading informational texts such as articles and excerpts from books, fourth-grade students performing at the *Proficient* level should be able to locate relevant

information, integrate information across texts, and evaluate the way an author presents information. Student performance at this level should demonstrate an understanding of the purpose for text features and an ability to integrate information from headings, text boxes, and graphics and their captions. They should be able to explain a simple cause-and-effect relationship and draw conclusions.

Advanced

Fourth-grade students performing at the *Advanced* level should be able to make complex inferences and construct and support their inferential understanding of the text. Students should be able to apply their understanding of a text to make and support a judgment.

When reading literary texts such as fiction, poetry, and literary nonfiction, fourth-grade students performing at the *Advanced* level should be able to identify the theme in stories and poems and make complex inferences about characters' traits, feelings, motivations, and actions. They should be able to recognize characters' perspectives and evaluate characters' motivations. Students should be able to interpret characteristics of poems and evaluate aspects of text organization.

When reading informational texts such as articles and excerpts from books, fourth-grade students performing at the *Advanced* level should be able to make complex inferences about main ideas and supporting ideas. They should be able to express a judgment about the text and about text features and support the judgments with evidence. They should be able to identify the most likely cause given an effect, explain an author's point of view, and compare ideas across two texts.

Grade 8

Basic

Eighth-grade students performing at the *Basic* level should be able to locate information; identify statements of main idea, theme, or author's purpose; and make simple inferences from texts. They should be able to interpret the meaning of a word as it is used in the text. Students performing at this level should also be able to state judgments and give some support about content and presentation of content.

When reading literary texts such as fiction, poetry, and literary nonfiction, eighth-grade students performing at the *Basic* level should recognize major themes and be able to identify, describe, and make simple inferences about setting and about character motivations, traits, and experiences. They should be able to state and provide some support for judgments about the way an author presents content and about character motivation.

When reading informational texts such as exposition and argumentation, eighth-grade students performing at the *Basic* level should be able to recognize inferences based on main ideas and supporting details. They should be able to locate and provide relevant

facts to construct general statements about information from the text. Students should be able to provide some support for judgments about the way information is presented.

Proficient

Eighth-grade students performing at the Proficient level should be able to provide relevant information and summarize main ideas and themes. They should be able to make and support inferences about a text, connect parts of a text, and analyze text features. Students performing at this level should also be able to fully substantiate judgments about content and presentation of content.

When reading literary texts such as fiction, poetry, and literary nonfiction, eighth-grade students performing at the *Proficient* level should be able to make and support a connection between characters from two parts of a text. They should be able to recognize character actions and infer and support character feelings. Students performing at this level should be able to provide and support judgments about characters' motivations across texts. They should be able to identify how figurative language is used.

When reading informational texts such as exposition and argumentation, eighth-grade students performing at the *Proficient* level should be able to locate and provide facts and relevant information that support a main idea or purpose, interpret causal relations, provide and support a judgment about the author's argument or stance, and recognize rhetorical devices.

Advanced

Eighth-grade students performing at the Advanced level should be able to make connections within and across texts and to explain causal relations. They should be able to evaluate and justify the strength of supporting evidence and the quality of an author's presentation. Students performing at the Advanced level also should be able to manage the processing demands of analysis and evaluation by stating, explaining, and justifying.

When reading literary texts such as fiction, literary nonfiction, and poetry, eighth-grade students performing at the *Advanced* level should be able to explain the effects of narrative events. Within or across texts, they should be able to make thematic connections and make inferences about characters' feelings, motivations, and experiences.

When reading informational texts such as exposition and argumentation, eighth-grade students performing at the *Advanced* level should be able to infer and explain a variety of connections that are intratextual (such as the relation between specific information and the main idea) or intertextual (such as the relation of ideas across expository and argument texts). Within and across texts, students should be able to state and justify judgments about text features, choice of content, and the author's use of evidence and rhetorical devices.

Grade 12

Basic

Twelfth-grade students performing at the *Basic* level should be able to identify elements of meaning and form and relate them to the overall meaning of the text. They should be able to make inferences, develop interpretations, make connections between texts, and draw conclusions; and they should be able to provide some support for each. They should be able to interpret the meaning of a word as it is used in the text.

When reading literary texts such as fiction, literary nonfiction, and poetry, twelfth-grade students performing at the Basic level should be able to describe essential literary elements such as character, narration, setting, and theme; provide examples to illustrate how an author uses a story element for a specific effect; and provide interpretations of figurative language.

When reading informational texts such as exposition, argumentation, and documents, twelfth-grade students performing at the Basic level should be able to identify the organization of a text, make connections between ideas in two different texts, locate relevant information in a document, and provide some explanation for why the information is included.

Proficient

Twelfth-grade students performing at the *Proficient* level should be able to locate and integrate information using sophisticated analyses of the meaning and form of the text. These students should be able to provide specific text support for inferences, interpretative statements, and comparisons within and across texts.

When reading literary texts such as fiction, literary nonfiction, and poetry, twelfth-grade students performing at the Proficient level should be able to explain a theme and integrate information from across a text to describe or explain character motivations, actions, thoughts, or feelings. They should be able to provide a description of settings, events, or character and connect the description to the larger theme of a text. Students performing at this level should be able to make and compare generalizations about different characters' perspectives within and across texts.

When reading informational texts including exposition, argumentation, and documents, twelfth-grade students performing at the Proficient level should be able to integrate and interpret texts to provide main ideas with general support from the text. They should be able to evaluate texts by forming judgments about an author's perspective, about the relative strength of claims, and about the effectiveness of organizational elements or structures. Students performing at this level should be able to understand an author's intent and evaluate the effectiveness of arguments within and across texts. They should also be able to comprehend detailed documents to locate relevant information needed for specified purposes.

Advanced

Twelfth-grade students performing at the *Advanced* level should be able to analyze both the meaning and the form of the text and provide complete, explicit, and precise text support for their analyses with specific examples. They should be able to read across multiple texts for a variety of purposes, analyzing and evaluating them individually and as a set.

When reading literary texts such as fiction, poetry, and literary nonfiction, twelfth-grade students performing at the Advanced level should be able to analyze and evaluate how an author uses literary devices, such as sarcasm or irony, to enhance and convey meaning. They should be able to determine themes and explain thematic connections across texts.

When reading informational texts, twelfth-grade students performing at the Advanced level should be able to recognize, use, and evaluate expository and argument text structures and the organization of documents. They should be able to critique and evaluate arguments and counterarguments within and between texts, and substantiate analyses with full and precise evidence from the text. They should be able to identify and integrate essential information within and across documents.