

READING PREPAREDNESS FOR COLLEGE AND TECHNICAL PROFESSIONS

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I. Development of the 2009 Reading Framework

The 2009 Reading Framework for the National Assessment of Educational Progress (NAEP) was developed on the normal schedule to take into account the accumulated research base since the development of the 1992 Reading Framework. Work on the Reading Framework was begun in 2003, with the intent of implementing it in 2007. It was actually deployed with the 2009 administration. The two-year delay was a result of delaying implementation until sufficient data points had accumulated to assess the impacts of NCLB.

The charge to the Framework Committee was that the Framework did not have to be concerned with maintaining the trend line from past assessments, although this was later changed. In addition the Committee was charged with making NAEP consistent with No Child Left Behind and to consider better alignment with international assessments like PISA and PIRLS (Salinger, Kamil, Kapinus, & Afflerbach, 2005).

It is important to understand the definition of reading used by NAEP. The Framework defines reading in the following manner: Reading is an active and complex process that involves understanding written text; developing and interpreting meaning; using meaning as appropriate to type of text, purpose, and situation.

Some of the major changes from the 1992 framework included a different taxonomy of text. The taxonomy is divided into two major categories, literary and information text. The literary category encompasses stories, literary nonfiction (such as narrative essays, speeches, and autobiographies or biographies), and poetry. Information text includes expository text, argumentation and persuasive text, and procedural text and documents.

The Framework was designed to reflect texts that students encounter (but not textbooks or multimedia/electronic text). The distribution of text types at twelfth grade is 30% literary and 70% information (National Association Governing Board, 2008).

The Framework introduced a new taxonomy of cognitive targets that include ability to locate and recall information, integrating and interpreting information, and critiquing and evaluating information. These skills are further subdivided. This will be illustrated in the next section.

II. Grade 12 reading preparedness research: preliminary work.

The goal of this work was to have instructors in various professional programs determine the reading skills and abilities their students would need for entry in a beginning course. As a preliminary step to familiarize panelists the framework document was used to create a linear list of skills that were required in the framework. This list was intended to be a reference document for later use by panelists.

A webinar was offered to all panelists on the introduction to the framework and its component skills for reading. The webinar was intended to be an introduction rather than a complete explication of all of the nuances of the Framework. Content of the webinar focused on the NAEP reading skills at Grade 12. In the presentation, the major elements of the Framework were highlighted and briefly explained. A version of the webinar presentation was also used as part of the initial orientation with Panelists. Panelists were also provided with full copies of the Framework document itself for more complete reference. Panelists included instructors from five occupational programs preparing students for careers in Licensed Practical Nursing (LPN), Heating, Ventilation, and Air Conditioning, Pharmacy, Computer Support, and Automotive Technicians. In addition, instructors in beginning college courses were recruited as a panel.

In order to determine more precisely what sorts of reading were required for their instructional programs, each panelist was asked to submit a sample text and representative task that required reading. They were also asked to complete a checklist that listed all of the 12th grade NAEP reading skills. As an example, the summary for LPNs—one of the occupational area panels—is included below:

Cog Target Area	Lit or Info	Question	Objective	# Respondents Answering: Is required for a student to be at least minimally prepared for entry	Total Repondents	% of Respondents Answering "Required" (N=9)
Locate or Recall	Both	2	Locate or recall specific information such as definitions, facts, and supporting details in text or graphics	9	9	100%

	Lit	3	Locate or recall character traits	7	9	78%
		3	Locate or recall sequence of events or actions	9	9	100%
		3	Locate or recall setting	8	9	89%
		3	Locate or recall figurative language	5	9	56%
		3	Locate or recall organizing structures of literary texts, such as verse or stanza in poetry or description, chronology, comparison, etc. in literary non-fiction	4	9	44%
	Info	4	Locate or recall the topic sentence or main idea	9	9	100%
		4	Locate or recall the author's purpose	8	9	89%
		4	Locate or recall causal relations	7	9	78%
		4	Locate or recall organizing structures of texts, such as comparison/contrast, problem/solution, enumeration, etc.	8	9	89%
Integrate or Interpret	Both	5	Describe problem and solution, or cause and effect	9	9	100%
		5	Compare or connect ideas, perspectives, problems, or situations	8	9	89%
		5	Determine unstated assumptions in an argument	6	9	67%
		5	Describe or analyze how an author uses literary devices or text features to convey meaning	5	9	56%
		5	Describe or analyze how an author uses organizing structures to convey meaning	6	9	67%
		5	Describe or analyze author's purpose	6	9	67%
	Lit	6	Interpret mood, tone, or voice	6	9	67%
		6	Integrate ideas to determine theme	6	9	67%
		6	Interpret a character's conflicts, motivations, and decisions	5	9	56%
		6	Examine relations between or among theme, setting, plot, or characters	3	9	33%
		6	Explain how rhythm, rhyme, sound, or form in poetry contribute to meaning	0	9	0%
	Info	7	Summarize major ideas	9	9	100%
		7	Draw conclusions and provide supporting information	9	9	100%
		7	Find evidence in support of an argument	8	9	89%
		7	Distinguish facts from opinions	9	9	100%
		7	Determine the importance of information within and across texts	7	9	78%

	Both	8	Determine word meaning as used in context	9	9	100%
Critique or Evaluate	Both	9	Judge the author's craft and technique	1	9	11%
		9	Analyze, critique, or evaluate the author's perspective or point of view	4	9	44%
		9	Take different perspectives in relation to a text	4	9	44%
	Lit	10	Evaluate the role of literary devices in conveying meaning	4	9	44%
		10	Determine the degree to which literary devices enhance a literary work	0	9	0%
		10	Evaluate a character's conflict, motivations, and decisions	5	9	56%
	Info	11	Evaluate the way the author selects language to influence readers	4	9	44%
		11	Evaluate the strength and quality of evidence used by the author to support his or her position	7	9	78%
		11	Determine the quality of counterarguments within and across texts	5	9	56%
		11	Judge the coherence or logic of an argument	7	9	78%

On the basis of the responses that panelists presented, a preliminary Borderline Performance Description (BPD) was prepared. The content specialists conferred among themselves to produce this description. It was then used as the initial BPD presented to the panelists for discussion.

III. Iterative rounds of standard setting and BPD revisions

The initial BPD was presented to the panels for consideration and a general discussion was focused on editing the BPD to match the panelists' judgments of the reading knowledge, skills, and abilities needed by students to be minimally prepared to take courses in their job training program. Panelists were selected for their expertise in the job training area—not in reading, per se. Subsequent discussions and revisions of the BPD were held after panelists reviewed items and placed their bookmarks in preliminary rounds for arriving at recommended cut scores to represent minimal academic preparedness in

reading relative to the grade 12 reading NAEP. The major changes to the BPDs were to be made in the initial period, and the final round of revisions was prior to placement of the round 3 bookmarks.

IV. Commonalities

Content facilitators were asked to review the BPDs across all occupations to determine the commonalities and differences in reading requirements for the five occupational areas included in the 2009 preparedness research studies. The comparison was also made to the reading requirements for placement of entering students in college credit-bearing courses. The following is a result of that analysis.

Common Skills and Strategies Across Occupations

Note: Panelists in all the job training occupational areas seem to agree on these skills and strategies needed for students entering their training programs as seen below. Panelists in the studies for preparedness for college course placement identified only two.

Profession	Understand general vocab	Understand technical/informational vocabulary	Summarize	Identify main idea/key concepts/important information	Integrate information within/across texts	Draw conclusions within/across texts	Read/recognize charts, figures, diagrams, graphics, illustrations, etc.	Apply to other/new contexts/scenarios
Automotive	X	X	X	X	X	X	X	X
Computer	X	X	X	X	X	X		X
Heating	X	X	X	X	X	X	X	X
Nursing	X	X	X	X	X	X	X	X
Pharmacy	X	X	X	X	X	X	X	X

College				xx		xx		

Note: Most of these skills and strategies are specific to a technical job training program in an occupational area, as seen in the matrix.

Profession	Recall info to new contexts	Analyze information within/across texts	Recall Information	Identify, analyze, interpret details	Communicate conclusions	Interpret text	Provide evidence in support of an interpretation
Automotive		X					
Computer						X	X
Heating	X	X					
Nursing		X	X	X		X	X
Pharmacy				X	X		
College						XX	XX

Note: These skills and strategies seem to be specific to college-bound, but were not identified in the job training areas.

Profession	Understand the role of vocabulary in context	Explain why relevant information is included	Draw inferences	Recognize understand organization elements/ patterns of text	Identify intended audience and purpose of text	Identify, analyze, evaluate author's argument and evidence	Identify and explain author's point of view and theme
Automotive							
Computer							
Heating							
Nursing							
Pharmacy							
College	xx	xx	xx	xx	xx	xx	xx

Profession	Use text as reference to identify and explain author's point of view or theme	Make connections among ideas within and across texts	Understand figurative language				
Automotive							
Computer							
Heating							
Nursing							
Pharmacy							
College	xx	xx	xx				

V. CONCLUSIONS AND UNRESOLVED ISSUES

a. The final Borderline Performance Descriptions

General Preparedness for All Postsecondary Areas

Students minimally prepared for entry into a postsecondary credit-bearing and/or certificate-granting job-training program or into credit-bearing, postsecondary college courses should be able to understand the meaning of general vocabulary and recognize the differential use of words in technical and procedural contexts. These students should be able to identify important information and relevant details, summarize information, draw conclusions, and communicate those conclusions. They should be able to locate and

evaluate sources of information needed for specific purposes, follow instructions and/or the sequence of events in a process, and be able to recall and apply this information to a variety of situations. They should understand the difference between a fact and an opinion. They should be able to read charts, diagrams, figures, and illustrations and understand their purposes. They should be able to make connections among ideas within and across texts, draw conclusions based upon relevant evidence,

Knowledge/Skills/Abilities Required Specifically for Job-Training Programs

In addition to the knowledge, skills, and abilities required for all postsecondary areas, students minimally prepared for entry into a postsecondary credit-bearing and/or certificate-granting job-training program should be able to apply what they have read to other contexts and scenarios.

Knowledge/Skills/Abilities Required Specifically for College Preparedness

In addition to the knowledge, skills, and abilities required for all postsecondary areas, students minimally prepared for entry into credit-bearing, postsecondary college courses should be able to understand figurative language within the text. They should be able to draw simple inferences from what they read and develop interpretations of a text by offering evidence to support their interpretations. They should be able to recognize and understand the organizational elements or patterns of a text. They should be able to identify the intended audience and purpose of the text. They should be able to identify, analyze, and evaluate the author's argument and evidence. They should be able to identify and explain the author's point or theme using the text as reference.

The following example (one of the job training program's BPDs, rather than the general synthesis) illustrates both the agreement and differences between the general BPD and the occupation-specific BPDs

Automotive Master Technician

Students minimally prepared for a postsecondary credit-bearing and/or certificate-granting automotive training program should be able to understand the meaning of words used in both general and technical/procedural contexts. These students should be able to identify the main idea; summarize important information, key concepts, and relevant details; analyze and integrate information; and draw

conclusions within and across texts. They should be able to read charts, diagrams, figures, and illustrations and understand their purposes within the text. They should be able to locate information needed for specific purposes and be able to follow the sequence of events in a process. They should be able to distinguish the difference between a fact and an opinion and evaluate sources of information. They should be able to relate what they have read to the task at hand.

- b. In the college preparedness panel, some of the panelists were highly sophisticated with regard to reading theory and instruction. Others were relatively naïve in this regard. Some of the more sophisticated panelists were overly focused on literature. As noted earlier, however, the larger focus in NAEP is on information text.
- c. Many panelists could not identify the types of text that their students were required to read in the NAEP items. As noted earlier, NAEP does not include textbook type of material. This led to difficulties in many panelists' judgments and may have contributed to less reliable judgments across panels.
- d. Some of the college instructors thought their job was to teach many of the skills in the 12th grade Framework, particularly when it came to higher-level thinking skills. Some members of the occupational panels expressed a concern that they would not have time to teach reading skills.
- e. Panelists reported having difficulty accepting the basic procedure (standard-setting, item difficulty, etc.) and wanted to dispute the data on which they were to base their judgments. For example some panelists seemed to believe items were not always categorized appropriately in terms of difficulty. The reading experts had to explain the procedures for establishing difficulty, but there may have been residual effects on judgments.
- f. There was greater variability in the college preparedness panel with regard to admission requirements. Some institutions had open admission policies, making judgments of prerequisite skills difficult. Others had clear admission requirements, with (at least) implicit reading requirements.

REFERENCES

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