National Assessment Governing Board Committee on Standards, Design and Methodology

Friday, August 3, 2018 9:30 am - 12:00 pm

Agenda

9:30 – 9:35 am	Welcome and Review of Agenda	
	Andrew Ho, COSDAM Chair	
9:35 – 10:25 am	Design Considerations for Studies to Review and Revise the NAEP Mathematics and Reading Achievement Level Descriptions (SV #5) Sharyn Rosenberg, Assistant Director for Psychometrics Sunny Becker, HumRRO	Attachment A
10:25 – 11:10 am	Uses of NAEP (SV #3) Sharyn Rosenberg Andrew Ho	To be sent under separate cover
11:10 am – 12:00 pm	CLOSED SESSION : Briefing on 2017 NAEP Writing Assessment Helena Jia, Educational Testing Service	
	Information Item Update on Implementing the Strategic Vision (SV #2-10)	Attachment B

Design Considerations for Studies to Review and Revise the NAEP Mathematics and Reading Achievement Level Descriptions (SV #5)

The primary recommendation from the recent evaluation of NAEP achievement levels (National Academies of Sciences, Engineering, and Medicine, 2017) was to evaluate the alignment, and revise if needed, the achievement level descriptions (ALDs) for NAEP mathematics and reading assessments in grades 4, 8, and 12:

Recommendation #1: Alignment among the frameworks, the item pools, the achievement-level descriptors, and the cut scores is fundamental to the validity of inferences about student achievement. In 2009, alignment was evaluated for all grades in reading and for grade 12 in mathematics, and changes were made to the achievement-level descriptors, as needed. Similar research is needed to evaluate alignment for the grade 4 and grade 8 mathematics assessments and to revise them as needed to ensure that they represent the knowledge and skills of students at each achievement level. Moreover, additional work to verify alignment for grade 4 reading and grade 12 mathematics is needed.

In its formal response to this evaluation, the Board agreed to conduct studies to achieve this goal and noted that the revision of the updated Board policy on NAEP achievement levels will address the larger issue of specifying a process and timeline for conducting regular recurring reviews of the achievement level descriptions in all subjects and grades.

The current draft of the revised Board policy on NAEP achievement levels (to be discussed during a plenary session at the upcoming August Board meeting) specifies that empirical data shall be used to review and revise content ALDs for reporting. In addition, these reporting ALDs shall be written in terms of what students at each level *do* know and *can* do rather than what they *should* know and *should* be able to do.

As part of the Technical Support contract, Governing Board staff requested that the Human Resources Research Organization (HumRRO) organize an expert panel meeting to solicit technical input on considerations for: 1) conducting studies to review and revise the mathematics and reading ALDs at grades 4, 8, and 12, as referenced in the Board's formal response to the evaluation of NAEP achievement levels; and 2) implementing reporting ALDs more generally, as referenced in the draft revised policy statement.

On July 12-13, the following panelists were convened in Alexandria, VA: **Dr. Susan Davis-Becker** (ACS Ventures, LLC), **Dr. Karla Egan** (EdMetric, LLC), **Dr. Steve Ferrara** (Measured Progress), **Dr. Ed Haertel** (Stanford University), **Dr. Andrew Kolstad** (P20 Strategies, LLC), **Dr. Susan Loomis** (Consultant), **Dr. Barbara Plake** (University of Nebraska-Lincoln), and **Dr. Laurie Wise** (HumRRO).

Due to the proximity of the expert panel meeting to the August Governing Board meeting, formal meeting minutes are not yet available but they will be shared with COSDAM members later in August. During the upcoming August COSDAM meeting, Dr. Sharyn Rosenberg of the Governing Board staff and Dr. Sunny Becker of HumRRO will share key takeaways from the expert panel meeting to inform COSDAM discussion on next steps and recommendations for conducting studies to review and revise the math and reading ALDs.

Strategic Vision Activities Led by COSDAM

During the November 2016 Board meeting, a <u>Strategic Vision</u> was formally adopted to guide the Board's work over the next several years. For each activity led by COSDAM, information is provided below to describe the current status and recent work, planned next steps, and the ultimate desired outcomes. Please note that many of the Strategic Vision activities require collaboration across committees and with NCES, but the specific opportunities for collaboration are not explicitly referenced in the table below. In addition, the activities that include contributions from COSDAM but are primarily assigned to another standing committee (e.g., framework update processes) or ad hoc committee (i.e., exploring new approaches to postsecondary preparedness) also have not been included below.

The Governing Board's Assistant Director for Psychometrics, Sharyn Rosenberg, will answer any questions that COSDAM members have about ongoing or planned activities.

Strategic Vision Activity	Current Status and Recent Work	Planned Next Steps	Desired Outcome
SV #2: Increase opportunities to	Ongoing linking studies include:		NAEP scale scores
connect NAEP to administrative data	national NAEP-ACT linking study;	Complete ongoing studies	and achievement
and state, national, and international	longitudinal studies at grade 12 in MA,		levels may be
student assessments	MI, TN; longitudinal studies at grade 8	Decide what new studies to	reported and are
	in NC, TN; NAEP-TIMSS linking	take on	better understood in
Incorporate ongoing linking studies	study; NAEP-HSLS linking study;		terms of how they
to external measures of current and	NAEP Validity Studies (NVS) studies	Decide how to use and	relate to other
future achievement in order to		report existing and future	important indicators
evaluate the NAEP scale and add	Informational update on current studies	results	of interest (i.e., other
meaning to the NAEP achievement	was provided in the March 2018		assessments and
levels in reporting. Consider how	COSDAM materials	Complete additional	milestones)
additional work could be pursued		studies	
across multiple subject areas, grades,	As of June 2018, analyses are currently		
national and international	underway for the national NAEP-ACT		
assessments, and longitudinal	linking study, with presentation to		
outcomes	COSDAM tentatively planned for		
	November 2018		

Strategic Vision Activity	Current Status and Recent Work	Planned Next Steps	Desired Outcome
SV #3: Expand the availability,	Ina Mullis of the NVS panel spoke with	Use research to draft short	Board adopts formal
utility, and use of NAEP resources, in	COSDAM at the March 2017 Board	document of intended and	statement or policy
part by creating new resources to	meeting and is working on a white paper	appropriate uses for	about intended uses
inform education policy and practice	about the history and uses of NAEP	COSDAM discussion	of NAEP. The goal
		(November 2018)	is to increase
Research when and how NAEP	During the upcoming August 2018		appropriate uses and
results are currently used (both	Board meeting, COSDAM will discuss	NCES produces	decrease
appropriately and inappropriately)	how to use information from an ongoing	documentation of validity	inappropriate uses
by researchers, think tanks, and local,	study to inform a policy statement on	evidence for intended uses	(in conjunction with
state and national education leaders,	intended and appropriate uses of NAEP	of NAEP scale scores	dissemination
policymakers, business leaders, and			activities to promote
others, with the intent to support the		Governing Board produces	awareness of the
appropriate use of NAEP results		documentation of validity	policy statement)
(COSDAM with R&D and ADC)		evidence for intended uses	
		of NAEP achievement	
Develop a statement of the intended		levels	
and unintended uses of NAEP data			
using an anticipated NAEP Validity			
Studies Panel (NVS) paper and the			
Governing Board's research as a			
resource (COSDAM with NCES)			
Disseminate information on technical	This idea was generated during the	Work with NCES and	Stakeholders benefit
best practices and NAEP	August 2017 COSDAM discussion of	R&D to refine list of	from NAEP
methodologies, such as training item	the Strategic Vision activities	technical topics for	technical expertise
writers and setting achievement levels	the Strategie vision activities	dissemination efforts	

Strategic Vision Activity	Current Status and Recent Work	Planned Next Steps	Desired Outcome
SV# 5: Develop new approaches to	Input for the policy revision was	Seek external feedback and public	Board has updated
update NAEP subject area	provided through a panel of	comment (September 2018)	policy on
frameworks to support the Board's	standard setting experts, a literature		achievement levels
responsibility to measure evolving	review on considerations for	Full Board call to discuss revised	that meets current
expectations for students, while	creating and updating achievement	draft policy (October 2018)	best practices in
maintaining rigorous methods that	level descriptors (ALDs), and a		standard setting
support reporting student	technical memo on developing a	Board action on revised policy	and is useful for
achievement trends	validity argument for the NAEP	statement (November 2018)	guiding the
	achievement levels (early 2018)		Board's
Consider new approaches to creating			achievement levels
and updating the achievement level	COSDAM discussed the policy		setting work
descriptors and update the Board	revision during the May and March		
policy on achievement levels	2018 Board meetings		
	Full Board will discuss the draft		
	revised policy during the upcoming		
	August 2018 Board meeting		
SV# 7: Research policy and technical	White papers commissioned,	Per the discussion and next steps	Determine whether
implications related to the future of	symposium held in Washington,	at the March 2018 Executive	changes to the
NAEP Long-Term Trend assessments	DC (March 2017), and follow-up	Committee meeting, COSDAM	NAEP LTT
in reading and mathematics	event held at American Educational	will discuss design considerations	schedule, design
	Research Association (AERA)	for the next administration of	and administration
Support development and publication	annual conference (April 2017)	LTT. Potential design	are needed (led by Executive
of multiple papers exploring policy and technical issues related to NAEP	Full Board and Executive	considerations will be dependent	Committee and
		on the schedule for conducting the next LTT assessment (TBD)	
Long-Term Trend. In addition to the	Committee discussions (March, May, and August 2017) and	the next LTT assessment (TDD)	NCES)
papers, support symposia to engage researchers and policymakers to	webinar on secure LTT items and		
provide stakeholder input into the	p-values from 2012 administration		
Board's recommendation	(October 2017).		
bourd's recommendation	(000001 2017).		

Strategic Vision Activity	Current Status and Recent Work	Planned Next Steps	Desired Outcome
SV# 9: Develop policy approaches to	COSDAM presentation and	Additional discussion planned for	Determine whether
revise the NAEP assessment subjects	discussion on initial considerations	November 2018, with Board	new assessment
and schedule based on the nation's	for combining assessments	action on the NAEP Assessment	schedule should
evolving needs, the Board's priorities,		Schedule tentatively scheduled	include any
and NAEP funding	Full Board presentation and	for March 2019	consolidated
	discussion on efficiencies in what		frameworks or
Pending outcomes of stakeholder	and how to measure student		coordinated
input (ADC activity), evaluate the technical implications of combining	knowledge and skills (March 2018)		administrations
assessments, including the impact on scaling and trends	Small group discussions during the May 2018 Board meeting		
	The upcoming August 2018 Board		
	meeting includes a plenary session		
	on the assessment schedule,		
	focused on Social Studies		
SV# 10: Develop new approaches to	Several studies are ongoing (see	Decide whether additional	Statements about
measure the complex skills required	activities under SV# 2)	research should be pursued at	using NAEP as an
for transition to postsecondary		grade 8 to learn more about the	indicator of
education and career	Per COSDAM discussion at August	percentage of students "on track"	academic
	2017 meeting, additional studies are	to being academically prepared	preparedness for
<i>Continue research to gather validity evidence for using 12th grade NAEP</i>	on hold until at least November	for college by the end of high school or whether additional	college continue to be defensible and
reading and math results to estimate	2018 pending Board decision on how to move forward with findings	research should be conducted	
the percentage of grade 12 students	from Ad hoc Committee on	with more recent administrations	to have appropriate validity evidence
academically prepared for college	Measures of Postsecondary	of NAEP and other tests	validity evidence
actuaemically prepared for college	Preparedness	of MAEF and other tests	
	1 repareditess	Decide whether Board should	
		make stronger statement and/or	
		set "benchmarks" rather than	
		using "plausible estimates"	
		using plausible estimates	