National Assessment Governing Board
Reporting and Dissemination Committee

March 6, 2015
10:00 am – 12:30 pm

AGENDA

10:00 – 10:45 am	**Joint Session with Assessment Development Committee** Welcome and Joint Session Overview *Shannon Garrison, ADC Chair* *Andrés Alonso, R&D Chair* Technology and Engineering Literacy Reporting *Cary Sneider, ADC Vice Chair* *Emmanuel Sikali, NCES* *Jonas Bertling, ETS*	Attachment A
10:45 – 10:50 am	BREAK	
10:50 – 11:05 am	**ACTION:** Release Plan for 2014 NAEP Report Cards: • U.S. History • Geography • Civics *Stephaan Harris, NAGB Staff*	Attachment B
11:05 – 11:45 am	Focused NAEP Reports: Topics, Budget, and Planning *Laura LoGerfo, NAGB Staff* *Andrés Alonso, R&D Chair*	Attachment C
11:45 am – 12:00 pm	Core Contextual Questions for 2017 NAEP Administration: Review Process and Schedule *Stephaan Harris, NAGB Staff* *Laura LoGerfo, NAGB Staff*	Attachment D
12:00 – 12:20 pm	Governing Board Strategic Planning Initiative *Andrés Alonso, R&D Chair* *Rebecca Gagnon, R&D Vice Chair*	See Strategic Planning Tab in Board Materials
12:20 – 12:30 pm	Information Item: Projected Schedule of Future NAEP Releases	Attachment E

NAEP Technology and Engineering Literacy (TEL) Reporting

Joint Session of the Assessment Development Committee

and the Reporting and Dissemination Committee

Purpose

The purpose of this joint session is to explore issues related to the reporting of NAEP's newest assessment, Technology and Engineering Literacy (TEL), which is scheduled for release in October 2015.

At its November 2014 meeting, the Assessment Development Committee (ADC) received a briefing on the status of the TEL data analyses. Based on this briefing and subsequent Committee discussion, the ADC requested a joint meeting in March 2015 with the Reporting and Dissemination Committee (R&D) to discuss challenging issues, unique opportunities, and effective strategies for the upcoming TEL reporting. As a potential model for TEL reporting, the ADC suggested that R&D members examine the 2011 online report and released tasks from NAEP's Science Interactive Computer Tasks (ICTs) at http://www.nagb.org/newsroom/naep-releases/science-hots-icts.html

Background on TEL

In 2005 the National Academy of Engineering and the National Research Council called on the Governing Board to add a NAEP assessment in the area of Technological Literacy. The Board extensively deliberated the recommendation, added this assessment to the NAEP schedule, and conducted a multi-year, comprehensive framework development process involving thousands of educators, policymakers, IT professionals, engineers, testing experts, and others.

Eventually renamed Technology and Engineering Literacy, or TEL, this innovative assessment was based on a Board-adopted Framework that called for a unique combination of scenario-based tasks and discrete test questions, all of which were to be administered via a computer-based platform. After various stages of test development and a full-scale pilot test, the TEL assessment was administered in 2014 to a nationally representative sample of more than 20,000 eighth graders, in both public and private schools.

The TEL assessment is designed to gauge how well students can apply their understanding of technology principles to real-life situations. The assessment focuses on the level of knowledge and competencies related to technology and engineering needed by all students and citizens to function in society. An important component in the array of NAEP subject-area assessments, TEL joins the NAEP Mathematics and Science exams to provide our nation with information on student achievement in all of the STEM areas.

TEL measures students' knowledge and skills in three interconnected areas: Technology and Society, Design and Systems, and Information and Communication Technology. There are three cross-cutting practices as well: (1) Understanding Technological Principles; (2) Developing

Solutions and Achieving Goals; and (3) Communicating and Collaborating. An innovative component of the assessment is the incorporation of interactive scenario-based tasks. These tasks allow the collection of a wide array of information on student performance, including observable data captured as students interact with the TEL tasks. This innovation allows NAEP to expand TEL reporting beyond the traditional NAEP scores by including students' problem-solving strategies and processes.

Relevant Links

Technology and Engineering Literacy Framework (full and abridged)
http://www.nagb.org/publications/frameworks/technology/2014-technology-framework.html

NAEP/National Center for Education Statistics page on Technology and Engineering Literacy Framework, including overview, resources, video, and an interactive task that viewers can try.
http://nces.ed.gov/nationsreportcard/tel/

Video featuring former Governing Board Member Alan Friedman – "NAEP Technology and Engineering Literacy: New Education Assessment"
https://www.youtube.com/watch?v=N3ZrK76wez4

Video from the National Center for Education Statistics – "An Introduction to the NAEP Technology and Engineering Literacy Assessment"
https://www.youtube.com/watch?v=eziz0f_d2ZM

Video from the National Center for Education Statistics – "Exploring a TEL Task"
https://www.youtube.com/watch?v=uexguF1674k

Release page of *The Nation's Report Card Science in Action: Hands-On and Interactive Computer Tasks from the 2009 Science Assessment*
http://www.nagb.org/newsroom/naep-releases/science-hots-icts.html

NATIONAL ASSESSMENT GOVERNING BOARD
RELEASE PLAN FOR THE
NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS (NAEP)

The Nation's Report Card: U.S. History, Geography, and Civics 2014

The 2014 U.S. History, Geography, and Civics Report Cards will be released together to the general public during April 2015 in one event, as approved by the Board at the March 2015 meeting. Following a review and approval of the report's results, the release will be arranged as an online webinar with a separate post-release outreach effort for each of the social studies in order to provide individual attention for each subject. The release event will include a data presentation by the Acting Commissioner of Education Statistics, with moderation and comments by at least one member of the National Assessment Governing Board and one or more additional panelist who are social studies experts. Full accompanying data will be posted on the Internet at the scheduled time of release.

In 2014, approximately 26,000 8th-grade students from 1,510 public and private schools participated in the U.S. history, geography, and civics assessments. All assessments were administered in paper-and-pencil form.

Results are at the national level; no state data will be included. Results will include average scores and percentages of students at the *Basic, Proficient, and Advanced* achievement levels. These results will be reported for students overall and for demographic and socioeconomic groups, such as gender, race/ethnicity, type of school, eligibility for free or reduced-price lunch (an indicator of low income), and disability and English language learner status. Also included will be information about instructional and classroom activities in these subject areas.

The report will be in the form of interactive web pages, allowing the reader to explore each subject in detail, as well as move between subjects. There will be links to more detailed data, as well as to information about the frameworks and how the assessments were conducted.

DATE AND LOCATION

The release event for the media and the public will occur in April 2015. The release date will be determined by the Chair of the Reporting and Dissemination Committee, in accordance with Governing Board policy, following acceptance of the final report.

EVENT FORMAT

- Introductions and opening statement by a National Assessment Governing Board representative
- Data presentation by the Acting Commissioner of Education Statistics
- Comments by at least one Governing Board member
- Comments by at least one expert in the field of social science education and assessment
- Questions from the webinar audience
- Program will last approximately 75 minutes
- Event will be broadcast live over the Internet, and viewers will be able to submit questions electronically for panelists. An archived version of the webinar, with closed captioning, will be posted on the Governing Board website at www.nagb.org along with other materials such as the press release and panelist statements.

REPORT RELEASE

The Acting Commissioner of Education Statistics will publicly release the report at the NAEP website—http://nationsreportcard.gov—at the scheduled time of the release event. An online copy of the report, along with data tools, questions, and other resources, will be available at the time of the release on the NAEP website. An interactive version of the release with panelists' statements, a Governing Board press release, subject frameworks, and related materials will be posted on the Board's web site at www.nagb.org. The site will also feature links to social networking sites and audio and/or video material related to the event.

EMBARGOED ACTIVITIES BEFORE RELEASE

In the days preceding the release, the Governing Board and NCES will offer access to embargoed data via a special website to approved U.S. Congressional staff in Washington, DC; approved senior representatives of the National Governors Association and the Council of Chief State School Officers; and appropriate media as defined by the Governing Board's Embargo Policy. A conference call for journalists who signed embargo agreements will be held to give a brief overview of findings and data and to answer questions from the media.

ACTIVITIES AFTER THE RELEASE

The Governing Board's staff will work with its communications contractor to coordinate a discrete post-event communications effort or event for each subject to extend the life of the results and provide value and relevance to stakeholders with an interest in each of the social sciences assessed. These efforts could include a webinar, social media campaign, seminar, or presentation at a large conference or other gathering. Board staff would work with major education policy groups in U.S. history, geography, and civics to ascertain relevant and beneficial opportunities for such targeted outreach.

POTENTIAL TOPICS FOR NATIONAL ASSESSMENT GOVERNING BOARD FOCUSED REPORTS

Over several years, Board members and staff have called for or suggested papers on various topics to inform Board policy decisions. These topics have emerged in previous Board Meeting materials and summaries, Board-commissioned reports by Allan Ginsburg and Marshall Smith, the ad hoc committee report entitled 'NAEP Background Questions: An Underused National Resource', and discussions with Board staff. This document presents these ideas in no particular order of import or value.

This list, instead, is intended to inspire initial discussions among Reporting and Dissemination Committee members about what topics may warrant further pursuit. Thus, this list does not provide substantive detail or explanation beyond a general topic heading. The session during the R&D Committee meeting in March is to elicit feedback on the listed topics, solicit additional topics of interest, and ascertain which potential papers should be prioritized.

The Board has funds to support at least one paper of modest budget this year. It would be helpful to leave the committee meeting in March with a winnowed and prioritized list of the most compelling and critical topics to start a slate of papers to fund, amenable to further discussion and revision as necessary. Once a prioritized list of potential topics is set, Laura LoGerfo will elaborate the highest priority topics to support Committee members' decision-making on what should merit funding this year, a topic for the May meeting agenda.

The topics pursued for papers by the Board should not overlap with any reports produced, or planned for production, by NCES. To aid the Committee members' discussion, as well as to facilitate collaboration and prevent content overlap, Table 1 presents upcoming reports from NCES in 2015 (see Attachment A).

There are two primary goals for Board papers: (1) To harness NAEP's unique capacity as a nationally representative assessment of academic achievement that can produce high-impact special reports on critical educational issues and practices; (2) To highlight the potential for rich analysis of NAEP data, including available contextual variables

Potential Topics:

1) Learning Opportunities: Within and Beyond School Walls
    a. Digital learning in its myriad manifestations, e.g., blended instruction (combine online and in-person instruction), virtual schools, Khan Academy (and its kin). How can NAEP consider these innovations?
    b. Differences in teacher and instructional characteristics by student gender, race/ethnicity, socioeconomic status, English language learner status, disability status, and achievement
    c. Learning after-school and at home, i.e., differential access to extracurricular learning opportunities

2) Parent Involvement, specifically how do teachers and schools interact with – and support – families.

3) Spotlight Report: Education policies and instructional practices of high-performing states and districts and of strong-growth states and districts

4) Charter Schools Redux: A Ten-Year Report – 2013 compared to 2003 (when a charter school report was last published)

5) What about Private Schools? Examining NAEP achievement and instructional practices in the private sector over two decades of trend data

6) Regional Reports: In-depth analyses of NAEP contextual and assessment data in specific regions across the United States. The following regions merited specific mention in previous Board and/or committee meetings, however, this is not an inclusive list.
    a. New England states
    b. Midwestern states
    c. Learning in the South: A report across the Southern Regional Education Board (SREB) states

7) The Evolution of Eighth-Grade Algebra: Changes in the occurrence and prominence of grade 8 algebra over two decades

8) Connections across NCES: Surveys administered by NCES, such as the Early Childhood Longitudinal Study and High School Longitudinal Study, overlap with NAEP in a few key years. Connecting NAEP achievement data to the extensive longitudinal databases produced by these survey programs may prove a powerfully informative effort. This paper would explore how this connection would work, conduct preliminary analytic work

if possible, outline future directions, and chart a course for potentially linking with the upcoming Middle Grades Longitudinal Study.

9) Crossing the Gaps: Analyses that look at student performance on NAEP by race/ethnicity and socioeconomic status; by race/ethnicity and gender; by gender and socioeconomic status

10) Building the Foundation: Describe the theoretically-based frameworks which underlie the selection of contextual questions in NAEP and their connection with learning and achievement

Table 1: Report cards and Focus on NAEP reports in 2015

Title/ Topic	Report Type	Submission Month
Focus on NAEP: English Language Learners	Focus on NAEP	April 2015
NAEP Grade 8 Black Male Students Through the Lens of the National Assessment of Educational Progress	R&D	May 2015
Grade 12 Black Male Students: Results from NAEP 2013	Focus on NAEP	June 2015
2014 Technology & Engineering Literacy	Report card	July 2015 (pending achievement-level setting)
Focus on NAEP: Students with Disabilities	Focus on NAEP	August 2015
Accommodations and inclusion in NAEP	Focus on NAEP	September 2015
Student Access to Technology by Locale and SES	Focus on NAEP	September 2015
2015 Reading National and State	Report card	September 2015
2015 Mathematics National and State	Report card	September 2015
2015 Reading TUDA	Report card	November 2015
2015 Mathematics TUDA	Report card	November 2015

Note: Table 1 presents upcoming report releases and publications from NCES using NAEP data. This list is comprehensive but not complete. Other analyses produced by other divisions at NCES may use NAEP data but are not included in this list.

Core Contextual Modules:

Reporting and Dissemination Committee Review Process

and Timeline for Item Development

R&D will have reviewed the core contextual modules three times before they are included in the 2017 NAEP administration. These modules center on the following five topics: (1) socio-economic status; (2) technology use; (3) school climate; (4) grit; and (5) desire for learning.

The R&D Committee's first review occurred at the August 2014 Board meeting, through which the Committee recommended making the core questions more inclusive, accessible, and more positive. After this review, the items entered the cognitive lab phase.

Cognitive lab testing on all new and revised core questions began in December 2014 and will conclude in March 2015. This work includes cognitive labs for the student, teacher, and school administrator items. The main purpose of cognitive labs is to evaluate if respondents understand the questions as intended. Cognitive lab efforts also aim at comparing different versions of alternative item formats for each topic leading to a total of several hundred items (across all respondents) being pre-tested. This comparison of different item formats permits the NAEP team to choose the most accurate and efficient measurement approaches for each module.

The second R&D review will occur in May 2015 during the meeting. At this time, the committee will review the set of core contextual questions that passed cognitive lab testing and may be administered in the 2016 pilot. Based on R&D members' comments, proposed questions may be dropped or questions that were administered via cognitive labs, but not recommended for inclusion, may be added. However, new questions cannot be developed nor can questions be revised for 2017 due to Office of Management and Budget (OMB) stipulations that all new and revised questions be tested first in cognitive labs. Any comments that would result in revisions to questions or creating new questions could be applied to a future development cycle (e.g., 2019 or 2021, depending on development goals).

The third (and final) R&D review before the 2017 NAEP operational assessments will occur in spring 2016. At this time, the committee will review the proposed set of questions to be administered in the operational administration. This review will be similar to the May 2015 review. Proposed questions may be dropped or questions that were administered in the pilot, but not recommended for inclusion, may be added. Comparable to the May 2015 review, new questions cannot be developed nor can questions be revised for 2017 due to OMB stipulations. Any comments suggesting revisions to questions or creating new questions could be applied to a future development cycle (e.g., 2019 or 2021, depending on development goals).

The table on the following page presents a timeline for the review of contextual modules for 2017 NAEP. This table has been updated from what was shared with R&D as part of the August 2014 Board book.

Timeline for 2017 Core Item Development and Reporting

STAGES	DATES	TASKS	COMPLETE
ITEM DEVELOPMENT & PRE-TESTING	08/2014	R&D review of existing item pool and draft items	✓
	08/2014	Continuation of item development for cognitive labs* based on R&D and Questionnaire Standing Committee** input	✓
	10/2014	OMB*** fast-track review of items in cognitive labs	✓
	11/2014-03/2015	Pre-testing of new and revised items for cognitive labs*	
	03/2015	Analysis of pre-testing data and decisions for pilot questionnaires	
PILOT	05/2015	R&D clearance review for pilot	
	06/2015	OMB*** review of items for pilot	
	01/2016-03/2016	Pilot administration	
	2016	Analysis of pilot data and decisions for operational	
OPERATIONAL	Spring 2016	R&D clearance review for operational	
	Spring 2016	OMB** review of items for operational	
	01/2017-03/2017	Operational administration	
	2017	2017 grade 4 and 8 reporting	
	2018	2017 grade 12 reporting	

*Cognitive labs allow NCES to study how respondents understand, mentally process, and answer survey questions.

**The Questionnaire Standing Committee provides guidance for contextual questionnaires and is similar to a subject area standing committee that would provide guidance for a specific subject.

*** OMB approval is needed for federal agencies that collect survey data from 10 or more people.

ies NATIONAL CENTER FOR EDUCATION STATISTICS
Institute of Education Sciences

Upcoming NAEP Reports as of February 2015

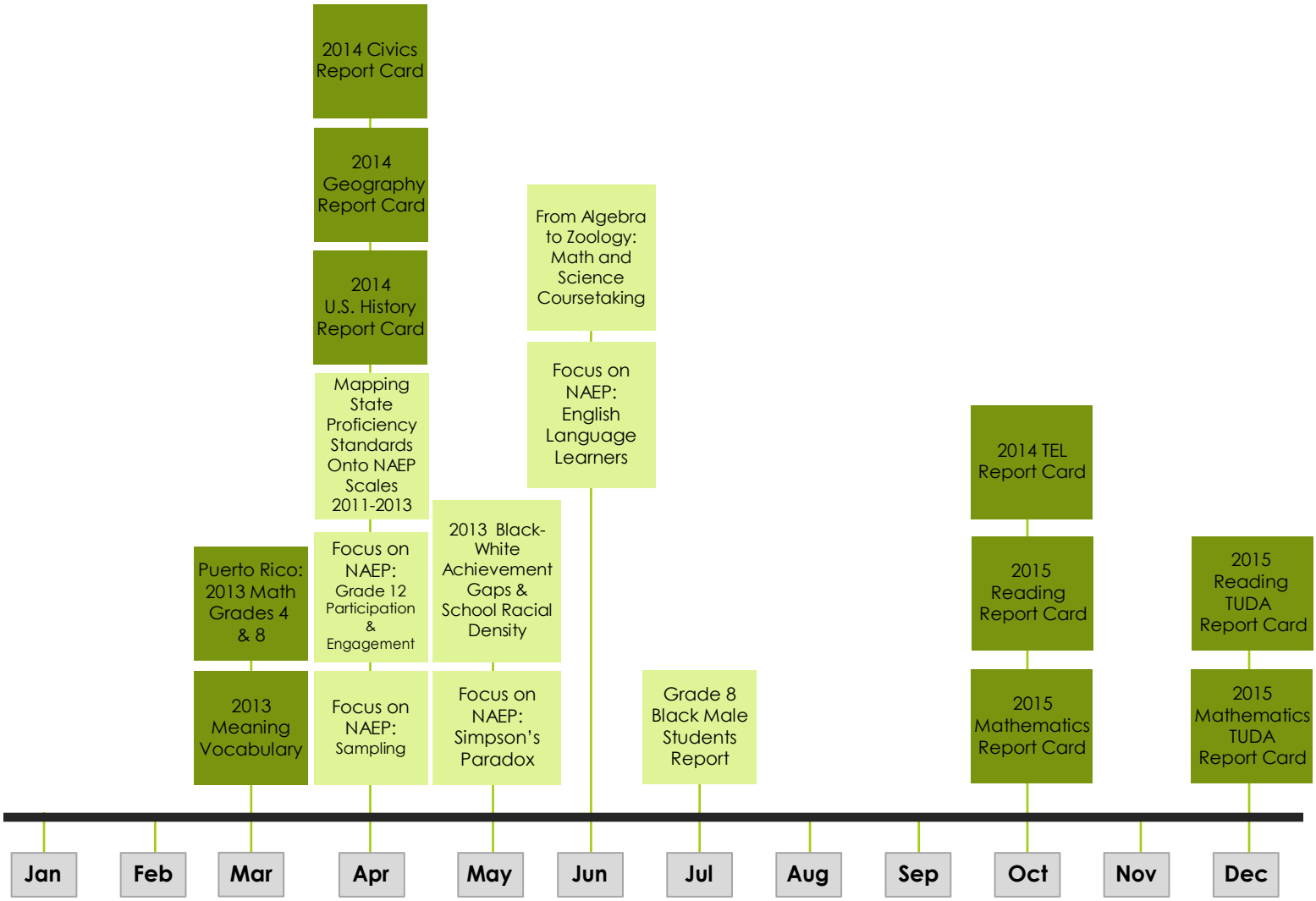
Initial NAEP Releases

Report	**Expected Release Date**
2013 Puerto Rico	March 2015
2013 Meaning Vocabulary	March 2015
2014 Civics Report Card	April 2015
2014 Geography Report Card	April 2015
2014 U.S. History Report Card	April 2015
2014 Technology & Engineering Literacy Report Card	October 2015
2015 Mathematics Report Card	December 2015
2015 Reading Report Card	December 2015
2015 Mathematics TUDA Report Card	December 2015
2015 Reading TUDA Report Card	December 2015

Other NAEP Reports

Mapping Proficiency Standards Onto the NAEP NAEP Scales 2011-2013	April 2015
Focus on NAEP 12th Grade Participation & Engagement	April 2015
Focus on NAEP: Sampling	April 2015
2013 Black-White Achievement Gaps & School Racial Density Report	May 2015
Focus on NAEP: Simpsons Paradox	May 2015
From Algebra to Zoology: How Well Do Students Report Mathematics and Science Course Taking?	June 2015
Focus on NAEP: English Language Learners	June 2015
NAEP Grade 8 Black Male Students Through The Lens of the National Assessment of Educational Progress	July 2015

2015 NCES Assessment Data Release Timeline



LEGEND

- **NAEP Report Cards**
- **Other NAEP Reports**
- **International Reports**

Releases in 2015

- 2013 Puerto Rico
- 2013 Meaning Vocabulary
- 2014 Civics Report Card
- 2014 Geography Report Card
- 2014 U.S. History Report Card
- Mapping State Proficiency Standards Onto NAEP Scales 2011-2013
- Focus on NAEP: 12th Grade Participation & Engagement
- Focus on NAEP: Sampling
- 2013 Black-White Achievement Gap and School –Level Racial Composition
- Focus on NAEP: Simpson's Paradox
- From Algebra to Zoology: How Well Do Students Report Mathematics and Science Coursetaking?
- Focus on NAEP: English Language Learners
- Grade 8 Black Male Students Through the Lens of the National Assessment of Educational Progress
- 2014 Technology & Engineering Literacy Report Card
- 2015 Reading National and State Report Card
- 2015 Mathematics National and State Report Card
- 2015 Reading TUDA Report Card
- 2015 Mathematics TUDA Report Card

Assessment Data Collection Schedule
2015

- **NAEP 2015:** Mathematics, Reading, and Science: Grades 4 and 8
- **NAEP 2015:** Mathematics, Reading, and Science Pilot Technology-Based Assessments: Grades 4 and 8
- **PIRLS 2016:** Reading Field Test: Grade 4
- **TIMSS 2015**: Mathematics and Science: Grades 4 and 8
- **TIMSS 2015:** Advanced Mathematics and Physics: Grade 12