### **Evaluation of the NAEP Achievement Levels for Mathematics and Reading**

# **Background**

Public Law 107-279 states:

The achievement levels shall be used on a trial basis until the Commissioner for Education Statistics determines, as a result of an evaluation under subsection (f), that such levels are reasonable, valid, and informative to the public.

Even after being in use for about 25 years and undergoing previous evaluations (1993, 1998, 2009), the NAEP achievement levels are still considered to be on a trial basis. During his tenure as National Center for Education Statistics (NCES) Commissioner, Jack Buckley initiated a new evaluation to determine whether the trial status could be resolved.

#### **About the Evaluation**

The National Center for Education Evaluation and Regional Assistance (NCEE), part of the Institute for Education Sciences (IES), is administering the current evaluation of the NAEP achievement levels. On September 29, 2014, NCEE awarded a contract to The National Academy of Sciences to perform this work.

Objectives for the evaluation include the following:

- Determine how "reasonable, valid, reliable and informative to the public" will be operationalized in this study.
- Identify the kinds of objective data and research findings that will be examined.
- Review and analyze extant information related to the study's purpose.
- Gather other objective information from relevant experts and stakeholders, without creating burden for the public through new, large-scale data collection.
- Organize, summarize, and present the findings from the evaluation in a written report, including a summary that is accessible for nontechnical audiences, discussing the strengths/weaknesses and gaps in knowledge in relation to the evaluation criteria.
- Provide, prior to release of the study report, for an independent external review of that report for comprehensiveness, objectivity, and freedom from bias.
- Plan and conduct dissemination events to communicate the conclusions of the final report to different audiences of stakeholders.

### Design

This study focuses on the achievement levels used in reporting NAEP results for the reading and mathematics assessments in grades 4, 8, and 12. Specifically, the study is reviewing developments over the past decade in the ways achievement levels for NAEP are set and used and will evaluate whether the resulting achievement levels are "reasonable, valid, reliable, and informative to the public." The study relies on an independent committee of experts with a broad range of expertise related to assessment, statistics, social science, and education policy. The project receives oversight from the Board on Testing and Assessment (BOTA) and the Committee on National Statistics (CNSTAT) of the National Research Council.

Members of the interdisciplinary review committee were selected in early 2015 (see below):

Name	Affiliation
Dr. Christopher F. Edley, Jr. (Chair)	University of California at Berkeley
Dr. Peter Afflerbach	University of Maryland, College Park
Dr. Sybilla Beckmann	University of Georgia
Dr. H. Russell Bernard	University of Florida
Dr. Karla Egan	EdMetric LLC
Dr. David J. Francis	University of Houston
Dr. Margaret E. Goertz	University of Pennsylvania
Dr. Laura Hamilton	The RAND Corporation
Dr. Brian W. Junker	Carnegie Mellon University
Dr. Suzanne Lane	University of Pittsburgh
Ms. Sharon J. Lewis	Retired (formerly with the Council of the Great City Schools)
Dr. Bernard L. Madison	University of Arkansas
Dr. Scott Norton	Council of Chief State School Officers
Dr. Sharon Vaughn	The University of Texas at Austin
Dr. Lauress L. Wise	HumRRO

Additional information about the Committee and project activities is available at: <a href="http://www8.nationalacademies.org/cp/projectview.aspx?key=49677">http://www8.nationalacademies.org/cp/projectview.aspx?key=49677</a>. The first Committee meeting took place in Washington, DC on February 19-20, 2015. Governing Board staff attended the open session and made a presentation to the Committee on the history of the NAEP achievement levels setting activities. The second meeting of the Committee took place in Washington, DC on May 27-28, 2015. Governing Board staff attended the open session on the afternoon of May 27<sup>th</sup> to listen to panel discussions involving representatives of the media, state and local policymakers, advocacy organizations, and the Common Core State Standards assessment consortia, about interpretations and uses of NAEP achievement levels. Several

additional meetings were conducted in the latter half of 2015 in closed session. The final report is expected to be released in late 2016.

## Presentation to the Governing Board

Governing Board members will be briefed on the findings from the evaluation on Saturday morning, November 19<sup>th</sup>. If the final report has not yet been made public, then the briefing will occur in closed session. The presenters are members of the interdisciplinary review committee: Dr. Christopher Edley (Chair), Dr. Suzanne Lane, and Dr. Lauress Wise.

CHRISTOPHER EDLEY, JR. (*Chair*) is the honorable William H. Orrick, Jr., distinguished professor and faculty director at the Chief Justice Earl Warren Institute on Law and Social Policy at the School of Law of the University of California at Berkeley, where he previously served as dean. Earlier, he was a professor at Harvard Law School. His academic work is in administrative law, civil rights, education policy, and, generally, domestic public policy. His public policy work has included policy and budget positions under Presidents Jimmy Carter and Bill Clinton. He also served as a senior policy adviser in the presidential campaign of Barack Obama and on the transition board, with responsibility for education, immigration, and health. More recently, he co-chaired the congressionally chartered National Commission on Education Equity and Excellence, which was charged to revisit the 1983 report, *A Nation at Risk*, and recommend future directions for reform. He is a member of the American Academy of Arts and Sciences, the National Academy of Public Administration, the Council of Foreign Relations, and the Gates Foundation's National Programs Advisory Panel. He has a B.A. in mathematics from Swarthmore College, an M.A. from the Harvard University John F. Kennedy School of Government, and a J.D. from Harvard Law School.

SUZANNE LANE is a professor in the research methodology program at the University of Pittsburgh. Her research and professional interests are in educational measurement and testing, with a focus on technical and validity issues in large-scale assessment programs and the effectiveness of education and accountability programs. She has served as president of the National Council on Measurement in Education and on its Joint Committee for the Revision of the Standards for Educational and Psychological Testing. She also served on the Management Committee for the next revision of the Standards for Educational and Psychological Testing published in 2014. She has also served as vice president of the measurement and research methodology division of the American Educational Research Association. She has been on a number of technical advisory committees for the College Board, ETS, the Partnership for Assessment of Readiness for College and Careers, the U.S. Department of Education's evaluation of the National Assessment of Educational Progress and its technical review panel for the Race to the Top, and the National Center for Educational Outcomes. She has a Ph.D. in educational psychology from the University of Arizona.

LAURESS WISE is a principal scientist at the Human Resources Research Organization (HumRRO), where he previously served as president. At HumRRO, he currently directs a project to provide quality assurance for the National Assessment of Educational Progress (NAEP). His work has ranged broadly in educational research and educational policy and assessment. He serves on technical advisory committees for the Hawaii, Oklahoma, and Rhode Island departments of education, and is currently directing the independent evaluation of California's new high school exit exam. He recently served as co-chair for the committee that revised the *Standards for Educational and Psychological Testing* of the American Education Research Association, the American Psychological Association, and the National Council on Measurement in Education, and he is currently serving as president of the National Council of Measurement in Education. He previously served on the Panel for the Evaluation of the NAEP Trial State Assessment of the National Academy of Education. He has a Ph.D. in mathematical psychology from the University of California, Berkeley.