What Are NAEP Achievement Levels and How Are They Determined?

Every two years, the National Assessment of Educational Progress (NAEP) in reading and mathematics is administered and results are reported. The results are presented for the nation, for states and jurisdictions like the District of Columbia, and for 27 select urban school districts. The Nation’s Report Card, as NAEP is known, provides more than just average scores, so that student performance can be understood more fully. Results can be examined by characteristics of schools, teachers, and students, such as urbanicity, teacher certification, and student demographics.

The National Assessment Governing Board was created by Congress in 1988 as an independent, nonpartisan board to set policy for NAEP. The Governing Board’s duties include determining what subjects are assessed when and developing student achievement levels for NAEP. Achievement levels represent what students should know and be able to do, essentially answering the question: How good is good enough on NAEP?

The Governing Board defines the meaning of the achievement levels of NAEP Basic, NAEP Proficient, and NAEP Advanced through a careful and deliberate process. Achievement-level setting, also called standard setting, is not unique to NAEP or to educational testing. Medical boards and state bar organizations use cut scores to determine who may practice in their respective professions. More broadly, athletic competitions may set cut scores for what skills need to be demonstrated before moving to the next round. For The Nation’s Report Card, the process translates content expectations to the NAEP scale, producing cut scores that separate each category of performance.
NAEP standard-setting involves approximately 20 to 30 content experts, typically teachers and other subject-matter experts, who meet for several days and receive in-depth training. Standard-setting experts provide technical guidance throughout the process and the content experts apply their knowledge and experience to recommend the achievement levels. Panelists also recommend exemplars—items or student responses that are representative examples of performance at the NAEP Basic, NAEP Proficient, and NAEP Advanced levels. Achievement Level Descriptions, specific to each assessment, accompany the recommendations to clarify what NAEP Proficient means, for example, on the grade 4 mathematics assessment.

NAEP Proficient is defined differently than other uses of the term. For example, the Every Student Succeeds Act refers to student “proficiency.” State assessment systems may use the terms “proficient” and “proficiency,” but there is wide variation in how states define proficient, e.g., equivalent to grade-level performance or a description of what students already know. This variation in terminology is often a source of confusion when it comes to understanding the NAEP achievement levels. NAEP Proficient 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. Thus, NAEP Proficient represents the goal for what all students should know.

The National Assessment Governing Board is responsible for setting achievement levels based on the outcome of the standard-setting process. The Board has set achievement levels in nine NAEP subjects and always solicits public comment on the plans for the standard-setting process and on the content of the Achievement Level Descriptions. The Nation’s Report Card includes information about the types of items or responses that exemplify each achievement level, which helps to illustrate what performance at each achievement level looks like.

The Governing Board has set achievement levels in these nine NAEP subjects:

- math
- reading
- writing
- civics
- economics
- geography
- science
- technology and engineering literacy
- U.S. history

By presenting both average scores and achievement levels, the National Assessment Governing Board fulfills its Congressionally mandated obligation to improve the reporting of results on The Nation’s Report Card. For more information, please visit the Governing Board’s website: www.nagb.gov.