

Building From the Research:
Test Design for K-12 Science
Achievement

National Academy of Sciences
Board on Testing and Assessment

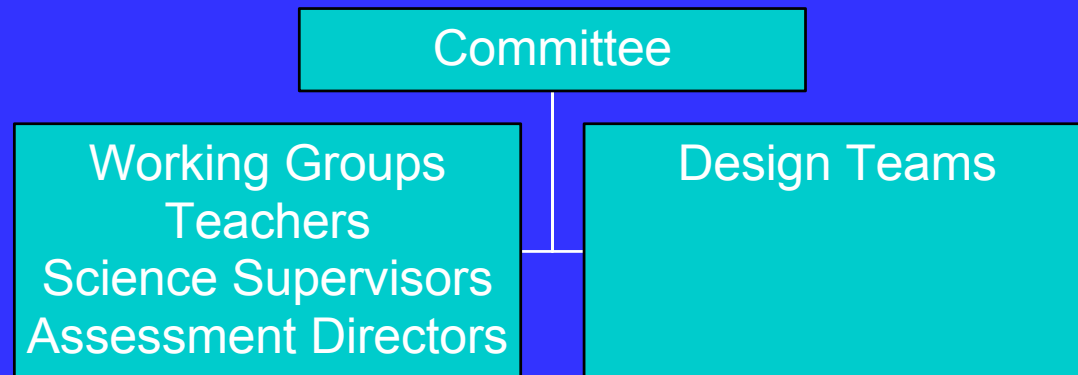
Committee's Charge

1. To provide advice and guidance to states on the design and development of high quality science assessment systems to meet the 2007 – 2008 implementation requirements of the No Child Left Behind Act; and
2. To foster communication and collaboration between the NRC study committee and key stakeholders so that the guidance provided by the committee's report is responsive and can be practically implemented.

Committee's Approach

- Review and synthesize research
- Gather input from stakeholders
- Commission design teams
- Commission papers that lay out visions for science assessments that may serve as future models
- Foster communication and collaboration with stakeholders throughout the course of the study and develop plans to disseminate their report and recommendations widely

Committee Resources



Charge to the Working Groups

- Provide advice and guidance to the committee so that the committee's recommendations will be responsive and able to be implemented
- Provide advice and guidance to the design teams so that their designs reflect what is important to teachers, assessment directors, and state science supervisors
- Serve as disseminators of the committee's report and recommendations to members of their professional communities

Charge to the Design Teams

- Prepare a paper detailing their conception of a model for test development that takes into account the requirements of NCLB, incorporates quality standards for educational and psychological tests, and is sufficiently flexible that it can be adapted to the requirements of a variety of state assessment systems.

The Design Teams

- High Quality Commercial Tests
- Instructionally Supportive Assessments
- Multi-Level, Multi-State Collaborative Assessments
- Teacher- Led, Classroom-Based Assessment

Special Design Teams

- Lay out the learning progressions of two major “big ideas” in science – one from the life sciences and the other from the physical sciences
- Incorporate these progressions into a test framework that reflects how students learn and represent knowledge in a specific domain