Accountability: Responsibility for general school processes and student achievement, including confirming that resources were effectively used and using assessment results to provide information about what children have learned to the public.

Assessment: Using various methods to obtain information about student learning that can be used to guide a variety of decisions and actions. Methods include observations, interviews, video and audio tapes, projects, experiments, tests, performances, and portfolios.

Bias: A lack of objectivity, fairness, or impartiality on the part of the assessor or evaluator, the assessment instrument or procedures, or in the interpretation and evaluation process, that leads to misinterpretation of student performance or knowledge.

Content standards: The desired learning (knowledge, skills, understandings, and habits of mind) that students should acquire and be able to demonstrate.

Developmentally appropriate: Practices based on what is known about how children and youth develop, learn, and manifest their learning.

English language learners: Individuals whose primary language is not English and who are in the process of learning English. Sometimes called limited English proficient students.

Evaluation: The process of interpretation and use of information to make decisions; also, judgment regarding the quality, value, or worth of a response, product, or performance based upon established criteria.

Exhibition: An extended, multi-part project resulting in tangible products and/or presentations; a term often used to describe major performances or activities in a student's school career or a culmination of work in a class.

Habits of mind: A summary term for various dispositions important for effective thinking and learning, including such things as: reading with curiosity; reflecting critically on one's own work; developing independence, clarity, and incisiveness of thought; willingness to work hard; and an ability to manage time effectively.

Important learning: Central concepts, essential skills, and critical ways of thinking within or across a subject/discipline.

Learning styles: Characteristic cognitive, affective, and physiological behaviors that serve as relatively stable indicators of how individual learners perceive, interact with, and respond to the learning environment.

Observation: Watching and recording what students do, without immediate judgment or interpretation.

Opportunity to learn: Giving students the means to acquire high level knowledge and skills; also, provision of equitable and adequate learning resources, including capable teachers, rich curriculum, high-quality facilities, equipment and materials, and essential support services.

Performance: A presentation of one's work before an audience, which may include classmates, parents, or members of the community, in addition to scorers.
**Performance assessment**: General term for an assessment activity in which students construct responses, create products, or perform demonstrations to provide evidence of their knowledge and skills.

**Performance standard**: An established level of achievement, quality of performance, or degree of proficiency. Performance standards specify what a student is expected to achieve or perform to show the student has substantially met content standards.

**Portfolio**: A purposeful or systematic collection of selected student work and student self-assessments developed over time, gathered to demonstrate and evaluate progress and achievement in learning.

**Portfolio assessment**: The process of developing, reviewing, and evaluating student portfolios.

**Project**: An extended work, such as a research report in history or a science investigation.

**Professional development**: Continued learning by educators to improve their knowledge and skills.

**Reliability**: The degree to which an assessment measures consistently or to which assessment scores are free from errors of measurement.

**Sampling**: A way to collect information about a group by examining only a part of the group (the sample), or by dividing a test into sections and giving each member of the group or the sample only one part of the test (matrix sampling).

**Scoring guide ("rubric")**: A guide based on specified standards used to score performance assessments. Rubrics contain a scale (e.g., 6,5,4,3,2,1 or "distinguished, proficient, apprentice, novice") and descriptions of the features/characteristics of work at each point on the scale.

**Stakeholder(s)**: Those individuals who have a substantial interest in schools and student learning, who may include students, teachers, administrators, other school staff, parents, advocacy organizations, community members, higher education institutions, and employers.

**Tracking**: The process of sorting students of the same age or grade level into categories and assigning them to various kinds of classes with different levels of instruction, for most or all of the school day, and for the long term or permanently.

**Validity**: The extent to which an assessment measures what it is supposed to measure. More precisely, the degree to which evidence and judgment supports or disproves the adequacy and appropriateness of inferences and actions based on specific assessment information. Validity indicates the degree of accuracy of predictions or inferences based upon an assessment score.
The primary purpose of this Bibliography is to provide readers with a general introduction to performance assessment. Works marked with an asterisk (*) provide general overviews of new assessments. Other works provide information about particular assessments, particular methods or activities, assessment in particular disciplines, assessment with particular groups, or discussions of implementation and progress. A few provide information on professional development or parent involvement.


FairTest Examiner. Cambridge, MA: National Center for Fair & Open Testing (FairTest).


Portfolio News, La Jolla, CA: University of California, San Diego, Teacher Education Program, Portfolio Assessment Clearinghouse.


The following organizations provide assistance with or materials about performance assessment. In addition, various teacher, principal, administrator, school board, state superintendent, and subject area professional associations provide information on performance assessment or assistance in implementing performance assessments.

**Association for Supervision and Curriculum Development (ASCD)**
1250 North Pitt Street
Arlington, VA 22314-1403
(703) 549-9110

**Center for Research on Evaluation, Standards and Student Testing (CRESST)**
University of California at Los Angeles
10880 Wilshire Boulevard, Rm. 734
Los Angeles, CA 90024-1522
(310) 206-1532

**Center on Learning, Assessment, and School Structure (CLASS)**
648 The Great Road
Princeton, NJ 08540
(609) 252-1211

**Coalition of Essential Schools**
Box 1969
Brown University
Providence, RI 02912
(401) 863-3384

**National Center for Education Outcomes for Students with Disabilities**
350 Elliott Hall
University of Minnesota
75 East River Road
Minneapolis, MN 55455
(612) 626-1530

**National Center for Fair & Open Testing (FairTest)**
342 Broadway
Cambridge, MA 02139
(617) 864-4810

**New Standards Project**
c/o National Center on Education and the Economy
700 11th Street NW, Suite 750
Washington, DC 20001
(202) 783-3668

**Performance Assessment Collaboratives for Education (PACE)**
Harvard Graduate School of Education
8 Story Street
Cambridge, MA 02138
(617) 496-2770

**Project Zero**
Harvard Graduate School of Education
Longfellow Hall
Appian Way
Cambridge, MA 02138
(617) 495-4342

**The Prospect Center**
P. O. Box 326
North Bennington, VT 05257-0326
(802) 442-8333
How the Principles and Indicators Were Developed

In 1991, the National Forum on Assessment released Criteria for the Evaluation of Student Assessment Systems, a two-page statement endorsed by dozens of education and civil rights organizations, designed to help guide the improvement of student assessment systems. This statement was the starting point for development of the Principles.

The Principles were produced through a multi-step process, beginning in November 1993, in which many drafts were written, discussed, and revised. The Forum itself met monthly to discuss the development of the document.

To obtain input from organizations and individuals outside the Forum, meetings were held in a number of cities. Some involved a range of people (teachers, administrators, community members, researchers, and policymakers) while others included members of a particular organization. These meetings were held in:

Cambridge, MA (co-hosted by Project Zero), December 20, 1993
Washington, DC (civil rights groups), January 6, 1994
Ft. Myers, FL (meeting of EIAC Assessment Task Force of CCSSO), January 20, 1994
Washington, DC (teachers with the NEA), January 24, 1994
Los Angeles (co-hosted by CRESST), March 15, 1994
San Francisco (co-hosted by the Far West Laboratory), March 16, 1994
Arlington, VA (administrators with the AASA), March 31, 1994
Chicago (co-hosted by Designs for Change), May 13, 1994
Chicago (meeting of ASCD Assessment Consortium), May 14, 1994
Milwaukee (co-hosted by the Milwaukee Public Schools), May 16, 1994
Madison (co-hosted by Center on Organization and Restructuring of Schools), May 17, 1994
Cleveland (co-hosted by the Cleveland Foundation), May 18, 1994
Alexandria, VA (principals with the NAESP), June 2, 1994
New York (co-hosted by NCREST), June 7, 1994
Albuquerque (CCSSO Large-Scale Assessment Conference), June 14, 1994
Cambridge (co-hosted by Lesley College), June 20, 1994
Phoenix (CCSSO Large-Scale Assessment Conference), June 20-22, 1995

In addition, hundreds of individuals and organizations received the Principles by mail, with many responding to drafts and offering feedback. Input from the meetings and the written comments were incorporated by the Forum into subsequent drafts and the final product.

Co-chairs of the National Forum on Assessment are Monty Neill, the National Center for Fair & Open Testing (FairTest), and Ruth Mitchell, The Education Trust, American Association for Higher Education. They wish to thank the many reviewers, the organizations which hosted meetings, and the many Forum members who volunteered substantial time to work on the Principles.

FairTest provided staffing for the project. Funding was provided by the John D. and Catherine T. MacArthur Foundation and the Joyce Foundation, with additional support from the Ford Foundation.
Assessment of student learning is undergoing profound change at the same time reforms are taking place in learning goals and content standards, curriculum, instruction, the education of teachers, and the relationships among parents, communities, schools, government, and business. These Principles provide a vision of how to transform assessment systems and practices as part of wider school reform, with a particular focus on improving classroom assessment while ensuring large-scale assessment also supports learning. To best serve learning, assessment must be integrated with curriculum and instruction.

High quality assessment must rest on strong educational foundations. These foundations include organizing schools to meet the learning needs of all their students, understanding how students learn, establishing high standards for student learning, and providing equitable and adequate opportunity to learn.

The Principles reflect an "ideal"—what the National Forum on Assessment believes is the best that assessment can be and do. We understand that they will not be implemented immediately or with great ease. We do firmly hold, however, that education systems must move toward meeting these principles if assessment is to play a positive role in improving education for all students.

Principle 1: The Primary Purpose of Assessment Is to Improve Student Learning

Assessment systems, including classroom and large-scale assessment, are organized around the primary purpose of improving student learning. Assessment systems provide useful information about whether students have reached important learning goals and about the progress of each student. They employ practices and methods that are consistent with learning goals, curriculum, instruction, and current knowledge of how students learn. Classroom assessment that is integrated with curriculum and instruction is the primary means of assessment. Educators assess student learning through such methods as structured and informal observations and interviews, projects and tasks, tests, performances and exhibitions, audio and videotapes, experiments, portfolios, and journals. Multiple-choice methods and assessments intended to rank order or compare students, if used, are a limited part of the assessment system. The educational consequences of assessment are evaluated to ensure that the effects are beneficial.

Principle 2: Assessment for Other Purposes Supports Student Learning

Assessment systems report on and certify student learning and provide information for school improvement and accountability by using practices that support important learning. Teachers, schools and education systems make important decisions, such as high school graduation, on the basis of information gathered over time, not a single assessment. Information for accountability and improvement comes from regular, continuing work and assessment of students in schools and from large-scale assessments. Accountability assessments use sampling procedures. Rigorous technical standards for assessment are developed and used to ensure high quality assessments and to monitor the actual educational consequences of assessment use.
Principle 3: Assessment Systems Are Fair to All Students

Assessment systems, including instruments, policies, practices and uses, are fair to all students. Assessment systems ensure that all students receive fair treatment in order not to limit students' present and future opportunities. They allow for multiple methods to assess student progress and for multiple but equivalent ways for students to express knowledge and understanding. Assessments are unbiased and reflect a student's actual knowledge. They are created or appropriately adapted and accommodations are made to meet the specific needs of particular populations, such as English language learners and students with disabilities. Educators provide students with instruction in the assessment methods that are used. Bias review committees study and approve each large-scale assessment.

Principle 4: Professional Collaboration and Development Support Assessment

Knowledgeable and fair educators are essential for high quality assessment. Assessment systems depend on teachers and other educators who understand the full range of assessment purposes, use appropriately a variety of suitable methods, work collaboratively, and engage in ongoing professional development to improve their capability as assessors. Schools of education prepare teachers and other educators well for assessing a diverse student population. Educators determine and participate in professional development and work together to improve their craft. Their competence is strengthened by groups of teachers scoring student work at the district or state levels. Schools, districts, and states provide needed resources for professional development.

Principle 5: The Broad Community Participates in Assessment Development

Assessment systems draw on the community's knowledge and ensure support by including parents, community members, and students, together with educators and professionals with particular expertise, in the development of the system. Discussion of assessment purposes and methods involves a wide range of people interested in education. Parents, students, and members of the public join a variety of experts, teachers, and other educators in shaping the assessment system.

Principle 6: Communication about Assessment Is Regular and Clear

Educators, schools, districts, and states clearly and regularly discuss assessment system practices and student and program progress with students, families, and the community. Educators and institutions communicate, in ordinary language, the purposes, methods, and results of assessment. They focus reporting on what students know and are able to do, what they need to learn to do, and what will be done to facilitate improvement. They report achievement data in terms of agreed-upon learning goals. Translations are provided as needed. Examples of assessments and student work are made available to parents and the community so they know what high quality performance and local students' work looks like. Assessment results are reported together with contextual information such as education programs, social data, resource availability, and other student outcomes.

Principle 7: Assessment Systems Are Regularly Reviewed and Improved

Assessment systems are regularly reviewed and improved to ensure that the systems are educationally beneficial to all students. Assessment systems must evolve and improve. Even well-designed systems must adapt to changing conditions and increased knowledge. Reviews are the basis for making decisions to alter all or part of the assessment system. Reviewers include stakeholders in the education system and independent expert analysts. A cost-benefit analysis of the system focuses on the effects of assessment on learning. These Principles, including "Foundations," provide the basis for evaluating the system.
We, the undersigned, recommend that educators, schools, districts, states, and parents, advocacy, civil rights, community, business, and other organizations concerned with education give serious consideration to the Principles and Indicators for Student Assessment Systems for use in evaluating, revising, and developing assessments and assessment systems.

Organizations

The Achievement Council, Los Angeles, CA
Alameda County Office of Education, CA
American Association of Colleges for Teacher Education (AACTE), Washington, DC
Association for Community Based Education (ACBE), Washington, DC
Association for Supervision and Curriculum Development (ASCD), Alexandria, VA
Association for Women in Science, Washington, DC
Boston Leadership Academy, Boston University California Teachers Association
California Tomorrow Center for Collaborative Education, New York, NY
Center for Collaborative Education, Metro Boston, Inc., Massachusetts
Center for Language in Learning, El Cajon, CA
Center for Women Policy Studies, Washington, DC
Center on Learning, Assessment, and School Structure (CLASS), Princeton, NJ
Chicago Teachers Union Quest Center, Chicago, IL
Cleveland Education Fund, Ohio
Commonwealth of the Northern Marianas Public School System, Saipan, MP
Community Involved Charter School, Lakewood, CO
Community School District 3, New York, NY
Community Training and Assistance Center (CTAC), Boston, MA
The Council for Exceptional Children, Reston, VA
Council of the Great City Schools, Washington, DC
Cross City Campaign for Urban School Reform, Chicago, IL
Current Index to Research of Music in Education (CIRME), Boston, MA
Education Law Center - PA, Philadelphia
The Equality in Testing Project, Holmdel, NJ
Erikson Institute, Chicago, IL
Evaluation Assistance Center East at the George Washington University Institute for Equity and Excellence in Education
Fairfax Association of Elementary School Principals (FAESP), Virginia
Fairfield Area School District, Pennsylvania
Fenway Middle College High School, Boston, MA
Foundation For Youth Impact, Inc., Atlanta, GA
The Foundations School, Chicago, IL
Gallaudet University, Washington, DC
High/Scope Education Research Foundation, Ypsilanti, MI
Hispanic Education Coalition, Washington, DC
Institute for Democracy in Education, Ohio University
Institute for Education and Social Policy, New York University
The Institute for Learning & Teaching, St. Paul, MN
Intercultural Development Research Association (IDRA), San Antonio, TX
International Reading Association (IRA), Newark, DE
The Learning Center at Wildcat Canyon Ranch/City Stables, Oakland, CA
Ludlow Independent Schools, Ludlow, KY
Manoa Writing Program, University of Hawai'i
Manpower International Inc., Milwaukee, WI
Mexican American Legal Defense and Educational Fund (MALDEF), Los Angeles, CA
Midwest Desegregation Assistance Center, Kansas State University
Milwaukee District Advisory Council, Wisconsin
Mississippi Human Services Agenda
National Association for Bilingual Education (NABE), Washington, DC
National Association for the Education of Young Children (NAEYC), Washington, DC
National Association of Elementary School Principals (NAESP), Alexandria, VA
National Association of Secondary School Principals (NASSP), Reston, VA
National Association of State Directors of Special Education (NASDSE), Alexandria, VA
National Center for Fair & Open Testing (FairTest), Cambridge, MA
National Center for Restructuring Education, Schools, and Teaching (NCREST), New York, NY
National Center on Educational Outcomes for Students with Disabilities, Minneapolis, MN
National Clearinghouse for Bilingual Education, George Washington University
National Coalition for Indian Education, Albuquerque, NM
National Coalition of Education Activists, Rhinebeck, NY
National Council for the Social Studies, Washington, DC
National Education Association (NEA), Washington, DC
National Parent Teacher Association (National PTA), Chicago, IL
National Urban Coalition, Washington, DC
National Urban League, New York, NY
National Women's Law Center, Washington, DC
Network of Educators on the Americas (NECA), Washington, DC
New England Desegregation Assistance Center at Brown University, Rhode Island
North Philadelphia Community Compact for College Access and Success, Pennsylvania
Northern Trails Area Education Agency, Iowa
Panasonic Foundation, Secaucus, NJ
Parents Only Want Equal Rights in Education (POWER-E), Detroit, MI
Partnership for Professional Development, University of Louisville
Pennsylvania School Reform Network
Philadelphia Education Fund, Pennsylvania
Portfolio News / Portfolio Assessment Clearinghouse, University of California at San Diego
Program Evaluation and Research Group, Lesley College
Project Zero, Harvard Graduate School of Education
Public Education Fund Network, Washington, DC
Public School 261, Brooklyn, NY
Rochester Teachers Association's (RTA) Leadership for Reform Institute, New York
Science Weekly, Inc., Silver Spring, MD
Social Equity Technical Assistance Center, San Diego State University
Synergy Learning, Brattleboro, VT
Teachers' Laboratory, Brattleboro, VT
University Heights High School, Bronx, NY
United Teachers, Los Angeles, CA
Virginia Association of Test Directors
Virginia Educational Association (VEA) Study Group
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John E. Lensch, Principal, Roanoke, VA
Henry M. Levin, David Jacks Professor of Higher Education and Economics, Stanford University
Joseph P. McDonald, Director of Research.
National Forum on Assessment
SIGN-ON FORM

PRINCIPLES AND INDICATORS FOR STUDENT ASSESSMENT SYSTEMS

We, the undersigned, recommend that educators, schools, districts, states, and parent, advocacy, civil rights, community, business, and other organizations concerned with education give serious consideration to the Principles and Indicators for Student Assessment Systems for use in evaluating, revising, and developing assessments and assessment systems.

Name: ____________________________________________
Title: ____________________________________________
Organization: ______________________________________
Address: __________________________________________
City: _______________________________________ State: _____ Zip: ________

Telephone: __________________ Fax: __________________ e-mail: ________________

☐ You may add our organization to the list of signers of the above statement. I understand our name will be used in public releases of the Principles and Indicators.

☐ You may add my individual name to the list of signers.

☐ You may use my organization's name, for identification purposes only, in public releases of the Principles.

☐ As an individual signer, you may not add my organization's name, even for identification purposes. I would like to be identified as ____________________________

Date________________ Signature________________________

Mail or Fax to:
National Forum on Assessment
c/o FairTest
342 Broadway
Cambridge, MA 02139
Fax # (617) 497-2224

Note: The list of signers will be updated periodically.