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AUTHOR	Sweet, David; Zimmermann, Jacquelyn, Ed.
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ABSTRACT

This document describes performance assessments (PAs) (alternative assessments or authentic assessments). PA requires students to perform a task rather than select an answer on a ready-made list. Some methods that have been used successfully to assess performance include open-ended or extended response exercises, extended tasks, and portfolios. These methods require that students actively develop their approaches to the task under defined conditions, knowing that their work will be evaluated according to agreed-upon standards. PAs may be a more valid indicator of students' knowledge and abilities that traditional assessments. PAs can provide impetus for improving instruction and increase students' understanding of what they need to know and be able to do. Learning how and where data can be applied should be a central part of curriculum. PAs require students to structure and apply information and engage them in active learning. PAs should be based on the curriculum, rather than constructed by persons unfamiliar with the particular state, district, or school curriculum. PAs provide worthwhile tasks that present interesting possibilities for applying an area of curriculum-related knowledge and skills and are inherently instructional. Compared to traditional measures, PAs require a greater expense of time, planning, and thought from students and teachers. Users must pay close attention to technical and equity issues to ensure that PAs are fair to all students. Three examples of successful strategies school, in a Tennessee city school district, and by the Vermont State Department of Education are included, as are 16 addresses of sources of additional information. (RLC)

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Performance Assessment

What is it? Performance assessment, also known as alternative or authentic assessment, is a form of testing that requires students to perform a task rather than select an answer from a ready-made list. For example, a student may be asked to explain historical events, generate scientific hypotheses, solve math problems, converse in a foreign language, or conduct research on an assigned topic. Experienced raters—either teachers or other trained staff—then judge the quality of the student's work based on an agreed-upon set of criteria. This new form of assessment is most widely used to directly assess writing ability based on text produced by students under test instructions.

How does it work? Following are some methods that have been used successfully to assess performance:

- **Open-ended or extended response exercises** are questions or other prompts that require students to explore a topic orally or in writing. Students might be asked to describe their observations from a science experiment, or present arguments an historic character would make concerning a particular proposition. For example, what would Abraham Lincoln argue about the causes of the Civil War?
- **Extended tasks** are assignments that require sustained attention in a single work area and are carried out over several hours or longer. Such tasks could include drafting, reviewing, and revising a poem; conducting and explaining the results of a science experiment on photosynthesis; or even painting a car in auto shop.
- **Portfolios** are selected collections of a variety of performance-based work. A portfolio might include a student's "best pieces" and the student's evaluation of the strengths and weaknesses of several pieces. The portfolio may also contain some "works in progress" that illustrate the improvements the student has made over time.

These methods, like all types of performance assessments, require that students actively develop their approaches to the task under defined conditions, knowing that their work will be evaluated according to agreed-upon standards. This requirement distinguishes performance assessment from other forms of testing.

Why try it? Because they require students to actively demonstrate what they know, performance assessments may be a more valid indicator of students' knowledge and abilities. There is a big difference between answering multiple choice questions on how to make an oral presentation and actually making an oral presentation.

More important, performance assessment can provide impetus for improving instruction, and increase students' understanding of what they need to know and be able to do. In preparing their students to work on a performance task, teachers describe what the task entails and the standards that will be used to evaluate performance. This requires a careful description of the elements of good performance, and allows students to judge their own work as they proceed.

What does the research say? *Active learning.* Research suggests that learning how and where information can be applied should be a central part of all curricular areas. Also, students exhibit greater interest and levels of learning when they are required to organize facts around major concepts and actively construct their own understanding of the concepts in a rich variety of contexts. Performance assessment requires students to structure and apply information, and thereby helps to engage students in this type of learning.

Curriculum-based testing. Performance assessments should be based on the curriculum rather than constructed by someone unfamiliar with the particular state, district or school curriculum. This allows the curriculum to "drive" the test, rather than be encumbered by testing requirements that disrupt instruction, as is often the case. Research shows that most teachers shape their teaching in a variety of ways to meet the requirements of tests. Primarily because of this impact of testing on instruction, many practitioners favor test reform and the new performance assessments.

Worthwhile tasks. Performance tasks should be "worth teaching to"; that is, the tasks need to present interesting possibilities for applying an array of curriculum-related knowledge and skills. The best performance tasks are inherently instructional, actively engaging students in worthwhile learning activities. Students may be encouraged by them to search out additional information or try different approaches, and in some situations, to work in teams.

What does it cost? These positive features of performance assessment come at a price. Performance assessment requires a greater expense of time, planning and thought from students and teachers. One teacher reports, "We can't just march through the curriculum anymore. It's hard. I spend more time planning and more time coaching. At first, my students just wanted to be told what to do. I had to help them to start thinking."

Users also need to pay close attention to technical and equity issues to ensure that the assessments are fair to all students. This is all the more important as there has been very little research and development on performance assessment in the environment of a high stakes accountability system, where administrative and resource decisions are affected by measures of student performance.

What are examples of successful strategies and programs?

- Charlotte Haguchi is a third- and fourth-grade teacher at Farmdale Elementary School in Los Angeles. Regarding assessment and instruction as inseparable aspects of teaching, Ms. Haguchi uses a wide array of assessment strategies to determine how well her students are doing and to make instructional decisions. She uses systematic rating procedures, keeps records of student performances on tasks, and actively involves students in keeping journals and evaluating their own work. Ms. Haguchi can be seen in action along with other experts and practitioners in the videotape *Alternatives for Measuring Performance* by NCREL and CRESST. (See Jeri Nowakowski and Ron Dietel, below.)
- William Symons is the superintendent of Alcoa City Schools in Alcoa, Tennessee. Seeking higher, more meaningful student standards through curriculum reform, Dr. Symons works with school staff and the community to create a new curriculum focused on standards and an assessment linked to the curriculum. Comments and advice from Dr. Symons and other practitioners and experts are available on the audiotape *Conversations About Authentic Assessment* by Appalachia Educational Laboratory. (See Helen Saunders, below.)
- Ross Brewer is the director of planning and policy development in the Vermont Department of Education. Vermont is assessing fourth- and eighth-grade students in writing and mathematics using three methods: a portfolio, a "best piece" from the portfolio, and a set of performance tasks. Other states that have been very active in developing and implementing performance assessments include: California, Arizona, Maryland, New York, Connecticut, and Kentucky. (See Ed Roeber and state officers, below.)

Where can I get more information?

W. Ross Brewer
Planning and Policy Department
Vermont Department of Education
Montpelier, VT 05602
(802)828–3135

Carolyn D. Byrne
Division of Educational Testing
New York State Education Department
Room 770 EBA
Albany, NY 12234
(518)474–5902

Dale Carlson
California Department of Education
721 Capitol Mall
Sacramento, CA 95814
(916)657–3011

Don Chambers
National Center for Research in Mathematical Sciences Education
University of Wisconsin at Madison
1025 West Johnson Street
Madison, WI 53706
(608)263–4285

Ron Dietel
National Center for Research on Evaluation, Standards, and Student Testing (CRESST)/UCLA
145 Moore Hall
405 Hilgard Avenue
Los Angeles, CA 90024–1522
(310)206–1532

Steven Ferrara
Program Assessment Branch
Maryland Department of Education
200 West Baltimore Street
Baltimore, MD 21201
(410)333–2369

James Gilchrist
New Standards Project
Learning, Research and Development Center
3939 O'Hara Street
Pittsburg, PA 15260
(412) 624–8319

Paul Koehler
Arizona Department of Education
1535 West Jefferson
Phoenix, AZ 85007
(602)542–5754

Kate Maloy
National Research Center on Student Learning/LRDC
3939 O'Hara Street
Pittsburgh, PA 15260
(412)624–7457

Joe McDonald
Coalition of Essential Schools
Brown University
Box 1969
Providence, RI 02912
(401)863–3384

Jeri Nowakowski
North Central Regional Educational Laboratory (NCREL)
1900 Spring Road, Suite 300
Oak Brook, IL 60521
(708)571–4700

Edward Reidy
Office of Assessment and Accountability
Kentucky Department of Education
19th Floor Capital Plaza Tower
500 Mero Street
Frankfort, KY 40601
(502)564–4394

Douglas Rindone
Division of Research, Evaluation and Assessment
Connecticut Department of Education
Box 2219
Hartford, CT 06145
(203)566–1684

Ed Roeber
Council of Chief State School Officers
1 Massachusetts Avenue NW
Suite 700
Washington, DC 20001–1431
(202)336–7045

Larry Rudner
ERIC Clearinghouse/AIR
3333 K Street NW
Suite 300
Washington, DC 20007
(202)342–5060

Helen Saunders
Appalachia Educational Laboratory
1031 Quarrier Street
P.O. Box 1348
Charleston, WV 25325
(304)347–0400

by David Sweet

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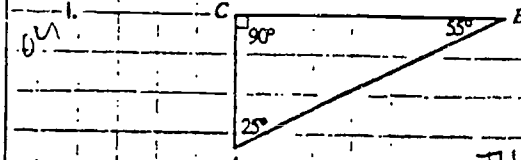
An Open-Ended Exercise in Mathematics: A Twelfth Grade Student's Performance

Look at these plane figures, some of which are not drawn to scale. Investigate what might be wrong (if anything) with the given information. Briefly write your findings and justify your ideas on the basis of geometric principles.

I.

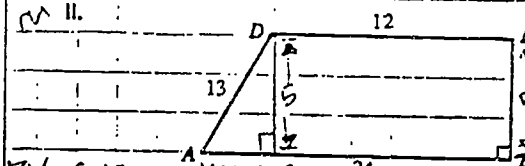


90°
55°
25°
170

NOT POSSIBLE

THE SUM OF THE THREE ANGLES IN A TRIANGLE SHOULD EQUAL 180°. IN THIS PARTICULAR FIGURE, THE ANGLES DO NOT ADD UP TO 180°.

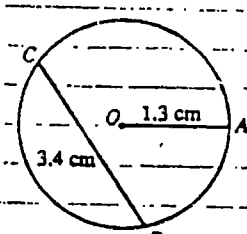
II.



I CANNOT FIND ANYTHING WRONG WITH THIS FIGURE! WHEN I DRAW A PERPENDICULAR LINE FROM POINT D, THE TRIANGLE HAS SUITIBLE MEASUREMENTS. THE RECTANGLE HAS CORRECT MEASUREMENTS ALSO.

BY SUBTRACTING 12 FROM 24, I CAN GIET A DISTANCE FOR A PART OF THE TRIANGLE.

III.



1.3
2
2.6

THIS IS NOT POSSIBLE. THE SEGMENT CD IS SUPPOSED TO BE SHORTER THAN A DIAMETER LENGTH. THE RADIUS (AO) MULTIPLIED BY TWO IS NOT GREATER THAN THE CD. THEREFOR A FIGURE LIKE THIS CANNOT BE REA

Education Research Consumer Guide is produced by the Office of Research, Office of Educational Research and Improvement (OERI) of the U.S. Department of Education.

Lamar Alexander, Secretary of Education ▪ Diane Ravitch, Assistant Secretary, OERI

Francie Alexander, Deputy Assistant Secretary, OERI

Joseph C. Conaty, Acting Director, Office of Research