Teaching Teachers How to Interpret Standardized Tests

The 2001 federal "No Child Left Behind" Act adds pressure on teachers, administrators, and school superintendents to use standardized test results to improve teaching and administration.

Many school personnel, however, have not had an opportunity to develop the assessment skills necessary to accurately interpret the highly complex class, school, and district-wide data that follow the avalanche of tests.

To help address this important issue, a team of researchers at UC Santa Barbara is producing free instructional tools on educational measurement and statistics for use by educators nationwide. The first of three 25-minute modules, "What's the Score?," is now available in web-based, DVD, and videotape formats at no cost to school districts.

"Ideally the materials will help teachers and principals to be better prepared to use test results to help them make decisions about how to modify instruction and target resources, and to feel more comfortable in explaining test results to students, parents, the school board, and the press," said Rebecca Zwick, professor in UCSB's Gevirtz Graduate School of Education.

A specialist in educational measurement and statistics, she leads the three-year project, which is funded by a $478,000 grant from the National Science Foundation.
The modules---professionally produced for geographically, ethnically, and socioeconomically diverse schools throughout the country---will be "understandable and clear without sacrificing rigor," said Zwick, allowing teachers to learn relatively quickly and at their own pace.

"Most state licensing tests for teachers and principals do not include materials in educational testing and statistics, and many teacher certification programs do not offer much course work in that area, so there is a need for professional development for teachers, principals, and other school personnel who are being called upon to interpret test scores more and more," said Zwick.

The first animated module, "What's the Score?," explores topics such as means, medians, and modes; criterion-referenced and norm-referenced test score interpretations; and proficiency cut points, percentile ranks, and grade-equivalents.

The module was administered to 68 teacher-education students at UCSB and 45 teachers and administrators in the Santa Barbara and Lucia Mar school districts.

Those who viewed the module before completing an assessment literacy survey tended to receive higher scores on the survey.

Understanding such basics is just the beginning, said Zwick, since educators' questions might well go beyond definitions and formulas.

A very small sample:

How precise are test scores?

When are differences between individuals or between classes significant?

What about changes over time?

What does it mean for youngsters to be above a proficiency cut point?

These topics will be addressed in future modules.

School districts may obtain free copies of "What's the Score?" or sign up to participate in the 2005-06 school year evaluation process for the second module, now under production, by contacting Rebecca Zwick at rzwick@education.ucsb.edu.
About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.