



Volume 11, Number 3

NEWSLETTER

September 2003

BALANCE AND SYNERGY IN STUDENT ASSESSMENT

By Susan M. Brookhart, Duquesne University

This issue begins a feature about balance in assessment that takes up a challenge reported in the June 1 issue of the Newsletter. The National Education Association (NEA) has issued a paper about balanced assessment, calling for more and better coordination of information from classroom and large scale assessment. Quoting from the newsletter article: "The [NEA] paper highlights differences in purpose, intended users, achievement targets, results, roles and responsibilities of those involved, and the manner in which each connects assessment to student motivation. At the same time, however, suggestions are advanced for taking advantage of that which they must have in common-how to find an appropriate synergy between the two." I posed the question, "What should a synergy between large-scale and classroom assessment look like?" to a range of people, beginning with the Newsletter Advisory Board. For the purposes of this feature, "classroom assessment" means information teachers use for daily instruction and/or reporting and "large scale" means anything larger than that - district or state level tests as well as commercial tests, for example. I asked these measurement professionals for a brief statement of their professional judgment on this question. In this issue, we publish the first in the collection, from Barbara S. Plake, Wendy McColskey and Nancy McMunn, and Louis F. Cicchinelli. The next issue will contain several more of these pieces. Any interested NCME member who would like to contribute is encouraged to contact me. The NCME Newsletter is an appropriate venue for discussing a measurement issue araised by another respected educational professional organization.

OPTIMAL SYNERGY BETWEEN LARGE-SCALE TESTING AND CLASSROOM ASSESSMENTS

By Barbara S. Plake, Buros Center for Testing, University of Nebraska-Lincoln

In thinking about how classroom assessments and large-scale testing might effectively work together in supporting learning and instruction, it is important to clarify what is meant by "classroom assessment" and "large-scale assessment". By classroom assessment I am referring to tests that are used in the classroom by teachers to help inform the progress students are making on the current classroom instruction. The intent is for the test results to have a direct and immediate impact on instruction for students. By contrast, large-scale testing often occurs infrequently during the academic year, perhaps once or twice. Further, it may be that the large scale tests were specifically designed to match the content standards prepared by the state to measure and monitor student achievement on this content across the grades tested. These tests are most often criterion-referenced assessments and student achievement is frequently reported by performance categories such as Basic, Proficient, and Advanced. This is contrasted with other large scale assessments that were not designed to match a specific set of content standards. Rather, these tests are developed to align more generally with content from a larger set of states or even nationally or internationally. These tests frequently provide norm-referenced results.

It seems obvious to me that the classroom assessments and a state's criterion referenced tests should have a higher level of synergy than might be the case between classroom assessments and norm-referenced large scale assessments. The classroom curriculum should be directed, at minimum, at the state content standards. The large scale state-wide assessments designed to measure student progress on these same state content standards, therefore, should show a close relationship. Large-scale norm-referenced assessments that are designed to show how performance of students locally compares to that of students nationally do not share the linkage between content and curriculum that is present with

continued on page 2

classroom and criterion-referenced large scale state tests. Of course because the content specifications for the norm-referenced tests are developed to be as generalizable as possible to the majority of state content standards, the differences in performance between classroom assessments and nationally focused normreferenced tests may not be very pronounced.

BETTER CLASSROOM ASSESSMENT IN SUPPORT OF STUDENT LEARNING

By Wendy McColskey and Nancy McMunn, SERVE

The integration of classroom and large-scale assessment, often referred to as a 'balanced' assessment system, involves using classroom assessment to provide students feedback on their learning and to modify instruction, while using large-scale assessment results for program evaluation and school accountability purposes. In other words, the purposes of the assessment, the kinds of instructional outcomes assessed and the methods used to assess them, are different and unique to the particular level (state, district, school, classroom).

From our experience in working closely with teachers on improving assessment in the classroom, it seems clear that most teachers put forth effort in finding good instructional activities but relatively little into designing good assessment methods or strategies (like a "culminating performance" approach to ending a unit of instruction). Teachers often use poorly designed multiple-choice tests from text materials that may not align with their learning targets or instruction provided to the students. Designing good assessment tools is hard, especially if teacher time or expertise in this area is limited. Experience suggests that even when school reforms stressing the importance of alternative approaches to assessment are implemented, and adequate time is given to design methods that go beyond factual recall, teachers struggle with whether this richer kind of performance assessment will prepare students for the items on state tests. It is important to help teachers realize that assessment in the classroom has purposes and methods that go beyond those of large-scale assessments. Leadership plays an important role here and states are perhaps in the best position to provide information to educators that make it clear that classroom assessment and even school-wide assessments (as in graduation exhibitions, for example) do not have to mimic state test formats.

Several major educational professional organizations (AASA, NAESP, NASSP, NEA, and NMSA) took a proactive step in trying to influence the debate about the nature of the relationship between state testing programs

and assessment at other levels. A Commission, headed by Jim Popham, released the report, *Building Tests to Support Instruction and Accountability: A Guide for Policymakers*, which advanced nine recommendations for states to implement to improve the usefulness of the assessment system (An article on this work is available at

http://www.serve.org/publications/VisionMagazineV1N 2.pdf).

Requirement four specifically addresses the issue of communicating to districts and schools that assessment at the classroom level is a distinct process. It reads: "A state must provide educators with optional classroom assessment procedures that can measure students' progress in attaining content standards not assessed by state tests." The recommendation implies that rather than creating banks of multiple-choice test items which

continued on page 3

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School of EducationFax. (406) 442-8257Duquesne Universitye-mail: susanbrookhart@bresnan.netPittsburgh, PA15282

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might encourage teachers to mimic state test formats, perhaps districts and states could increasingly provide exemplars of complex performance tasks that assess critical thinking skills in a content area. Making these kinds of assessments of deep understanding available could send a powerful message about the different natures of classroom and large-scale assessment.

In January 2003, a conference was held in Washington, DC sponsored by the National Research Council (NRC) for a project entitled: Assessment in Support of Instruction and Learning: Bridging the Gap Between Large-Scale and Classroom Assessment. Presentations made on selected programs outlined different views of how to bridge the gap. Many of the programs were about creating more district/school assessments and how districts can use these to supplement the information from state tests and provide more frequent and detailed information about student achievement. It may be helpful to add diagnostic testing tools to provide more information to schools on the specific areas of student However, this will not address the achievement. problem of helping schools and teachers understand the importance of improving the quality of classroom assessment practices as Lorrie Shepard outlined in her AERA presidential address on the role of assessment in a classroom learning culture.

ASSESSMENT SYNERGY

By Louis F. Cicchinelli, Executive Vice President, Midcontinent Research for Education and Learning

In our haste to find a cost-efficient, equitable way to measure student achievement, large-scale, standardized tests have become not only commonplace, but the cornerstone of many state accountability systems. At times, these assessments are the sole determinants of student progress and the basis of sanctions and rewards for schools and teachers.

Just a few short years ago, the education literature on assessment called into question the value and utility of large-scale standardized tests for measuring student knowledge and skills. Attaching high stakes to these assessments was seen by some as a sure-fire way to create adverse consequences for the educational process --- consequences such as narrowing of the curriculum, teaching to the test, and teaching test-taking skills instead of content. Educators have long argued that the teaching and learning process would be better served by more robust assessments that rely on authentic tasks, include samples of work, foster higher order thinking skills, measure growth in cognitive and metacognitive skills, and offer the opportunity to provide relatively immediate feedback to teachers and students alike.

Certainly large-scale standardized test scores can give us a snapshot of systemwide performance at a moment in time, and even indicate general areas where improved curriculum and instruction would be beneficial. However, it is classroom assessments that yield the feedback students and teachers need to improve teaching and learning and ultimately student achievement. Though training may be needed to help administrators and teachers effectively use student data to make instructional decisions, the benefits are usually well worth the investment of time and money.

There is considerable research that shows that timely and specific feedback to learners is among the most effective instructional strategies. Teachers can quickly determine which concepts students are having difficulty with, and which are well understood. Instructional time and energy can then be better used to meet student needs and improve performance. Equally important is the recognition teachers can provide to students for a job well done.

Complementary large-scale standardized tests and classroom assessments can be designed that provide both summative and formative information about student learning and achievement. Achieving synergy between these two assessment levels can lead to the best of all possible accountability systems -- one that alerts us to potential gaps and lapses in student performance as well as guides our choice of interventions to assure adequate progress toward high levels of student achievement.

NEWS FROM AERA DIVISION D

By Anne R. Fitzpatrick, Secretary, AERA Division D

<u>2004 Annual Meeting</u>: The Division D Program Committee is busy, busy, busy planning/coordinating the Division D paper sessions, symposia, round-tables, as well as business and committee meetings to be held in San Diego in mid-April, 2004. Catherine Hombo (chombo@ets.org) is the chair of the committee, and Brian Habing and Greg Kelly are co-chairs.

<u>Awards</u>. There is a new Division D award for Significant Contribution to Educational Measurement and Research Methodology! Chair of this committee is Joanne Peng.

continued on page 4

Look on page 6 of this newsletter for a description of the award and application guidelines.

Division D and the Qualitative Research SIG have issued a call for nominations for the 2003 Mary Catherine Ellwein Outstanding Dissertation Awards. These awards are given for dissertations that make outstanding contributions to qualitative or quantitative methodology in educational research. The call is included in d'News, Division D's newsletter, which is posted on the Division D web page. (http://www.aera.net/divisions/d/).

Mentoring Opportunities. The Professional Mentoring Committee of Division D makes mentors available to young professionals in Division D. A young professional is any individual who has earned his or her degree (Ph.D., Ed.D., etc.) within the past three years. Division D mentors help young professionals in a variety of ways, ranging from giving advice on work/life issues to collaborating on research projects. Each year, before the start of AERA's annual meeting, a breakfast is held to enable mentors and young professionals to meet each other as well as other colleagues. If you are a young professional who is interested in the mentoring program, please visit the committee's web page (http://www.edmeasurement.net/aera/). If you are interested in acquiring a mentor, please contact Jim Impara (jimpara@unl.edu), who is the new chair of the committee.

The Affirmative Action Committee Division D has begun a mentoring program that involves graduate students in the meetings of technical and advisory panels associated with operational testing programs. The students will have the guidance of either a member of the advisory panel, staff of the testing program, or staff of the testing company associated with the program. Patti Elmore (<u>pbelmore@siu.edu</u>) is the new chair of the committee. For further details, please see the Division D newsletter, posted on the Division D web page.

NCME 2003 AWARD FOR TECHNICAL OR Scientific Contributions to the Field of Educational Measurement

The NCME Technical Award was presented at NCME in Chicago, on April 23, 2003. In the year 2003, NCME honors technical or scientific contributions to the field of

educational measurement in 2000, 2001, or 2002. Among the criteria for the award were quality, innovation, and importance of the contribution.

The recipient was James O. Ramsay, a professor at McGill University. Dr. Ramsay is a past president of the Psychometric Society, and currently is president of the Statistical Society of Canada. The citation recognized "his exceptional work in nonparametric modeling of response data. Dr. Ramsay's groundbreaking work in the nonparametric regression, kernel smoothing, and the nonparametric estimation of item response functions will have a substantial impact on future model-based measurement. His modeling program TESTGRAF and his co-authored book, *Functional Data Analysis*, are just two examples of his outstanding contributions to measurement." Dr. Ramsay describes his work briefly below.

NCME 2003 TECHNICAL AWARD NOTES

By James O. Ramsay, McGill University

The theme that underlies my approach to data analysis is the use of flexible methods for representing the functions that are either used as modeling elements or as direct fits to data - but with the twist that these methods should reflect what we already know about aspects of these functions. I believe that when we use very high dimensional models, such as functions, it is essential to bring any prior information that we have to the estimation process.

Consequently, the central idea in our paper (Rossi, Wang and Ramsay, 2002) is that the advantages of the more familiar parametric models can be preserved while still permitting as much flexibility in the item response function as is required to fit the data. That is, one is not required to choose between a parametric model with its small number of parameters and a nonparametric curve with its greater flexibility but less well understood statistical properties. Instead, the paper shows that, when estimating an item response function, a continuum of possibilities are available between a low-dimension model similar to the three-parameter logistic and an arbitrarily flexible nonparametric curve.

We exploited the theory of linear differential equations in defining a roughness penalty that is customized so that the more heavily the data are smoothed, the closer the fit will resemble a specified parametric model, which in this case is something very much like the famous three-parameter logistic curve. Moreover, estimates were obtained through maximum marginal likelihood estimation, often considered the estimation criterion of *continued on page 5*

choice in psychometric problems involving latent traits.

This work points the way to statistical methods that provide smart estimates in the sense of permitting the analyst to incorporate prior knowledge of data and model features while retaining the capacity for the data to reveal new structure. Not surprisingly, there are strong connections here with Bayesian methods.

- Ramsay, J. O. and Silverman, B. W. (1997) *Functional Data Analysis*. New York: Springer-Verlag.
- Ramsay, J. O. and Silverman, B. W. (2002) *Applied Functional Data Analysis*. New York: Springer-Verlag.
- Rossi, N., Wang, X. and Ramsay, J. O. (2002) Nonparametric item response function estimates with the EM algorithm. *Journal of the Behavioral and Educational Sciences*, 27, 291-317.

NCME OUTREACH AND PARTNERSHIP Opportunities

By Steve Zuniga, CRESST/UCLA and Marianne Perie, Educational Testing Service

One of the important goals of the NCME Outreach and Partnerships Committee is to build relationships between NCME and other professional education associations. The committee's goal for this year is to encourage NCME members to become more familiar with the work of three associations: The American Association of School Administrators (AASA), the National Association of Secondary School Principals (NASSP), and the National Conference of State Legislators (NCSL). The NCME Outreach and Partnerships Committee has submitted an NCME proposal for next year's San Diego meeting which, if accepted, will include representatives from each association.

The Outreach and Partnerships committee encourages NCME members to submit presentation proposals to any of the three associations. If you are interested in developing a proposal, please contact Ron Dietel, chair of the NCME Outreach and Partnerships Committee at ron@ucla.edu or via phone at 310-794-9168. Like NCME and AERA, most of these associations develop their conference agendas almost a year in advance of their conference, so contact Ron soon if you are interested.

American Association of School Administrators

The American Association of School Administrators (AASA) mission is to support effective school systems and leaders who are dedicated to the highest quality of public education. AASA goals are to improve the

condition of public education, connect schools and communities, and enhance the quality and effectiveness of school leaders. AASA's next two annual meetings are scheduled for February 19-22, 2004 in San Francisco and February 17-20, 2005 in San Antonio. AASA will host a 2004 Summer Institute for Rural and Suburban Superintendents on July 18-21, 2004 in Dana Point, California. For more information, check the AASA web site at: www.aasa.org.

National Association of Secondary School Principals

The National Association of Secondary School Principals (NASSP) is comprised of middle and high school principals, assistant principals, and school leaders from around the world. The NASSP promotes the development of administrative leadership and students' intellectual growth. The NASSP publishes reports, provides professional development, and has created a relationship with Congress to achieve its goal of excellence in school leadership. The next annual meeting is scheduled for February 27-March 1 in Orlando, Florida. For more information visit the NASSP web site at www.nassp.org.

National Conference of State Legislators

The National Conference of State Legislators (NCSL) is a forum for advancing ideas nationwide and on Capitol Hill. NCSL is a bipartisan organization that allows legislators a venue to discuss issues and provides lawmakers, committees, and staffs with resources for research, publications, and seminars. NCSL answers more than 16,000 questions from legislators annually on various issues and is recognized as the preeminent bipartisan organization dedicated to serving lawmakers. The 2004 annual meeting is scheduled for July 19-23 in Salt Lake City, Utah. For more information see the NCSL web site at <u>www.ncsl.org</u>.

NCME WEBSITE HAS NEW DIRECTOR

M. David Miller, Professor and Chair of the Department of Educational Psychology at the University of Florida, is the new director of the NCME website. He began July 1, 2003, taking over from Delwyn L. Harnisch, University of Nebraska-Lincoln. The NCME website is located at http://www.ncme.org and includes pages titled About NCME, Listservs, Annual Meeting, News, Publications, Related Sites, and Opportunities. The NCME Newsletter is also available on the website.

ANNOUNCEMENT OF DIVISION D AWARD: SIGNIFICANT CONTRIBUTION TO EDUCATIONAL MEASUREMENT AND RESEARCH METHODOLOGY AWARD

By Chao-Ying Joanne Peng (Chair), Kadriye Ercikan, and Mark Gierl

We are announcing and soliciting nominations for a new Division D Award: Significant Contribution to Educational Measurement and Research Methodology. This annual award is intended to recognize a published research that represents a significant advancement in theory and practice of educational measurement and/or educational research methodology. The research may be the work of an individual or a team of researchers. The winner of this award will be announced and honored at the 2004 AERA annual meeting with a plaque and a \$500 check.

Guidelines:

In selecting a winner for this award, the following guidelines will apply:

- Quality and potential impact of the research on educational measurement and research methodology are the primary criteria for this award.
- The recognized publication may be, but is not limited to, a refereed research article, conference paper, monograph, book chapter, and/or book. The work must have been published between August 1st, 2002 and July 31st, 2003.
- The nominee must be the first or sole author of the work and must be a member of AERA Division D.
- The work may not have received another award from AERA, a professional organization or educational institution.

Application Procedures:

- I. A complete nomination consists of
- The nomination letter (self nomination is welcome),
- A copy of the nominated research publication including its bibliographic citation. If the publication is a book or monograph, the nominator should indicate which portion of the book or monograph is nominated for this award.
- The nominee's vita.
- II. Submit the complete nomination by November 30th, 2003 to:
 Joanne Peng, Chair of the Award Committee Room 4050, School of Education 201 N. Rose Ave., Indiana University, Bloomington, IN 47405-1006

peng@exchange.indiana.edu

(812) 856-8337, (812) 856-8333 (fax)

CALL FOR NOMINATIONS: BRENDA H. LOYD OUTSTANDING DISSERTATION AWARD

The National Council on Measurement in Education (NCME) is seeking nominations for the eighth annual Brenda H. Loyd Award for an outstanding dissertation in the field of educational measurement. The author of the dissertation need not be a member of NCME. However, the author's advisor must be a member of NCME. Nominations will be accepted for dissertations completed between July 1, 2001, and June 30, 2003.

The winner of the award will receive \$1,000 and a commemorative plaque. In addition, the advisor or committee chair for the award-winning dissertation will receive a letter of congratulations. The award will be presented at the 2004 NCME Annual Meeting, to be held in San Diego. An announcement of the award recipient will be published in the NCME newsletter. An honorable mention award may also be given; its recipient will be recognized with a certificate.

To nominate a dissertation, the following items should be submitted to the Chair of the Brenda H. Loyd Dissertation Award Committee <u>by November 15, 2003</u>:

- a letter of nomination from the author's advisor;
- a summary of the dissertation research (up to 10 pages), including the rationale for the study, research questions, methodology, results, and conclusions;
- a table of contents (including a list of tables and figures); and
- a statement from the graduate school confirming the date of completion and acceptance of the dissertation.

The criteria used by the Dissertation Award Committee include the significance of the contribution to the field of educational measurement, quality of the literature review, technical quality of the research, and clarity of the writing.

Please submit materials by November 15, 2003 to:

Anne R. Fitzpatrick, Chair NCME Brenda H. Loyd Dissertation Award Committee Educational Testing Service 80 Garden Court-Suite 202 Monterey, CA 93940 Telephone Number: 831-647-3774

JASON MILLMAN PROMISING MEASUREMENT SCHOLAR AWARD DESCRIPTION AND APPLICATION PROCEDURES

In 1995, the Department of Education at Cornell University, where Dr. Millman spent his entire career, initiated the Jason Millman Promising Scholar Program. The award was intended to honor the lifetime work of Dr. Millman, to recognize his contributions to the field of applied measurement, and to continue Dr. Millman's support of scholars in their formative years who are just beginning their research careers.

Beginning in 2003, the National Council on Measurement in Education, with the support of the Millman endowment, will continue the tradition with this award. As in the past, it is designed to honor Dr. Millman's work by recognizing a scholar at the early stages of his/her career whose research has the potential to make a major contribution to the applied measurement field. In addition to recognition by NCME, the successful candidate will receive \$1000. Only one candidate will be chosen to receive the award each year.

Criteria for Eligibility:

To be eligible for the award in a given year, the candidate must have: (1) received the doctorate within the last five years; (2) two or more unique papers either accepted for presentation at an NCME annual meeting or published in NCME publications within the last five years; and (3) the support of his/her professional colleagues that his/her work represents a significant contribution to the field of applied measurement.

Application Procedures:

For full consideration of candidates, applications/ nominations must include the following items.

- 1. A letter of nomination from a professional colleague who is a member in good standing of NCME.
- 2. At least two letters of recommendation (from persons other than the nominator) that speak to: (1) the candidate's contributions to the field of measurement as a teacher and/or as an applied measurement practitioner and/or as a measurement researcher; and (2) the reasons for which the candidate's work represents a significant contribution to the field of applied measurement.
- 3. Two or more unique papers presented at any of the last 5 NCME annual meetings, or published in the last 5 years in an NCME publication.

A. NCME annual meeting papers may be in a revised format.

- B. Nonpublished or published dissertations do not qualify as a paper, although papers developed on the same or similar topics do qualify.
- C. Candidate must be the first author on all multipleauthor papers. In this case, the candidate must provide a statement that defines his/her contributions to the paper.
- 4. Candidate's current curriculum vita.
- 5. A letter from the candidate outlining his/her career goals and how his/her work contributes significantly to the field of measurement.

Deadline:

Deadline for submission is November 3, 2003. All materials must be submitted on the same date for receipt by the deadline date. Only complete sets of materials will be considered. The Committee will acknowledge receipt and notify the candidate if any materials are missing.

Method of Submission:

Candidates may use more than one mode of delivery for submitting materials. One copy is required for materials submitted electronically. Six copies are required for materials submitted as hard copy. If some materials are submitted electronically and some by surface mail/package delivery, they must all be submitted on the same date. If more than one mode of delivery is used for the submission, the candidate must notify the Committee chair of the modes and expected date(s) of arrival. Submission dates and expected arrival dates must precede the deadline date.

Submit materials to Committee Chair:

Susan.Loomis@act.org, use Subject Line: NCME Millman Award

Susan Cooper Loomis Attention: NCME Millman Award K-12 Assessment Programs (26). ACT, Inc. 2201 N. Dodge Street Iowa City, IA 52243 (319) 337-1048 FAX: (319) 341-2335

NCME AWARD FOR OUTSTANDING Dissemination of Educational Measurement Concepts to the Public

In the year 2004, NCME will honor outstanding dissemination of educational measurement concepts to the public in 2001, 2002, or 2003. Examples of past awards that have been made in this category include: James Mitchell, Buros Institute, the Australian Council for Educational Research, The Seattle Times, and the Admission and Guidance Services Division of the College Board. NCME members and others are invited to identify candidates for this significant award. Selection criteria for the award will include, quality, innovation, and importance of the contribution.

Self nominations are encouraged as are nominations for others. Individuals or groups are eligible for this award. Nominees need not be NCME members. A nomination consists of 6 copies of a 3-5 page statement summarizing the technical or scientific contribution as well as an electronic version of the statement. Applicants should clearly describe and demonstrate the importance of the contribution to the field of educational measurement. Additional supporting documentation is welcome. Applications should include the names and addresses of two persons familiar with the specific application and its results. The committee may request further materials and may contact others who are likely to be able to evaluate the contribution.

Nominations should be sent by January 31, 2004, to Wim J. van der Linden, Department of Research Methodology, Measurement, and Data Analysis, University of Twente, PO Box 217, 7500 AE Enschede, The Netherlands. Phone: +31-53-489 3581. Fax is +31-53-489 4239. Email: w.j.vanderlinden@utwente.nl. The award will be presented at the NCME Annual Meeting in San Diego, CA, April 2004.