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FROM THE PRESIDENT

Richard J. Patz, ACT

It's a cliché that change is a constant, but at this time it would be difficult to begin this note with anything other than some remarks about the changes underway at NCME. There are, of course, significant changes afoot in our field: technologies pushing the frontiers of measurement practice, new school tests emerging across the United States, and dynamic research and scholarship challenging long-established conventions and common wisdom. These and other developments continue to make measurement and education exciting and challenging fields of endeavor. In this first note, however, I will focus a bit more reflectively on the changes taking place at NCME itself, as these are more significant now than at any time in the past decade.

I am delighted to welcome Joe Casey as NCME's new executive director. Joe assumed the role on June 1, the culmination of a multiyear process of management transition. Joe works from our new headquarters in Philadelphia, where he is part of the Fernley & Fernley association management company. Look for a note from Joe toward the end of this newsletter.

Preparations for the management transition occurred in earnest during Laurie Wise's presidency, as he, Anne Fitzpatrick, former Board member and chair of the Budget and Finance Committee, and I worked with both former and new management companies to implement the NCME Board decision in favor of a management change. That difficult decision was facilitated by the fine work of previous Board members Jim Impara, Jim Wollack, Anne Fitzpatrick, and Joseph Martineau. All involved in the many aspects of the process—identifying our requirements, drafting an RFP, managing the selection process, and executing the change—have kept a focus on what NCME needs to grow, thrive, and advance our mission.

We are now starting to see concrete realizations and manifestations from this management change. These result from the combined efforts of our volunteer members and the professional staff who support Joe at Fernley & Fernley.

New Website

Our previous NCME website has resided on an old and increasingly obsolete technology platform. The new website, launched at the end of June 2015, has a more robust platform with greater functionality. We have migrated a great deal of content from the old, left a few dusty pieces behind, and continue to stand up the core membership features and functions in a way that is consistent with best practices for membership organizations. We will need to be patient and offer constructive criticism as content is refined, functionality is fully configured, and new user ids and passwords are created. Thankfully, April Zenisky and the rest of the NCME website committee are actively engaged, as is the website editor, Brett Foley. Feel free to offer feedback to Joe, April, Brett, or me as we move the new website forward.

Annual Meeting Abstract Management

Planning for the 2016 Annual Meeting to be held in Washington, DC next spring is off to a great start. Look online for the conference theme and a link to the Call for Proposals. Underlying the call is a new software system for managing the submission and adjudication of abstracts and for selecting, assembling, and publishing the conference program. This process has been a significant pain point for NCME and our program chairs for a number of years. Aligning a process that works for our membership with a software program configured to meet our needs has proven to be a formidable task. This year, we are doing

a reboot and transitioning to a system offered by Omnipress. Our program chairs, Andrew Ho and Matt Johnson, and our training and development chair, Xin Li, have worked tirelessly with Fernley & Fernley and Omnipress to get us to a workable starting point. The work they have done together should serve NCME and future program chairs well for many years. Please do your part in test-driving the new system by submitting a proposal for a paper, coordinated session, or a training course. You won't want to miss the opportunity to participate in the 2016 Annual Meeting program.

We have an exciting year ahead. With most of the transition activities behind us, the NCME Board, working with all of our committees, will be focused on advancing our shared work and our mission. Our July 2015 board meeting will be held in our new Philadelphia headquarters. Our NCME Mission Fund has just concluded its first service activity—an outreach session on the 2014 *Standards for Educational and Psychological Testing* at CCSSO's National Conference on Student Assessment. We are very pleased to be publishing the first volume in our new NCME book series later this year, and, of course, we are actively working to create a compelling and successful 2016 Annual Meeting.

The purpose of all the internal change at NCME is to provide a better membership experience, modernize our practices and tools, and help our organization grow. Though occasionally bumpy, these improvements should help us to better serve our membership and the communities we support. Please keep in touch and let me, the NCME Board, and/or Joe Casey know what changes you'd like to see and what priorities you'd like to have us advance together.

FROM THE EDITOR

Heather Buzick, Educational Testing Service

This issue started off with the first message from our new NCME President, Rich Patz. Along with the annual change in leadership, NCME's new management company, Fernley & Fernley, has begun their tenure. See the note by Joe Casey, NCME Executive Director, in this issue for further details on the transition and contact information.

Our recurring content includes the graduate student column, currently written by Jonathan Rollins, our Spotlight member (Michael Rodriquez), the Fitness Run/Walk Corner, and the Legal Corner, where S.E. Phillips discusses opt-outs and state testing. We are adding a new series on fairness and testing to the regular newsletter content. Maria Elena Oliveri, Edynn Sato, and Thanos Patelis, all members of the Newsletter Advisory Board, have taken the lead on conceptualizing and organizing the new series. They have included an introduction to the series in this issue.

We have updates from the Publications Committee, the Awards Committees, and the Graduate Student Issues Committee. Recaps of the 2015 NCME award winners, announced at the 2015 Annual Meeting in Chicago, are included as well.

I encourage you to send me articles, suggestions for content, and feedback on this or previous issues.

GRADUATE STUDENT CORNER
THINKING TECHNOLOGY: THE PROCESS IN PROGRESS

Jonathan D. Rollins III, the University of North Carolina at Greensboro

The future holds many changes that will undoubtedly influence our research and practice as we graduate students enter the measurement field. A reflection on how technology had an impact on measurement over the past 30 years quickly reveals how important it is to anticipate how such progress will change the field in the next 30 years. Colleges/universities often are said to be preparing students for jobs that don't yet exist. Advances in current technology and the introduction of new technology will bring along with them novel challenges to be faced and decisions to be made.

Jerome Clauser, who was a previous graduate student columnist from the University of Massachusetts – Amherst, wrote an NCME Newsletter column in 2012 wherein he interviewed Dr. Ronald Hambleton, Dr. Michael Kane, and Dr. Wim van der Linden concerning the past and future of measurement (Volume 20, Number 3). In this column, I expand on Jerome's column and explore further how changes in technology, and more specifically computerization, will likely impact the field throughout our careers. The first section below describes advances in computerization we can anticipate, especially because some of the developments are currently underway. The second section contains an interview with Dr. Terry Ackerman, who not only has seen how the use of technology has evolved in measurement in both academic and operational settings, but also has been pivotal in bringing technology to the forefront of measurement practice.

Technology and the Future of Measurement

Improving the efficiency of computing speed has long been a desire for measurement researchers. Examples of this historically have been found with estimation algorithms, notably with conditional maximum likelihood and Markov chain Monte Carlo methods. It is important to consider how progress will be made with both software and hardware. In fact, the creation of new software, and even new programming languages, which will serve both academic and industry endeavors, will lead to more resources that will make complex analyses even more available and accessible than they currently are for a diverse number of psychometric topics.

Such software and code likely will be run using parallel computing, which is a process that uses multiple processing elements to perform calculations/estimations. Substantial progress has already been made in this area and will likely continue to improve computational speed. However, more complexity with computer machinery also introduces more points where errors and exceptions might occur. Multiple calculations attempting to access a single memory location at the same time would be an example. Error messages can already be a nuisance in 2015, but we must anticipate these new computer issues, especially when considering tight deadlines that are often found with scoring and reporting data in practice.

Additional consideration must be given to cloud computing, which is the hosting of computer services (i.e., running an application) over the Internet instead of locally on a machine. While this allows more centralization of testing processes, it also introduces some security concerns because live testing data would be being transmitted over networks. The creation of large servers to host a vast number of processes, such as that done with cloud computing, has also permitted advances in how we can analyze extremely large data sets. All of this is especially helpful as we consider novel item types that may depend on capturing multimedia or gaming application input, which may take up much more memory than scoring items traditionally as dichotomous or polytomous outcomes. While maybe not within the span of our future careers, the introduction of quantum computing will also take precedence as we consider training future generations of psychometricians who will follow.

Innovation in measurement will likely enter new frontiers as technological capacity increases. Fresh approaches to machine learning and automata may affect how we score open-ended response items. Current advances in artificial neural networks have shown the promising potential of learning algorithms. Furthermore, testing that involves human-computer interactions may be reimagined as artificial intelligence begins to model human behavior more closely. And modeling this behavior may even influence how we interpret and use scores, as a potential intersection of biometrics and psychometrics may allow us to associate theta (or multiple thetas) with specific regions of brain activity or series of cognitive processes that will be mapped.

While these changes will impact our everyday practice of measurement, specific areas of measurement will likely be impacted by improved computerization, including but certainly not limited to diagnostic measurement, score reporting, assessment

engineering, automated item generation and item banking, and assessment using mobile devices, among others. Such rapid emergence of software and computational resources will undoubtedly be very helpful, though issues of accessibility may possibly need to be further addressed. Not all graduate students will have access to newer proprietary software, and colleges/universities will continue to be pivotal in providing these resources freely or at reduced costs for graduate students to use. Furthermore, current software may not be fully supported on computer platforms in the distant future. This concern has already surfaced with programs that were designed to run on DOS machines, and now we use virtual machines to run these programs on some of our latest computers. As long as we are cognizant of these possibilities, then it will be easier to plan ahead and be better prepared for any issues and concerns that we may face with technology as it continues to evolve.

Interview With Dr. Terry Ackerman

Dr. Terry Ackerman currently serves as a full professor and associate dean of research and assessment within the School of Education at the University of North Carolina at Greensboro. Many in our readership will recall that Dr. Ackerman was previously the vice president (2008–2009) and president (2009–2010) of NCME. Currently he is president-elect of the Psychometric Society. Prior to entering academia, he was an assistant director of the Program Support and Research Department at ACT. Some of his research interests have included computerized adaptive testing, test construction, and differential item/test functioning. Within the context of multidimensional item response theory (IRT), Dr. Ackerman developed software that practitioners can use to better understand the various composites of skills that are being assessed by multidimensional tests. I asked him to provide some insight into the future role of technology in the measurement field.

What are your views on how advances in efficiency and innovation of computerization will change the future of measurement?

While there are many areas in the measurement field and NCME that have been affected by technology, I would just like to mention just a few. These include the teaching of measurement, analytic and modeling advancements, NCME collaboration, and communication between testing practitioners and test users. Within the field of measurement education, the increasing use of new software and technological teaching resources (e.g., Jing,[1], Camtasia, [2] Knewton[3]) not only aid both formative and summative assessment practices, but have the potential to make the teaching of measurement more effective. Second, I have a deep appreciation of computer technology, having seen the progress made in measurement with the evolution of computer technology over the past 30-plus years. The transition from the storage of 5.25” 1.2 megabyte floppy disks to forthcoming 1 terabyte flashdrives, the speed of typical PCs increasing to over 500 gigaflops, and supercomputers working at the speed of petraflops—computing power is truly incredible. We are able now to estimate parameters of very sophisticated models due to the combination of efficient algorithms and sheer computing power. Third, the use of software technology serves as a great potential for the NCME conference and outreach efforts. A few years back, we used Blackboard Collaborate to facilitate a virtual session so that measurement practitioners in Central America, South Africa, and China could present their research at an NCME meeting from their home countries and could discuss their research with those at the conference. These sessions helped to facilitate the exchange of ideas and resources on topics such as test design, equating, score-scale development, and other basic elements of a testing programs with practitioners from third world countries. This is a clear direction for measurement outreach that NCME should pursue. Finally, advances in technology and enhanced graphics should help to facilitate the communication between testing practitioners and the general public. We clearly need to do a better job at reporting what our test results mean and how they can be used by students, parents, teachers, and administrators.

Do you believe that improvements in technology may change the extent to which measurement is an interdisciplinary/multidisciplinary field?

Technology provides a bridge for communication between disciplines. Measurement has benefited from interdisciplinary interactions in the past. One noted example is the use of the Mantel-Haneszel statistic (1959), which was developed as an analysis of data from the retrospective analysis of disease and brought into the measurement world by Holland and Thayer (1988) to examine differential item functioning. Another example is the genetic algorithm used to identify the number of latent dimensions in the software DETECT developed by Zhang and Stout (1999). The genetic algorithm is a search heuristic that mimics the process of natural selection. A third example is provided by a very popular approach to estimating parameters in sophisticated psychometric models using Markov chain Monte Carlo methods. MCMC methods are used not only in Bayesian statistics, but also in computational physics, biology, and linguistics. The growth and potential of the measurement field depends on drawing upon the multidisciplinary research and is essential for the measurement field to grow.

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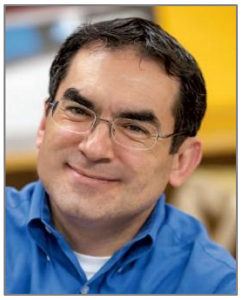
[1] https://www.techsmith.com/jing.html
[2] https://www.techsmith.com/camtasia.html
[3] http://www.knewton.com/overview/

Author note: Jonathan Rollins is a Ph.D. student in the Department of Educational Research Methodology at the University of North Carolina at Greensboro. Some of his interests include IRT parameter estimation, equating/linking, and dimensionality.

SPOTLIGHT ON THE PEOPLE WHO MAKE OUR ORGANIZATION GREAT

Michael Rodriguez, University of Minnesota



How did you get into the field?

Before graduate school, I worked for the research center of a local foundation—the Wilder Foundation in St. Paul, Minnesota, my hometown. We designed, implemented, and reported on program evaluations. My area was youth development and educational programs. At that time, the demographics of the city were changing dramatically, with increasing numbers of Latino immigrants and Hmong and other Southeast Asian refugees. I wondered how we could measure, study, and understanding our efforts to support such diverse communities. I knew that to do it right, I needed specialized training—and I wanted to get it right because the stakes are so high. After two years of conducting program evaluations and community studies, I sought out programs to study measurement. After visiting Michigan State University (MSU), I knew it was the place for me.

If you weren't in this field, what would you do?

This is hard to say. I might be still at the Wilder Research Center or somewhere in the Foundation—a large organization operating programs throughout the city of St. Paul. My alternate graduate school plan was to seek a degree in counseling, which was also a strong area of interest.

What advice would you have for graduate students who want to get into this field?

Do it! As with most career pursuits, interest is a great starting point. But, to be successful, aptitude and experience are requirements. When all three are aligned, you've found your calling. The great thing about educational measurement is that it includes a wide variety of roles in just as wide a range of venues. Measurement covers the human lifespan, from cradle to career and beyond. We do our work in public and private settings, community-based organizations and corporate companies, and government agencies and self-owned firms. The options are nearly endless and innovation is constant.

What do you like to do for fun outside of work?

When I'm not working, I'm with family. I am a fifth generation Minnesotan, so I have family all over the area. There's always something going on—either a family event or celebration, or someone is remodeling, building, or repairing something and could use help. This past year, I've had family helping me remodel my kitchen—which is another way to pass the time away from work. But having a 15 year old son at home is a sure way to achieve some life-work balance. He makes sure I'm not on my computer for too long…

What would you say has been one of the biggest innovations in psychometrics in the last decade or two?

The area that has been intriguing me is the use of mixed models to explore item functioning. While I was a student at MSU, Aki Kamata was designing his approach to multilevel modeling of item responses, items being nested within persons. We had conversations exploring the realm of possibilities in examining person and item characteristics through such flexible models. The work being done by Wilson and others on explanatory item response functions is exciting, leading to deeper analyses of relevant and useful features of items and person characteristics to understand the measurement properties of test item responses.

When you go to conferences, how do you pick which sessions to attend?

I go to conferences to learn, share, and network. The sessions I choose contribute to those goals. First, I keep track of who is innovating approaches to problems on which I am currently working. I seek out the professionals who are leading the field in relevant areas first and then search out innovative ideas or approaches second. I am also intrigued by national figures, particularly those who work for the federal government and the Department of Education. I'm something of a policy wonk, so issues related to public policy design and implementation are intriguing to me—I'm particularly interested in how we can enhance equity through good policy design and to design public policy so that the intent is likely to be successfully implemented. So I was very happy to see the NCME plenary session with John King—which was an extraordinary session. He presented the measurement community with important avenues to contribute to federal education and assessment policies. I look forward to more in the years to come.

Who has been a significant influence in your professional life?

None of us find our way on our own. There's no possible way to identify only a single individual who has had the most influence, but there are a few that have been especially important to my career. Without going back too far, my advisor, Susan Phillips, and other faculty in the measurement program at MSU prepared me well and gave me opportunities to contribute in important ways. My first AERA Division-D paper was presented in a session chaired by Tom Haladyna over 18 years ago. Following that session, he invited me to lunch and has been an important mentor and co-author ever since. I was also lucky to be at MSU during Mark Reckase's first year in the program—and have continued working with him on a great international research project looking at mathematics teachers. I was honored to serve NCME as a member of the Board of Directors during the presidencies of Terry Ackerman, Wayne Camara, and Linda Cook. I aspire to their commitment to service, to the field of educational measurement, and to the communities affected by testing programs. Finally, I continue to strive to meet the challenges that Terry Ackerman put forth in his presidential address—challenges to improve the appropriateness, meaningfulness, and usefulness of our work in communities with the greatest needs, as well as to enhance the diversity of the profession and this organization. Our progress toward these goals has been far too slow—we have a lot of work to do.

INTRODUCING A SERIES ON FAIRNESS AND TESTING

Maria Elena Oliveri, Educational Testing Service
Edynn Sato, Pearson
Thanos Patelis, Center for Assessment



In this issue, we would like to introduce a new series on fairness and testing to be featured in the NCME newsletter. The series will showcase a variety of perspectives, commentaries, and conceptualizations on this foundational aspect of test validity. Within each of the next several newsletter issues, we will focus on a specific aspect of fairness and explore key questions such as: For whom are fairness issues considered? What are some of the most pressing challenges related to fairness in an era of globalization? How is fairness considered in the use of assessments with multiple populations that vary in their understanding of the curriculum, and in their test-taking behavior or degree of English fluency? What difficulties are encountered in the development and use of fair assessments for populations such as English language learners, students with disabilities, and culturally and linguistically diverse individuals? We will address these issues through submitted and/or solicited summaries from NCME members and other experts in the field.

The new series is responsive to the pivotal changes made in the 2014 *Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 2014). These changes include the notion that fairness is not an ad hoc component to simply be added to the list of processes involved in assessment development. Fairness is not merely a supplementary step along an array of quality control procedures; instead, the *Standards* suggests that fairness ought to be considered at all stages of testing beginning with test design and development and moving through administration, scoring, and score use and interpretation.

This shift in perspective is manifested in the organization of the fairness chapters from 1999 to 2014. Whereas in the former *Standards* there were three separate chapters on fairness (Fairness in Testing and Test Use, Testing Individuals of Diverse Linguistic Backgrounds, and Testing Individuals With Disabilities), the chapters are now combined into a single chapter in the 2014 *Standards*. The now consolidated chapter also was moved to the beginning of the *Standards* under the section containing the foundational chapters. The implications of these changes are manifold. First, the changes reflect the notion that fairness and

accessibility issues are the right of all members of a test population rather than relevant only to particular groups. Second, they suggest that fairness and validity are inseparable; both are at the forefront of the interpretation of test scores. The 2014 *Standards* thus advocate for the valid interpretation of scores as a key principle for all test takers (Plake & Cook, 2015).

This topic was addressed at this year's NCME annual meeting by the Diversity and Testing Committee's Invited Symposium, "Exploring the Implications of the 'Fairness' Chapter of the 2014 *Standards for Educational and Psychological Testing*." The symposium highlighted shifts in the *Standards* with regard to fairness, including the addition of the foundational chapter on fairness. In this new series, we intend to build on these initial efforts and emphasize the types of challenges that are likely to arise in the implementation of the goals and vision described in the 2014 *Standards*.

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LEGAL CORNER: PARENTS OPTING OUT FOR STATE TESTING

S.E. Phillips, Assessment Law Consultant

There appears to be a growing movement for parents to opt their children out of statewide testing. The reasons vary from objections to the Common Core State Standards to beliefs that the tests demoralize students and/or are a waste of valuable instructional time. Except for cases in which the tests are required for graduation or promotion to the next grade, statewide accountability tests typically have low or no stakes for students but high stakes for school accountability and teacher evaluations. For example, under the No Child Left Behind (NCLB) Act, schools must test at least 95% of their students to meet adequate yearly progress requirements and avoid possible loss of federal funding. However, for the large majority of states that have been granted waivers, NCLB sanctions apply only to the lowest performing priority schools. In addition, because those children whose parents choose to remove them from statewide testing may be atypical of the students in their schools, the potential exists for teachers and schools to be evaluated on student scores that do not accurately represent the achievement of the students in their classrooms.

Current Data on Parents Removing Their Children From Statewide Testing

Significant numbers of parents refusing to have their children take state accountability tests have been reported in Colorado, Florida, Oregon, Maine, Michigan, New Jersey, New Mexico, and New York (Kamenetz, 2015). State opt-out rates for Spring 2015 tend to be small but rates for individual schools and districts may be significantly larger. For example, in New Jersey, a reported 14.5% of juniors and 4.6% of students in Grades 3–8 were not tested due to parent refusals but as many as 38% of students in the Montclair district may have opted out of testing (Ujifusa, 2015). Presently, like most states, New Jersey has no policy on testing refusals or what schools should do with nontesting students, so it is left up to districts to decide. Proposed legislation in New Jersey would require schools to notify parents of scheduled tests and provide alternative activities for nontesting students.

In New York, where parent opt-outs appear to be highest among those reported, an estimated 14% of students are not being tested this spring due to parent refusals versus about 5% last year (Wallace, 2015). In the Brentwood District, where over 90% of students are minority and over 80% economically disadvantaged (ED), 49% of students opted out of the English language arts (ELA) test and 57% opted out of mathematics (Strauss, 2015). In Amityville (90% minority; 77% ED), Greenport (49% minority; 56% ED) and South Country (50% minority; 51% ED), opt-out rates were reported to be more than 36%, 61%, and 64%, respectively (Strauss, 2015). There were also reports that some administrators attempted to suppress opt-outs by threatening parents with retention of their children or asserting that it was illegal for parents to opt out of testing. After repeated wrangling with state officials over teacher evaluations and following the governor's announcement in January 2015 that student test scores would be weighted 50% in teachers' evaluations, the New York United Teachers Union urged parents to opt their children out of testing. Also, a parent advocacy group opposed to state testing posted parts of the New York's ELA test online because they believed the content of the items was inappropriate and traumatizing for their children. The U.S. Secretary of Education threatened New York schools with reductions in federal funding if their participation rates fall below 95% and stated that his children, who attend school in Virginia, were not traumatized by the state tests. In response, Strauss (2015) argued that

testing experiences differ in the two states and provided the following excerpts from 6th grade state reading test passages as evidence that the New York test was too difficult and not grade appropriate:

> VIRGINA—Julia raced down the hallway, sliding the last few feet to her next class. The bell had already rung, so she slipped through the door and quickly sat down, hoping the teacher would not notice. Mr. Malone turned from the piano and said, "Julia, I'm happy you could join us." He continued teaching, explaining the new music they were preparing to learn. Julia relaxed, thinking Mr. Malone would let another tardy slide by. Unfortunately, she realized at the end of class that she was incorrect.
>
> NEW YORK—The artist focuses on the ephemerality of his subject. "It's there for a brief moment and the clouds fall apart," he says. Since clouds are something that people tend to have strong connections to, there are a lot of preconceived notions and emotions tied to them. For him though, his work presents "a transitory moment of presence in a distinct location."

Note however, that the selected excerpts may not be typical of the state tests from which they originated. Moreover, such comparisons are not possible for states administering adaptive tests online because each student is administered a different set of individually targeted items from a large item bank. For such tests, the first reading passage excerpted above might be administered to an average sixth grade student while the second might be more appropriate for a high ability sixth grader. Because fixed form paper tests must sample reading material from across the sixth grade ability continuum, such tests typically include some easier, some average, and some harder reading passages. Thus, the short excerpts given above are insufficient for evaluating the relative difficulty and grade appropriateness of their respective state reading tests.

Reasons Parents Are Opting Out of Testing

Parental reasons for refusing to have their children tested are varied. Sample parent opt-out letters provided by advocacy group United Opt Out list the following reasons for parents to refuse high-stakes testing:

- Constant testing affects socio-emotional well-being by causing anxiety and depression.
- Quality learning experiences are reduced and students' curiosity and love of learning are diminished.
- Recall of isolated facts and narrow skills reduces students' capacities for attaining new knowledge.
- Teaching to the test replaces higher order thinking with repetitive skill, drill, and kill exercises.
- Focusing on tests of reading, mathematics, and science to the exclusion of other subjects narrows the curriculum.
- Individual seatwork reduces students' opportunities for learning through socialization and teamwork.
- Testing wastes valuable instruction time.
- Many exercises in the Common Core State Standards and their aligned tests are developmentally inappropriate.
- Test preparation activities divert limited resources away from more valuable educational activities.
- Using student test scores for teacher evaluations violates the 1938 Fair Labor Standards Act because the testing of minors to support teacher pay bonuses is detrimental to the minors' well-being and educational opportunities (Founders of United Opt Out National, 2013).

Constitutional Origin of Parental Rights

Parent advocates have argued that parents' fundamental constitutional rights to direct the upbringing and education of their children include opting out of statewide tests they believe are detrimental to their children's education. However, there are no specific parental rights enumerated in the Constitution. The reference to parental rights appears to have originated from court cases involving parental challenges that cited the fourteenth amendment due process clause together with the ninth amendment, which provides that "[t]he enumeration in the Constitution of certain rights shall not be construed to deny or disparage others retained by the people." When applying the fourteenth and ninth amendments to parental rights issues, courts have balanced the concerns of the parents against the policy objectives of the state or school district. For example, in *Meyer v. Nebraska* (1923) and *Pierce v. Society of Sisters* (1925), the U.S. Supreme Court established the right of parents to direct the education and upbringing of their children. Courts have also held that parents have the right to home school their children (*In the Interest of D.B.*, 1988), exempt their children from curricula such as sex education that may be contrary to their religious beliefs (*Spence v. Bailey,* 1972), and obtain special education assistance for qualifying students who attend private schools (*Zobrest v. Catalina Foothills Sch. Dist.,* 1993).

Based on these holdings, parents with definite religious or political views have objected to mandated content and have campaigned for changes in school board personnel. Content standards that require students to read materials about controversial

topics and form judgments about alternative actions have triggered such parental challenges. Social studies and science content standards that deal with politically controversial topics have also been targets for challenge.

For example, suppose a reading passage excerpted from a news magazine article described a survey of American religious beliefs in which a random sample of Americans from a variety of denominations responded to questions such as *How often do you attend church services each month?* Suppose further that a reading comprehension question following the passage asked which denomination reported attending church services most often each month. Some parents might object to this question as implying a value judgment about the superiority of one denomination over another or as an attempt to influence students for or against their particular religion. The objections described above might be addressed by substituting a news magazine article describing a survey of the number and types of automobiles owned by a random sample of Americans. Presumably asking students to summarize information or form judgments about automobile ownership would be much less controversial.

Challenge to Norm-Referenced Test Content

Just such a challenge to tested content was asserted in *Maxwell v. Pasadena Ind. Sch. Dist.* (1994). In *Maxwell*, a group of parents challenged the content of a Texas statewide, norm-referenced assessment. Among other things, the objecting parents alleged that the test violated their first amendment guarantees of free exercise of religion and freedom of speech by requiring their children to answer personal questions and to respond to questions contrary to their religious beliefs. The parents filed affidavits from their children alleging that the test items contained inappropriate religious content and intrusive personal questions. With one exception, the alleged objectionable items, as recalled by students, were not on the actual test and bore very little resemblance to the item sampler from which they were apparently taken. The one exception was a graph reading item with data categorized by religion. Students were not asked to endorse or agree with any religious view, but rather to correctly read and interpret the numbers presented in the graph. The remedy sought by the parents was an opportunity to view all statewide tests (including the graduation test) before each test was administered to their children.

The state of Texas defended its need for secure test forms to maintain the validity and fairness of its tests for all students. The state argued that given limited testing time, each test form could only include a sample of the larger set of content students were expected to learn. Further, assuming teachers teach and students study the larger set of content, the test sample will provide a reasonable estimate of the portion of the larger set of content each student has learned. But if some teachers and students know the specific content of the test questions beforehand and prepare only for that smaller set of content, they will have an unfair advantage over others who did not know which questions they would be asked. The higher scores of those who had advance knowledge of the test questions might be mistaken for greater achievement of the content standards. The state also argued that post-administration viewing of its assessments by the public would prevent reuse of the viewed test items and would require the development of a complete set of new items for the next test administration. The increased test development and equating costs were estimated at several million dollars.

The trial court balanced the competing interests of the parents and the state and ruled that the parents had a right to view the assessments administered to their children. Although the court held that the parents had sincerely held religious beliefs, the court found no violation of the first amendment right to free exercise of religion. Instead, the court held that the parents' fundamental liberty right to direct the education of their children had been violated. The violation of a fundamental right can be upheld only if the state has a compelling interest and the means are narrowly tailored. The trial court found that the state had a compelling interest in assuring an adequate education for Texas children but the state's nondisclosure policy was not narrowly tailored to serve that interest. The final judgment of the court ordered

> [The state is] enjoined from administering [the test] to Texas students unless [it provides] parents of such students the opportunity to view a true and correct copy of the test within 30 days after it has been administered and graded. (*Maxwell v. Pasadena Ind. Sch. Dist.*, 1994, p. 3)

The decision was appealed by the state. While the appeal was pending, the Texas legislature passed a new law requiring annual release of all assessment items (except pretest items) administered by the state to Texas students. This new law substantially increased the cost of administering the statewide assessment because items could not be reused and equating designs became more complicated. The legislature budgeted $6 million to cover the expenses associated with disclosure and maintenance of the technical quality of the assessments. In addition to the increased cost, the new law also increased the material available for inappropriate teaching to the specific content of the assessment rather than the broader domain of knowledge and skills represented by the state's content standards. Some policymakers speculated that after sufficient numbers of items had been released, parents might become satisfied that no objectionable content was being used to assess state standards. If so, it might be possible to return to nondisclosure. Although this did not happen, after several years of annual disclosure, the legislature did modify the disclosure cycle from annual to biennial.

State Laws Regarding Parental Rights

In several states and school districts, parents may request in writing that their children be excused from a classroom lesson or activity containing content that is morally or religiously objectionable or that the parent believes is detrimental to the child's education. Anecdotal evidence suggests that despite being absent on statewide testing and makeup days, children who were opted out of testing by their parents have been permitted to advance to the next grade without any negative consequences. For example, in Texas, where the education code exempted testing from allowable parent opt outs and the reading and mathematics tests given in the fifth and eighth grades were used for promotion decisions, nearly all students who were not tested in 2011 moved on to the next grade, most likely because state law also provided for a placement committee of the principal, teacher, and parent to make the final decision (Denny, 2014). In 2014, at the urging of parent opt-out advocates, Waco ISD created a refusal-to-test form that when signed by parents allowed a student to attend school and complete alternative, meaningful activities during testing periods, though state policy still required assigning a zero score for accountability purposes (Fiedler, 2014). Some parent advocates have posted sample opt-out letters on the Internet that parents can adapt for their children and schools. There are also sample opt-out letters based on the specific laws of each state on the United Opt Out website (Founders of United Opt Out National, 2013).

Consequences of Parent Opt-Out Decisions

It remains to be seen whether the U.S. Department of Education will require the withholding of federal funds from states, districts, or schools with participation rates less than 95%. Other than NCLB requirements, there are no official federal or state consequences for students who refuse to test. Several states have laws that allow parent opt-outs, though these laws were designed originally to cover curricular activities, not tests. Nonetheless, the growing numbers of parents choosing to opt out of state testing may require adjustments in state accountability measures and teacher evaluations to ensure fairness. The trend so far has been increasing numbers of parent opt outs each year, and advocates have used social media and the Internet effectively to disseminate parent opt-out information. Some policymakers have suggested that it is the responsibility of school administrators to convince parents to test their children, but parent advocates insist it is their right to choose whether or not their children participate in state tests.

The adult and peer pressures experienced by students who attend school on tests days and find themselves caught between their parents' request that they refuse to test and school administrators' assertions that they must test may exceed the pressures of taking a test they find difficult and/or irrelevant. It is clear that significant lack of participation will affect aggregated accountability test results and render them less useful for their intended purpose. It is also clear that there is significant tension and disagreement among stakeholders about the usefulness, appropriateness, and quantity of educational testing. The fact that groups that traditionally disagree have joined together to oppose testing and to enlist parental support via opt outs suggests that more policy discussions with stakeholders are needed and more state legislation is likely. In the absence of an acceptable compromise, lawsuits are possible from teachers who believe they have been unfairly evaluated or from parents of students who face local consequences for refusing to test. If a court is asked to decide when or if parents can opt their children out of state tests, the result may please none of the affected parties. To avoid future litigation, proponents of state tests will need to limit total testing time and persuade critics that the remaining tests benefit student learning.

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2015 NCME AWARD WINNERS

Career Contribution Award: David Thissen (see the March 2015 issue of this newsletter)

Alicia Cascallar Award: Peter Baldwin

Annual Award: Sandip Sinharay, Shelby J. Haberman, and Kyong Hee Chon

Bradley Hanson Award: Chaitanya Ramineni, Brent Bridgeman, and Paul Deane

Brenda H. Loyd Award: Ronli P. Diakow

Jason Millman Award: Laine Bradshaw

The 2015 Winner of the Alicia Cascallar Award for an Outstanding Paper by an Early Career Scholar

Christina Wikström, Alicia Cascallar Award Committee Chair

Peter Baldwin was the 2015 winner of the Alicia Cascallar Award for an Outstanding Paper by an Early Career Scholar. Peter is a senior measurement scientist at the National Board of Medical Examiners. He obtained his doctoral degree in psychometrics from University of Massachusetts, Amherst in 2008. The title of his winning paper is *Weighting Components of a Composite Score Using Naïve Expert Judgments about Their Relative Importance*. Both recommendation letters stress and the award committee concurs that this paper has provided not only a theoretical contribution, but also a practical one to the research on composite score. The award winning paper has recently been accepted for publication in the journal of *Applied Psychological Measurement*.

The Alicia Cascallar Award for an Outstanding Paper by an Early Career Scholar has been established to honor Alicia Cascallar's professional commitment and accomplishments and to continue her practice of mentoring and encouraging promising new scholars in the area of educational measurement. The award will be given to an early career scholar for an outstanding paper presented at one of the two most recent NCME annual meetings. A cash award of $1,000, a citation, and a waiver of NCME conference fees for the following year will be provided as partial support for an early career member of NCME to travel to the annual meeting. The award will be presented at the NCME Annual Meeting in 2016.

More information about the award and how to nominate can be found on the NCME website. Please note that the deadline for nominations is August 1 this year.

The 2015 Winner of the Annual Award

Andrew Wiley, Annual Award Committee, Past Chair

The 2015 Annual Award for an Outstanding Technical or Scientific Contribution to the field of Educational Measurement recognized the innovative research in IRT model data fit conducted by the team of Sandip Sinharay, Shelby H. Haberman, and Kyong Hee Chon. Their research suggested innovative and high-quality techniques for assessing IRT model data fit, and demonstrated the usefulness of the techniques using several operational data sets. Their research considered not only statistical significance but also practical significance, and they provided practical guidelines and made their software available for free for noncommercial use. Their research promises to benefit researchers in educational measurement, and several testing programs that employ IRT models and lead to more accurate and hence more valid scores.

Dr. Sinharay is currently a chief statistician at Pacific Metrics in Monterey, CA. Dr. Haberman is currently a distinguished presidential appointee at Educational Testing Service in Princeton, NJ. Kyonghee Chon is a professor at Kangnam University in South Korea.

The 2015 Winner of the Bradley Hanson Award

David Miller, Bradley Hansen Award Committee Chair

Chaitanya Ramineni, Brent Bridgeman, and Paul Deane, ETS researchers, received the 2015 Bradley Hanson Award for their project "A New Calibration Approach for Automated Scoring Algorithms Using External Criterion." Their project has developed new methods for automated scoring and calibration that should be broadly applicable. In addition, their research includes important advances in the validation of automated scores.

The 2015 Winner of the Brenda H. Loyd Outstanding Dissertation Award

Marc Julian, Brenda H. Loyd Award Committee, Past Chair

Ronli Diakow is currently a postdoctoral researcher at the Center for the Promotion of Research Involving Innovative Statistical Methodology (PRIISM) at NYU. She received her doctorate in education from University of California, Berkeley and her award winning dissertation was titled *Improving Explanatory Inferences From Assessments*. The dissertation consisted of three original, innovative, and scientifically rigorous papers, and the methods developed were widely applicable for use in educational, behavioral, and social science research. Her research focuses on developing statistical models to produce better diagnostic information about classroom instruction based on longitudinal and theory-based assessments. With the PRIISM group, she is working on projects for sensitivity analysis with multilevel data and the analysis of longitudinal data.

The 2015 Winner of the Jason Millman Promising Measurement Scholar Award

Tia Sukin, Jason Millman Award Committee, Past Chair

Laine Bradshaw was this year's Jason Millman Promising Measurement Scholar. This award serves to honor Jason Millman's work by recognizing a scholar at the early stages of their career whose research has the potential to make a major contribution to the applied measurement field. Dr. Bradshaw's research exemplifies that potential. Dr. Bradshaw currently serves as an assistant professor at the University of Georgia, where she also received her Ph.D. in research, evaluation, measurement, and statistics.

At the heart of Dr. Bradshaw's research is designing new diagnostic models to fit complex cognitive theories. For example, she developed a model that blended a nominal response IRT model with a diagnostic classification model in order to give students diagnostic feedback about latent misconceptions they exhibited through their incorrect answers. She has already coauthored three *Psychometrika* articles and has served as a peer reviewer for this prestigious journal. In addition to designing new models, she has also been engaged in applying those models in both research and operational settings. With the support of a National Science Foundation grant, she collaborated with mathematics educators to design multidimensional, diagnostic tests from the ground up to be used for research related to how middle grades teachers reason about mathematics.

Currently, she is partnering with PARCC and Pearson to lead the psychometric design of their Grades 2–8 diagnostic assessment system for mathematics comprehension. In fact, this testing program is one of the first of its kind, operationally using diagnostic cognitive model-based assessments.

Thank you to Dr. Bradshaw for her commitment to applied measurement and to the Jason Millman award committee for their great efforts in reviewing nomination packets and deliberating a deserving winner. Thank you, Lihua, Marsha, Jimmy, Qing, Josh, and Molly for your hard work. Lihua Yao will be serving as chair of this award committee for the 2016 NCME conference. I'd also like to thank all those who submitted nominations and packets. There is impressive work being done among early career researchers; please consider nominating someone you know next year.

MOST DOWNLOADED ARTICLES ON WILEY ONLINE LIBRARY

Rose C. McCallin, Colorado Department of Regulatory Agencies

The Publications Committee is responsible for working with publishers on behalf of NCME. We review and report metrics relevant to evaluating the success of NCME journals and books. Members include Matthew Barrett, Georgia Institute of Technology; James Carlson, Educational Testing Service; Kimberlee Everson, Western Kentucky University; Se-Kang Kim, Fordham University; Rose McCallin, Colorado Department of Regulatory Agencies; Mark Raymond, National Board of Medical Examiners; and Benjamin Shear, Stanford University. Kristen Huff is our Board liaison.

We recently received the 2014 annual report from Wiley, publisher of *Journal of Educational Measurement* (*JEM*) and *Educational Measurement: Issues and Practice* (*EM:IP*). The report summarizes activities Wiley undertook in 2014 to publish *JEM* (volume 51) and *EM:IP* (volume 33) and to promote discoverability, circulation, and readership of articles in these two journals. We pulled together some report metrics regarding the most downloaded articles on Wiley Online Library. Here are snapshots with links to abstracts of the most downloaded articles for each journal from the date of publication on Wiley Online Library through December 31, 2014. The number of article downloads is indicated on the vertical axes.

Remember, your NCME membership includes free access to all *JEM* (1964-present) and *EM:IP* (1982-present) articles on Wiley Online Library. Simply log in to the members portion of the NCME website and then select Online Journal Access. While you are there, be sure to check out the latest for both *JEM* and *EM:IP*. You also can access *EM:IP* Early View, which offers the online *Version of Record* articles before inclusion in an issue. Enjoy!

Matthew Barrett

Jim Carlson

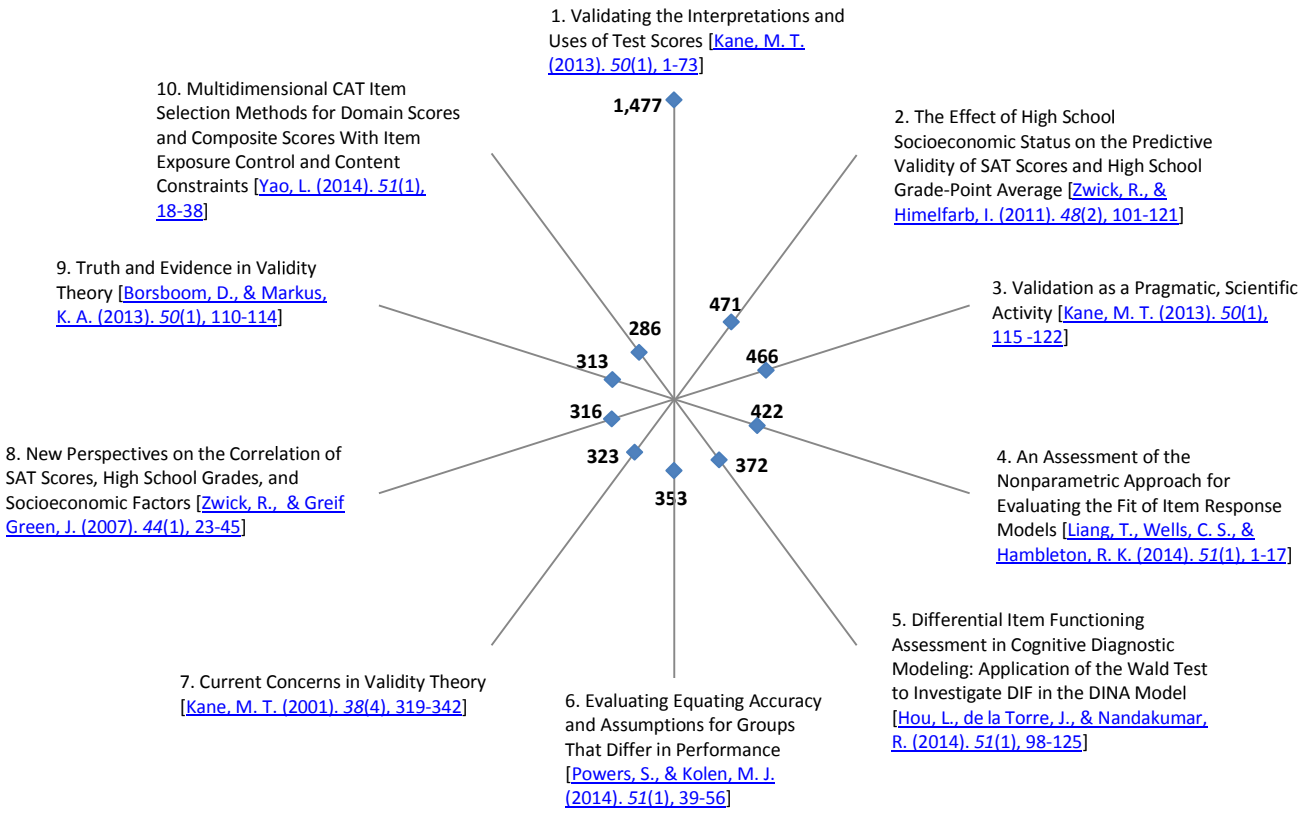
Kim Everson

Se-Kang Kim

Mark Raymond

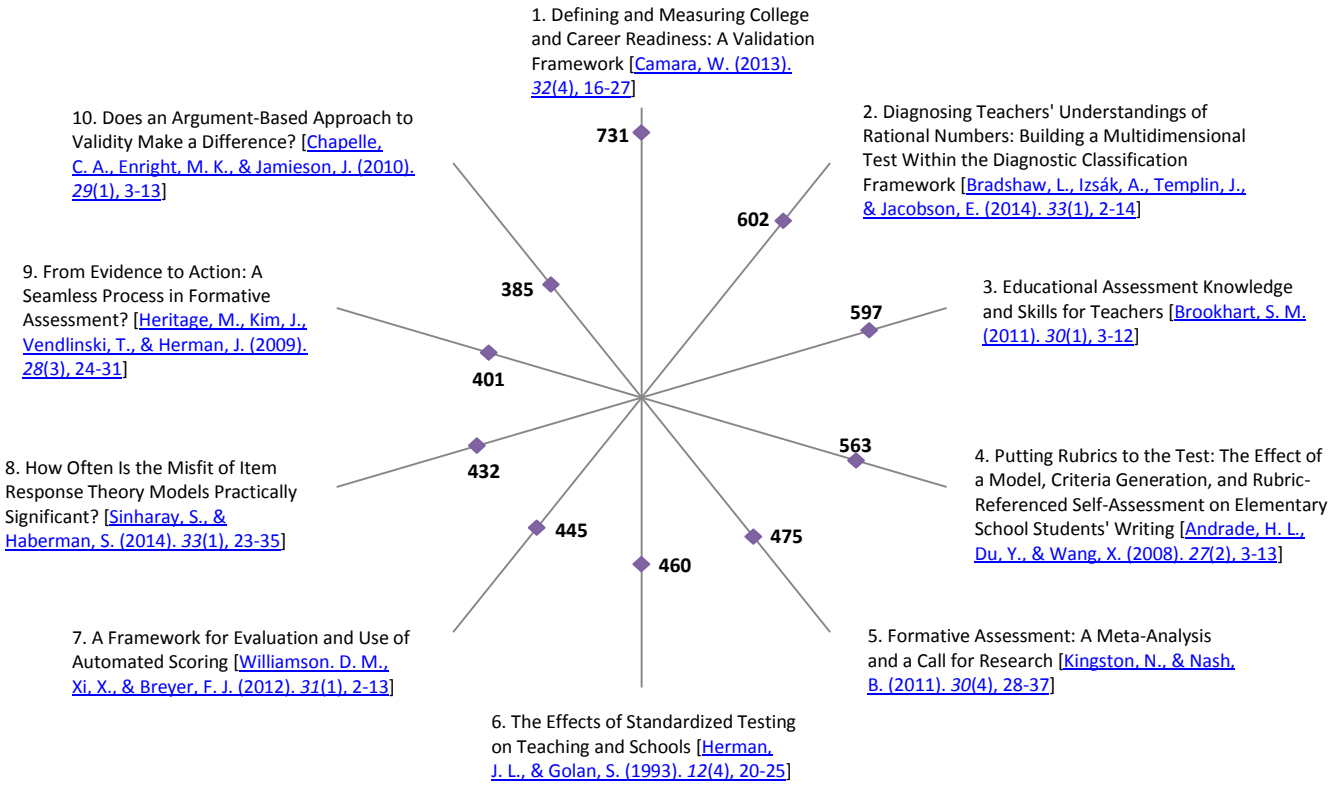
Ben Shear

Journal of Educational Measurement



Data represent the total number of article downloads from date of publication on Wiley Online Library through 12/31/2014.

Educational Measurement: Issues and Practice



Data represent total number of article downloads from date of publication on Wiley Online Library through 12/31/2014.

NCME AWARD COMMITTEES UPDATE

Won-Chan Lee, University of Iowa (Board Liaison to awards committees)

NCME recognizes achievement of members with the following six awards:

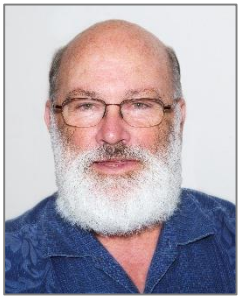
- Alicia Cascallar Award—an outstanding paper by an early career scholar
- Annual Award—an outstanding technical or scientific contribution to the field of educational measurement, exceptional service, excellence in teaching, or outstanding mentorship
- Bradley Hanson Award—contributions to educational measurement
- Brenda H. Loyd Dissertation Award—an outstanding dissertation
- Career Contributions award—outstanding career contributions
- Jason Millman Award—a promising measurement scholar

Award committees are responsible for soliciting nominations from the membership and selecting a recipient. Committee chairs will announce the winners at the annual business meeting and breakfast.

The new submission deadline for all six awards for 2016 is August 1, 2015. For the call for nominations and submission guidelines, visit the NCME website.

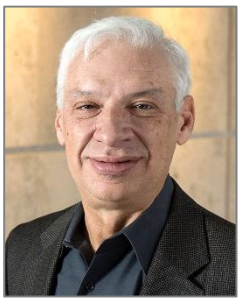
Christina Wikström, Chair
Alicia Cascallar Award

Jonathan Templin, Chair
Annual Award



David Miller, Chair
Bradley Hanson Award

Seock-Ho Kim, Chair
Brenda H. Loyd Dissertation Award



Wayne Camara, Chair
Career Contributions Award

Lihua Yao, Chair
Jason Millman Award

NCME FITNESS WALK/RUN CORNER

Brian French & Jill van den Heuvel for the NCME Fitness Walk/Run

An excellent time was had by all walkers and runners on a beautiful sunny morning along the lakeshore in Chicago. There was an opportunity to both renew connections with old friends and make new friends along the way. The smiling faces of the NCME member participants below were not bothered by the early morning start! Team University of Iowa led by Michael Kolen and Team Pacific Metrics led by Tia Sukin secured their places on the NCME fitness walk/run plaques. Congratulations to both teams (which are perennially tough to beat)!

Stay tuned for more information on the event in each newsletter. We wish you a restful, fun, and active summer!

Participants in NCME Fitness Walk/Run

University Division: University of Iowa
Captain Michael Kolen

Test Company Division: Pacific Metrics
Captain Tia Sukin

GRADUATE STUDENT ISSUES COMMITTEE UPDATE

Brian Leventhal, University of Pittsburgh

The Graduate Student Issues Committee (GSIC) is responsible for making sure that NCME meets the needs of graduate students and focuses the planning of events and initiatives that center on graduate student issues. In the past year, the GSIC, chaired by Lisa Beymer (Boise State), completed many successful activities. The year was highlighted by the return and expansion of the Graduate Student Research *e*Poster Session as well as the new Graduate Student Social at the annual meeting in Chicago.

The social event, organized by Jerusha Gerstner (NCME GSIC), Kristen Smith (AERA Div. D GSC), and Gloria Yeomans-Maldonado (AERA Div. D GSC) and sponsored by NCME, AERA Division D, and ACT, was an enormous success with more than 60 graduate students in attendance. The GSIC looks to further expand the social event for the annual meeting in Washington, DC.

The second year of the Graduate Student Research *e*Poster Session was a successful event hosted by the GSIC. With 50 graduate student presenters and full funding by NCME, the GSIC was able to organize two separate blocks for graduate students to present their original research in digital form. With 86 graduate students submitting proposals, the GSIC was very fortunate to have aid from 26 members of the NCME community who devoted some of their time to reviewing the entries. In addition, each student presenter was paired with a discussant, who provided feedback and insight into the student's research.

The GSIC welcomes three new members, Brian Leventhal (GSIC chair), University of Pittsburgh; Masha Bertling, Harvard Graduate School of Education; and Ricardo Neito, University of Texas at Austin, and a new faculty advisor, Dr. Dubravka Svetina, Indiana University.

A NOTE FROM FERNLEY & FERNLEY

Joe Casey, NCME Executive Director

As of June 1, 2015, Fernley & Fernley is the new association management company for NCME. Accredited by the Association Management Company Institute (AMCI), Fernley & Fernley is a fifth generation family firm founded in 1886 in Philadelphia, PA and is considered the nation's first association management company.

Fernley & Fernley is in the process of transitioning the NCME website and is providing all of the online functions NCME members are accustomed to, as well as a new abstract management platform for the 2016 NCME Annual Meeting. You will receive an email from NCME headquarters with your login credentials and instructions when setup is complete.

While change can be challenging, we at Fernley & Fernley trust that the transition and affiliation with your new central office/association headquarters will result in increases in member and volunteer engagement, opportunities for innovative programming and events, and new and expanded resources and expertise to advance the science and practice of measurement in education.

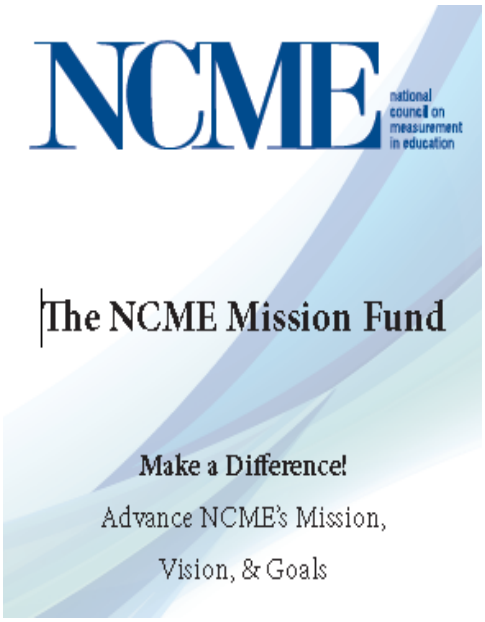
You'll soon get to know your new association headquarters team, and we very much look forward to working with you. Call us at 215-461-6263 (that's 461-NCME!). Our address and general contact information is posted on the NCME web site, as well as below. We welcome any questions or comments that you may have.

100 North 20th Street, Suite 400
Philadelphia, PA 19103-1443
Phone: 215-461-NCME (6263)
Fax: 215-64-2175

You can reach me directly at 215-320-3711 or jcasey@fernley.com. I enjoyed meeting many of you in Chicago in April and look forward to meeting many more NCME members in Washington, DC in April 2016!

Mark Shermis, Chairman of NCME's Budget & Finance Committee, recently visited the offices of Fernley & Fernley, the new central office for NCME, in Philadelphia, PA. The visit was part of the transition activities for the central office move from TRG, which was NCME's Wisconsin-based former management company.

John King, Senior Adviser Delegated the Duties of Deputy Secretary, United States Department of Education (center, facing audience), takes an audience question from Andrew Ho, Harvard University (center, standing by the microphone), during the invited plenary session "The Role of the Measurement Profession in the Renewal of ESEA and Other Federal Educational Initiatives" at the 2015 NCME Annual Meeting.



- *The Mission Fund allows NCME the potential to carry out a variety of mission-driven activities such as workshops and small conferences, outreach, dissemination, and support of early career scholars and students.*
- *The first activity supported through the Mission Fund is a workshop at the National Conference on Student Assessment to help state personnel understand implications of the newly released AERA/APA/NCME Standards.*
- *Please help NCME reach its $50,000 goal for Year 2. Make your tax-deductible contribution today at http://ncme.org (member login required).*

Next Annual Meeting of the National Council on Measurement in Education

April 7-11, 2016

Washington, DC

Foundations and Frontiers: Advancing Educational Measurement for Research, Policy, and Practice

Call for Proposals Deadline: August 1, 2015

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