FROM THE PRESIDENT

Wim J. van der Linden, CTB/McGraw-Hill

I am writing this message on one of the last days of 2013, in the somewhat reflective mood that tends to go with them. The past year has been more exciting for me than I had anticipated. But at the same time it has been a tremendous privilege to serve as your president and witness all current developments in our organization first hand.

In three months we will have our 2014 Annual Meeting in Philadelphia. Program co-Chairs Paul De Boeck and Kathleen Scalise just released a document with the highlights of the meeting. We will have many more plenary sessions this year than at earlier meetings, including a series of six invited presentations by prominent speakers from fields adjacent to educational measurement. All highlights will be announced in a series of email messages shortly, so please keep an eye on your mailbox.

In the meantime, Vice President Laurie Wise has already begun preparing the 2015 annual meeting in Chicago. He has been joined by Ye Tong, Pearson, and Jennifer Randall, UMass, who have accepted their nominations as our next Program co-Chairs, along with Caroline Wiley, HumRRO, our new Training Session Chair. We are most grateful to these colleagues for their willingness to serve NCME in these roles.

When you read this message the results from our recent elections will be known. If you have voted—and I sincerely hope you did—you will know that we have selected our new Vice President, two new Board members, and had to submit our votes for the several changes to our Bylaws proposed by the Bylaws Review Committee, existing of Linda Cook (chair), Anne Fitzpatrick, David Frisbie, and Joseph Martineau. The results of all these votes will be brought to your attention by a separate message.

As you may already know, after many years of loyal service to NCME, Plumer Lovelace III decided to accept another position and leave TRG a few months ago. We are quite appreciative of all the good things he has done for us in his role as the NCME Executive Director, including a long series of well-organized annual meetings. Susan Rees, TRG’s President, currently serves as our Executive Director ad interim while at the same time recruiting someone to replace Plumer.

Our new Fund Development Committee (Linda Hargrove, Chair; Wayne Camara; Linda Cook; Deb Harris; Suzanne Lane; Seohong Pak; and Cathy Wendler) has made an energetic start. The Committee has been established to provide NCME with a charitable giving arm, a long-cherished wish of many us. The committee has used a personal meeting to work on a step-by-step plan to solicit donors, describe the goals and activities to be supported by Development Fund, and communicate about the plan with potential donors and beneficiaries as well as the NCME membership. NCME just signed a consultancy agreement with a company specialized in fund raising to get professional help further developing the plan. The final decision on the plan has been scheduled for the Board meeting on January 31.

Speaking about this upcoming meeting, the Board will address quite a few other important issues, including the future of our current agreement with AERA for annual meeting services, how to involve NCME membership in the decision making process, and an update of the NCME strategic plan.

More about these issues in my next column. Meanwhile, please accept my best wishes for a healthy and professionally successful 2014. And if you haven’t already renewed your NCME membership, please do so right now.
GREETINGS FROM THE EDITOR
Susan Davis-Becker, Alpine Testing Solutions

Happy NEW YEARS to everyone! In this issue our president provides us with an update on some very recent events and news from NCME leadership. Melinda Montgomery presents some keys to the job search process as it is approaching that time of year again! Our Spotlight member is Nancy Petersen from ACT. Also in this issue, we take the opportunity to catch up with a few of the NCME committees and the work that is keeping them busy! NCME is such a great and successful organization due to its numerous volunteers – I would encourage all members to find a way to get involved if you have not done so already. Looking forward to the 2014 Annual meeting, our program co-chairs have provided us with some highlights that should be part of the meeting and our Fun Run coordinators have provided a report on the membership survey they conducted. Finally, we have included Mark Raymond’s call for the next NCME Newsletter editor – a great way to volunteer!

GRADUATE STUDENT CORNER: MANAGING THE JOB APPLICATION PROCESS AND MATERIALS
Melinda Montgomery, University of Kansas

Now that my dissertation proposal has been accepted and my research is well under way, part of my time focuses around the job application process. Possible jobs in our field vary from academia to various testing companies and government agencies. My first challenge was to determine where I wanted to focus my career. I know that I really enjoy teaching and working with students and that I want the freedom to focus on my research interests. However, I am also aware that I enjoy psychometrics; model fitting, scaling, equating and working with data in general. Knowing my interests and skills helped me choose a career direction and narrow my focus. That is step one; know your skill set and what you want to do in your career. Having narrowed the focus, the next step is navigating the application process.

The Job Search

Postings for academic positions usually begin around September and run through about January. These postings are for jobs beginning August of the next academic year. It is a little strange to apply for positions while completing the dissertation but that is how the process works. Industry positions are posted throughout the year and applications are not submitted until just a few months prior to the beginning of the start date.

Sometimes job offers for industry positions can be accepted at the “all but dissertation” stage. This is more common in areas where there are a large number of testing companies, such as the New England area. Often whether to stay at the university and focus on the dissertation or to accept a full-time position while completing the dissertation comes down to funding. While it can be challenging to complete the dissertation while working full time, I have known students who have managed it. When funding is a concern, full-time jobs do exist for students completing the dissertation process.

There are many places on the web to look for open positions. I usually look first at the NCME careers tab on the NCME website (http://ncme.org/resource-center/career-center/). For testing company jobs, it is also advisable to look at the websites of companies you are interested in for open positions. It may also be helpful to look at the Chronicle of Higher Education for faculty openings. In terms of faculty positions, it is best to narrow the search to those listed at the Assistant Professor level. The term “open rank” means that the institution would like to hire someone at the Associate level, someone who has already been an Assistant Professor. However, if the institution is unable to find someone at the Associate level, applicants at the Assistant level may be considered.

One important criterion to consider for any job is “fit”. Are you a good fit for the job and is the organization a good fit for you? I continue to think about this idea of fit when considering position postings. For example, if I know that the institution is looking for someone to focus on program evaluation then that position will likely not be the best fit for me. Program evaluation is not something that I have focused on in my graduate studies. The same can be said for open industry positions. Not all open positions will fit your individual skill set or interests.
Application Materials

Whether you decide to begin your career in academia or industry, there are a number of materials that will be required. Academic positions have more requirements than industry but a cover letter and résumé/vitae will be required for both position types.

Academic Positions

Cover letter. Each cover letter should be individualized to the institution to which you are applying. The cover letter should not just provide an overview of the vitae but rather it should explain how your experience and interest align with the posted job description. If you cannot explain how your interests align to the job then this position may not be the best fit. Read this letter several times and be diligent about checking for typographical errors. Since the cover letter is the first document the search committee will review, it needs to introduce you as a viable candidate.

Curriculum Vitae. There are a number of online examples describing how to organize a Curriculum Vitae (CV). I also looked at the CVs of several faculty members to see how theirs were organized. Be sure to include a list of relevant course work at the end of the CV. You will also want to include any conference presentation or publications, accepted or in process.

Statement of Research Agenda. Potential faculty members are expected to have a focused research agenda. Part of the position of a faculty member is to produce independent research. In this paper you can explain how your graduate work fits into or has led you to focus on your specific research area. Even if the institution does not require this as a formal document, it is a good idea to think through and draft a research agenda so that you are prepared to talk about your research interests in the interview process. In addition, some applications will allow you to submit additional supporting materials. In this case, I would include the Statement of Research Agenda and the Statement Teaching Philosophy for consideration.

Statement of Teaching Philosophy. This statement should describe any previous teaching experience as well as how those experiences influenced your teaching. It should explain your classroom management style and well as your grading and student evaluation practices. If you have not had teaching experience opportunities as a graduate student, you have had the opportunity to sit in the classrooms of various teachers with differing teaching styles. Draw on those experience and talk about how you would conduct your classroom and teaching practices. Again, even if this statement is not required for the application, it is a good idea to think through your teaching philosophy prior to the interview.

Teaching evaluations. Some institutions will request your previous teaching evaluations. If you have not had this opportunity, it does not mean that you cannot apply. If a college teaching experience was part of your doctoral course requirements, it might be possible to submit a letter from the instructor that observed the class you taught. Search committees are aware that not all graduate programs provide opportunities for graduate students to be the instructor of record, so just explain that the opportunity was not available.

Examples of scholarly writing. These can be articles published or submitted for publication as well as conference presentations. At the Assistant Professor level, the committee is looking for publishing potential. Having published articles is certainly best, but having articles in the pipeline of publication is also beneficial because it shows potential.

Letters of recommendation. The first letter should be from your advisor. It will look strange to the committee if your advisor does not support your application. After that, choose two other faculty members or members of a testing company where you worked or interned. Ask each of the faculty members personally if they will be willing to write letters supporting your application. They may ask to see a copy of your CV and a copy of the job description. Faculty get very busy, so as the deadline approaches, send out reminders indicating when the letters are due. Many application websites provide a way for you to see who has submitted letters and who has not. This is your application – be proactive – follow-up to verify that all material have been submitted.

Industry Positions

The application process for industry positions is far less cumbersome in terms of materials that must be submitted. Many entry-level positions only require a letter of interest and a résumé. Letters of recommendation may be required later, but initially you will only need to provide a list of references and their contact information.
**Letter of interest/cover letter.** Whether listed as a letter of interest or a cover letter the requirement is the same. The goal is to briefly explain that you are interested in this position and why. This letter should include at least a couple of lines that explain how your skills match the posted position. Most positions ask that this letter be brief so one page is usually enough.

**Résumé or Curriculum Vitae.** I actually have both a résumé and a CV. I send the CV to academic postings and reserve the résumé for nonacademic positions. The difference is that the résumé is shorter and organized slightly differently. The Internet has many examples of how to organize both a CV and a résumé. No matter which format you choose, the goal is to highlight your skills. Include software or computer programs that you know, research you have worked on, publications and any work experience that you would like considered.

**List of references.** These positions usually just require a list of references with email addresses. Your academic advisor should be in this list, as should anyone who can speak to your skills as they relate to the position to which you are applying.

**Managing the Materials**

One of the biggest challenges that I found, apart from finding open positions, was managing and organizing the materials. I began by creating a folder on my desktop where I kept all of the important information. The CV does not change across applications, so I placed the most updated version in the main folder. I did the same thing with the statement of research agenda, the statement of teaching philosophy, my teaching evaluations and examples of scholarly writing. I also created a Word document containing the contact information of my references so that I could copy and paste into applications as necessary.

As I found postings that I was interested in, I created subfolders with information specific to each application. These individual folders contained the job posting and cover letter tailored to each institution. Creating separate subfolders helps ensure that the correct letter is sent to the correct organization. At the very least, utilize some sort of naming convention. You could also add copies of the other materials (i.e., CV) to each of these folders.

I recommend making a list of organizations that you are applying to with contact and application submission information for each. Be sure to include deadlines on this list. Most faculty positions require applicants to set up a user account so I include account access information within each subfolder. Some industry positions also require that you set up a user account. It is a good idea to keep track of all of those login credentials somewhere.

One final thought on applications materials. If possible, have your advisor or other faculty member review your materials. Insight from people who have gone through the process and have reviewed application material can make your application stronger.

**What to expect after submitting the application**

The first thing to expect is to wait, particularly for academic positions. Most positions will have a large number of applications so it will take time for application reviewers to sort through them and decide which applicants they would like to interview. The first interview will be a phone interview. I recommend that you have all of your reference materials, CV and supporting information, laid out in front of you for reference during the phone call. This will allow you to access details quickly.

Assuming that the phone interview goes well, the next phase is an invitation for an on-site interview. In the academic setting, you will likely be one of at least three candidates invited to the campus. You can expect the academic on-site interview may be conducted over a two-day period. If you get an on-site interview for either position type, it is a good sign that the organization is interested in you as a candidate. For the on-site campus interview, the committee will be looking to see if you are a good fit as a colleague. With an industry position, employers will be trying to determine if you are a good fit for the team you will be working with. You will also be sizing up the environment to see if it is a good fit for you.

In closing, I want to wish everyone in the job hunt the best of luck. I know I have enjoyed my graduate experience; and I hope you have as well. As our time as graduate students comes to an end, we must turn our focus toward our future careers. This can be a little overwhelming but rest assured that there are many different job opportunities for individuals with our skill set. I hope these tips will help you face your job search with confidence.
SPOTLIGHT ON THE PEOPLE WHO MAKE OUR ORGANIZATION GREAT:
NANCY PETERSEN

In this issue our spotlight is on Nancy Petersen, a Distinguished Research Scientist at ACT.

How did you get into the field?

By accident. After I received my BA in mathematics from the University of Iowa, I taught high school math for several years. I decided teaching wasn’t for me and applied to graduate school in statistics, thinking that after I completed my degree I would like to find a statistician position in one of the social sciences. The statistics department assigned me as a teaching assistant to H. D. Hoover, Robert Forsyth, and James Maxey, professors in the Educational Measurement and Statistics program at Iowa. Here was my application. Even though I had taken undergraduate measurement and classroom testing courses to satisfy the requirements for a secondary teaching certificate, I hadn’t realized that it was possible to have a career as a statistician in testing. Consequently, I switched to H. D. Hoover as my advisor for my MS in Applied Statistics, and later to Melvin Novick for my PhD in Educational Measurement and Statistics.

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

Nowadays, I would retire so I could have more time to travel and show my cats. When I was younger, I would have liked to have been a veterinarian: I like working with animals and it would have helped reduce the costs associated with my hobby of breeding and showing Persian cats.

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

First, get a master’s degree in statistics, become proficient with SAS, and take some computer programming courses in JAVA, R, VB, or C++. My staff increasingly has to write all their own psychometric software as our IT staff does not have the expertise to develop such software. Next, even if you want to teach or work for a state department of education, first get an applied job with a testing company for 3-4 years to learn what is really involved in assembling, publishing, administering, and evaluating a test. Finally, never forget the lessons you learn there later in your career, when designing research, teaching, consulting, or overseeing the implementation of a state testing program.

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

I read a lot, enjoy going to movies, and like to travel – I have only one major place left to visit on my bucket list – but most of my time outside of work revolves around my cats. Since 1974, I have been breeding and showing blue, cream, and bluecream Persian cats with a fair amount of success. I typically attend shows a couple times a month that are affiliated with the Cat Fanciers’ Association.

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

The biggest innovations I have seen in my career were the computing power to implement IRT and the introduction of the personal computer – both developments were needed for computer-based testing to come of age in the last two decades. In 1980, when I first implemented IRT equating for the SAT, I had to reserve full use of a mainframe CPU for about 16 hours to calibrate the math and verbal items in a single SAT administration using the item calibration program LOGIST with samples of about 10,000 per measure. In the late 80’s-early 90’s when we started developing CATs, it would take 3 days on a PC to compute Simpson-Hetter item exposure control parameters – how we prayed that the electricity would not go off during one of those runs. Today my staff runs these types of analyses and much more complex simulations in seconds when assembling our CAT pools.

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

First, I look for sessions with papers on topics that might be relevant to projects that I am involved with at work. Next, I look for sessions in which experienced measurement professionals discuss current and emerging issues related to testing. Finally, I attend sessions that sound interesting or include presentations by friends.
Who has been a significant influence in your professional life?

I have been very lucky to work with so many great psychometricians through the years, starting with H. D. Hoover who taught me about K-12 testing, vertical scaling, and grade equivalents and who has remained a friend all of these years. Mel Novick was my PhD advisor; I was his first graduate student. He helped me find my first job in testing in England and then, after two years, advised me to return to the states and work for ETS. Mel was a great mentor and someone I could go to for sound technical advice in the 70’s and 80’s. In addition to fully understanding the policy and political environment surrounding testing, he understood what it takes to develop and run an operational testing program, having worked at both ETS and ACT. While at ETS, I learned the subtleties of equating from William Angoff and IRT from Fred Lord. Working with Paul Holland and Charlie Lewis, I learned how to problem solve for practical solutions to operational testing issues. And, when I applied for a position as director of a statistical analysis area, my supervisor Gary Marco gave me sage advice as to how to enjoy a job in which I would no longer do the analyses myself. He told me as a supervisor to seek my enjoyment in hiring and mentoring the best staff possible. Gary’s advice still serves me well to this day.

NCME COMMITTEES – HARD AT WORK!
We wanted to check in with some of the NCME committees who have been very busy working for the organization and advancing the various missions of NCME. Thanks to the committee chairs for the updates we are able to provide here.

NCME Membership Committee
Matthew Gaertner, Pearson & Sharyn Rosenberg, National Assessment Governing Board

It’s been an active year for the NCME Membership Committee, and it began with an important change to the way NCME not only attracts and retains new members, but also recruits individuals to the measurement profession. Up until 2013, these activities were coordinated by separate Recruitment and Membership committees – each with unique responsibilities, but both sharing many common goals. Beginning in 2013, those committees were merged to form the new NCME Membership Committee, and we now draw on the strength and wisdom of nine members with 108 years of combined experience in measurement and evaluation – Sharyn Rosenberg (Chair), Matthew Gaertner (Co-Chair), Michael Bunch, Erika Hall, Joni Lakin, Kendra Middleton, Howard Mzumara, Frank Rijmen, Diane Signatur, and Kelly O’Shea.

In 2013, the Membership Committee worked hard to broaden the pool of NCME members and measurement professionals, retain NCME’s strong membership base, and advertise our organization internationally. For example, as part of broader efforts to attract talented students at home and abroad to the measurement field, the Membership Committee has been revising and expanding its guide to graduate programs in educational measurement (http://ncme.org/default/assets/File/program_descriptions%20(2013-11-18).pdf). The guide provides contact information and program descriptions both in the U.S. and Canada; if you oversee one of these graduate programs, please take some time to check out the guide and contact Matt Gaertner (matthew.gaertner@pearson.com) with any corrections.

We have also been focused on bringing back individuals whose NCME memberships have lapsed in recent years. In 2014, we will be distributing an important survey asking lapsed members to (briefly) describe their involvement with NCME, why they left, and what might entice them to return. As psychometricians we have an unusual fondness of survey instruments, so we expect a breathtaking response rate. If you’re reading this and your membership has lapsed, renew today! If you know colleagues who have left the organization, please encourage them to respond to our survey, right after you renew today.

We look forward in 2014 to continuing our work strengthening the NCME membership base. We welcome input from our colleagues in this regard; please feel free to email Sharyn Rosenberg (sharyn.rosenberg@ed.gov) or Matt Gaertner (matthew.gaertner@person.com) with any suggestions. Best wishes from the Membership Committee for a rejuvenating holiday season and a happy new year.
Greetings from the Graduate Student Issues Committee (GSIC)! I am writing to give a quick update about the Graduate Student Research Session at the 2014 Annual Meeting. For the session this year, we received a record number of 107 graduate research proposals and were able to accept approximately 70% of the proposals for presentation at the Annual Meeting. We are very pleased with the high quality of the proposals and are proud to have fellow graduate students that are making novel and important research contributions in the field of educational measurement.

Last year, our committee tested an innovative media format for the Graduate Research Session. We thoroughly reviewed feedback from the session and determined that although there are exciting possibilities with the new format, we need time to develop new guidelines and to provide technology and software support for graduate presenters in order to make the new format successful. We are currently in communication with the Board about implementing these changes for the Graduate Research Session at future meetings. However, as these changes are not yet ready to be implemented, we will be having a traditional poster session for the 2014 Meeting. Our priority is to maintain a high standard for the presentation of research at the session, and graduate students have historically produced high quality posters for the session.

In addition to the graduate students serving on the GSIC, a graduate student representative serves on each of the other NCME committees. These volunteer positions provide a great opportunity for students to gain professional service experience and to network with leaders in the field of educational measurement. A number of positions will be opening up for graduate students to serve for the April 2014 to April 2015 term. Keep an eye out in the coming months for information about how to apply for one of these positions.

We look forward to seeing you in Philadelphia at the 2014 Annual Meeting!

Diversity and Testing Committee
Claudia Flowers, UNC-Charlotte and Martha Thurlow, University of Minnesota

About the NCME Diversity and Testing Committee
Examining issues of fairness in testing and test use has evolved over the past 20 years. In today’s testing environments, it is not enough to conduct differential item and test functioning analyses after test development. Enhancing access for all test takers is a complex process that requires developers to consider accessibility for all students during all phases of the test conceptualization, development, administration, analyses, and reporting.

The Diversity and Testing Committee assists NCME in the identification of issues relevant to diverse members and test takers, organizes a symposium for the Annual Meeting, and collaborates with other NCME governance groups to address issues of relevance and importance to diversity in NCME’s internal governance and all activities. NCME defines diversity as “…the quality or fact of being diverse or different. This can be along the dimensions of gender, age, ethnicity, race, sexual orientation, socio-economic status, physical abilities, political beliefs, religious beliefs or other ideologies.”

The Diversity and Testing Committee is composed of six members and one student member. Members serve a 3-year term and the student member is appointed annually based on the recommendation of the Area Director, Amy Hendrickson. The current members of the committee are Peter Conforti, Claudia Flowers, Sen Qi, Jerome Shaw, Martha Thurlow, Carsten Wilmes, and Lei Yu. Please consider volunteering to serve.

2014 Invited Symposium
The 2014 Invited Symposium will focus on growth models. Growth models provide evidence of whether students are on-track to target proficiency levels, but there is a need to examine the impact for specific student subgroups. The purpose of this symposium is to present current research that explores the variations among growth models when applied to students with disabilities and English Learners.

Gerald Tindal, Director of Behavioral Research and Teaching at the University of Oregon, will present research on growth models for two populations: (a) a transition matrix will be used to show growth (across years) for students with significant cognitive disabilities taking a statewide test, and (b) hierarchical linear models will be used to show (within year) growth for students with
disabilities on curriculum-based measures. Both studies will highlight the need for complete and accurate data in making appropriate inferences on growth.

Joni Lakin, Assistant Professor at Auburn University in the Department of Educational Foundations, will present research that uses state-level data to compare the behavior of four widely used growth models when applied to English Learner and non-EL students. Differences in the behavior of the models indicate that the choice of growth model can substantially impact inferences made about the academic progression of EL students.

Derek Briggs, Professor and Program Chair, Research and Evaluation Methods at the University of Colorado Boulder and Michael J. Kolen, Professor at the University of Iowa, will serve as the discussants. Martha Thurlow, Director of the National Center on Educational Outcomes at the University of Minnesota, will moderate the session.

New Initiatives for 2014
The Diversity and Testing Committee will be proposing new initiatives for 2014. The development of the NCME Diversity and Testing website will be redesigned to include past NCME presenters for the invited symposium and links to diversity and testing issues websites. The committee welcomes any additional recommendations from the NCME membership. Please contact Claudia Flowers (ClaudiaFlowers@uncc.edu) to submit your recommendations.

Outreach and Partnerships

Anthony Benners, New York City Department of Education

The NCME Outreach and Partnerships Committee is responsible for developing strategic partnerships with external groups and organizations to advance the science and practice of measurement in education, including the use of tests in public policy, and to increase the visibility of NCME as a resource for policy-makers in educational assessment. The committee’s mission includes identifying other major professional organizations and educational policy groups for potential collaboration with NCME on a short-term and long-term basis to implement initiatives and respond to targeted policy issues.

Short-term activities may be those that result in a specific deliverable or outcome (e.g., intra- or inter-association position on an important, timely policy issue, development of a joint-publication on careers or other professional issues, efforts to provide training and development in measurement to members in related associations, identifying NCME members with expertise who can represent the organization in testimony or develop written comments for NCME in relation to proposed guidelines, legislation). Long-term activities or partnerships may include such things as reduced dues for members of other associations, the planning and execution of annual symposium at the NCME or other annual meetings, and the development of guiding principles or substantive responses to policy and technical issues. In addition, the Committee is expected to build and foster relationships with key organizations, and keep NCME leadership informed of important policy issues that are emerging and any proposals for addressing such issues and challenges.

For 2013-14 committee membership year, our committee was tasked with creating a dissemination plan for free issues of JEM and EMIP. Working with our board liaison, The Rees Group, the journal editors, and the publisher, Wiley-Blackwell, the free journal issues will be sent to the directors of assessment at state boards of education along with cover letters that provide information on NCME and encourages recipients to visit the NCME website to learn more about our organization.

A number of members are rotating off the committee in the coming year; so if you have experience in outreach, assessment and measurement-related policy, and have an interest in initiating collaborative efforts with other major professional organizations and educational policy groups, we encourage you to volunteer. The committee staffing process begins with a call for volunteers that appears on the NCME website in early March and is announced at the Annual Meeting Breakfast. The volunteer process opens immediately following the Annual meeting. NCME members volunteer by accessing the volunteer software through the members’ only portal on the NCME website [http://ncme.org/members/] and selecting committees they wish to volunteer for.

If you have any questions about the committee or have a relevant initiative that you would like to propose please contact us through the committee contact page: http://ncme.org/members/committee-contact/.

Looking forward to seeing you in Philadelphia!
HIGHLIGHTS FOR THE 2014 MEETING

Paul De Boeck, Ohio State University & Kathleen Scalise, University of Oregon

Invited Speakers in Psychology, Technology, Statistics, & Economics

Angela Duckworth (University of Pennsylvania) will present in the field of psychology on her construct of “Grit,” the tendency to sustain interest in and effort toward very long-term goals.

Angela Duckworth -- True Grit
Who succeeds in life? Is it simply those among us who are gifted and talented in our pursuits? Or, is aptitude merely “potential” if effort and interest are not sustained over time? In this presentation, Angela Duckworth reviews her research on grit, the tendency to pursue challenging goals over years with perseverance and passion. She describes the predictive power of grit for performance in the National Spelling Bee, graduation from West Point, graduation from the Chicago Public Schools, and a variety of other contexts. Next, she describes current work on the underlying motivational, cognitive, and behavioral mechanisms explaining what makes gritty individuals different from others. Finally, she summarizes her current thinking on how we can cultivate grit in ourselves and in others.

Ryan Baker (Teachers College Columbia University) will present in the field of technology and computer science on data mining. Founding president of the International Educational Data Mining Society, he and his colleagues develop automated detectors to make inferences in near real time about respondent’s engagement, emotion, performance and meta-cognition.

Ryan Baker -- Measuring Learner Engagement with Data Mining
In recent years, there has been increasing interest in measuring learner engagement in automated ways. In this talk, I discuss my group’s work to develop and validate measures of a range of engaged and disengaged behaviors, as well as affect, within student use of online learning, using a combination of field observation and data mining.

Donald Hedeker (University of Illinois Chicago) will present in the field of statistics on ordinal data. His work on multilevel analysis of ordinal outcomes, mixed effects, and mixed models for longitudinal ordinal data helps scholars ask questions with types of data sets encountered ubiquitously in educational research questions.

Donald Hedeker -- A Location Scale Item Response Theory (IRT) Model for Ordinal Questionnaire Data
An ordinal IRT model is described which allows within-subjects variance and random subject scale. In addition to item parameters associated with a subject’s ability, item difficulty and discrimination scale parameters are included. These scale parameters indicate the degree to which items are scaled differently across the ordinal categories (scale difficulty) and separate subjects of varying levels of variability (scale discrimination).
Eric Hanushek (Stanford University) will present in the field of economics on teacher quality. His work on valuing teachers, the “cost of ignorance,” and supporting an effective teacher in every classroom draws on economics to inform the debate about school reform.

Eric Hanushek -- *The Economic Value of Teacher Quality*

The substantial analysis of teacher effectiveness can now be linked to the economic returns both to students and to the overall economy. By linking estimates of the value-added of teachers to the increased achievement of students, it is possible to get direct estimates of economic outcomes. The analysis suggests very large returns to highly effective teachers.

Invited Speakers in Educational Measurement

Valerie Shute (Florida State University), previously of Educational Testing Service, will speak for the field of education measurement on games. Her work asks questions such as whether design, development, and evaluation of advanced game systems support learning and measure competencies.

Valerie Shute -- *Model-Based Tools Embedded Within Games to Assess and Support Important Competencies*

Psychometrics involves the design, administration, and interpretation of tests to measure psychological variables. And while we can’t actually “measure” these constructs directly, we can measure proxies, and make inferences back to the targeted constructs. The inferences can then be used to support learning. I will illustrate this approach in the context of a game we recently developed called Newton’s Playground.

Jim Popham (UCLA) will speak for the field of education measurement on criterion-reference measurement. From implications of criterion-referenced measurement to how to do it well, Dr. Popham has been and continues to be a leading figure in the movement to promote and employ well-crafted criterion-referenced measurements in educational assessment.


Fifty years ago, Robert Glaser introduced the world to criterion-referenced measurement. This new approach to educational testing had been triggered by the striking instructional successes he and others had seen while employing programmed instruction and teaching machines. Criterion-referenced testing, then, soon became regarded as a measurement strategy capable of triggering substantial improvements in students’ learning. But has it? This presentation will supply a half-century answer to that question.

Debate and Discussion Sessions

The skills of the 21st century (100 minutes)

Participants:
- Nathan Kuncel (psychology, University of Minnesota)
- Mariale Hardiman (education, John Hopkins University)
Moderator: Patrick Kyllonen (ETS)

Cognitive approaches in educational measurement (50 minutes)

Moderator: Joanna Gorin (ETS)

Participants:
- Lorrie Shepard (University of Colorado at Boulder)
- André Rupp (ETS)
- Russell Almond (Florida State University)
Invited Psychometric History Session
- Louis Guttman, by Charles Lewis (Fordham University)
- Karl Jöreskog, by Irini Moustaki (London School of Economics)
- Roderick McDonald, by Hariharan Swaminathan (University of Massachusetts at Amherst)
- Georg Rasch, by Susan Embretson (Georgia Institute of Technology)

Invited NCME Book Series Session
New NCME Applications of Educational Measurement and Assessment Book Series
Organizer: Michael Kolen
Contributors:
- Wayne Camara & Michael Kolen, Introduction and description of the series
- Henry Braun, on volume "Meeting the Challenges to Measurement in an Era of Accountability"
- Fritz Drasgow, on volume "Technology and Testing: Improving Educational and Psychological Measurement"
- Neil Dorans, on volume "Fairness"

Submitted Validity Session
What is the best way to use the term “Validity”?
Organizer: Paul Newton
Participants:
- Gregory Cizek
- Michael Kane
- Keith Markus
- Pamela Moss
- Stuart Shaw
- Lorrie Shepard
- Stephen Sireci

Invited Symposium – Diversity and Testing Issues
Growth models provide evidence of whether students are on-track to target proficiency levels, but there is a need to examine the impact for specific student subgroups. The purpose of this symposium is to present current research that explores the variations among growth models when applied to students with disabilities and English Learners.
Presenters:
- Gerald Tindal, Director of Behavioral Research and Teaching at the University of Oregon
- Joni Lakin, Assistant Professor at Auburn University in the Department of Educational Foundations
Discussants:
- Derek Briggs, Professor and Program Chair, Research and Evaluation Methods at the University of Colorado Boulder
- Michael J. Kolen, Professor at the University of Iowa
Moderator:
- Martha Thurlow, Director of the National Center on Educational Outcomes at the University of Minnesota

Award Sessions
Career Award Address
Address by Susan Embretson, the award winner
Dr. Embretson, Professor of Psychology at Georgia Tech, will be delivering the Career Award Address. She has been very influential in integrating cognitive theory into psychometric models and test design. Her interests span modern psychometric methods (e.g., item response theory), cognitive and intelligence, and quantitative methods. NCME congratulates Dr. Embretson on a lifetime of contributions to the field, and is delighted to present her work and that of the following award winners:

Reporting Reliable Change in Students’ Overall and Domain Abilities across Two Time Points
Chun Wang, University of Minnesota
Measurement of change in student performance is pivotal in educational research. Average growth differs from one sub-content area to another. This study presents a longitudinal extension of a higher-order IRT model, and shows how this new approach could improve the reliability of change score at both overall and domain levels.

Sharing Research and Beyond
Kyung (Chris) T. Han, Graduate Management Admission Council

Kyung T. Han, a winner of the Jason Millman Promising Measurement Scholar Award, will share his story about his research and development of software tools. Several psychometric software tools that he developed, including WinGen, IRTEQ, SimulCAT, MSTGen, and SimulMAT, will be introduced as well as his latest work on CAT.

Multidimensional Item Response Theory for Score Reporting
Lihua Yao, Defense Manpower Data Center

The precision for the subscore and overall score estimates can be improved using multidimensional item response theory model for tests in both paper and pencil format and computer adaptive testing (CAT); literature review for current research and future trend and item pool generation and CAT selection methods will be discussed.

Duanli Yan, Educational Testing Service

The dissertation introduced a new nonparametric tree-based MST methodology. This new algorithm has advantages over the traditional methodologies to MST, including simplicity, lack of restrictive assumptions, and the possible implementations based on small samples. It is an extension of the tree-based CAT design described by Yan, Lewis, and Stocking (2004).

NCME FITNESS WALK/RUN CORNER
Brian French & Jill van den Heuvel for the NCME Fitness Walk/Run

Happy winter walking and running! Since the last update we sent out a survey so we would like to thank everyone who responded and update you on some results. Of the respondents, 48% have taken advantage of the opportunity to join the event. We encourage even more of you to do so! In fact, 75% of people who participate want to see it actively grow. The primary reasons people take part in the event are for social engagement (37%), fitness (30%), and team fun (21%). Did you know that some people have participated more than 16 times! Nice work. And the majority of walkers/runners are starting to build their tradition with 1-5 times (71%) under their belts. Some great quotes also came in from our members:

“Almost like it's a sightseeing event along with a walk/run”; “Last year was my first but I will do again”; “Part of the appeal of the event is actually the bus ride to and from the race location, and the opportunity to talk with others from the conference during the ride.”

Keep moving and we will see you in Philly!

Call for Nominations: Editor, NCME Newsletter
Deadline: April 15, 2014

The NCME Publications Committee is soliciting nominations for Editor of the NCME Newsletter, to serve a three-year term beginning January 2015. The Publications Committee will screen nominations and offer a slate to the President and NCME Board of Directors, which make the appointment in early summer 2014.
The NCME Newsletter, published quarterly, includes announcements and brief descriptions of current activities of interest to the membership, including significant publications, upcoming meetings, and NCME Board and committee activities. The Newsletter provides NCME members with timely information about current events in measurement practice and research, including news from state and federal agencies, school districts, universities and colleges, credentialing agencies, educational research laboratories, and publishers.

Major responsibilities of the Editor:
- Plan content for each issue, including regular columns and feature articles.
- Solicit, review, and edit content for the Newsletter.
- Write material for each issue (e.g., regular column); correspond with authors as necessary.
- Communicate with the President and Board to identify and summarize newsworthy association activities.
- Serve a three-year appointment from January 2015 through December 2017; report to the NCME Board through the Publications Committee.
- Appoint an Editorial Board to assist with all activities.

A modest stipend is available for clerical support, if needed, in accordance with NCME policy. If interested in this position, or if you would like to nominate a colleague, please contact Mark Raymond, Publications Committee Chair, by email (mraymond@nbme.org).

Deadline for nominations is April 15, 2014.

To get the NCME Newsletter four times a year (March, June, September, and December) go to
http://ncme.org/publications/newsletter/

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**Newsletter Advisory Board**

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**Susan Davis-Becker**, Editor, Alpine Testing Solutions

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