Editor’s Note
by Jason L. Meyers

Welcome to the Sixth Edition of the Pearson Test, Measurement, and Research Services (TMRS) Newsletter, a quarterly publication aimed at publicizing the ongoing research efforts of our group to those both within and outside of our Pearson community.

As always, I’d like to commend everyone on your impressive accomplishments and thank you for sharing them for inclusion in this issue. I take great pride in presenting my colleagues’ numerous contributions to the measurement community. I’d also like to acknowledge my advisory board members who continually ensure that our newsletter is of the highest quality. Without the dedicated work of all parties, this newsletter would not come to fruition.

In this issue, I am pleased to announce the establishment of an endowment to create a Pearson Center for Applied Psychometric Research at The University of Texas at Austin, to recognize a handful of employees for their service to Pearson, to announce two management changes within Content Support Services, and to welcome a new face to Research Services. In addition, this issue contains the quarterly award winners, grant award recipients, short entries relaying the experiences of our 2009 Pearson Fellows, and a recent blog by Dr. Jon Twing. Finally, in this issue we also detail the conference presentations, journal articles, and seminars and training sessions created or conducted by our staff during the third quarter of 2009.

We aim for widespread dissemination of this newsletter. If you or someone you know would like to be added to our distribution list, or if you require a printed version of the newsletter, please contact me directly. I also welcome questions, comments, and suggestions in a continual effort to improve the newsletter.

Back issues can be downloaded from www.pearsonedmeasurement.com/research/newsletter.htm. We hope you enjoy this issue and look forward to hearing from you.

Announcements

Pearson Foundation’s $1 Million Donation Will Create an Applied Psychometric Research Center at The University of Texas

New Endowment Furthers Innovative Educational Assessment Research

In late August, the Pearson Foundation and The University of Texas at Austin announced the establishment of a long-term collaboration to support psychometric and measurement research through the creation of a $1 million endowment. Bringing together the highly acclaimed Department of Educational Psychology in the College of Education and Pearson’s international expertise in educational assessment, the five-year endowment will enhance the application of psychometrics and educational measurement research.

The $1 million investment will create the Pearson Center for Applied Psychometric Research, located at UT Austin, and will provide research support for innovative approaches to assessment, such as online assessment (including inquiry-based learning), automated scoring technology, and student performance-based assessment. In addition, the center will continue to expand research and application of techniques for equitable and fair assessment, as well as assessments in the least restrictive environments.

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With a focus on technology-based applications and systems, the research endowment will help further educational achievement, increase accessibility for all student group populations, and create opportunities to better measure college and career readiness, including attributes of problem solving and critical thinking, in the expanding global economy.

The Pearson Endowed Professorship in Psychometrics and the Pearson Endowed Faculty Fellowship in Psychometrics will also support career development and opportunities for psychometricians, helping to increase opportunity, measurement expertise capacity, and diversity in the field.

“The Pearson Foundation’s donation underscores the company’s dedication to designing and delivering assessments that advance measurement best practice, help ensure greater educational equity, and improve instruction and learning. Through our endowment with The University of Texas, we are investing in assessment research that will promote and personalize education for all,” said Steve Dowling, Pearson executive vice president. “We also hope to support international collaboration in assessment practice through coordination with similar programs at Oxford University and the University of Western Australia.”

“This partnership with the Pearson Foundation significantly enhances what we are already doing in the use of technology in education and assessment,” said Dr. Manuel J. Justiz, dean of the College of Education. “Through the center, faculty and students will conduct cutting-edge research in new assessment procedures, which have implications for educational practices. We deeply respect the foundation’s work in the area of educational assessment and feel so honored that they have elected to collaborate with us and avail themselves of resources in our Department of Educational Psychology. This is an extremely exciting step for us.”

Jason Wachsmuth Joins Research Services

This month, Jason Wachsmuth transitioned to Research Services from the Test Map Team. In his new role Jason will perform literature reviews, SAS programming, and data management, as well as administer some of the Research Services activities. Jason’s responsibilities will evolve as he continues to work within Research Services.

TMRS Employees Recognized for Years of Service

During the third quarter of 2009, the following individuals were recognized for their service to Pearson.

Chingwei (David) Shin 5 years
Walter (Denny) Way 5 years
Natasha Williams 5 years
Kathleen Feinstein 8 years
Karen Barsuhn 39 years

Karen is a project manager with Project Solutions Management in San Antonio. Karen first started working with Harcourt in fall of 1971. Karen has seen the company go through many changes and new owners. She has been active in helping groups across the company adapt to and grow with those changes, and we look forward to her continued sharing of expertise and experience for many years to come.

CSS Announces New Managers

This month, John Loughran announced the promotions of Jay Larkin and Rick Wilmeth to the position of Content Support Manager. In their new roles, Jay continues to report to Suzanne Trevvett and Rick continues to report to Linda Fralick. Reporting structure changes leveraging this new management support are not anticipated until early 2010.

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Rick has more than seven years of experience with large-scale assessments. He has been with Pearson for five years and previously worked for another major assessment company. Rick’s assessment development experience includes both state and district projects and Pearson-branded products. He has twelve years of teaching experience ranging from grade 6 general mathematics to high school geometry. During his teaching years, he served as the lead teacher for pre-algebra and algebra. Rick also served as an adjunct faculty member at Odessa College, where he supervised a lab and tutored students.

Jay has worked in the assessment industry for more than nine years. He has been with Pearson for six years and previously worked for another assessment company. Jay’s assessment development experience includes both state and district projects and Pearson-branded products such as Learnia. He has seven years of teaching experience ranging from grade 6 to high school English, speech, and drama.

Appointments

Paul D. Nichols was offered and accepted an invitation to serve on NCME’s Membership Committee.

Walter (Denny) Way was selected to serve as a panelist for the assessment session at the Edward F. Reidy, Jr. Interactive Lecture Series (RILS) conference to be held October 1–2, 2009, in Portsmouth, NH.

Edward (Ed) Wolfe was appointed to the editorial board of the Open Psychology Journal.

Awards

The following individuals were recognized for their outstanding contributions at the quarterly Rewards and Recognition presentation during the August session of Learning at Lunch.

All-Star Award Recipients

Anne Anderson
For exceptional leadership on back-up for Item Bank Management (Item Tracker); keeping item writers’ and contractors’ statements of work and contracts recorded (July 2009)

Mary Ingvoldstadt
For outstanding contributions on MS MCT2 Language Arts (June 2009)

Stephen Murphy
For outstanding contributions on OK EOI (June 2009)

Dave Sanderson
For outstanding contributions on OK EOI (June 2009)

Ellen Strain-Seymour
For exceptional leadership on OK EOI (July 2009)

Team Player Award Recipients

Annie Angerer
For outstanding contributions on the GA Program (May 2009)

Sharlotte Carey
For outstanding contributions on MN MCA II Reading (June 2009)

Kwang-Lee Chu
For outstanding contributions on OK Equating (June 2009)

Bethany Cobb
For outstanding contributions on MN MCA II and MN MCA III (June 2009)

Sandy DeSchinckel
For outstanding contributions on MN Math (June 2009)

Aaron Eilers
For outstanding contributions on MN MCA II and MN MCA III (June 2009)

David Freers
For outstanding contributions on MN Math (June 2009)

David Freers
For outstanding contributions on the Copyrights and Permissions Assistance for GMADE and GRADE (July 2009)

Nick Gefaller
For outstanding contributions on MN MCA II and MN MCA III (June 2009)

Vicky Harland
For outstanding contributions on MN Math (June 2009)

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Tiffany Hartmann
For outstanding contributions on AZ AIMS Reading (June 2009)

Katy Knoll
For outstanding contributions on TAKS and EOC (June 2009)

John Luke
For outstanding contributions on MN MCA II and MN MCA III (June 2009)

Christine MacInnis
For outstanding contributions on TAKS Science (May 2009)

Tracy Meineke
For outstanding contributions on implementing dual monitors (May 2009)

Diane Merchant
For outstanding contributions on MN MCA II and MN MCA III (June 2009)

Theresa Meyer
For outstanding contributions on the ISAT Program (June 2009)

Theresa Meyer
For outstanding contributions on AZ AIMS Reading (June 2009)

John Morris
For outstanding contributions on MN MCA II and MN MCA III (June 2009)

Cindy Malott
For outstanding contributions on MN MCA Math (July 2009)

Eric Moyer
For outstanding contributions on MN MCA II and MN MCA III (June 2009)

Kari Pendergrass
For outstanding contributions on MN MCA II and MN MCA III (June 2009)

Sarah Seidl
For outstanding contributions on MN MCA II and MN MCA III (June 2009)

Kelly Tjaden
For outstanding contributions on importing MS Schedules into Outlook (July 2009)

Liz Traister
For outstanding contributions on MN Math (June 2009)

Elsa Vargas
For outstanding contributions on MN MCA II and MN MCA III (June 2009)

Jeff Vorwald
For outstanding contributions on MN MCA II and MN MCA III (June 2009)

Renee Yaun
For outstanding contributions on MN MCA II and MN MCA III (June 2009)

Presentations


Seminars & Training

On Monday, September 21, 2009, Psychometric and Research Services staff from Austin and San Antonio presented a workshop on equating. The topics and corresponding presenters are shown below.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>General Procedures for 3PL Equating</td>
<td>Anli Lin</td>
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<tr>
<td>General Procedures for Rasch Equating</td>
<td>Katie McClarty</td>
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<td>What does Winsteps do in Fixed Calibration?</td>
<td>Kuang-Lee Chu, Hua Wei</td>
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<td>Problem Solving in Equating</td>
<td>Laurie Davis</td>
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<tr>
<td>Open Discussion on Collaborative Research Activities</td>
<td>Rob Kirkpatrick, Laurie Davis, Kimberly O’Malley</td>
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Publications


Grant Awards

**Partial Credit Scoring Implementation for NCLEX Innovative Items**

Principal Investigator: Dr. David Shin
Co-Principal Investigators: Dr. Yuehmei Chien & Dr. Edward W. Wolfe
Funded by: National Council of State Boards of Nursing
Responsibilities: Conduct simulation study of partial credit item selection in a computerized adaptive test.
Grant amount: $29,490

**Applications of a Partial Credit Model to NCLEX Multiple Option & Ordered Response Items**

Principal Investigator: Dr. Edward W. Wolfe
Co-Principal Investigators: Dr. Yuehmei Chien & Dr. David Shin
Funded by: National Council of State Boards of Nursing
Responsibilities: Develop and evaluate partial credit scoring rubrics for dichotomously scored multiple response test items.
Grant amount: $99,490

Life at Pearson: Reflections From Our Psychometric Fellows

Shelley Ragland, Austin

Many interns here have the opportunity to spend an eight-week summer break from classes to experience large-scale operational testing at Pearson. My internship was a little different, as my doctoral program in Measurement and Assessment at James Madison University requires a much longer internship (between six to eight months) to fulfill the Ph.D. degree requirements. This usually occurs after students have completed comprehensive exams and begun their dissertation research.

Despite this longer time frame, my experiences seem quite similar to my fellow interns. The Pearson internship has been a kaleidoscope of exciting, engaging activities that cover an amazing assortment of psychometric responsibilities ranging from computer analyses alone at my desk to client meetings with dozens of attendees in large conference rooms. Each new project has reminded me of how much I learned in graduate school and how much I have to learn to successfully translate that knowledge into practice.

I remember studying standard setting as a topic in preparation for comps. I knew the names of several different types and I could explain the rationale behind this activity and its importance to political aspects of assessment. However, when I recently sat down with my colleagues to discuss arrangements for an upcoming standard setting, I was flabbergasted at the amount of planning and preparation that were required. The coordination of people—who are performing distinctly different tasks—and materials—that must be accurate and complete—provides an entirely different perspective to the understanding of standard setting.

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Another aspect of life in the field that has been tremendously different from graduate school for me has been the nature of the statistical programming I conduct. In graduate school, I often used very small, orderly data sets to conduct fairly complex analyses, but here at Pearson I usually have at least 300,000 records in my starting dataset that need to be aligned with other data, usually involving merges and checks and deletions that can take several hours. Frequently these complex data manipulations are needed in order to produce frequency tables, a rather uncomplex analysis.

Finally, some of the time in grad school I had the opportunity to solve problems that had a correct answer, although our faculty tried hard to prepare us for situations that did not. At Pearson as well, I have found amazing support from all of my fellow psychometricians in thinking about how to get an answer of interest and how to defend its rightness for a particular situation. I believe that the long internship has given me an opportunity to probe a little more closely at a larger number of projects than the summer internship, but I also believe that both types of internship provide a myriad of opportunities to sample psychometrics at its finest (and “funnest”).

Casey Nixon, Austin

Upon accepting the Pearson summer internship, I wasn’t sure what to expect. In my first week, everyone in the psychometrics group took the time to introduce themselves and make me feel welcome. I was able to meet with each person individually, to learn more about their roles within the company, and to get advice regarding my path to graduation, dissertation topics, and coursework relevant to my goals. This was a valuable opportunity to plan my last semesters in graduate school in a way that would best help me prepare for future work in a testing company such as Pearson.

My favorite aspect of the internship was the diversity of projects that I was exposed to. I primarily worked with modified and alternate versions of the TAKS: TAKS-M and TAKS-Alt, and also with TELPAS, for limited-English-proficient students. At one point, I was able to attend a data review meeting, in which educators from different areas of Texas came together to discuss potential TELPAS test items, and evaluate their strength in assessment alongside the statistical properties of the items.

I was also given the opportunity to work on a study regarding the relationship between students’ scores on the math portion of the TAKS and their passing rates in math courses at school. Although much of the work was done independently, I was able to meet periodically with someone in the psychometrics group if I encountered questions or inconsistencies within the data analysis. This was a great opportunity to become familiar with the type of data used by large testing companies; my skills with using SAS improved tremendously.

The experiences I had at Pearson over the summer were of great benefit. Although working for a testing company had always been my ultimate goal, I gained a great deal of confidence in my desire to do so as a result of my summer internship experience. I learned much about the day-to-day operations of the company, as well as the larger events such as assessment audits and data reviews, which I quickly realized require a large amount of teamwork and preparation. I highly recommend that any student with goals of working in an educational testing environment intern with a company such as Pearson in their last years of school. The internship was very rewarding, and I am thankful to have been given the opportunity.

Hong Wang, Iowa City

It was a great pleasure to be a summer intern at Pearson and I had a wonderful experience at this institution. During my internship, I worked with experienced psychometricians on several research projects, including a study on the comparability of CAT and CBT versus paper-and-pencil tests, an investigation of the effect of cut-score policies on decision consistency, and some validation work on EAP estimation. My mentors, Dr. David Shin and Dr. Yuehmei Chien, provided me with professional guidance in developing and refining research topics and in carrying out the research studies. Under their mentorship, I completed a proposal on cut-score policies and submitted it to the 2010 AERA conference.

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While conducting these research projects, I learned how psychometric work, such as equating, was conducted in operational practice and how technical specifications for state assessment were developed. In addition, I enhanced my SAS programming skills and understood better the practical issues in large-scale assessment. More importantly, I came to know the responsibilities of a psychometrician and the skills required for this position.

The fellowship program at Pearson has provided me with the invaluable experience of working in a large testing company, which is aligned with my future career goal. I have indeed enjoyed working and communicating with the professionals here. I much appreciate the great help that Paul Nichols and David Shin offered for my accommodations at Iowa City. I'd like to recommend this fellowship program to other graduate students in my field.

Laine Bradshaw, San Antonio

What a summer! It's been challenging, exciting, enlightening, and most of all, rewarding. As much as I enjoy my studies at the University of Georgia, there is no substitute for the hands-on experience I've had working through the auspices of Pearson's Psychometric Fellowship. I’m grateful to have had the opportunity to be a part of the daily operations of the Psychometrics and Research Services division, where I have worked alongside a diverse and talented group of psychometricians who didn’t hesitate to answer my questions and explain in detail many of the typical psychometric tasks they perform on any given day.

For the last two months I have worked primarily on a research project examining the implementation of an accommodation provided on a large-scale test by a state for English language learners. We’ve sought to determine how the linguistic modifications impacted the performance of subgroups of students, test reliability, and scale score comparability. Through this project I have gained experience in analyzing large data sets and developed a comfortable fluency with SAS, which was a goal of mine coming into the summer. Not only did I find the study to be engaging and educational, I also feel like I have been a part of something that may have a significant and positive impact on accommodation procedures as that area of the field grows and changes along with our nation’s demographics.

Throughout the internship, employees in PRS have volunteered to give training classes for the interns, the subject matter of which was based on their personal areas of research or interest. Classes ranged from introductions of specific computer software used by Pearson to broader topics central to this field. Each session presented the opportunity to learn important content from experts in each area, and I found all of these presenters to be enthusiastic and helpful in sharing their expertise. I appreciated each of the sessions, and I am thankful for the opportunity to survey a cross-section of topics integral to test development.

Overall, the internship was an even better experience than I had hoped it would be. This internship won’t just be an entry on my curriculum vitae; it has become a life-changing event that will pay dividends as I begin my dissertation and my career. My mentors, Michael Young and Serena Lin, are, of course, largely responsible for making this summer so edifying, and I am especially grateful to them. Everyone here at the San Antonio office has in some way added to the experience, and it means a great deal to me. Thank you!

Yan Liu, San Antonio

During my internship at Pearson, the human resources department organized two orientations. These orientations not only gave me an opportunity to learn more about Pearson, but also to see how the different divisions within Pearson all work together. Over the course of my internship, I attended several training seminars that covered a variety of topics such as an introduction to programming (SAS & WINSTEPS), computerized classification testing, item parameter drift, pattern scoring, validity, and vertical scaling. All of the presenters brought an in-depth knowledge to the seminars and shared their research experience with us.

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In addition to the seminars, I gained valuable experience working closely with psychometricians on both operational work and a research project. On the operational side, I was involved in a replication project on equating with Dr. Allen Lau. From this experience I was able to add to my knowledge on equating techniques and build on what I learned in my graduate courses. I also had the opportunity to collaborate with Dr. Alvaro Arce-Ferrer on a research project on measurement issues in the context of vertical scaling. Based on our research project we submitted a proposal for the 2010 NCME annual conference.

I would like to thank Dr. Anli Lin, Dr. Daeryong Seo, Dr. Kwang-lee Chu, and Dr. Stephen Jirka for sharing their research expertise and knowledge with me, providing reference papers and books, and giving me some specific instruction on software use. Finally, I would also like to thank the organizers of the Pearson internship program for giving me this opportunity to have this valuable experience and to see how psychometricians work on large-scale tests in a testing company. As a graduate student, we rarely have a chance to see the whole procedure of a large-scale test, from the test design to analysis and score reporting.

TrueScores

Each issue of the Pearson Test, Measurement, and Research Services (TMRS) Quarterly Newsletter includes a recent entry from the TrueScores blog written by Jon Twing. For more information on TrueScores, please visit www.truescores.com.

Pearson is Fulfilling the Goal to be the Nation’s Thought Leader in Assessment

by Jon S. Twing, Executive Vice President, TMRS

A primary objective of Pearson as the leading provider of educational measurement research is to lead the effort on effective educational policy discussion. Sometimes these efforts are clearly articulated in customer facing actions (like legally defensible setting of student performance standards), academic research publications, or conference presentations. Other times, policy and/or position papers are prepared to inform our customers and others regarding the direction Pearson is steering education. I was recently involved in the development of such a paper and wanted to share it with you in this post.

Using Assessments to Improve Student Learning and Progress is a very interesting paper that clarifies the roles of large-scale, high-stakes assessments as contrasted with classroom assessments. While I have made such comparisons in other TrueScores posts, this paper is much more comprehensive.

Here is a brief excerpt of the distinctions made in the paper:

Assessments for learning provide the continuous feedback in the teach-and-learn cycle, which is not the intended mission of summative assessment systems. Teachers teach and often worry if they connected with their students. Students learn, but often misunderstand subtle points in the text or in the material presented. Without ongoing feedback, teachers lack qualitative insight to personalize learning for both advanced and struggling students, in some cases with students left to ponder whether they have or haven’t mastered the assigned content.

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This paper also contains links to other Pearson-related efforts to inform and shape public policy and opinion as evidenced from the following excerpt:

Assessments for learning are part of formative systems, where they not only provide information on gaps in learning, but inform actions that can be taken to personalize learning or differentiate instruction to help close those gaps. The feedback loop continues by assessing student progress after an instructional unit or intervention to verify that learning has taken place, and to guide next steps. As described by (Pearson authors) Nichols, Meyers, and Burling:

“Assessments labeled as formative have been offered as a means to customize instruction to narrow the gap between students’ current state of achievement and the targeted state of achievement. The label formative is applied incorrectly when used as a label for an assessment instrument reference to an assessment as formative is shorthand for the particular use of assessment information, whether coming from a formal assessment or teachers’ observations, to improve student achievement. As William and Black (1996) note: ‘To sum up, in order to serve a formative function, an assessment must yield evidence that...indicates the existence of a gap between actual and desired levels of performance, and suggests actions that are in fact successful in closing the gap.’”

This quote also shows how the Pearson themes are, indeed, consistent in that personalized learning is supported through the Pearson “teach and learn” cycle as informed by assessment—one of Pearson’s primary goals. So go check it out!