

CENTER FOR ASSESSMENT & RESEARCH STUDIES

Fall 2016 Progress Report

PUBLICATIONS

A&M doctoral student, Liz Pyburn recently had a publication in the *College Student Affairs Journal*. The manuscript titled “Birds of a feather cluster together: Noncognitive attributes and international student success” was the result of her research apprenticeship. The work merges CARS assessment consultation with student research, and met a need requested by the Office of International Programs.

Keston Fulcher published an article in *Assessment Update* with the help of A&M alumni Chris Coleman, and former CARS Director, Donna Sundre. The article was written at the request of Trudy Banta, and was titled “Twelve Tips: Building High-Quality Assessment through Peer Review” and it highlights the APT process used here at JMU and provides organizations advice on conducting meta-assessment.

APT FEEDBACK REPORTS SENT OUT OCT. 3RD

APT feedback reports were sent on October 3rd, 2016. The purpose of the assessment progress template (APT) is to provide the most current assessment-related information for each of JMU’s academic programs. A separate template is completed for each academic and certificate program offered at JMU. This year, 100% of academic programs submitted APT reports, representing almost 120 academic programs on campus. Evaluating the APT reports, through a process known as meta-assessment, is no small undertaking. Each APT is reviewed by a minimum of two trained reviewers, with ratings assigned and diagnostic feedback given. Then each report goes through a rigorous quality control check. The very hard work of CARS GAs (Liz Smith, Kelly Foelber, Andrea Pope, and Scott Strickman), and PASS consultants (Liz Pyburn, Tom Waterburym and Nick Curtis) must be recognized for all that they did during this QC process. Academic program assessment coordinators, program chairs, and college deans now have information on the quality of their assessment processes. The feedback will be used to help programs improve their assessment process so that student learning can continue to be evidenced in a rigorous framework.

A few highlights:

- 100% APT submission rate!
- Over half of the programs were considered exemplary.
- New programs are already submitting high-quality assessment plans into their program structure.
- Several programs are revising their existing plans to incorporate the changing field, student body, or faculty expectations. Nice work to everyone!

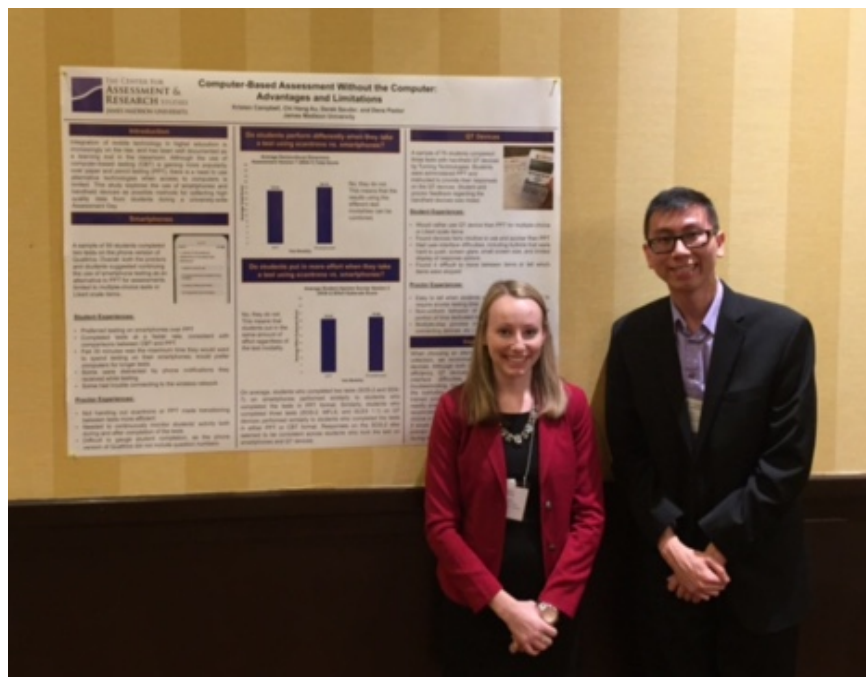
ASSESSMENT DAY

The Assessment Day team (Dena Pastor, Derek Sauder, Kristen Campbell, and Chi Au) worked to develop new faculty and visitor webpages regarding A-day. The purpose was to better explain what Assessment Day is to visitors, and to provide relevant information to JMU faculty about the purpose and policies of Assessment Day. The faculty webpage on A-Day did not exist prior to their work, and the new webpage was kept general enough to apply to visitors as well. The new faculty page about Assessment Day can be found here:

<http://www.jmu.edu/assessment/visitor/aboutaday.shtml>

Hopefully, increasing faculty awareness about the purpose of Assessment Day will encourage them to be enthusiastic about A-day to their students. We also hope that this will help faculty better understand the class cancellation policy that goes with Assessment Day.

Assessment Day GAs Kristen Campbell and Chi Au presented on an alternative testing format that was piloted during the last Assessment Day. The poster presented at the annual meeting of the Virginia Assessment Group was titled “Computer-based assessment without the computer: Advantages and limitations.” The poster presentation examined the results of utilizing both handheld response devices and student smartphones (referred to as alternative technologies) for assessment purposes in the university-wide Assessment Day. Student comments from focus groups were paired with test proctor notes to provide a multifaceted review of the two methods. Mean scores on the measures were also compared to traditional testing formats (e.g. paper and pencil, computer-based testing). Advantages and limitations regarding the use of alternative technologies were discussed. The poster was presented during a one and a half hour poster session. Approximately twenty people were in attendance.



2nd year MA student Kristen Campbell, and 1st year MA student Chi Au present their poster at the Virginia Assessment Group meeting held November 16-18th in Richmond, VA.

Many faculty and students attended the annual conference of the Northeastern Educational Research Association (NERA) held in Trumbull, Connecticut. The JMU presence at the conference, which was held from October 26th through October 28th, was prominent as usual. During these three days, students and faculty presented papers, posters, and workshops; participated in panels and chaired sessions; and networked with fellow researchers and practitioners in our field. A selection of the presentations delivered by CARS people are listed below. The theme of this year's conference was "*Making an Impact – Effectively Communicating the Results of Educational Research.*" Many CARS/JMU alumni serve in various capacities within the organization. Next year's conference co-chairs are all JMU graduates – Daniel Jurich, Whitney Smiley, and Jason Kopp.

Workshops

Propensity Score Analysis (*Presenters: Heather Harris, Jeanne Horst, and Jessica Jacovidis*)
Item-Writing and Survey Development (*Facilitator: Liz Pyburn; Discussant: Debbi Bandalos*)

Paper Sessions

Educational Measurement: Applications (*Discussant: Dena Pastor*)
Educational Measurement: IRT and Categorical CFA (*Chair: Kristen Smith*)
Meta-Assessment: Improving the Quality of Assessment Reporting in Higher Education
(*Presenters: Courtney Sanders, Nick Curtis, and Scott Strickman*)
Three is a Crowd! Comparing Five Group Difference Methods for Small Samples
(*Presenters: Monica Erbacher and Thai Ong*)
A Multitrait-Multimethod Analysis of the Construct Validity of Ethical Reasoning
(*Presenters: Allison Ames and Chi Au*)
Games and Technology in Education (*Chair: Nick Curtis*)
Content Expert-Elicited Information to Construct Prior Distributions for Item Response Theory Models (*Presenters: Allison Ames and Chi Au*)
Type I Error Rates of Ten Post-Hoc Comparison Procedures: A Simulation (*Presenter: Derek Sauder*)
Educational Measurement: Novel Models (*Chair: Shane Kerr*)
Comparing Missing Data Methods in the Context of Propensity Score Matching: A Simulation (*Presenters: Kelly Foelber, Heather Harris, and Liz Pyburn*)

Conference Season

Fall is a busy time of year for traveling and presenting at conferences. In addition to the NERA conference discussed on page 3, our faculty and students attended many other workshops and meetings. Some highlights from those events are shared here.

Keston Fulcher, Jeanne Horst, and a cadre of graduate students (Chi Au, Kristen Campbell, Nick Curtis, Nikole



ANNUAL CONFERENCE - NOVEMBER 16-18, 2016 - RICHMOND, VA

Gregg, Madison Holzman, Andrea Pope, and Tom Waterbury) attended the annual meeting for the [Virginia Assessment Group](#) in Richmond in November. Each CARS participant was involved in leading either a presentation, poster, or workshop while at the conference. Jeanne actively participated as board member, which included meeting many people at the registration table and participating in the board meeting. Keston led the plenary session on the last day of the conference. This was a great opportunity for us to share our mission and work with regional and national leaders in our field! See the last page of this report for presentation information.



Keston Fulcher was invited to be the keynote speaker, and deliver a workshop at the [Assessment Network of New York's](#) regional conference. Keston traveled to New York City to deliver his presentation titled "Shifting cultures: From assessment to improvement." This was a great honor for Keston, and an opportunity to build a relationship with a new organization. Keston co-presented with Assessment & Measurement graduate Megan Rodgers Good who is currently the Director of Assessment at Auburn University.

JMU alumni better off than most according to Gallup



If you've been paying attention to JMU press lately, you have probably seen this headline, or one similar on your newsfeed or in your email. JMU is excited to announce the results of research done via a survey that JMU alumni recently participated in. As you can read on the JMU website – the

results of the survey completed by JMU alumni were compared to the results nationally, and JMU alumni ranked high in overall well-being. The survey measured well-being on a number of different dimensions including workplace engagement, civic and community engagement, health and wellness, financial stability, and strong social relationships. This is exciting news for JMU, but it could not have been done without the work of a very important team working across campus, with Gallup, to put this survey in the field, and sort through the results. A special kudos goes to the following faculty and students from our department, and elsewhere on campus who worked diligently over the past year on this project.

Congratulations to Keston Fulcher, John Hathcoat, Heather Harris, and Courtney Sanders from the Center for Assessment & Research Studies for their work on this project – as well as Dary Erwin (School of Strategic Leadership Studies), Fletcher Linder (IdLS/University Programs), Heather Patterson (Pre-Professional Health Advising), Randy Mitchell (Student Success), Ashley Privott (Alumni Relations), and Brad Kurtz (Univeristy Advancement – Data Analysis and Reporting).

We look forward to seeing what other developments come from this project!

The link to the full article on the JMU website can be found here:
<http://www.jmu.edu/news/2016/11/17-gallup-poll-results.shtml>

Faculty

Dr. Sara Finney, serving as the chair of the Technical Advisory Committee for the GRE test, attended a three-day GRE Board meeting in Princeton, NJ. During this meeting discussions centered on outcomes assessment in higher education.

Dr. Keston Fulcher accepted an offer from the National Institute of Learning Outcomes Assessment (NILOA) to serve on its advisory panel. This is a progressive, world-leading organization in higher education. Serving on this panel will allow JMU to learn about the latest advancements in higher education and allow us to share our innovations with other leaders.

Dr. John Hathcoat gave a presentation to students in PSYC 651 at SIM University. In this virtual environment, students are assigned to serve as the director of a department in student affairs at a simulated university. As part of their position, they are asked to create an assessment plan. The presentation focused on introducing students to student outcomes assessment and how to write objectives.

John was also interviewed by the *Chronicle of Higher Education* regarding the Multi-State Collaborative. John's interview can be found here: [The next great hope for measuring learning.](#)

CARS recently conducted a faculty search to fill a vacant Asst./Assoc. Professor, and Asst./Assoc. Assessment Specialist position. Drs. Sara Finney & Christine DeMars co-chaired the search committee. An offer has been made and accepted and the new person will start July 1, 2017.

Dr. Allison Ames was awarded the Office of Sponsored Programs New Faculty Award for high-quality proposal seeking external funding during her first-year at JMU.

Assessment & Measurement PhD program & Psyc Sciences Quantitative Psychology MA program faculty & student news

Students

Derek Sauder successfully proposed his thesis to his committee on October 7th. His thesis is titled "Examining the Type I Error and Power of 18 Common Post-hoc Comparison Tests."

Nick Curtis was appointed to the JMU-Kosovo Steering Committee.

Catie Mathers successfully proposed her thesis on November 28th. Catie's thesis is titled "Student learning gains in higher education: A longitudinal analysis with faculty discussion." Catie's committee consists of Drs. Sara Finney, John Hathcoat, and Keston Fulcher.

Aaron Myers successfully proposed his thesis titled "Retrospective versus Prospective Measurement of Examinee Motivation in Low-Stakes Testing Contexts: A Moderated Meditation Model: on November 18th. Aaron's committee consists of Drs. Sara Finney, John Hathcoat, and Kenn Barron.

Publications

- Fulcher, K.H., Coleman, C.M., & Sundre, D.L. (2016). Twelve Tips: Building High-Quality Assessment through Peer Review. *Assessment Update*, 28: 1-16. doi: 10.1002/au.30062
- Pyburn, E.M., Horst, S.J., & Erbacher, M. (2016). Birds of a feather cluster together: Noncognitive attributes and international success. *College Student Affairs Journal*, 34(3), 13-29.

Presentations

- Amato, H., Curtis, N.A., & Orem, C. (2016, September). *Quality assurance at James Madison University: Institutional research and outcomes assessment*. Presentation delivered to the visiting Kosovar Minister of Education and public university presidents. James Madison University, Harrisonburg, VA.
- Ames, A.J., & Curtis, N.A. (2016, October). *Meta Assessment: Evaluating the Quality of Academic Program Assessment*. Webinar hosted by the Association for the Assessment of Learning in Higher Education; <https://youtu.be/CuczLn98rGI>.
- Au, C.B., & Ames, A.J. (2016, October). *A Multitrait-Multimethod Analysis of the Construct Validity of Ethical Reasoning*. Paper presented at the annual conference of the Northeastern Educational Research Association, Trumbull, CT.
- Campbell, K.T., Au, C.B., Sauder, D.C., & Pastor, D.A. (2016, November). *Computer-based assessment without the computer: Advantages and limitations*. Poster presented at the annual meeting of the Virginia Assessment Group, Richmond, VA.
- Curtis, N.A., Pope, A., & Waterbury, G.T. (2016, November). *From assessment to improvement: establishing strong assessment culture as the foundation for student learning improvement*. Presentation at the annual meeting of the Virginia Assessment Group, Richmond, VA.
- Foelber, K.J., Harris, H.D., & Pyburn, E.M. (2016, October). *Comparing missing data methods in the context of propensity score matching: A Simulation*. Paper presented at the annual conference of the Northeastern Educational Research Association, Trumbull, CT.
- Foelber, K.J., & Sauder, D.C. (2016, September). *Simulations in psychometrics: An introductory workshop*. Workshop presented at the Center for Assessment & Research Studies. James Madison University, Harrisonburg, VA.
- Foelber, K.J. (2016, September). *My summer at the National Board of Medical Examiners*. Symposium series presentation at the Center for Assessment & Research Studies. James Madison University, Harrisonburg, VA.

- Fulcher, K.H. (2016, October). *Next-level learning outcomes assessment: Varying perspectives, common goals*. Invited concurrent session for the Virginia Association for Management Analysis & Planning fall conference, Richmond, VA.
- Fulcher, K.H., & Good, M.R. (2016, October). *Shifting cultures: From assessment to improvement*. Keynote workshop provided to the Assessment Network of New York's regional conference, New York, NY.
- Fulcher, K.H. (2016, September). *Ethical reasoning: Defining, teaching, assessing*. Concurrent session presented at Drexel University Annual Conference on Teaching and Learning Assessment. Philadelphia, PA.
- Fulcher, K.H., Merrill, T., & VanDyke, R. (2016, November). *Learning improvement by design, final thoughts and next steps*. Closing keynote address at the annual meeting of the Virginia Assessment Group, Richmond, VA.
- Gregg, N., Holzman, M.A., & Horst, S.J. (2016, November). *Telling the whole story: Illuminating student voices behind the numbers*. Invited Pecha Kucha presentation with discussion at the annual meeting of the Virginia Assessment Group, Richmond, VA.
- Harris, H.D., & Horst, S.J. (2016, October). *Propensity Score Analysis*. Workshop presented at the annual conference of the Northeastern Educational Research Association, Trumbull, CT.
- Harris, H.D. (2016, September). *My summer internship at Inteleos*. Symposium series presentation at the Center for Assessment & Research Studies. James Madison University, Harrisonburg, VA.
- Hartman, C.J., DeMars, C.E., Griscom, H., Hutner, H., & Goodall, P. (2016, October). *Measuring students' environmental stewardship learning over time*. Poster presented at the annual meeting of the Association for the Advancement of Sustainability in Higher Education, Baltimore, MD.
- Hathcoat, J.D. (2016, October). *The design and implementation of mixed methods research*. Workshop presented at the Center for Faculty Innovation. James Madison University, Harrisonburg, VA.
- Holzman, M.A., Sunde, S., Miesen, C., & Finney, S.J. (2016, October). *Enhancing student learning: A multi-year implementation fidelity assessment of orientation*. Invited webinar presented to College Student Educators International.
- Myers, A.J., & Finney, S.J. (2016, October). *Investigating the dimensionality of examinee anxiety across test instruction conditions in a low-stakes testing context*. Paper presented at the annual conference of the Northeastern Educational Research Association, Trumbull, CT.
- Pierrakos, O., Curtis, N.A., & Anderson, R.D. (2016, October). *How Salient is the Identity of Engineering Students*. Presentation at the IEEE Frontiers in Education conference, Erie, PA.

Pyburn, E.M., & Bandalos, D.L. (2016, October). *Item construction*. Workshop presented at the annual conference of the Northeastern Educational Research Association, Trumbull, CT.

Pyburn, E.M., & Bandalos, D.L. (2016, October). *Item Wording Matters: How Three Attitudinal Item Characteristics Affect Item Intercepts, Loadings, and Response Times*. Poster presented at the annual meeting of the Society for Multivariate Psychology, Richmond, VA.

Russell, J., & Fulcher, K.H. (2016, September). *One size does not fit all: Developing custom assessment solutions for your institution*. Webinar moderated by the Chronicle of Higher Education; sponsored by Educational Testing Service, and presented by ETS and JMU.

Sauder, D.C., & DeMars, C.E. (2016, October). *Type 1 Error Rates of Ten Post-hoc Comparison Procedures: A Simulation*. Paper presented at the annual conference of the Northeastern Educational Research Association, Trumbull, CT.