EDUCATION

Doctor of Philosophy, Educational Leadership and Policy Studies, Arizona State University (ASU), Tempe AZ (2011) Coursework focused on quantitative research applied to education policy and higher education outcomes.

<u>Dissertation Title</u>: Characteristics of Students Placed in College Developmental Mathematics: Using the ELS:02/06 Data to Understand and Predict Developmental Mathematics Placements

Master of Arts, Social and Philosophical Foundations of Education, ASU, Tempe AZ (2011)

Master of Business Administration, W. P. Carey School of Business, ASU, Tempe AZ (2004)

Bachelor of Science, Computer Information Systems, Excelsior College, Albany NY (2002)

PROFESSIONAL EXPERIENCE

Arizona State University

2012 - Present

Senior Director, Management Analysis, Office of Planning and Budget

- Designed, modeled and led the approval process for an innovative new tuition approach. Created a complex, flexible excel model to evaluate alternatives such as different rates, rate relationships, program groupings and special student groups. Performed sensitivity analysis to ensure equitability of the proposed changes and find an optimized solution that met both financial and political goals.
- Created an enrollment forecasting model accurate within +/-1.5% overall for the next academic year
- Wrote strategic plans for new university initiatives, including Stadium 365.
- Developed an Employee Retention model for university staff. Identified characteristics and behaviors indicative of an employee at risk of attrition in order to preemptively intervene.
- Developed and maintained an econometric model of tuition elasticity of demand for use in forecasting of enrollment and revenue.
- Lead the development of a comprehensive strategic financial model for 5-10 year projections.
- Lead the redevelopment of the university Budget System to support a new financial system, including planning for training, evaluating prototypes and communicating the changes to users.
- Represented the Budget function in the project to choose a new financial system. Further represented Budget during decision-making sessions about how the new financial data model would be designed and how those decisions would impact the budget process.
- Conceptualized and developed an econometric model to evaluate the impact of ASUOnline to the university as a whole, including both cost and quality measures.
- Combined student, human resources (HR) and financial data to create a clear, concise picture for university leadership of where ASU stood in relation to performance goals.
- Benchmarked ASU against peer and similar institutions on a variety of topics including tuition, fees, fiscal
 efficiency and staffing.
- Assisted campus police with the creation of a strategic plan and a staffing model that considers square footage, call volumes, and the activity types on campus.
- Responded to requests for data and analysis from NCES/IPEDS, the Arizona Legislature and the AZ Board
 of Regents, as well as internal stakeholders such as the CFO, Provost and President.
- Led team of 3 senior analysts tasked with analytical projects and multidimensional database management and support. Mentored graduate assistant in applying analytic and data mining skills to concrete problems (dashboard development, simulations, automation, etc.)
- Provided research and advising support to a multi-institutional coalition (the University Innovation Alliance) investigating predictive student success software offerings.
- Nominated for (by the CFO) and completed the ASU Advanced Leadership Initiative, Cohort 2, a leadership training initiative designed to develop the most promising leaders throughout the institution.

Assistant Clinical Professor, Mary Lou Fulton College of Education

Creator & Program Coordinator, Advanced Analytics in Higher Education Graduate Certificate

Conceived, designed, developed and taught/teaching a 15 credit online data science certificate program
contextualized within Higher Education. Program is intended to enhance the ability of higher education

institutions to make use of advanced research and data science techniques to support data-driven decision making. Courses included teaching advanced Excel, SQL, RapidMiner and Tableau. See http://links.asu.edu/AdvancedAnalytics for details.

- Directed recruiting and marketing for the Advanced Analytics program. Reviewed transfer courses for compliance with prerequisite statistical knowledge.
- Identified, interviewed and hired additional faculty for the Advanced Analytics program to ensure consistency of student care during the program.
- Worked with advising services to develop appropriate answers to student questions, ensure compliance with policy and create a one-stop-shop for student support.

PAR Framework Consulting Statistician/Data Scientist 2012 - 2015

- Applied statistical and analytic techniques to a large cross-institutional data set in order to determine trends and potential intervention opportunities. Focused on new students and those identifiably at risk.
- Applied data mining techniques to this cross-institutional longitudinal data set in order to answer core
 questions around student retention and success.
- Assisted with outcome reporting to the funding agency (the Bill and Melinda Gates Foundation), including
 explaining results and implications, documenting how the analytic aspects of the project met projected
 timelines and discussing future steps.
- Presented results to internal and external audiences, including at professional conferences. Wrote papers for submission to journals and delivery at conferences.

Maricopa Community Colleges

Adjunct Faculty

2007 - 2014

- Taught undergraduate Introduction to Statistics.
- Developed improved lab manual for use in teaching SPSS to students.
- Implemented online homework system for ground students in order to speed feedback to students and improve learning.
- Taught in both ground and online modalities for multiple colleges in the district.

Apollo Group 2010 - 2012

Associate Director, Financial Planning and Analysis

- Developed predictive statistical model for enrollment and revenue. Enrollment was accurate within +/- 1% four months out, while revenue was accurate within +/- 2% three months out.
- Provided data requirements for the data warehouse development team.
- Applied statistical techniques to quantifying seasonal changes in enrollments.

Manager, Analytics

- Mined extensive student-level and learning management system data for insight into how to improve learning, retention and graduation rates.
- Taught statistical and data mining techniques to other analysts in order to improve the overall quality of our use of data within the institution.
- Created predictive model of student success, including acquiring all necessary data fields, statistical analysis of the data, and final model creation for implementation into production processes. Model correctly predicts a student passing their current course 85% of the time prior to course start (based on student behaviors in prior courses), 90% of the time after the first week of class and 95% of the time by week three.

- Led team of three analysts in the creation of sophisticated analysis related to student engagement, achievement and retention. Projects included comparison of course results before and after curriculum changes and evaluation of the impact of new features added to the electronic classroom.
- Defined requirements and enhancement requests for dashboards and data warehouse.

Arizona State University

Research Assistant

2005-2009

- Management of large, complex data sets, including preparation for modeling and analysis.
- Extensive statistical analysis of large data sets, resulting in conference presentations and publications (see page 2).
- Coursework includes 21 credit hours in graduate statistics, including Multivariate and Multilevel (Hierarchical Linear) Modeling.

Freeport McMoRan Copper & Gold

Business Intelligence Lead

2004-2010

- Architected multiple subject areas within the data warehouse, including data modeling, ETL mappings and Business Objects universes.
- Managed multiple concurrent projects, including directing resources and defining schedules.
- Statistical analysis of data to improve operational processes and identify trends.
- Part of the team that revised the Corporate-wide Operations Financial Forecasting model
- Integration, analysis and modeling of operational data, resulting in a 10% improvement in throughput,
 6% reduction in power requirements and reduction of a full-time employees' manual effort with no increase in costs

McKesson Corporation

Manager, Application Development

2002 - 2004

- Reduced quarterly reporting effort by 6 weeks, saving \$100,000 per year through automation.
- Negotiated \$1,500,000 contract for consulting services and managed their efforts.
- Managed and mentored diverse team of varying skill and experience levels, including remote and offshore team members.

Cornell University 1999 - 2002

Director, Information Technology, School of Hotel Administration & the Statler Hotel

- Managed \$2,500,000 budget for school and hotel. Member of Executive Committee.
- Managed project to rewire building, including writing RFP and evaluating responses.
- Mentored employees who later were promoted or took on new responsibilities.
- Defined strategic plan for hardware, software and applications, saving \$100,000 per year.

Manager, Data Warehousing, Cornell University

- Led evaluation and purchase of campus-wide query tool. Gained cross-campus consensus.
- Negotiated \$1,000,000+ software contract for database site license.
- Developed partnerships with vendors to support ongoing projects.
- Defined strategic plan for information delivery to all colleges.

REFEREED PUBLICATIONS

Gunter, L. M., Barber, R. T., & Wynne, C. D. L. (2018). A canine identity crisis: Genetic breed heritage testing of shelter dogs. PLOS ONE, 13(8), e0202633. https://doi.org/10.1371/journal.pone.0202633.

Previous research in animal shelters has determined the breeds of dogs living in shelters by their visual appearance; however the genetic breed testing of such dogs is seldom conducted, and few studies have compared the breed labels assigned by shelter staff to the results of this testing. In the largest sampling of shelter dogs' breed identities to-date, 459 dogs at Arizona Animal Welfare League & SPCA (AAWL) in Phoenix, Arizona, and 460 dogs at San Diego Humane Society & SPCA (SDHS) in San Diego, California, were genetically tested to determine their breed heritages. In our sample, we identified 125 distinct breeds with 91 breeds present at both shelters. The three most common breed signatures, in order of prevalence, American Staffordshire Terrier, Chihuahua, and Poodle, accounted for 42.5% or all breed identifications at the great grandparent level. During their stay at the shelter, dogs with pit-bull-type ancestries waited longer to be adopted than other dogs. When we compared shelter breed assignment as determined by visual appearance to that of genetic testing, staff at SDHS was able to successfully identify at least one breed in the genetic heritage of 67.7% of dogs tested; however their accuracy fell to 10.4% when asked to identify more than one breed. Lastly, we found that as the number of pit-bulltype relatives increased in a dog's heritage, so did the shelter's ability to correctly identify it. When we consider the complexity of shelter dog breed heritage coupled with the difficulty of predicting how multiple breeds interact to produce the phenotype of an individual dog, we believe focusing resources on assessing and communicating the behavior of shelter dogs would best support adoption efforts.

Gunter, L., Barber, R., & Wynne, C. (2016). What's in a Name: Effect of Breed Perceptions & Labeling on Attractiveness, Adoptions & Length of Stay for Pit-Bull-Type Dogs. PLoS ONE.

Previous research has indicated that certain breeds of dogs stay longer in shelters than others; however exactly how breed perception and identification influences potential adopters' decisions remains unclear. Current dog breed identification practices in animal shelters are often based upon information supplied by the relinquishing owner, or staff determination based on the dog's phenotype. However, discrepancies have been found between breed identification as typically assessed by welfare agencies and the outcome of DNA analysis. In Study 1, the perceived behavioral and adoptability characteristics of a pit-bull-type dog were compared with those of a Labrador Retriever and Border Collie. We also assessed whether the addition of a human handler influenced those perceptions. In Study 2, we compared lengths of stay and perceived attractiveness of dogs that were labeled as pit bull breeds to dogs that were phenotypically similar but were labeled as another breed at an animal shelter. We call the latter dogs, "lookalikes." In Study 3, we compared the perceived attractiveness in video recordings of pit-bull-type dogs and lookalikes with and without breed labels. Lastly, we analyzed data from an animal shelter that ceased applying breed labeling on kennels, and compared lengths of stay and outcomes for all dog breeds, including pit bulls, before and after the change in labeling practice. In total, our findings suggest that breed labeling influences potential adopters' perceptions and decision-making. Given the inherent complexity of breed assignment based on morphology coupled with negative breed perceptions, removing breed labels is a relatively low-cost strategy that will likely improve outcomes for dogs in animal shelters.

Barber, R. and Sharkey, M. (2012) <u>Course correction: using analytics to predict course success.</u> In Proceedings of the 2nd International Conference on Learning Analytics and Knowledge (LAK '12), Simon Buckingham Shum, Dragan Gasevic, and Rebecca Ferguson (Eds.). ACM, New York, NY, USA, 259-262. DOI=10.1145/2330601.2330664

Predictive analytics techniques applied to a broad swath of student data can aid in timely intervention strategies to help prevent students from failing a course. This paper discusses a predictive analytic model that was created for the University of Phoenix. The purpose of the model is to identify students who are

in danger of failing the course in which they are currently enrolled. Within the model's architecture, data from the learning management system, financial aid system, and student system are combined to calculate a likelihood of any given student failing the current course. The output can be used to prioritize students for intervention and referral to additional resources. The paper includes a discussion of the predictor and statistical tests used, validation procedures, and plans for implementation.

Garcia, D. R., Barber, R., & Molnar, A. (2009) Profiting from Public Education: Education Management Organizations (EMOs) and Student Achievement, Teachers College Record

Almost a quarter of charter school students attend schools managed by for-profit EMOs. This study compares the academic achievement of EMO-managed charter schools to other charter schools and traditional public schools in Arizona, finding that students who remain in an EMO for 3 years have higher reading vocabulary (basic) scores and lower reading comprehension (higher-order) scores. We make a case for the importance of using subtest scores in future research and in the reporting of academic achievement results to key constituency groups such as parents and policy makers.

Garcia, D. R., McIlroy, L., & Barber, R. (2008) Starting Behind: A Comparative Analysis of the Academic Standing of Students Entering Charter Schools, Social Science Quarterly

The preponderance of existing research has focused on whether charter school students are more disadvantaged, hence harder to educate, than district school students by defining "disadvantaged" according to student racial/ethnic or socioeconomic characteristics. Our analysis broadens the operational definition of a "disadvantaged" student to include academic achievement. Students who transferred from district to charter schools had the lowest levels of prior academic achievement of any other group.

REFEREED CONFERENCE PRESENTATIONS

Association for Institutional Research 2017 Conference, May 2017 Professional Development in Institutional Research: What Skills Do We Need? Barber, Rebecca T.

IR departments have long been the source of most data on campuses, and thus have long developed skills in extracting data from databases, writing reports, and checking numbers. However, in a world of predictive and other advanced analytic techniques, the skills needed by institutional researchers appears to be changing. What skills do the next generation of institutional researchers need? How do IR professionals balance the need for technical skills with the need for both a solid understanding of the higher education domain and the communication skills to work with teams across the campus? As the place of IR moves toward AIR's new vision of working collaboratively across campus, how does that change the professional development required?

Arizona Association for Institutional Research 2017 Conference, April 2017 Predictive Analytics: 10 Things to Think About Barber, Rebecca T.

Predictive models are useful throughout an institution of higher education, but it is easy to get blinded by the fun of modeling and lose sight of the underlying purpose. This presentation will cover 10 things I have learned when developing predictive models that will ensure their ultimate usefulness and applicability to the institution and its students.

Western Assoc. of College & University Business Officers (WACUBO) Conference, May 2014 Using Tuition Elasticity to Forecast Enrollment Barber, Rebecca T.

Understanding how students will react to changes in tuition and aid policy is a critical part of forecasting enrollment, and therefore both revenues and expenses for an institution. ASU set out to create a predictive model including retrospectively calculated tuition elasticity to estimate enrollment likelihood for student subgroups. This presentation will review the model, methodology, lessons learned and provide information on how other institutions could apply this approach within their own competitive environment.

Association for Institutional Research (AIR) 2014 Conference, May 29, 2014

Withdrawals are addictive: Findings from the PAR cross-institutional database regarding the dangers of withdrawals

Barber, Rebecca T.

The PAR Proof of Concept found that student withdrawals were not isolated events, but had a lasting impact on the student's academic career. Students with a withdrawal in the previous term were more likely to withdraw in later terms and less likely to achieve a passing grade in their courses. This session expands upon these initial findings using the latest PAR data, which includes 16 institutions and 3+ years worth of longitudinal student and course level records. The presentation will discuss the new data set, the methodology applied and the results of the analysis.

Association for Institutional Research (AIR) 2013 Conference, May 12, 2013 The Next Step in Data Analysis: Predictive Analytics
Barber, Rebecca T.

The next step in data analysis is using data about past activities to detect problems and predict student academic behavior. This presentation highlights two large-scale predictive analytics projects, one within a single institution and the second using cross-institutional data. We discuss the tools and techniques used and the process of identifying the right elements to include in the models. Attendees learn which variables prove predictive and which ones are not included in the final models. Finally, we discuss the political processes around the implementation of such models within an institution. The session provides a starting point for institutions interested in implementing predictive models for use in retention efforts.

Association for Institutional Research (AIR) 2013 Conference, May 21, 2013 The SUM > WHOLE: Cross-Institutional Collaboration and the PAR Framework Barber, R., Iboshi, P., Dillon, J., Nadasen, D.

The Predictive Analytics Reporting (PAR) Framework set out to create a collaborative cross-institutional data set to which the team could apply big-data style analytics in order to better understand patterns of student loss and suggest responses to retention risks. This panel discussion reviews the processes through which the proof-of-concept (POC) team approached the initial data analysis, the results of the POC, and how those results along with the feedback of the new partners led the larger PAR phase II team to change its approach. Attendees learn about the insights discovered through data analysis, active collaboration, and iteration among institutions of varying sizes, business models, and missions.

History of Education Society 2009 Conference Ancient History: School Choice before Friedman Barber, Rebecca T.

Historical conflicts over public funding of schools outside the common school system should inform contemporary discussions about public support of school choice reform. By analyzing these conflicts through the framework of *parental goals* we begin to see how the conflicting aims of different stakeholders have led to disagreements and divergent solutions. This study will use a *parental goals* framework to examine documentary evidence from a number of historic proto-choice initiatives and

identify reasons for parental behavior and support of school choice. These reasons can enhance modern policy debates and clarify conflicting research findings as to parental use of choice.

American Educational Research Association (AERA) 2008 Conference The Consequences of Encouraging School Mobility via School Choice Policies Barber, R., Garcia, D. R.

No Child Left Behind (NCLB) and other school choice policies encourage students to transfer schools as a remedy for poor academic performance. School choice policies assume that transferring between schools will result in positive academic outcomes. According to previous literature, however, school mobility has a detrimental impact on student academic achievement particularly for academically disadvantaged, minority and low SES students. Thus, school choice policies that encourage school mobility present a contradiction where struggling students, those who are most prone to the negative effects of school mobility, are the very students encouraged to transfer schools. This study will explore the impact of school transfers on academic achievement in a school choice setting.

American Educational Research Association (AERA) 2007 Conference Profits and Performance; Education Management Organizations and Student Achievement Barber, R., Garcia, D. R., & Molnar, A

Based upon the paper (above), this presentation focuses on the differences between for-profit managed charter schools, not-for-profit managed charter schools and traditional public schools. For-profit managed charter schools were found to increase performance in basic skills areas while allowing performance in complex thinking skills to drop, resulting in no statistical difference in combined scores. This indicates the need to monitor sub-scores as well as combined scores in accessing charter school performance.

American Educational Research Association (AERA) 2007 Conference

Starting Behind: A Comparative Analysis of the Academic Standing of Students Entering Charter Schools. Garcia, D. R., McIlroy, L., & Barber, R

Based on the paper (above), this presentation focuses on the academic disadvantage at which students entering charter schools find themselves.

Association of Institutional Researchers (AIR) 2006 Conference Non-traditional-aged new faculty: What does their emergence mean to your institution? Barber, Rebecca T.

Building on the AERA presentation, this presentation is intended for the Institutional Research audience with Universities with a focus on how to spot these trends within your own institution's faculty. Despite federal regulations barring age discrimination, the findings of the first study point to existing problems in many fields that need to be monitored.

American Educational Research Association (AERA) 2006 Conference Non-traditional-aged new faculty: Tenure prospects, satisfaction and success. Barber, Rebecca T.

This presentation is based upon analysis of National Survey of Postsecondary Faculty (NSOPF) 2004 and 1999 data sets. I examine the careers of full time faculty who achieved their highest degree after the age of 40, representing a change in career at a later stage of life. This work looks at their prospects of getting tenure, their assessment of their own job security and satisfaction, and the demographic trends in this growing cohort.

GRANTS

Nationwide deployment and evaluation of fostering programs in animal shelters

Maddie's Fund, 2018: Funded \$1,728,495 Wynn, Clive; Gunter, Lisa; Barber, Rebecca

The overarching aim of this 100 shelter nationwide project is to demonstrate that fostering of shelter dogs stays outside the animal shelter) is an effective tool to increase adoptions, improve animal well-being, and can be readily achieved by shelters of many different kinds. This project will assess the efficacy of three different methods of shelter training for fostering programs, and it will compare the impacts of three types of fostering. In a small subset of six shelters, the welfare benefits of fostering will be evaluated through behavioral, health and physiological measures collected before, during, and after fostering.

Preparing Scholars for Academia and Beyond: An Understanding of PhD Career Pathway Mellon Foundation / Council of Graduate Schools, 2017: Funded \$80,000 Artiles, Alfredo; Cason, Jennifer; Barber, Rebecca T.; Potts, Shelly

Historically, PhD training is accomplished largely through an apprenticeship model, where a student works closely under the guidance of a faculty research advisor and learns the norms of academic life. Previous literature illustrates that many PhD students, academic scholars, and individuals outside academia typically assume that most PhD students seek academic careers. The primary goal of the proposed project is to identify PhD career pathways and to strengthen the conditions to prepare Arizona State University (ASU) PhD students for multiple careers pathways.

INVITED TALKS

WACUBO Future Leaders Forum, December 1, 2015

Predictive Analytics and Big Data in Decision Support

Barber, Rebecca T.

An overview of the terminology and techniques of predictive analytics for use within the Business and Finance organizations of Higher Education Institutions. Intended to help attendees become educated consumers of analytic data and to help them understand the elements of an appropriate team for developing predictive models.

Sloan-C Pre-Conference Workshop, November 20, 2013

Predictive Analytic Reporting (PAR) Framework Essentials for Academic Risk Identification
Wagner, Ellen D.; Barber, Rebecca T.

This workshop offers an orientation to the Predictive Analytics Reporting Framework, a multiinstitutional data mining project that uses big data and predictive analytics to look for patterns of student loss and uses those results to proactively remove barriers.

Campus Safety, Health and Environmental Management Association, March 27 2013 Money Matters: Developing a Sustainable Model for EH&S Funding Barber, Rebecca T.; Igres, Leon

A well-run environmental health and safety (EH&S) program can save an institution millions of dollars in liability, not to mention the impact of bad publicity. Yet as an institution grows or changes, the workload for EH&S changes as well. The talk will examine a project at Arizona State University that was designed to create a long-term funding model for EH&S which would respond to both campus growth and changes in how space is used. Working together, EH&S and the Office of Planning and Budget examined the current literature and known best practices around funding and staffing of an EH&S organization. We then took a close look at how the EH&S team spent their time and thus the costs associated with the different services provided. Finally a model was developed that uses the Postsecondary Education Facilities Inventory (PEFI) codes for each space on campus to assign stratified rates that reflect the level of effort required from EH&S to support different types of space.

DOCTORAL COMMITTEES

Gunter, L. (2018). Understanding the Impacts of Breed Identity, Post-Adoption and Fostering Interventions, & Behavioral Welfare of Shelter Dogs (Ph.D.). Arizona State University, United States -- Arizona. Retrieved from https://search.proguest.com/docview/2046922747/abstract/D0BA7C7F2736447APQ/1

Cunningham, J. A. (2017). Predicting Student Success in a Self-Paced Mathematics MOOC (Ph.D.). Arizona State University, U.S. -- Arizona. Retrieved from https://search.proquest.com/docview/1900990574/abstract/2A21B2BE67264F2APQ/1

Cason, J. (2016). Preparing Future Scholars for Academia and Beyond: A Mixed Method Investigation of Doctoral Students' Preparedness for Multiple Career Paths (Ed.D.). Arizona State University, United States -- Arizona. Retrieved from https://search.proquest.com/docview/1793940487/abstract/D87DA53B470D4A36PQ/1

TEACHING AND SEMINARS

- HED 644: Higher Education Finance and Budget (ASU) (Summer 2014 Spring 2016, Fall 2018 present)
- Data Mining and Predictive Analytics for Business Officers (3-day workshop, WACUBO, 2015 present)
- HED 603: Foundations of Data Analytics (Fall 2016 Fall 2017)
- HED 604: Analytics Process and Technology (Fall 2016 Fall 2017
- HED 605: Data Management and Preparation (Spring 2017 Spring 2018)
- HED 607: Visualization and Presentation (Spring 2017 Spring 2018
- HED 606: Advanced Analytics in Higher Education (Summer 2017 Summer 2018)
- HED 608: Topics in Advanced Analytics (Fall 2017 Fall 2018)
- HED 598: Introduction to Big Data and Predictive Analytics in Higher Education (Summer 2016)
- Predictive Analytics (1-day seminar at AIR, 2014)
- PSY 240: Introduction to Statistics (Glendale Community College, Rio Salado College, 2010-2015)
- PSY 101: Introduction to Psychology (Glendale Community College, 2012-2013)

PROFESSIONAL SERVICE

- Vice Chair and Member, WACUBO Data Analysis Committee (2014 present)
- Member, WACUBO Host Committee (2018-2019)
- Reviewer, Association for Institutional Research Annual Conference proposals (2015 present)
- Program Chair, RMAIR 2017
- Reviewer, Association for Institutional Research Tech Tips (2015-2017)
- Reviewer, WACUBO Annual Conference (2014 present)
- Reviewer, Association for Institutional Research 2013 Charles F. Elton Best Paper Award
- Reviewer, Association for Institutional Research 2013 conference proposals
- Reviewer, Journal of Asynchronous Learning Networks (2012-Present)
- Reviewer, Urban Education (2010-Present)
- Reviewer, Current Issues in Education (2009-Present), multiple papers
- Session chair, multiple, American Educational Research Association (AERA) 2008
- Reviewer, American Educational Research Association (AERA) 2008, multiple proposals

FELLOWSHIPS AND AWARDS

- Advanced Leadership Initiative Fellow, 2018
- Arizona State University Environmental Health and Safety Award of Excellence March 2013
- David L. Clark National Graduate Student Research Seminar March, 2008

Arizona State University Graduate Fellowship - 2006-2007 for EMO research

PROFESSIONAL AFFILIATIONS

- Association for Institutional Research (AIR)
- Rocky Mountain Association for Institutional Research (RMAIR)
- National Association of College and University Business Officers (NACUBO/WACUBO)
- American Statistical Association (AmStat)
- Higher Education Data Warehousing Forum
- EDUCAUSE

CERTIFICATIONS

Project Management Institute, Project Management Professional (PMP) 2003 - 2022 Cert. # 71674

TECHNOLOGIES

- Database/Data Storage: Oracle, SQL Server, Teradata, PostgreSQL
- Data Visualization Tools: Tableau
- Statistical Tools: SPSS, Stata, R
- Data Mining Tools: RapidMiner, R
- Other: Microsoft Excel, Word, PowerPoint, Visio, Project, Google Apps, Whitebirch