

*Assistant Professor, University of Nebraska at Omaha (UNO)*

✉ BOSMITH@UNOMAHA.EDU 🌐 [HTTPS://BENSRESEARCH.COM](https://bensresearch.com)

## EDUCATION

---

Ph.D. Economics – Washington State University (WSU) – 2014

– Field Course Specializations: *Industrial Organization, International Economics*

– Research Areas: *Regional, Economic Education, Industrial Organization, Behavioral, Computational*

– Chair: *Philip Wandschneider*

B.B.A. Finance – Washington State University (WSU) – 2009

## TEACHING EXPERIENCE

---

### University of Nebraska at Omaha – In load

Graduate – ECON 8330 – Data Analysis from Scratch (1 time)

Advanced econometrics and machine learning course where students learn to program all estimators from scratch. Additionally, this class introduces numerous non-parametric, machine learning and simulation techniques. This is the most advanced data science course in the College of Business.

*Fall 2018*

Graduate – ECON 4210/8216 – Industrial Organization (4 times)

A graduate level Industrial Organization course with a focus on behavioral economics and game theory.

*Spring 2018, Spring 2017, Spring 2016, Spring 2015*

Graduate – ECON 8210 – Managerial Economics (1 time)

A graduate level managerial course focused on applying economic theory to real world problems.

*Fall 2014*

MBA – BSAD 8150 – Essential Concepts (15 times)

As a core course in the MBA program, this class introduces the most important economic concepts for managers. These concepts are then reinforced with cases, news articles, and business tools; which are discussed in later courses (e.g. Porter's five forces, SWOT analysis).

*Fall 2018, Spring 2018, Fall 2017 (2), Summer 2017, Spring 2017, Fall 2016 (2), Summer 2016, Spring 2016, Fall 2015 (2), Spring 2015, Fall 2014 (2)*

Undergraduate – ECON 3200 – Economic Theory: Micro (3 times)

Intermediate level microeconomics theory course.

*Spring 2018, Spring 2017, Spring 2016*

Undergraduate – ECON 2200 – Microeconomics (6 times)

Principles level microeconomics course.

*Fall 2018, Fall 2017 (2), Fall 2016 (2), Fall 2015 (Thompson Learning Community)*

Undergraduate – ECON 1200 – Introduction to the U.S. Economy (1 time)

Replaced an instructor starting in the third week of the semester. This is a principles level course covering parts of both micro- and macroeconomics. The class is intended for non-business majors.

*Spring 2018*

### University of Nebraska at Omaha – Out of load

Executive Education – Economics Section of Union Pacific Business Development Program (Cotaught, 3 times)

A custom principles level course directed at managers without business degrees within Union Pacific.

*Spring 2018, Spring 2017, Spring 2016*

Executive MBA – Behavioral Economics of BSAD 8480 (2 times)

*August 2016, August 2015*

Graduate – Master’s of Econ Math Primer (4 times)

Intense one day math course for students beginning the Master’s of Economics program.

*August 2018, August 2017, August 2016, August 2015*

### Washington State University – In load

Undergraduate – ECONS 101 – Fundamentals of Microeconomics (2 times)

Principles level microeconomics course.

*Spring 2014, Fall 2013*

Middle and High School – Instructor and Course Developer, Decisions Through Data (3 times)

Four day introductory statistics class for middle and high school students. Part of both the “CougarQuest” and “Dare to Dream Academic Academy” programs.

*Summer 2013 (3)*

### Washington State University – Out of load

Instructor and Course Developer, Intro to SQL (1 time)

One period class intended for data scientists – materials at <http://goo.gl/woVPS>.

*Spring 2013*

Instructor and Course Developer, LaTeX and Git (1 time)

One period class with extensive handouts – materials at <http://goo.gl/wvpjR>.

*Fall 2012*

Instructor and Course Developer, Python for Economists (1 time)

Four day class for graduate students learning to program – materials at <http://goo.gl/qq0TLJ>.

*Spring 2012*

### NON-PEDAGOGICAL PEER-REVIEWED ARTICLES

TITLE	<b>Adjusting for Guessing and Applying a Statistical Test to the Disaggregation of Value-Added Learning Scores</b>
COAUTHOR	Jamie Wagner
PUBLISHER	<i>The Journal of Economic Education – Forthcoming (Fall 2018 Issue)</i> Working Paper: <a href="https://ssrn.com/abstract=2941454">https://ssrn.com/abstract=2941454</a>
DESCRIPTION	This paper adjusts disaggregated value added learning types to account for guessing. Further, it provides a statistical test to distinguish true learning from ‘white noise.’ This method is now used by researchers, assessment committees, and instructors around the United States and Germany.
MY ROLE	I conceived of the project, wrote all of the software, performed all of the statistics/modeling, and wrote the majority of the paper.

TITLE	<b>Estimating State-Industry Employment, With an Application to Industrial Localisation</b>
COAUTHOR	Andrew Cassey
PUBLISHER	<i>Applied Economics – Forthcoming</i> Working Paper: <a href="https://papers.ssrn.com/abstract=3173283">https://papers.ssrn.com/abstract=3173283</a>
DESCRIPTION	In this paper, we develop a method of filling censored Census data using the hierarchical structure of the data. We use this method to fill all food industry data from 1963-2012. Using this approach, we show that the level and distribution of localization has not changed over time despite changes in transportation cost and the population distribution.
MY ROLE	I wrote all of the software, performed all of the statistics and coauthored the paper.
TITLE	<b>Improved Grade Outcomes With an E-mailed ‘Grade Nudge’</b>
COAUTHORS	Dustin White, Pat Kuzyk, and James Tierney
PUBLISHER	<i>The Journal of Economic Education – January 2018</i> <a href="https://doi.org/10.1080/00220485.2017.1397570">https://doi.org/10.1080/00220485.2017.1397570</a>
DESCRIPTION	Using a randomized trial, we show that providing grade information to students via email results in better student outcomes. Further, we provide software so that any instructor can implement the ‘grade nudge’ in their class. The software is available at <a href="https://bensresearch.com/nudge/">https://bensresearch.com/nudge/</a> .
MY ROLE	I conceived of the project, wrote the software, did the analysis and was the primary author of the paper.
WIDER APPEAL	This research project has been featured on the blogs of Richard Thaler and Tyler Cowen and the Department of Health and Human Services has featured it in a report as an example of using behavioral economics to implement successful policy. Further, the article has been featured in <i>The Teaching Professor</i> newsletter; which has a readership of largely non-economists.
TITLE	<b>Short vs. Long: Cognitive Load, Retention and Changing Class Structures</b>
COAUTHORS	Brandon Sheridan and Erin Pleggenkuhle-Miles
PUBLISHER	<i>Education Economics – July 2017</i> <a href="http://dx.doi.org/10.1080/09645292.2017.1305099">http://dx.doi.org/10.1080/09645292.2017.1305099</a>
DESCRIPTION	Using a quasi-experimental design which controls for student ability, we show that as the length of a class increases student exam performance decreases. This is the first paper to show that long classes with path-dependent topic areas can result in worse outcomes for students in a classroom environment.
MY ROLE	I conceived of the project, designed the experiment, performed the statistics and was the primary author of the paper.
TITLE	<b>Giving Away the Store: How the zero price constraint results in fewer add-on features</b>
PUBLISHER	<i>Economics Bulletin – June 2016</i> <a href="http://www.accessecon.com/Pubs/EB/2016/Volume36/EB-16-V36-I2-P98.pdf">http://www.accessecon.com/Pubs/EB/2016/Volume36/EB-16-V36-I2-P98.pdf</a>
DESCRIPTION	In this paper, I show that given the firm can’t charge a price below free for the base good, fewer features will be sold as add-ons. This results in a benefit to the consumer. While the implications for the software industry are obvious, this model applies to other electronic intellectual property products with aftermarkets such as e-books, magazines, and newspapers.
TITLE	<b>A Practitioner’s Guide to Testing Regional Industrial Localization</b>
COAUTHOR	Andrew Cassey
PUBLISHER	<i>Washington State University Extension Bulletin – November 2015</i> <a href="http://cru.cahe.wsu.edu/CEPublications/TB05/TB05.pdf">http://cru.cahe.wsu.edu/CEPublications/TB05/TB05.pdf</a>
DESCRIPTION	Allows for the application of our statistical testing method by anyone, even if they don’t have programming experience. Special builds of the software are available for a variety of platforms.
MY ROLE	Built software, wrote instructions, and coauthored the paper.
TITLE	<b>Low-cost, Transportable Hydrogen Fueling Station for Early Market Adoption of Fuel Cell Electric Vehicles</b>
COAUTHORS	I.A. Richardson, J.T. Fisher, P.E. Frome, S. Guo, S. Chanda, M.S. McFeely, A.M. Miller, and J.W. Leachman
PUBLISHER	<i>International Journal of Hydrogen Energy – May 2015</i> <a href="http://doi.org/10.1016/j.ijhydene.2015.04.066">http://doi.org/10.1016/j.ijhydene.2015.04.066</a>
DESCRIPTION	We developed a dramatically less costly hydrogen fuel station
MY ROLE	Created the economic models and determined the economic feasibility of alternative designs. Wrote the economic sections of the paper and full design document.

TITLE	<b>Simulating Confidence for the Ellison-Glaeser Index</b>
COAUTHOR	Andrew Cassey
PUBLISHER	<i>Journal of Urban Economics</i> – May 2014 – <a href="http://doi.org/10.1016/j.jue.2014.02.005">http://doi.org/10.1016/j.jue.2014.02.005</a>
DESCRIPTION	Provides a statistical interpretation of industry geographic agglomeration
MY ROLE	Developed software to run massive simulations as well as created software tools to calculate industry agglomeration, coauthored the paper
TITLE	<b>Pundits – The Confidence Trick: Better Confident than Right?</b>
COAUTHOR	Jadrian Wooten
PUBLISHER	<i>Significance</i> – August 2013 – <a href="http://doi.org/10.1111/j.1740-9713.2013.00675.x">http://doi.org/10.1111/j.1740-9713.2013.00675.x</a>
DESCRIPTION	A general audience article discussing our findings that the audience desires both accuracy and confidence from pundits.
MY ROLE	Conceived of the project, built the software, performed the analysis and was the primary author of the paper.
WIDER APPEAL	Research project highlighted in over 30 news outlets including <i>Forbes</i> , <i>MarketWatch</i> , <i>Inc.</i> , <i>NPR</i> , <i>Business Insider</i> and <i>Geek Wire</i> (more info: <a href="http://goo.gl/vM8T7L">http://goo.gl/vM8T7L</a> ).

---

 PEDAGOGICAL PEER-REVIEWED ARTICLES
 

---

TITLE	<b>Create Random Assignments: A cloud-based tool to help implement alternative teaching materials</b>
COAUTHOR	Jadrian Wooten
PUBLISHER	<i>The Journal of Economic Education</i> – July 2018 <a href="https://doi.org/10.1080/00220485.2018.1464983">https://doi.org/10.1080/00220485.2018.1464983</a>
DESCRIPTION	A short article describing a web-based tool to create random homework assignments within Google Drive. The software ( <a href="https://bensresearch.com/CRA">https://bensresearch.com/CRA</a> ) can deliver random assignments as Google Documents or PDFs over email.
MY ROLE	I wrote the software, and was the primary author of the instructions and article.
TITLE	<b>Lesson Plans for Teaching Economics with The Big Bang Theory</b>
COAUTHORS	Wayne Geerling, Dirk Mateer, James Tierney, and Jadrian Wooten
PUBLISHER	<i>The Journal of Economics Teaching</i> – May 2018 <a href="http://downloads.journalofeconomicsteaching.org/3/1/1-4.pdf">http://downloads.journalofeconomicsteaching.org/3/1/1-4.pdf</a>
DESCRIPTION	A collection of formal K-12 lesson plans to teach introductory economics using the Big Bang Theory.
MY ROLE	I wrote the lesson plans “Sheldon’s Time is Too Valuable” and “Outsourcing a Date.”
TITLE	<b>Multiplatform Software Tool to Disaggregate and Adjust Value-added Learning Scores</b>
PUBLISHER	<i>The Journal of Economic Education</i> – April 2018 <a href="https://doi.org/10.1080/00220485.2018.1438863">https://doi.org/10.1080/00220485.2018.1438863</a>
DESCRIPTION	This article is a short description of the Assessment Disaggregation software which can be downloaded here: <a href="https://tazzben.github.io/WW/">https://tazzben.github.io/WW/</a> . This software converts raw (Scantron or ZipGrade formatted) exam files into adjusted and unadjusted learning types as described by Smith & Wagner (2018) and Walstad & Wagner (2016). As calculating these scores by hand is time consuming, this software allows for the wide-scale adoption of these improved measurements of learning.
TITLE	<b>Bazinganomics: Economics Of The Big Bang Theory</b>
COAUTHORS	James Tierney, G. Dirk Mateer, Jadrian Wooten, and Wayne Geerling
PUBLISHER	<i>The Journal of Economic Education</i> – April 2016 <a href="http://dx.doi.org/10.1080/00220485.2016.1146099">http://dx.doi.org/10.1080/00220485.2016.1146099</a>
DESCRIPTION	This article is a short description of our website, Bazinganomics.com. The website provides clips, explanations and <i>how to teach...</i> articles for use in an economics classroom.
MY ROLE	Designed the website and contributed to the <i>how to teach...</i> articles.

## SPECIAL INVITATION PRESENTATION

TITLE	<b>What Drives Demand for Pundits?</b>
SERIES	<i>WSU Common Reading Lecture</i> – November 5th, 2013 – with Jadrian Wooten
DESCRIPTION	A general audience presentation discussing our findings that the audience desires both accuracy and confidence from pundits. <i>The Common Reading Lecture</i> is delivered to new freshman each year around a central theme. This lecture was attended by more than 300 freshman. <i>News release: <a href="http://goo.gl/j0C6uI">http://goo.gl/j0C6uI</a></i>

## CONFERENCE PRESENTATIONS

**Allied Social Science Associations**

- The Localization of Processed Food Products Over Time (January 2016)

**AEA Conference on Teaching and Research on Economic Education**

- On Guessing: Comparing Estimates of the Guessing Parameter with Monte Carlo Simulations (May 2018)
- Short vs. Long: Cognitive Load, Retention and Changing Class Structures (June 2016)
- Short Semesters and Long Classes: Measuring the Impact on Studying and Learning Outcomes (May 2015)
- Teaching with the Popular Press: A More Entertaining and Economical Way to Teach Economics (May 2014)

**Southern Economic Association**

- Estimating State-Industry Employment, With an Application to Industrial Localization (November 2017)
- Adjusting for Guessing and Applying a Statistical Test to the Disaggregation of Value-added Learning Scores (November 2017)
- Stronger Preferences and Lower Profit Margins? How Additional Utility Can Result in Lower Prices and Increased Consumer Surplus (November 2015)
- We Nudge and You Can Too! Informing Students of Grade Outcomes at the Moment of Decision (November 2015)
- Bazinganomics: Teaching Economics with The Big Bang Theory (November 2015)
- Using Online Tools for a Collaborative Classroom (November 2014)
- “I’ll trade you some accuracy for that confidence:” The story of pundit accuracy and viewer preferences (November 2013)

**Annual Economics Teaching Conference**

- Using Google Drive to Collaborate, Automate and Nudge (November 2014)
- Teaching with the Popular Press: A More Entertaining and Economical Way to Teach Economics (October 2013)

**Academy of Economics and Finance**

- On Guessing: Comparing Estimates of the Guessing Parameter with Monte Carlo Simulations (February 2018)
- We Nudge and You Can Too! Informing students of grade outcomes at the moment of decision (February 2016)
- Giving Away the Store: How the zero price constraint results in fewer add-on features (February 2016)
- Piracy, Awareness and Welfare in a Required Aftermarket (February 2014)
- Teaching with the Popular Press: A More Entertaining and Economical Way to Teach Economics (February 2014)
- “I’ll trade you some accuracy for that confidence:” The story of pundit accuracy and viewer preferences (February 2013)

**Topics in Education Symposium**

- Beyond the Pre- and Post-Test Assessment Procedure (November 2017)
- Improved Classroom Outcomes with an E-Mailed 'Grade Nudge' (November 2017)

### **Innovation in Pedagogy and Technology Symposium**

- We Nudge and You Can Too: Improving Outcomes with an Emailed Nudge (May 2018)

### **Digital Learning Showcase**

- We Nudge and You Can Too: Improving Outcomes with an Emailed Nudge (May 2018)

### **Great Plains Business and Economics Conference**

- Estimating State-Industry Employment, With an Application to Industrial Localization (October 2017)

### **PUBLISHED TEACHING SOFTWARE**

---

<b>TITLE</b>	<b>Create Random Assignments</b>
<b>WEBSITE</b>	<a href="https://bensresearch.com/CRA/">https://bensresearch.com/CRA/</a> (link to Chrome Store on site)
<b>DESCRIPTION</b>	Google Drive based random homework assignment generator designed to leverage Drive's built in collaboration tools
<b>TITLE</b>	<b>Create Group Projects</b>
<b>WEBSITE</b>	<a href="https://bensresearch.com/CGP/">https://bensresearch.com/CGP/</a> (link to Chrome Store on site)
<b>DESCRIPTION</b>	Automatically generate Google Drive based collaborative work spaces for group projects
<b>TITLE</b>	<b>Nudge</b>
<b>WEBSITE</b>	<a href="https://bensresearch.com/nudge/">https://bensresearch.com/nudge/</a> (link to Chrome Store on site)
<b>DESCRIPTION</b>	Append grade outcome messages at the bottom of every assignment
<b>TITLE</b>	<b>Disaggregate and Adjust Value-added Learning Scores</b>
<b>WEBSITE</b>	<a href="https://tazzben.github.io/WW/">https://tazzben.github.io/WW/</a>
<b>DESCRIPTION</b>	A tool to disaggregate Scantron or ZipGrade pre- and post-test responses into value-added learning scores and adjust them for guessing.

### **TEACHING AWARDS AND GRANTS**

---

UNO MBA Professor of the Year (Award, 2018)

UNO MBA Professor of the Year (Award, 2017)

Improvements in Assessment of Principles in Micro- and Macroeconomics (Grant, 2016)

### **SELECTED PROFESSIONAL SERVICE**

---

*Journal of Economics Teaching* Executive and Advisory Board Member (2016-)

*Journal of Economics Teaching* Website Designer and Manager (2016-)

*Bazinganomics* Website Designer (2015-)

#### **Advising**

- Miles Russell – *in progress*, M.A. Committee (UNO)
- Ethan Spangler – Graduated 2017, Ph.D. Committee Member (WSU)
- Dustin White – Graduated 2016, Ph.D. dissertation chapter coauthor (WSU)
- Jessica Perrigan – Graduated 2016, M.A. Committee Chair (UNO)
- Gregory Campbell – Completed 2015, USSTRATCOM Mentor (UNO)

**Economics Assessment Manager (UNO)**

- Program level assessment (2016-)
- General education assessment (2016-)

### Committee Membership (UNO)

- UNO Academic Assessment Committee (2017-)
- Technology and Educational Resources Council (Member: 2014-, Co-chair: 2016-)
- Graduate Economics Program Committee (2014-)
- College of Business Administration (CBA) Graduate Program Committee (2015-)
- Evaluation of Teaching Task Force (2016-2018)

### Search Committees (UNO)

- Data Analytics Search Committee (2015-2016)
- Economics Search Committee (2014-2015)

### Communities of Practice (UNO)

- An Investigation of the Extended MBA Class Format (Facilitator – 2014-2015)
- Pre-Tenured Leadership Circle (2014-2015)

### Selected Service Presentations (UNO)

- A Slightly Damaged iPod and Slightly Damaged Candy: How a lack of information in a market can be bad for everyone (“Economics and Accounting Day” presentation for local high school students – February 2018)
- Connecting to Database Resources Hosted in MySQL (Presentation for CBA faculty – December 2017)
- Instructor Driven Assessment with Flow Disaggregation, Guessing Adjustments, and Nationally-Normed Results (Poster presentation for UNO administration/faculty – September 2017)
- Improvements in Assessment Brown Bag (Presentation for CBA faculty – January 2017)
- A Discussion of FiveThirtyEight’s Prediction Method (Presentation for Economics Club – October 2016)
- Limited Resources and Choices: How Do You Make a Product When You Don’t Have Any Money? (Presentation for Benson Business and Entrepreneurship Academy – March 2016)
- The Economics of Gift Giving (Presentation for Economics Club – December 2015)

*Affiliated with the UNO Center for Innovation, Entrepreneurship & Franchising (2014-)*

**Review/Judge Panels (UNO): 5**

**Referee:** Economics Bulletin, Economic Inquiry, Emerging Markets Finance and Trade, The Journal of Economic Education, Journal of Economics Teaching, The Scandinavian Journal of Economics, Urban Studies

**Created Open Source Projects:** Expense.txt, Time.txt, Depreciate for Ledger / Ledger Scheduler / csvToLedger, Rally Point

## COMPUTER SKILLS

---

LANGUAGES	AppleScript, ASP.NET (Using C#), C, C++, C#, Objective-C, HTML / CSS, Java, JavaScript, PHP, Python, SQL, VBScript, Others
PROTOCOLS	XML, JSON, SOAP, REST
DEVELOPED APPS FOR	iOS, Mac OS X, Unixes and Linux, Windows, AJAX / HTML 5 / Web (Specialty), Office Add-ons, Google Apps Add-ons
DATABASES	MySQL, Microsoft SQL, SQLite High Performance / High Volume SQL Expert
STATISTICAL	GAUSS, Stata, Mathematica, SAS, MatLab, SciPy, R
GRAPHICS	Adobe Photoshop, Adobe Illustrator, Adobe InDesign

PRODUCT DEVELOPMENT, PROGRAMMING, PROJECT MANAGEMENT, BUSINESS, AUDIO/VIDEO PRODUCTION, AND INTERACTIVE INSTRUCTIONAL MATERIAL EXPERIENCE

---

PERIOD	<b>2002 – 2015</b>
EMPLOYER	<b>WBP SYSTEMS</b>
JOB TITLE	<b>Founder / Chief Software Architect</b>
PRODUCTS	Heap CRM, Torch Project Management
SERVICES	Business Software Consulting
DESCRIPTION	Design and code for-sale applications for small business (with global customer base). This includes creating all knowledge base articles/blog posts (hundreds), instructional videos and marketing material. Additionally, the products integrate with over twenty 3rd party applications, provide four API hooks and are industry leaders in language analysis, search technology and HTML5 offline mobile experiences.

STATISTICAL RESEARCH EXPERIENCE

---

PERIOD	<b>2010 – 2013</b>
EMPLOYER	<b>WSU – Graduate School, WSU – Institutional Research</b>
JOB TITLE	<b>Research Assistant</b>
DESCRIPTION	Created reports and designed automation software to eliminate reoccurring tasks previously done by hand. Prepared reports for other departments in the university and answered research questions such as the effectiveness of particular departments