Stephen J. Aguilar

Rossier School of Education · University of Southern California · Los Angeles, CA

aguilars@rossier.usc.edu stephenaguilar lapel.tech | Updated: September 1, 2019

Education

Ph.D., Education and Psychology, University of Michigan	2016
M.S., Psychology, University of Michigan	2014
M.A., Humanities (Philosophy), University of Chicago	2008
B.A., Philosophy & Psychology, Georgetown University	2005

Academic Positions

Assistant Professor of Education 2018-pres.

Rossier School of Education University of Southern California

Provost Postdoctoral Scholar 2016-2018

Rossier School of Education University of Southern California

Research Grants and Contracts

Current

Using Learning Analytics and Natural Language Processing to Explore the Role of Synchronous Chat in Knowledge Construction During Online Course Sessions

Research Grant (\$25,000)

2U, Incorporated

Principal Investigator. Co-PI: Brendesha Tynes. 2017-2019

Assessing the Role of Asynchronous Materials in Supporting Learning

Research Grant (\$25,000)

2U, Incorporated

Principal Investigator. Co-PI: John Pascarella. 2017-2019

Completed

Using a Refutation Text to Address Misconceptions about Common Core Policy

Internal Research Funds Award (\$1,440)

USC Rossier School of Education

Principal Investigator. 2018

Total awarded: \$116,440

Masters of their Destinies? Hispanic Students' Sense of Control in Relation to Post-Secondary Outcomes, a Generalized Structural Equation Modeling Approach

AERA Fellowship Program on the Study of Deeper Learning (\$20,000)

American Educational Research Association & The William and Flora Hewlett Foundation **Principal Investigator.** November 1, 2016 – June 31, 2018

Improving Access to College Through Game, Technology, and Social Media

Fund for the Improvement of Postsecondary Education, First in The World Grant (\$3,2000,000) U.S. Department of Education (#P116F140097)

Researcher. Principal Investigator: William G. Tierney. 2014-2018.

Provost Postdoctoral Research Grant

Office of the Provost (\$10,000)

University of Southern California

Principal Investigator. 2016-2018

Educational Evaluation of Technical Knowledge Acquisition (TechKnAcq) Project

Seedling Grant Evaluation (\$30,000)

Intelligence Advanced Research Projects Activity (IARPA); FA8650-15-C-9102

Principal Investigator. Co-PI: Gully Burns. January 1, 2017 – April 30, 2017

Understanding Gameful Design though the Lenses of Incentive Regimes and Videogame Genres

National Science Foundation: Division of Information & Intelligent Systems (\$2,000)

Fellow. PI: Matthew Berland. April 2016 - November 2016

Capturing and Measuring Students' Sense-Making of Visualizations Depicting Academic Achievement Research Grant (\$3,000)

Rackham Graduate School, University of Michigan

Principal Investigator. January 2015 – July 2016

Student co-authors are italicized

Refereed Journal Articles

- Carpenter, T., Pogacar, R., Pullig, C., Kouril, M., **Aguilar, S. J.**, LaBouff, J. P., Isenberg, N., Chakroff, A. (accepted). Survey-Software Implicit Association Tests: A Methodological and Empirical Analysis. *Behavior Research Methods*. (Impact Factor 4.06)
- **Aguilar, S.J.**, Polikoff, M., Sinatra, G. (2019). Refutation Texts: A New Approach to Changing Public Misconceptions about Education Policy. *Educational Researcher*. DOI: 10.3102/0013189X19849416 ⚠ (Impact Factor 4.00)
- **Aguilar, S.J.**, Kim, A.Y. (2019). Hispanic Students' Sense of Control in Relation to Post-Secondary Enrollment Outcomes. *Social Sciences*, 8, 67. DOI: 10.3390/socsci8020067
- Aguilar, S.J. (2018). Examining the Relationship Between Comparative vs. Self-Focused Academic Data Visualizations in At-Risk College Students' Academic Motivation. *Journal of Research on Technology in Education*, 50, 1, 84-103. DOI: 10.1080/15391523.2017.1401498 (Impact Factor 2.98)

- **Aguilar, S.J.** (2018). Learning Analytics: At the Nexus of Big Data, Digital Innovation, and Social Justice in Education. *TechTrends*, 62:37-45. DOI: 10.1007/s11528-017-0226-9 (Impact Factor 1.03)
- Aguilar, S.J., Holman, C., Fishman, B. (2018). Game-Inspired Design: Empirical Evidence in Support of Gameful Learning Environments. *Games and Culture*, (13)1. DOI: 10.1177/1555412015600305 (Impact Factor 1.50)
- Lonn, S., **Aguilar, S.J.**, & Teasley, S. D. (2015). Investigating Student Motivation in the Context of a Learning Analytics Intervention During a Summer Bridge Program. *Computers in Human Behavior*, 47, 90-97. DOI: 10.1016/j.chb.2014.07.013 (Impact Factor 3.54)

Refereed Proceedings Papers

- **Aguilar, S.J.**, *Baek, C.* (2019). Motivated Information Seeking and Graph Comprehension Among College Students. *Proceedings of the 9th International Conference on Learning Analytics & Knowledge (LAK'19)*. ACM, New York, NY. Tempe, AZ.
- Gordon, J., **Aguilar, S.J.**, *Sheng E.*, Burns, G. (2017). Structured generation of technical reading lists. *Proceedings of the 12th Workshop on Innovative Use of NLP for Building Educational Applications*. Copenhagen, Denmark.
- Brown, M.G., DeMonbrun, R.M., Lonn, S., **Aguilar, S.J.**, Teasley, S., (2016). What and when: the role of course type and timing in students' academic performance. *Proceedings of the Sixth International Conference on Learning Analytics And Knowledge (LAK '16)*. ACM, New York, NY. DOI: 10.1145/2883851.2883907
- Holeman, C., **Aguilar, S.J.**, Levick, A., Stern, J., Plummer, B., & Fishman, B., (2015). Planning Success: How Students Use a Grade Prediction Tool to Win Their Classes. *Proceedings of the Fifth International Conference on Learning Analytics And Knowledge (LAK '15)*. ACM, New York, NY. DOI: 10.1145/2723576.2723632 Acceptance rate: 27%
- Lonn, S., **Aguilar, S.**, & Teasley, S. (2014). Demystifying Success in a Summer Bridge Program: Investigating Students' Intrinsic Motivation and Mastery Goals in the Context of a Learning Analytics Intervention. *Proc. International Society of the Learning Sciences*. Boulder, CO. DOI: 10.22318/icls2014.1665
- Aguilar, S., Holman, C., & Fishman B. (2014). Multiple Paths, Same Goal: Exploring the Motivational Pathways of Two Distinct Game-Inspired University Course Designs. In Ochsner, J. Dietmeier, C. Williams, A., & C. Steinkuehler (Eds.), *Proc. GLS 10.0* (pp. 26-33). Madison, WI. DOI: 10.13140/RG.2.1.2685.6488
- Holman, C., **Aguilar, S.**, Fishman, B., Carr, M., Fiesta, M. Levick, A., Molnar, S., & Rocco, L. (2014). GradeCraft: A Working Example. In Ochsner, J. Dietmeier, C. Williams, A., & C. Steinkuehler (Eds.), *Proc. GLS* 10.0 (pp. 347-352). Madison, WI. DOI: 10.13140/RG.2.1.3734.2242
- **Aguilar, S.**, Lonn, S. Teasley, S. (2014). Perceptions and Use of an Early Warning System During a Higher Education Transition Program. *Proceedings of the Fourth International Conference on Learning Analytics And Knowledge (LAK '14)*. ACM, New York, NY, USA, 113-117. DOI: 10.1145/2567574.2567625 Acceptance rate: 30% ▶

- Aguilar, S., Fishman, B., Holman, C. (2013). Leveling-Up: Evolving Game-Inspired University Course Design. In Williams, C.C., A. Ochsner, Dietmeier, J., & C. Steinkuehler (Eds.), *Proc. GLS 9.0* (pp. 46–52). Pittsburgh, PA: ETC Press. DOI: 10.13140/2.1.4154.0805
- Holman, C., **Aguilar, S.**, Fishman, B., (2013). Designing a Game-Inspired Learning Management System. In Williams, C.C., A. Ochsner, Dietmeier, J., & C. Steinkuehler (Eds.), *Proc. GLS 9.0* (pp. 189–194). Pittsburgh, PA: ETC Press. DOI: 10.13140/RG.2.1.5044.9447
- Holman, C., **Aguilar, S.**, Fishman, B. (2013). GradeCraft: What Can We Learn From a Game-Inspired Learning Management System? *Proceedings of the Third International Conference on Learning Analytics and Knowledge (LAK '13)*, Dan Suthers, Katrien Verbert, Erik Duval, and Xavier Ochoa (Eds.). ACM, New York, NY, 260-264. DOI: 10.1145/2460296.2460350 Acceptance rate: 28%
- Lonn, S., **Aguilar, S.**, Teasley, S. (2013). Issues, Challenges, and Lessons Learned When Scaling up a Learning Analytics Intervention. *Proceedings of the Third International Conference on Learning Analytics and Knowledge (LAK '13)*, Dan Suthers, Katrien Verbert, Erik Duval, and Xavier Ochoa (Eds.). ACM, New York, NY, 235-239. DOI: 10.1145/2460296.2460343 Acceptance rate: 28%
- Fishman, B., **Aguilar**, **S.** (2012). Gaming the Class: Using a Game-based Grading System to Get Students to Work Harder... and Like It. In C. Martin, A. Ochsner, & K. Squire (Eds.), *Proc. GLS 8.0* (pp. 111–118). Pittsburgh, PA: ETC Press. DOI: 10.13140/RG.2.1.2423.5047

Book Chapters, Preptints, Reports, & White Papers

- **Aguilar, S. J.**, Polikoff, M. S., & Sinatra, G. M. (2018). When public opinion on policy is driven by misconceptions, refute them. *Brookings Evidence Speaks Reports*, 2(36), 1-11.
- **Aguilar, S.** (2013). Being and Learning. In Wittkower, D., & Rush, L. (Eds.). *Ender's Game and Philosophy: Genocide is Child's Play* (Vol. 80). Open Court Publishing Co. Chicago, IL.

Manuscripts Under Review

Aguilar, S.J., Baek, C., (under review). Sexual Harassment in Academe is Underreported, Especially by Students in the Physical Sciences. **■**

Working Papers

- **Aguilar, S.J.**, Sinatra, G. (in preparation). Using a Refutation Text to Change Knowledge and Implicit Bias Regarding Unauthorized Mexican Immigrants in the U.S.
- **Aguilar, S.J.**, Schenke, K. (in preparation). Exploring the Role of Calibration in Self-Monitoring and Help-Seeking Strategies Among College Students
- **Aguilar, S.J.**, (in preparation). Using Learning Analytics and Natural Language Processing to Explore the Role of Synchronous Chat in Knowledge Construction During Online Course Sessions
- **Aguilar, S.J.**, Karabenick, S., Gehring, W., Lonn, S. (in preparation). Well Calibrated? Modeling College Math Students' Predictions of Future Exam Performance.

Aguilar, S.J., (Apr. 2019). Creating Serendipity. Inside Higher ED.

Aguilar, S.J., (Mar. 2019). Yes, You Should Negotiate. Inside Higher ED. C

Aguilar, S.J., (Jan. 2019). Navigating Misunderstandings and Conflict. Inside Higher ED.

Aguilar, S.J., (Nov. 2018). How to Run a Meeting. *Inside Higher ED*.

Aguilar, S.J., (Oct. 2018). What the Job Market Is – and Isn't. *Inside Higher ED*.

Aguilar, S.J., (Sep. 2018). Building Relationships at Home. *Inside Higher ED*.

Aguilar, S.J., (Aug. 2018) On Belonging in the Academy. Inside Higher ED. C

Aguilar, S.J., (Jul. 2018). Establishing Your Scholarly Identity. Inside Higher ED. C

Aguilar, S.J., (Jun. 2018). Networking: Just Do It. *Inside Higher ED*.

Aguilar, S.J., (May 2018). Transitioning From a Postdoc to a Tenure-Track... *Inside Higher ED.*

Aguilar, S.J., (Jan. 2018). Tips for a Successful Job Talk. Inside Higher ED.

Aguilar, S.J., (Nov. 2016). The Language of "Privilege" Doesn't Work. *Inside Higher ED.*

Aguilar, S.J., (Apr. 2015). We Are Not Imposters. *Inside Higher ED*.

Media Coverage

General

Provost Postdoctoral Scholar Aguilar finds groove at Rossier USC Rossier News

Rossier faculty expands with hiring of postdoctoral scholar USC Rossier News

Research

Aguilar, S. J., Polikoff, M. S., & Sinatra, G. M. (2018). When public opinion on policy is driven by misconceptions, refute them. *Brookings Evidence Speaks Reports*, **2**(36), 1-11

When Think Tank Opinion on Policy Is Driven by Advocacy, Refute Them: A Reader *National Education Policy Center*

Refuting common Common Core misconceptions Thomas B. Fordham Institute 🗹

Here's One Way to Dispel Misconceptions About the Common Core Education Week

Competitive Fellowships & Other Funding

Provost's Postdoctoral Scholarship

USC Rossier School of Education

University of Southern California, Los Angeles, CA

Harold and Vivian Shapiro Award (\$1,000)

Rackham Graduate School

2016

2015

University	of Michigan,	Ann	Arbor,	Ml

Learning Analytics Fellow (\$2,000)	2013
Learning Analytics Fellows Program	
University of Michigan, Ann Arbor, MI	
Learning Analytics Summer Institute at Stanford	2013
Society for Learning Analytics Research	
Stanford University, Palo Alto, CA	
Poster Prize (\$500)	2013
Michigan State University Graduate Student Conference	<u> </u>
Michigan State University, MI	
Student Scholarship	2013
Second Biennial APA Division 45 Conference	2013
University of Michigan, Ann Arbor, MI	
Rackham Conference Travel Grant Award (\$4,750)	2012-16
Rackham Graduate School	2012-10
University of Michigan, Ann Arbor, MI	
Dooldone Marit Fallowskin	
Rackham Merit Fellowship Rackham Graduate School	2011
University of Michigan, Ann Arbor, MI	
Master of Arts Program in the Humanities Fellowship (\$61,000)	2017
Division of the Humanities	
University of Chicago, Chicago, IL	

Conference & Other Presentations

Refereed Conference Presentations

- **Aguilar, S.J.**, Gordon, J. (2018). Examining Players' Sense-Making of Representation, Gender, and Race(ism) in Overwatch. Poster presented at the *UCI Esports Conference*. Irvine, CA.
- Sinatra, G., **Aguilar, S.J.**, Gordon, J. (2018). Using Refutation Text to Shift Policy Misconceptions. Paper presented at the *Society for Text & Discourse*. Brighton, England.
- Tilson, J., Landel, R., Andersen, M.A., Dominguez, J., Kirages, D., Robertson E., Sebelski, C.A., Simpson, M.S., t Stevenson, J., Teglia A., **Aguilar, S.J.**, Gordon, J. (2018). Expanding a DPT program to include a hybrid online/on-campus cohort: a case study of shared governance. *American Council of Academic Physical Therapy ELC*. Jacksonville, FL.

- **Aguilar, S.J.**, (2018). Hispanic Students' Sense of Control in Relation to Post-Secondary Outcomes, a Generalized Structural Equation Modeling Approach. Poster presented at the *American Educational Research Association*. New York, NY.
- **Aguilar, S.J.**, (2018). Measuring Implicit Bias in Graph Types; and Studying the Relationship Between Information-Seeking Preferences and Graph Comprehension. Poster presented at the *American Educational Research Association*. New York, NY.
- Corwin, Z.B., Ochsner, A., Maruco, T.J., McClelland, A., Reichhardt, R., **Aguilar, S.J.**, (2018). Evaluating the effects of a game-based intervention on FAFSA completion: Mixed Methods and Multiple Metrics. Paper presented at the *American Educational Research Association*. New York, NY.
- Tilson, J.K., Gordon J., **Aguilar, S.J.**, Andersen, M.A., Dominguez, J., Havens, K.L., Hershberg, J., Kirages, D., Landel, R., Robertson, E., Sebelski, C., Stevenson, J., Simpson M. (2018). Implementing a Hybrid Online/On-Campus DPT Program at a Research-Intensive Institution: A Protocol for Comparing Learning Outcomes with an Existing Residential Program. Poster presented at the *American Physical Therapy Association CSM* (Combined Sessions Meeting). New Orleans, LA.
- Gordon, J., **Aguilar, S.J.**, Burns, G. (2017). Structured Generation of Technical Reading Lists. *12th Workshop on Innovative Use of NLP for Building Educational Applications*. Copenhagen, Denmark.
- Corwin, Z.B., Ochsner, A., Maruco, T.J., **Aguilar, S.J.**, (2017). Implementing a Digital College Access Initiative: Four Profiles of Engagement. Paper presented at the *Digital Media and Learning Conference*. Irvine, CA.
- **Aguilar, S.J.**, Sinatra, G. (2017). Using a Refutation Text to Change Misconceptions about U.S. Immigration. Poster presented at the *American Psychological Association*. Washington, D.C.
- **Aguilar, S.J.**, (2017). Studying the Role Depictions of Academic Information Play in At-Risk Students' Motivation to Succeed. Paper presented at the *European Association for Research on Learning and Instruction*. Tampere, Finland.
- **Aguilar, S.J.**, (2017). Masters of their Destinies? Hispanic Students' Sense of Control in Relation to Post-Secondary Outcomes, a Generalized Structural Equation Modeling Approach. Poster presented at the *American Educational Research Association*. San Antonio, TX.
- **Aguilar, S.J.**, (2017). Measuring Students' Affinities Toward Representations of their Academic Achievement: The Motivated Information-Seeking Questionnaire (MISQ). Poster presented at the *American Educational Research Association*. San Antonio, TX.
- **Aguilar, S.**, Karabenick, S., Lonn, S., Teasley, S., Cho, L. (2015). Examining the Motivational Implications of a Learning Analytics Intervention Designed for Advisors. Paper presented at the *European Association for Research on Learning and Instruction*. Limassol, Cyprus.
- **Aguilar, S.**, (2015). Exploring and Measuring Students' Sense-Making Practices Around Representations of their Academic Information. Poster presented at the *Learning Analytics and Knowledge Conference (LAK' 15)*. Poughkeepsie, NY.
- **Aguilar, S.**, Karabenick, S., Gehring, W., Lonn, S., (2015). Better than Predicted? Modeling College Math Students' Predictions of Future Exam Performance. Paper presented at the *Annual Meeting of the American Educational Research Association*. Chicago, IL.

- **Aguilar, S.**, Karabenick, S., Fishman, B., Holman, C. (2014). Supporting Students' Autonomy through Gameful Course Design. Poster presented at the *International Conference on Motivation*. Helsinki, Finland.
- Lonn, S., **Aguilar, S.**, Teasley, S. (2014). Demystifying Success in a Summer Bridge Program: Investigating Students' Intrinsic Motivation and Mastery Goals in a Design-Based Research and Learning Analytics Intervention. Poster presented at the *International Conference of the Learning Sciences*. Boulder, CO.
- **Aguilar, S.**, Fishman, B., Holman, C. (2014). Empirical Evidence in Support of Gameful Learning Environments. Paper presented at the Annual Meeting of the *American Educational Research Association*, Philadelphia, PA.
- Deterding, S., Fanelli, K., Vattel, L., Higgen, T., Schenke, K., Sheldon, L., Ewing, C., Fishman, B., **Aguilar, S.**, Holman, C. (2013). Beyond Badges & Points: Gameful Assessment Systems for Engagement in Formal Education. Symposium given at *Games+Learning+Society Conference 9.0*. Madison, WI.
- **Aguilar, S.**, Banerjee, M., & Rowley, S. (2012). The Role of Ethnicity and Gender in Academic Outcomes in Ethnic Minority Families. Poster presented at the *American Psychological Association's Division 45 Conference*. Ann Arbor, MI.

Invited Talks

- **Aguilar, S.**, (2018). *How can learning analytics contribute to educational equity?* Talk given at UCI School of Education's Brownbag Series. University of California, Irvine, CA.
- **Aguilar, S.**, (2016). *Learning Analytics*. Talk given at "Predicting Future Events Using Social Media Data". University of California, University of California's Institute for Prediction Technology. Irvine, CA.
- **Aguilar, S.**, (2015). *Introduction to HLM*. Talk given to Ph.D. students in labs in Developmental, Educational, and Community Psychologists (Eccles, Simpkins, Reich, Conley). University of California, Irvine School of Education. Irvine, CA.
- **Aguilar, S.**, (2015). Studying Representations of Academic Achievement and their Relationship to Student Motivation. Talk given at the Combined Program in Education and Psychology Colloquium Series. University of Michigan School of Education. Ann Arbor, MI.
- Karabenick, S., **Aguilar, S.**, (2014). *Student-Teachers' Beliefs and Self-Regulation*. Talk given at TeachingWorks Journal Club. University of Michigan School of Education. Ann Arbor, MI.
- **Aguilar, S.**, (2014). *Building a Within-Group Model in HLM7*. Guest lecture given for Multi-Level Analysis of Survey Data (HLM) course. Institute for Social Research, University of Michigan. Ann Arbor, MI.
- **Aguilar, S.**, Lonn, S., Teasley, S. (2014). *Perceptions and Use of Early Warning System During a Higher Education Transition Program*. Talk given at the Student Learning and Analytics at Michigan (SLAM). University of Michigan. Ann Arbor, MI.
- Fishman, B., **Aguilar, S.** (2012). *Get Students to Work Harder...and Like It.* Talk given at the University of Michigan's School of Education Brown Bag Series. University of Michigan School of Education. Ann Arbor, MI.

Teaching

Multi-Level Analysis of Survey Data (HLM)
Lead Instructor, Graduate level workshop
University of California, Irvine School of Education

Multi-Level Analysis of Survey Data (HLM) Assistant Instructor, Graduate level seminar Institute for Social Research, Ann Arbor, MI

Research Methods in Psychology Graduate Student Instructor, Undergraduate, Psychology Department University of Michigan, Ann Arbor

Self-Regulated Learning and Motivation (Breaking the Code of College Success) Instructor, Undergraduate Rossier School of Education, University of Southern California

Educational Psychology & Human Development Instructor, Undergraduate University of Michigan Ann Arbor, MI

Psychology of Adolescence Graduate Instructor, Undergraduate, Psychology Department University of Michigan, Ann Arbor, MI

Service & Professional Memberships

National Service

American Educational Research Association (AERA)

Secretary (2016-2018); Studying and Self-Regulated Learning (SSRL) Special Interest Group Junior Program Chair (2018-2019); SSRL Special Interest Group

American Psychological Association – Educational Psychology (APA-Div 15)

Program Co-Chair (2019)

Society for Learning Analytics Research (SoLAR)

Program Committee; member (2018-19) Ad-hoc Peer Reviewer

Journals

British Journal of Educational Psychology
Evaluation and Program Planning
Games and Culture
IEEE Transactions on Learning Technologies
Journal of Learning Analytics
Journal of Systems and Information Technology
Learning and Instruction
Teachers College Record

Conferences

European Association for Research on Learning and Instruction (2015-pres.) Learning Analytics and Knowledge (LAK) Conference (2012 – pres.) American Educational Research Association (AERA) Conference (2014 – pres.)

Institutional Service

University of Southern California

Faculty Online Advisory Group

Rossier School of Education, University of Southern California

Joan Herman and Richard Rasiej Mathematics Initiative 🗹

University of Michigan; Combined Program in Education and Psychology

Admissions Committee (2014 – 2015) Executive Committee (2014 – 2015) Colloquium Committee (2013 – 2014)

National Center for Institutional Diversity

Postdoc Application Reviewer (2015)

Professional Memberships

American Educational Research Association (2011 - present)
American Psychological Association, Division 15, Educational Psychology (2011 - present)
European Association for Research on Learning and Instruction (2014 - present)
International Society of the Learning Sciences (2011 - present)
Society for Learning Analytics Research (2012 - present)

Skills & Competencies

Languages

English (fluent: reading, writing, and speaking)

Spanish (native/fluent: reading, writing, and speaking)

Methods

Quantitative: Regression (OLS, logistic, multinomial logistic), Hierarchical Linear Modeling, Structural Equation Modeling, Social Network Analysis, Survey Design, Natural Language Processing

Qualitative: Design-Based Research, Semi-Structured Interviews

Software

Statistics: SPSS, Stata 14, HLM7, R Qualitative: MAXQDA, NVivo Programming: R, Python, LaTeX Design: Photoshop, Illustrator

References

Available upon request