Jing Liu
CURRICULUM VITAE

PERSONAL INFORMATION

Contact Information

Name: Liu, Jing
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Academic Appointments at University of Maryland College Park (UMD)

Primary

College of Education	
Associate Professor	2025-Present
Assistant Professor	2020-2025
Founding Director, Center for Educational Data Science and Innovation	2025-Present

Affiliation

Institute of Advanced Computer Studies, Faculty Affiliate	2025-Present
Artificial Intelligence Interdisciplinary Institute at Maryland	
Faculty Affiliate	2024-Present
Leadership Council	2026-Present
Trustworthy AI in Law & Society Institute, Faculty Affiliate	2024-Present
Value-Centered Artificial Intelligence, Faculty Affiliate	2023-Present
Human Computer Interaction Lab, Faculty Associate	2023-Present
Maryland Population Research Center, Faculty Associate	2023-Present
Language Science Center, Steering Committee	2024-2025

Educational Background

Ph.D., Economics of Education, Stanford University	2018
M.A., Economics, Stanford University	2016
M.A., Economics of Education, Peking University, China	2013
B.A., Economics, Peking University, China	2011

Other Employment and Affiliation

Annenberg Institute, Brown University	
Postdoctoral Research Associate	2018-2020
Visiting Professor	2020-2022
IZA Institute of Labor Economics	
Research Affiliate	2021-2024

Research Fellow	2025-Present
Maryland Longitudinal Data System Center, Principal Investigator	2020-Present
Baltimore Education Research Consortium, Research Board Member	2021-2024
DC Education Research Collaborative, Research Advisory Board Member	2021-2023

Professional Certifications, Licenses, and Memberships

Member, American Educational Research Association
Member, Association for Education Finance and Policy
Member, Association for Public Policy Analysis and Management
Member, Society for Research on Educational Effectiveness

RESEARCH, SCHOLARLY, CREATIVE, AND/OR PROFESSIONAL ACTIVITIES

For each journal publication, I describe my contribution within four categories: writing, conceptualization, data collection, and data analysis. For each of those categories, I describe my level of contribution as: Primary (I led the effort); Partner (I contributed in equal proportion to the other author(s)); Contributor, (I contributed in a secondary way to the first author); or Mentor (my contribution was in an advisory role).
* = UMD graduate student; + = graduate student RA from another institution

Refereed Journals

Refereed Journal Articles

18. Himmelsbach, Z.+, Hill, H., Liu, J., Demszky, D. (Forthcoming) "A Quantitative Study of Mathematical Language in Classrooms". *Educational Researcher*
   - Press coverage: Hechinger Report

17. Demszky, D., Liu, J., Hill, H., Sanghi, S., Chung, T.* (2025) "Automated Feedback Improves Teachers' Questioning Quality in Brick-and-Mortar Classrooms: Opportunities for Further Enhancement". *Computers & Education.* DOI: 10.1016/j.compedu.2024.105183
   - Press coverage: Education Week

16. Liu, J., Kuhfeld, M., Lee, M. (2025). Noncognitive Factors and Student Long-Run Success: Comparing the Predictive Validity of Observable Academic Behaviors and Social Emotional Skills. *Educational Policy*. DOI:10.1177/08959048231209262.

15. Demszky, D., Liu, J., Hill, H., Jurafsky, D., Piech, C. (2024). Can Automated Feedback Improve Teachers' Uptake of Student Ideas? Evidence from a Randomized Controlled Trial in a Large-Scale Online Course. *Educational Evaluation and Policy Analysis* DOI: 10.3102/01623737231169270.

14. Liu, J., Hayes, M., Gershenson, S. (2024). From Referrals to Suspensions: New Evidence on Racial Disparities in Exclusionary Discipline. *Journal of Urban Economics*. DOI: 10.1016/j.jue.2022.103453.

13. <u>Liu, J.</u>, Penner, E., Gao, W. * (2023). Troublemakers? The Role of Frequent Teacher Referrers in Expanding Racial Disciplinary Disproportionalities *Educational Researcher.* DOI: 10.3102/0013189X231179649.
- Press coverage: AERA Communications, Education Week, Diverse: Issues in Higher Education, EdSurge, USA Today, The Hechinger Report

12. Hayes, M., <u>Liu, J.</u>, Gershenson, S. (2023). Who Refers Whom? The Effects of Teacher Characteristics on Disciplinary Office Referrals. *Economics of Education Review*, 102376. DOI: 10.1016/j.econedurev.2023.102376.

11. <u>Liu, J.</u>, Loeb, S., & Shi, Y. (2022). More Than Shortages: The Unequal Distribution of Substitute Teaching. *Education Finance and Policy*, 17(2), 285–308. DOI: 10.1162/edfp_a_0329.
- Press coverage: Fordham Institute, NBC News, National Council on Teacher Quality, K-12Dive

10. <u>Liu, J.</u> & Cohen, J. (2021), Measuring Teaching Practices at Scale: A Novel Application of Text-as-Data Methods. *Educational Evaluation and Policy Analysis*, 43(4), 587-614. DOI: 10.3102/01623737211009267.
- Press coverage: Fordham Institute

9. <u>Liu, J.</u>, Lee, M., & Gershenson, S. (2021). The Short- and Long-Run Impacts of Secondary School Absences. *Journal of Public Economics*, 199, 104441. DOI: 10.1016/j.jpubeco.2021.104441.
- Press coverage: The White House

8. <u>Liu, J.</u> & Loeb, S. (2021). Engaging Teachers: Measuring Teacher's Impact on Student Attendance in Secondary School. *Journal of Human Resources*, 56(2), 343-379. DOI: 10.3368/jhr.56.2.1216-8430r3 [Lead Article].
- Press coverage: Chalkbeat, FutureEd, Education Dive, National Council on Teacher Quality

7. Kuhfeld, M., Soland J., Tarasawa, B., Johnson, A., Ruzek, E., & <u>Liu, J.</u> (2020). Projecting the Potential Impacts of COVID-19 School Closures on Academic Achievement. *Educational Researcher*, 49(8), 549-565. DOI: 10.3102/0013189X20965918.
- Press coverage: New York Times

6. Sun, M., <u>Liu, J.</u>, Zhu, JM. [+], LeClair, Z. [+] (2019). Using a Text-as-Data Approach to Understand Reform Processes: A Deep Exploration of School Improvement Strategies. *Educational Evaluation and Policy Analysis*, 41(4), 510-536. DOI: 10.3102/0162373719869318.

5. Penner, E., Rochmes, J., <u>Liu, J.</u>, Solanki, S., Loeb, S. (2019). Differing View of Equity: How Prospective Educators Perceive Their Role in Closing Achievement Gaps. *RSF: The Russell Sage Foundation Journal of Social Sciences*, 5(3), 103-127. DOI: 10.7758/rsf.2019.5.3.06.

4. Bo, S., <u>Liu, J.</u>, Shiu, J., Song, Y., Zhou, S. (2019). Admission Mechanisms and Mismatches between Colleges and Students: Evidence from A Large Administrative Dataset from China. *Economics of Education Review*, 68, 27-37. DOI: 10.1016/j.econedurev.2018.12.004.

3.   Whitney, C. R. & <u>Liu, J.</u> (2017). What We're Missing: A Descriptive Analysis of Part-Day Absenteeism in Secondary School. *AERA Open*, 3(2). DOI: 10.1016/j.econedurev.2018.12.004.
- Press coverage: Education Week, Stanford News

2.   Bettinger, E., <u>Liu, J.</u>, Loeb, S. (2016). Connections Matter: How Interactive Peers Affect Students in Online College Courses. *Journal of Policy Analysis and Management* (Big Data Special Section), 35(4), 932-954. DOI: 10.1002/pam.21932.

1.   <u>Liu, J.</u> & Yuan, C. (2012). Did Value-Added Tax Reform Change Enterprise's Employment? Evidence from the Value-Added Tax Reform in Northeastern China. *Economic Science* (in Chinese), 1, 103-114.

Refereed Conference Proceedings

7.   Adel, A.*, Demszky, D., <u>Liu, J.</u>, Espy-Wilson, C. (Forthcoming). "From Weak Labels to Strong Results: Utilizing 5,000 Hours of Noisy Classroom Transcripts with Minimal Accurate Data". *Interspeech 2025 Conference.*

6.   Tabatabaee, S.*, <u>Liu, J.</u>, & Espy-Wilson, C. (Forthcoming). "FT-Boosted SV: Towards Noise Robust Speaker Verification for English Speaking Classroom Environments". *Interspeech 2025 Conference.*

5.   Adel, A.*, <u>Liu, J.</u>, Ai, W., Demszky, D., Espy-Wilson, C. (2024) "Kid-Whisper: Towards Bridging the Gap in Automatic Speech Recognition for Children". *2024 AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society.*

4.   Xu, P.*, <u>Liu, J.</u>, Jones, N., Cohen, J., Ai, W. (2024) "The Promises and Pitfalls of Using Language Models to Measure Instruction Quality in Education". *2024 Annual Conference of the North American Chapter of the Association for Computational Linguistics.*

3.   Demszky, D. & <u>Liu, J.</u> (2023). M-Powering Teachers: Natural Language Processing Powered Feedback Improves 1:1 Instruction and Student Outcomes. *Proceedings of the Tenth ACM Conference on Learning @ Scale.* DOI: 10.1145/3573051.3593379

2.   Alic III, S., Demszky, D., Mancenido, Z., <u>Liu, J.</u>, Hill, H., & Jurafsky, D. (2022). Computationally Identifying Funneling and Focusing Questions in Classroom Discourse. *Proceedings of the 17th Workshop on Innovative Use of NLP for Building Educational Applications (BEA)*, pp. 224–233. DOI: 10.48550/arXiv:2208.04715

1.   Demszky, D., <u>Liu, J.</u>, Cohen, J., Hill, H., Mancenido, Z., Jurafsky, D., & Hashimoto, T. (2021). Measuring Conversational Uptake: A Case Study on Student-Teacher Interactions. *Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics.* DOI: 10.18653/v1/2021.acl-long.130

Pre-print / Working Papers

5.   Lagos, F., Saltmarsh, J., & Liu, J. (2025). "The Effect of Centralized-Admission School Lotteries on Between-School Segregation: Evidence from 300 Largest School Districts in the United States." (*under review*)

4.   Attia, A. A., Demszky, D., Ogunremi, T., <u>Liu, J.</u>, & Espy-Wilson, C. (2024). "Continued pretraining for Domain Adaptation of wav2vec2. 0 in Automatic Speech Recognition for Elementary Math Classroom Settings." (*under review*)

3.   Chung, S., Persico, C., & <u>Liu, J.</u> "The Effects of Daily Air Pollution on Students and Teachers". (*under review*)

2.   <u>Liu, J.</u>, Conrad, C.*, Blazar, D. "Coding for the Future? The Impact of High School Computer Science Courses on College Majors and Labor Market Outcomes". (*under review*)
*   This paper was previously circulated using the title "CS for All? The Impact of High School Computer Science Courses on College Majors and Earnings".
*   Press coverage: EdSurge, Fortune, Axios

1.   <u>Liu, J.</u>, Lee, M., Chung, A.* "Using A Growth Curve Modeling Approach to Understand the Dynamics and Disparities of Class Absences in Secondary School". (*under review*)
*   Press coverage: The 74 Million, Chalkbeat

Conferences, Workshops, and Talks

Invited Talks

26. Liu, J. (Scheduled, 2026, April). *Who Speaks and How Does That Matter? Investigating Classroom Dynamics with the EDSI Dataset.* College of Education, University of Florida.

25. Liu, J. (2026, January). *Who Speaks and How Does That Matter? Investigating Classroom Dynamics with the EDSI Dataset.* Education Policy Seminar, Stanford Graduate School of Education.

24. Liu, J. (2025, October). *AI in Our Classrooms: Research Insights and Policy Implications.* Joint Committee on Children, Youth, Families, Maryland General Assembly.

23. Liu, J. (2024, April). *MPowering Teachers: Using Natural Language Processing to Measure and Improve Teaching Effectiveness.* Wheelock College of Education and Faculty of Computing & Data Sciences, Boston University.

22. Liu, J. (2024, April). *Troublemakers? The Role of Frequent Teacher Referrers in Expanding Racial Disciplinary Disproportionalities.* (2024, April). Office for Civil Rights, U.S. Department of Education.

21. Liu, J. (2024, February). *Using Natural Language Processing to Measure and Improve Teaching Effectiveness:*

Evidence from Randomized Controlled Trials. EdPolicyWorks, University of Virginia.

20. Liu, J. (2024, February). *Using Natural Language Processing to Measure and Improve Teaching Effectiveness: Evidence from Randomized Controlled Trials.* Human Development and Quantitative Methodology, University of Maryland.

19. Liu, J. (2023, October). *Harnessing the Power of AI to Support Educators with Automated Feedback.* Value-Centered Artificial Intelligence Colloquium, University of Maryland.

18. Liu, J. (2023, October). *Troublemakers? The Role of Frequent Teacher Referrers in Expanding Racial Disciplinary Disproportionalities.* Coalition for Educational Equity, University of Pennsylvania.

17. Liu, J. (2023, August). *Harnessing the Power of Artificial Intelligence to Support Teachers.* China Institute for Educational Finance Research, Peking University.

16. Liu, J. (2023, July). *Unpacking the Origins of Educational Inequality–The Case of Exclusionary Discipline.* Institute of Economics of Education, Peking University.

15. Liu, J. (2023, May). *Postsecondary Success of Baltimore City students at USM Institutions.* Board of Regents Meeting, University System of Maryland.

14. Liu, J. (2023, April). Key-Note Speech: *Harnessing the Power of Artificial Intelligence to Support Teachers: A Novel Tool for Mathematics Instruction Measurement and Feedback.* Advancing Equity and Inclusion in Math Education with the Algebra Project, AI, and Mindset, University of Baltimore.

13. Liu, J. (2022, December). *From Referrals to Suspensions: New Evidence on Racial Disparities in Exclusionary Discipline.* School of Public Health, University of Maryland.

12. Liu, J., (2022, December). *Imperfect Attendance: Toward A Fairer Measure of Student Absenteeism.* Network to Advance State Attendance Policy and Practice Meeting, Attendance Works.

11. Liu, J. (2022, February). *Can Automated Feedback Improve Teachers' Uptake of Student Ideas? Evidence from a Randomized Controlled Trial in a Large-Scale Online Course.* Computational Linguistics and Information Processing Colloquium, University of Maryland.

10. Liu, J. (2021, December). *From Referrals to Suspensions: New Evidence on Racial Disparities in Exclusionary Discipline.* EdPolicyForward, George Mason University.

9.   Liu, J. (2021, December). *Can Automated Feedback Improve Teachers' Uptake of Student Ideas? Evidence from a Randomized Controlled Trial in a Large-Scale Online Course.* QUINT Observation System Seminar Series, University of Oslo.

8.   Liu, J. (2020, December). *Projecting the Potential Impacts of COVID-19 School Closures on Academic Achievement.* Board of Regents Meeting, University System of Maryland.

7.   Liu, J. (2020, December). *Projecting the Potential Impacts of COVID-19 School Closures on Academic Achievement*. Maryland Longitudinal Data System Center.

6.   Liu, J. (2021, April). *Projecting the Potential Impacts of COVID-19 School Closures on Academic Achievement*. Shanghai International Studies University.

5.   Liu, J. (2020, November). *Engaging Teachers: Measuring Teacher's Impact on Student Attendance in Secondary School*. College of Education, University of Maryland.

4.   Liu, J. (2020, September). *Engaging Teachers: Measuring Teacher's Impact on Student Attendance in Secondary School*. School of Education, University of California at Irvine.

3.   Liu, J. (2020, March). *Engaging Teachers: Measuring Teacher's Impact on Student Atten- dance in Secondary School*. Department of Public Policy, University of Connecticut.

2.   Liu, J. (2019, November). *Engaging Teachers: Measuring Teacher's Impact on Student Attendance in Secondary School*. Northwest Evaluation Association (NWEA).

1.   Liu, J. (2019, November). *Engaging Teachers: Measuring Teacher's Impact on Student Attendance in Secondary School*. Walton School of International and Public Affairs, Brown University.

Refereed Presentations

Notes: Presentations are grouped by paper/analysis—rather than by conference—as some have been presented to multiple audiences, with updated analyses or findings between each. Only those papers presented by J. Liu or by a graduate student (in close collaboration with J. Liu) are included.

11. Demszky, D., <u>Liu, J.</u>, Hill, H., Sanghi, S., Chung, T. "Improving Teachers' Questioning Quality through Automated Feedback: A Mixed-Methods Randomized Controlled Trial in Brick-and-Mortar Classrooms".
* Paper presented at the annual conference of the Association for Education Finance and Policy. Baltimore, MD (2024, March).

10. <u>Liu, J.</u>, Conrad, C., Blazar, D. "Computer Science for All? The Impact of High School Computer Science Courses on College Majors and Earnings".
* Paper presented at the annual conference of the Association for Education Finance and Policy. Baltimore, MD (2024, March).

9.   Hayes, M., <u>Liu, J.</u>, Gershenson, S. "Who Refers Whom? The Effects of Teacher Characteristics on Disciplinary Office Referrals".
* Paper presented at the annual conference of the Association for Education Finance and Policy. Denver, CO (2023, March).

8.   <u>Liu, J.</u>, Penner, E., Gao, W., "Troublemakers? The Role of Frequent Teacher Referrers in Expanding Racial Disciplinary Disproportionalities".
* Paper presented at the annual conference of the Association for Education Finance and Policy.

Denver, CO (2023, March).
* Paper presented at the Association for Public Policy Analysis and Management Annual Fall Research Conference. (2022, November).

7.   Liu, J., Hayes, M., Gershenson, S., "From Referrals to Suspensions: New Evidence on Racial Disparities in Exclusionary Discipline".
* Paper presented at the Society of Labor Economists Annual Conference. Online. (2021, May)

6.   Liu, J., Lee, M., "Beyond Chronic Absenteeism: The Dynamics and Disparities of Class-Absences in Secondary School".
* Paper presented at the annual conference of the Association for Education Finance and Policy. Kansas City, MO (2019, March).

5.   Liu, J. & Cohen, J., "Measuring Teaching Practices at Scale: A Novel Application of Text- as-Data Methods".
* Paper presented at the Association for Public Policy Analysis and Management Annual Fall Research Conference. Chicago, IL (2017, November).

4.   Liu, J., Loeb, S., & Shi, Y. (2022), "More Than Shortages: The Unequal Distribution of Substitute Teaching".
* Paper presented at the Association for Public Policy Analysis and Management Annual Fall Research Conference. Washington D.C. (2018, November).
* Paper presented at the Society for Research on Educational Effectiveness Annual Conference, Washington D.C.,(2017, March).

3.   Liu, J., Kuhfeld, M., Lee, M., Song, D., "Noncognitive Factors and Student Long-Run Success: Comparing the Predictive Validity of Observable Academic Behaviors and Social Emotional Skills".
* Paper presented at the Society for Research on Educational Effectiveness Annual Conference. Online. (2021).
* Paper presented at the Association for Public Policy Analysis and Management Annual Fall Research Conference. Online. (2021, November).

2.   Liu, J. & Loeb, S. (2021), "Engaging Teachers: Measuring Teacher's Impact on Student Attendance in Secondary School".
* Paper presented at the Association for Education Finance and Policy Annual Conference. Chicago, IL (2017, November).
* Paper presented at the Association for Public Policy Analysis and Management Annual Fall Research Conference. Denver, CO. (2016, November).

1.   Bettinger, E., Liu, J., Loeb, S., "Connections Matter: How Interactive Peers Affect Students in Online College Courses".
* Paper presented at the Association for Public Policy Analysis and Management Annual Fall Research Conference. Miami, Florida (2015, November).
* Paper presented at the GESIS Computational Social Science Winter Symposium. Cologne, Germany (2016, December)

Professional and Extension Publications

Policy Briefs/White Papers/Op-eds

12. Liu, J., Krall, B., Montana, S., Chung, T., and Hill, H. (2025). "A Framework for Building High-Quality Education Data for R&D in the Age of AI: The EDSI Dataset and Expert Insights." Center for Educational Data Science and Innovation, University of Maryland.

11. Liu, J., Gershenson, S., Anthenelli, M. (2025). "Ready or Not? A New Way to Measure Elementary and Middle School Quality." *Washington D.C.: Thomas B. Fordham Institute.* Link

10. Liu, J., Conrad, D., Blazar, D. (2024). "How 'Computer Science for All' initiatives affect students' college and career outcomes." *Brookings Brown Center Chalkboard.*

9. Demszky, D., Bush, J., D'Mello, S., Jacobs, J., Hau, I., Hill, H., Liu, J., Loeb, S., Maples, K., Pokorny, R., Rascoff, M., Robinson, J., Yeager, D., Wentworth, L. (2023). "Empowering Educators via Language Technology."

8. Liu, J., Demszky, D., Hill, H. (2023). "AI Can Make Education More Personal (Yes, Really)." *Education Week.*

7. Liu, J. (2023). "Disciplinary Referrals, Teachers, and The Sources of Racial Disciplinary Disproportionalities." *Brookings Brown Center Chalkboard.*

6. Liu, J. (2022). Imperfect Attendance: Toward A Fairer Measure of Student Absenteeism. *Washington D.C.: Thomas B. Fordham Institute.* Link
*Press coverage: K-12Dive, The 74 Million

5. Liu, J. and Cohen, J. (2021). "Natural Language Processing May Provide A New Perspec- tive on Effective Teaching." *Brookings Brown Center Chalkboard.*

4. Liu, J. (2020). "America Faces A Substitute Teacher Shortage—and Disadvantaged Schools Are Hit Hardest." *Brookings Brown Center Chalkboard.*

3. Kuhfeld, M., Soland J., Tarasawa, B., Johnson, A., Ruzek, E., & Liu, J. (2020). "The Impact of COVID 19 on Student Achievement and What It May Mean for Educators." *Brookings Brown Center Chalkboard.*

2. Liu, J. (2017). "It's Time to Ask Why Postsecondary Online Learning Is Not Working Well." *Inside Higher Ed.*

1. Liu, J. & Loeb, S. (2016). "Going to School Is Optional: Schools Need to Engage Students to Increase Their Lifetime Opportunities." *Brookings Evidence Speaks Series.*

Sponsored Research and Programs– Administered by the Office of Research Administration (ORA)

14. *Principal Investigator.* "The Impact of Industrial Credentials on Students' Education and Labor Market Outcomes–Evidence from Microsoft Certifications." Co-PIs: Benjamin Castleman & Di Xu (Arnold Ventures; $356,210; 2025-2026)

13. *Co-Principal Investigator.* "Language Co-Pilots by Educators, for Educators." PI: Dora Demszky; Co-PIs: Heather Hill & Willy Solano-Flores. (Bill & Melinda Gates Foundation; $2,267,154; 2024-2026)

12. *Co-Principal Investigator.* "An AI-Enhanced Colleague for Teachers: Developing and Studying an Innovative Platform for Efficient, Inclusive Middle-Grade Mathematics Lesson Planning." PI: Min Sun; Co-PIs: Wei Ai, Lorraine Males, and Melissa Boston. (National Science Foundation; $2,998,729; 2024-2028)

11. *Principal Investigator.* "Building A High-Quality Benchmark Dataset to Accelerate Research in AI and Education." Co-PIs: Heather Hill & Dora Demszky (Jointly funded by the Bill & Melinda Gates Foundation, the Walton Family Foundation and the Chan Zuckerberg Initiative; $4,567,775; 2025-2027)

10. *Principal Investigator.* "Improving Teachers' Equitable Mathematics Instruction Through Integrating Automated Feedback and Coaching: A Randomized Controlled Trial." Co-PI: Heather Hill (Research Partnership for Professional Learning & Overdeck Family Foundation; $249,360; 2024-2026)

9. *Principal Investigator.* "Can Identifying and Supporting Frequent Teacher Referrers Reduce Racial Disciplinary Disproportionalities? A Planning Study for A Field Experiment." Co- PI: Emily Penner. (Arnold Ventures; $94,886; 2024-2025)

8. *Co-Principal Investigator.* "Scaffolding Automated Feedback for Teachers." PI: Dora Demszky; Co-PIs: Heather Hill, Janet Carlson. (National Science Foundation; $200,000; 2023-2024)

7. *Co-Principal Investigator.* "Integration of Computer-Assisted Methods and Human Interactions to Understand Lesson Plan Quality and Teaching to Advance Middle-Grade Mathematics Instruction." PI: Min Sun; Co-PIs: Wei Ai, Lorraine Males, and Melissa Boston. (National Science Foundation; $1,490,000; 2023-2027)

6. *Principal Investigator.* "M-Powering Teachers II: A Machine Learning Tool for Mathematics Instruction Measurement and Feedback." Co-PIs: Heather Hill and Dora Demszky (Bill & Melinda Gates Foundation; $400,000; 2023-2025)

5. *Principal Investigator.* "M-Powering Teachers: A Machine Learning Tool for Mathematics Instruction Measurement and Feedback." Co-PIs: Heather Hill and Dora Demszky (Learning Agency; $249,978; 2022-2024)

4. *Co-Principal Investigator*. "NEXUS: Nurturing EXcellence for Undergraduate Success." PI: Nancy Shapiro. (Abell Foundation; $19,773; 2022-2023)

3. *Principal Investigator*. "Imperfect Attendance: Toward A Fairer Measure of Student Absenteeism". (Fordham Institute; $37,500; 2021-2022)

2. *Principal Investigator*. "The Impact of School Quality on Student Educational Attainment and Labor Market." (Maryland Longitudinal Data System Center; $10,000; 2021-2023)

1. *Principal Investigator*. "The Short- and Long-Run Impacts of Secondary School Absence." Co-PI: Seth Gershenson (Spencer Foundation; $50,000, 2019-2020)

Gifts, and Funded Research not administered by ORA – Other

Gifts

2. *Recipient*. Unrestricted gift to support the launching and operation of the Center for Educational Data Science and Innovation at UMD (Google LLC; $150,000; 2024)

1. *Recipient*. Unrestricted gift to support the research on computer science education policy (Google LLC; $246,668; 2024)

External Grants not Administered by ORA
Notes: External grants not administered by ORA include funded research conducted as private citizen and reported on Outside Professional Activities, and grants awarded prior to start of appointment at the University of Maryland College Park.

6. *Principal Investigator*. "Access, Impact, and the Computer Science Teacher Pipeline: A Systematic Study on the Expansion of Computer Science Courses in Maryland's High Schools" (University System of Maryland; $88,912; 2023-2025)

5. *Principal Investigator*. "M-Powering Teachers: Using Machine Learning to Measure and Improve Equity in K-12 Mathematics Classrooms," Grand Challenge Grants Program. Co- PIs: Wei Ai and Carol Espy-Wilson (University of Maryland; $1,048,518; 2023-2026)

4. *Principal Investigator*. "Unpacking the Origins of Racial Disparities in Exclusionary Discipline--A Descriptive Analysis of the Referral Process." Faculty-Student Research Award. (University of Maryland; $10,000; 2022-2023)

3. Support Program for Advancing Research and Collaboration (SPARC) New Assistant Professor Award. (University of Maryland; $15,000; 2021-2022)

2. Dissertation Support Grant (Stanford Graduate School of Education; $6,000; 2017-2018)

1. Dissertation Grant (Stanford Freeman Spogli Institute; $15,000; 2017-2018)

Research Fellowships, Prizes and Awards

15. Early Career Award, Association for Education Finance and Policy (2025)

14. Exemplary Researcher, Maryland Research Excellence Celebration, University of Maryland (2025)

13. Excellence in Scholarship Award for Pre-Tenure Faculty, College of Education, University of Maryland (2024)

12. Winner, the Future of K-12 Education Data Design Challenge, US Chamber of Commerce Foundation ($30,000; 2023)

11. Honoree, Maryland Research Excellence Celebration, University of Maryland (2023)

10. EdResearch for Action Writing Fellows, Results for America & Annenberg Institute, Brown University (2023-2024)

9. Emerging Education Policy Scholar, the Thomas B. Fordham Institute and the American Enterprise Institute (2019-2020)

8. National Academy of Education/Spencer Dissertation Fellowship ($27,500; 2017-2018)

7. Shultz Graduate Student Fellowship in Economic Policy, Stanford Institute for Economic Policy Research ($17,500; 2017-2018)

6. Technology for Equity in Learning Opportunities Award, Stanford Graduate School of Education ($7,500; 2017-2018)

5. The Karr Family Fellowship, Stanford Center for Education Policy Analysis (2014-2015)

4. The I. James and Viola Quillen Fellowship, Stanford Graduate School of Education (2013-2014)

3. Best Paper Award, Deloitte Tax Championship, China ($1,000; 2011)

2. Outstanding Graduate, Department of Public Finance, Peking University (2011)

1. Excellent Graduate Thesis, Department of Public Finance, Peking University (2011)

TEACHING, EXTENSION, MENTORING, AND ADVISING
TLPL = Teaching and Learning, Policy and Leadership

Training Programs

1.   *Invited Instructor*: Innovation Science for Education Analytics (ISEA): A Data Science Training Program to Advance Educational Research and Practice (2024-2026, Training Grant Awarded by IES: $799,992).

2.   *Program Designer and Instructor*: Annenberg Undergraduate Fellowship in Education and Social Policy (2019, Brown University).

Courses Taught

5.   TLPL788M: Research and Writing for Publication (1 credit, 1 per semester); taught twice, 2021-present; approx. 12 students/class.

4.   TLPL 670/PLCY 688B: Economics of Education (3 credits, 1 per semester); taught three times, 2022-present; approx. 16 students/class.

3.   TLPL 788D: Data Management for Social Science Research (1 credit, 1 per semester); taught once; 2021-2022; approx. 7 students/class.

2.   TLPL 765: Quantitative Analysis of Education Policy Analysis (3 credits, 1 per semester); taught four times, 2020-present; approx. 10 students/class.

1.   TLPL 788X: Policy Analysis of the Education Workforce (3 credits, 1 per semester); taught twice, 2020-2022; approx. 7 students/class.

Teaching Innovations

Course Developed

3.   TLPL788M: Research and Writing for Publication
2.   TLPL 765: Quantitative Analysis of Education Policy Analysis
1.   TLPL 788X: Policy Analysis of the Education Workforce

Courses Substantially Revised

1.   TLPL 670: Economics of Education

Program Development

2.   TLPL Doctoral Seminar: Designed a one credit course offered each semester for doctoral students to practice presentations, share research ideas, and attend research talks by external speakers (2021-present)

1.   TLPL Quantitative Research Methods: Collaborate with two colleagues to revise requirements

and build a four-course sequence (2020 – present)

Advising: Research or Clinical

Master's: Advisor

1. Ariel Rivers (MA advisor; Education Policy; expected graduation summer 2023)

Doctoral: Advisor

7. Sarah Montana (PhD co-advisor; Education Policy; 2024 – present)
6. Jiseung Yoo (PhD advisor; Education Policy; 2023 – present)
5. Matthew McCrea (PhD advisor; Education Policy; 2022 – present)
4. Max Anthenelli (PhD advisor; Education Policy; 2022 – present)
3. Youngsun Lee (PhD advisor; Education Policy; 2022 – present)
2. Ting-Yu Chung (PhD advisor; Education Policy; 2021 – present)
1. Wenjing Gao (PhD advisor; Education Policy; 2021 – present)

Doctoral: Dissertation Committee Member

8. Cameron Lee Conrad (PhD committee; Economics; Expected to graduate 2025)
7. Ashani Setha Jayasekera (PhD committee; Quantitative Methodology; Expected to graduate 2025)
6. Erin Janulis (PhD committee; Education Policy; Expected to graduate 2025)
5. Cristina Riquelme (PhD committee; Economics; graduated 2024)
4. Charlotte Healy (PhD committee; Education Policy; graduated 2024)
3. Maria Cristina Riquelme Gajardo (PhD committee; Economics; graduated 2024)
2. Francisco Lagos Marin (PhD committee; Education Policy; graduated 2022)
1. Robert Reed Senter (PhD committee; Special Education; graduated 2022)

SERVICE AND OUTREACH

Reviewing Activities for Journals and Presses

Editorial Services

4. Guest Editor, *Economics of Education Review*	2026 - Present
3. Editorial Board Member, *Educational Evaluation and Policy Analysis*	2026 - Present
2. Editorial Board Member, *Educational Researcher*	2024 - Present
1. Advisory/Review Board Member, *EdWorkingPapers*	2024 - Present

Reviewing Activities for Funding Agencies

4. Proposal Reviewer: Research Partnership for Professional Learning	2026

3. Proposal Reviewer: Institute of Education Sciences	2025
2. National Science Foundation	2023
1. William T Grant Foundation	2023

Reviewing Activities for Conferences

2. Program Committee: Society of Labor Economists Annual Conference	2023
1. Proposal Reviewer: Society of for Research on Educational Effectiveness Annual Conference	2021 & 2024

Reviewing Activities for Journals and Presses

AERA Open
American Education Research Journal
Contemporary Economic Policy
Computers & Education
Child Development
China Economic Review
Developmental Psychology
Economic Inquiry
Economics of Education Review
Education Finance and Policy
Education Researcher
Educational Evaluation and Policy Analysis
Labour Economics
The Elementary School Journal
Teaching and Teacher Education
Journal of Labor Economics
Journal of Public Economics
Journal of Human Resources
Journal of Research on Educational Effectiveness
Journal of Policy Analysis and Management
Journal of Economic Behavior and Organization
Remedial and Special Education
The High School Journal
Urban Education

Committees, Professional and Campus Service

Campus Service – University

2. Member, IT Council – Research Technology Working Group	2024-present

1. Member, A working group commissioned by the provost to conduct a strategic 2023 planning on UMD's AI research and education

Campus Service – College

3. Member, Review Committee for Research-Practice Partnership COE Grant	2021-2022
2. Member, Search Committee for Grant Writer in the COE's Research Office	2022–2023
1. Member, College Senate	2021-2023

Campus Service – Department

3. Merit Review Committee	2024
2. Division 3 Representative, TLPL Graduate Research and Education Committee	2023-2024
1. Member, Faculty Search Committee: Education Policy	2022–2023

Other

3. Organizer, the Inaugural International Workshop on Children's Speech in Education	2025
2. Organizer, Stanford NLP x Instruction Forum	2023
1. Founding Member, Chinese Education Finance and Policy Association	2020-present