

Safaa Dabagh

Mathematics and Statistics Instructor • Founder, Learn Without Walls • Los Angeles, California
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Summary

Community college mathematics and statistics instructor with a decade of classroom experience across three Los Angeles campuses, and a Lebanese-American mother of five who started at community college herself. Builds free, open learning tools used in her own sections, and publishes quantitative research on placement reform, equity, and AI-assisted course design in community college mathematics. Teaching is designed for the students open-access colleges serve: first-generation, working, returning, and neurodivergent learners.

Education

MA, Statistics, University of California, Los Angeles

BA, Mathematics/Economics, minor in Statistics, University of California, Los Angeles

Began at West Los Angeles College and transferred to UCLA

Teaching Experience

Santa Monica College

2016 to present

Instructor of Mathematics, main focus on statistics.

- Math C1000, Introduction to Statistics (formerly Math 54), including sections paired with the Math 54C co-requisite support course
- Math 4/4C, College Algebra for STEM Majors with co-requisite support, and other mathematics courses
- Hybrid and online delivery; Canvas course design; AI-assisted assessment design studied in two published analyses

West Los Angeles College

current

- Math C1000, Introduction to Statistics, POPP program section; other mathematics and statistics courses

Loyola Marymount University

current

- Math 205, Applied Statistics in R, two sections: a first course in statistical reasoning with the tidyverse for life sciences students

Joyce University of Nursing and Health Sciences

current

- Adjunct faculty: statistics and data science courses for nursing and health sciences graduate programs

Research and Publications

Rising Success, Persistent Gaps: Student-Level Statistics Outcomes Across California's Community College Placement-Reform Era (2018 to 2025). *Community College Review* (SAGE). Under review, submitted June 2026.

AI-Assisted Assessment Design in Mathematics and Statistics: A Multi-Course Bloom's Taxonomy Analysis of Cognitive Demand Shift. *Teaching Statistics*. Revise and resubmit.

Raising the Floor, Holding the Bar: Distributional Effects of AI-Assisted Course Design in Two Community College Mathematics Courses. EdArXiv preprint, DOI 10.35542/osf.io/x9nkw_v1.

Economic Disadvantage and Mass Shootings Across U.S. States, 2018 to 2024: A State-Level Panel Analysis. Research Square preprint, updated October 2026.

Methods used across these studies: logistic and negative-binomial regression with clustered standard errors, panel models with fixed effects, quantile decomposition with family-wise error control, bootstrap and trimming bounds, sensitivity analysis for unobserved confounding, and fully reproducible scripts.

Open Educational Resources and Projects

- **Learn Without Walls** (learnwithoutwalls.com): founder and author of a free, account-free learning platform with 21 courses and labs in statistics, college algebra, calculus, Python, R, SQL, data science, AI, and financial literacy, plus courses for young learners.
- **Stats Without Walls**: a browser-only statistics tool (descriptives through MANOVA, regression, probability calculators, sensitivity analysis for lurking variables) with the formula and a plain-English conclusion under every result; used in her statistics sections.
- **Four open textbooks**: *You're Smarter Than You Think: Statistics*, *You're Smarter Than You Think: College Algebra for STEM Majors*, *Statistics in the Eye of a Nurse*, and *Applied Statistics Using R*, all Creative Commons, written to be neurodivergent-friendly.
- **Instructor packs**: ready-to-teach slides, worksheets, and cheat sheets for statistics and algebra, free for any instructor to adapt.
- **Canvas AI grading assistant**: a Chrome extension and Cloudflare Worker that drafts feedback on Canvas submissions with the Claude API, in development for the Santa Monica College mathematics department.

Skills

- **Statistics and data**: R (tidyverse, ggplot2), Python (pandas, NumPy, scikit-learn), reproducible analysis pipelines
- **Teaching technology**: Canvas course design, hybrid and online pedagogy, Universal Design for Learning, Desmos
- **Development**: HTML, CSS, JavaScript, Chrome extensions, Claude API
- **Languages**: English, Arabic

Professional Development

- Google AI for Educators, completed