

LAUREN NICOLE EMERY

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EDUCATION

Doctor of Philosophy in Mathematics and Science Education June 2021
San Diego State University and University of California San Diego
Joint Doctoral Program

Master of Science in Biological Science August 2016
California State University San Marcos

Bachelor of Science in Biology May 2014
Point Loma Nazarene University, San Diego, CA

TEACHING EXPERIENCE

Adjunct Faculty August 2021-Present
Point Loma Nazarene University, Department of Biology

- Course: Research Design
- Develop course syllabus and course materials
- Provide a safe environment for graduate students to study mixed methods research practices for the life sciences
- Quantitative: Descriptive statistics, t-tests, ANOVA, Chi-Square, correlation, and linear regression
- Qualitative: Developing interview protocol, conducting interviews, and analyzing interviews
- Hybrid course, in-person and online asynchronous work
- Grade assignments in a timely manner
- Utilize Canvas and WorkDay for course materials and assignments
- Certified: Online Course Facilitation (Aug 2021)

Lecturer July 2021 - Present
San Diego State University, School of Teacher Education

- Courses: Elementary Science Methods and Advanced Secondary Science Methods
- Develop course syllabus and course materials
- Courses have a large focus on equitable pedagogical practices in science classrooms
- Other topics include: power and oppression in science education, the Next Generation Science Standards, culturally relevant/sustaining pedagogy, peer-coaching and leadership
- Provide a safe environment for credential students and elementary students to learn science
- Grade assignments and assessments in a timely manner
- Utilize Canvas, Zoom, SibMe, for course materials and assignments
- Mentor doctoral candidate during Fall 2021 - observe course, assist with planning and co-teaching some class sessions

University Supervisor, Secondary Science January 2021-May 2021
Program: Single-Subject Credential

San Diego State University, School of Teacher Education

- Observe classroom instruction for 5 teacher candidates
- Evaluate candidates' teaching practices in-classroom using the Teaching Performance Expectations inventory
- Meet with candidates to discuss lesson planning techniques, standards, and teaching practices prior to classroom observation
- Meet with candidates post-observation to debrief instructional segment
- Work with candidates' placements/guide teachers to support candidate in improving content knowledge and pedagogical knowledge

Graduate Teaching Associate

August 2019-December 2020

San Diego State University, School of Teacher Education

- Courses: Teaching Science in Elementary School (Elementary Science Methods)
- Developed course syllabus
- Developed and/or revised course materials
- Interacted and networked with in-service elementary school teachers at school site
- Provided a safe environment for credential students and elementary students to learn science
- Administered Science Embedded Assessment (ESA), program-wide assessment for Multiple Subject Credential
- Graded assignments and assessments in a timely manner
- Utilized Blackboard, Canvas, Zoom, SibMe, TaskStream, FlipGrid, JamBoard for course materials and assignments
- Mentored fellow doctoral student during Fall 2020 - colleague observed course, assisted with planning and co-teaching some class sessions

High School Biology Co-Teacher

September 2018-December 2018

Health Science High and Middle College

- Fulfilled teaching practicum requirement for Ph.D. program
- Co-taught a 9th and 10th grade high school biology course for one semester at an urban charter high school
- Developed accessible materials for student population – many students were English Language Learners and/or had low Lexile scores in comparison to their grade level
- Managed the classroom during day-to-day activities and student safety during laboratory activities
- Attended the school's morning meetings and participated in schoolwide discussion

Secondary Science Methods Co-Instructor

August 2016-June 2017

San Diego State University

- Graded weekly homework assignments, assisted in grading lesson plans and Alliance for Science Educators Toolkit (ASET) three-dimensional planning map that complemented lesson plans
- Assisted in setting up course activities and supplies
- Assisted in leading inquiry-based activities and laboratories; demonstrate activities to pre-service teachers to use in their classrooms
- Led the beginning of course when lead-instructor had scheduling conflicts; activities included quick-writes, group discussion on assigned readings, and discussion on current events in science and science education

Graduate Teaching Associate

January 2015-June 2015; January 2016-June 2016

Course: General Education Science Laboratory

California State University San Marcos, College of Science and Mathematics

- Created course syllabus and administered lab safety course to students
- Wrote, graded and administered laboratory quizzes
- Maintained course website, recorded and reported lab grades
- Supervised students in the laboratory and managed concerns

Teaching Assistant

August 2013-May 2014

Courses: Human Biology & Bioethics, Organismal Biology, & Cell Biology & Biochemistry

Point Loma Nazarene University, San Diego, CA

- Administered and graded laboratory quizzes
- Supervised (with laboratory professor) laboratory classes of 24 students per section
- Assisted students with laboratory assignments and write-ups
- Ensured safety of students while in laboratory
- Uploaded laboratory grades to course website (Blackboard)

RESEARCH EXPERIENCE

Doctoral Dissertation

January 2018-May 2021

San Diego State University and University of California San Diego

- Smaller study examined previously collected data from the Noyce Master Teacher Fellowship, NSF #1240127, and newly collected data
- Utilized discourse analysis techniques to examine annual classroom video for three practicing secondary science teachers over the course of five years
- Conducted semi-structured interviews with participating teachers 1.5 years following professional development program to examine attention to student thinking
- MAXQDA was used for qualitative data analysis, code development, application, and analysis
- Title: Exploring the relationship between teacher professional noticing and responsive teaching in experienced secondary science teachers
- Committee: Drs. Meredith Vaughn (Chair), Donna Ross, William Zahner, Stanley Lo, Gabriele Weinhausen, and Jennifer Lineback

University Graduate Fellow, Noyce Project Research Assistant III, Noyce Project

August 2018-August 2019

August 2016-August 2018

San Diego State University

- Noyce Project LEARN Master Teaching Fellowship, NSF #1240127
- Assisted in the planning and administration of professional development (PD) for fellows, PD focused on the Next Generation Science Standards (NGSS), Teacher Professional Noticing, and teacher leadership
- Scored classroom video clips of Fellows using rubrics designed by lead researchers
- Code fellow's responses for a Teacher Professional Noticing task, centered around an inquiry-based genetics class
- Transcribed teachers' blinded responses
- Helped to develop the coding scheme used to code the genetics Professional Noticing task

Master's Thesis Project

August 2014-August 2016

California State University San Marcos

- Combination of field work (Rapid City, SD) and laboratory work
- Collected and analyzed behavioral data on the American black bear (*Ursus americanus*)
- Surveyed individuals using behavioral sampling and recording techniques
- Processed blood samples to obtain serum
- Collected serum samples, performed EIA, and determined hormone concentrations in serum during mating season using a plate reader
- Utilized Microsoft Excel for statistical analyses
- Completion of Master's Thesis titled: Investigation of the mode of ovulation and ovarian cycle in bears
- Committee: Drs. Thomas Spady (Chair), Deborah Kristan, and Thomas Jensen

Polar Bear Conservation Project

January 2015-August 2016

California State University San Marcos

- Trained and supervised two undergraduate students on laboratory safety, fecal processing (homogenizing and drying), liquid-phase extraction of steroids, enzyme immunoassays (EIA) and utilization of plate reader to determine hormone concentration
- Supported undergraduate students in developing and presenting a poster at the annual student research symposium

PAPERS

Stewart, L., Ross, D. L., Elliot, K. (April 2019). Genetics for All: Supporting Targeted Populations in Biology. *The Science Teacher*.

LaRochelle, R., **Stewart, L.**, Koch, K., and Feiteira. (2018). Leveraging Pendulums. *Teaching Children Mathematics*, 24(7); p. 452-455.

PRESENTATIONS

Houle Vaughn, M., **Emery Stewart, L.**, Martin, M. M., and Ross, D. L. Developing and Assessing Growing in Science Teachers' Professional Noticing Over Five Years, American Education Research Association Annual Conference (AERA), San Francisco, CA (Transitioned to Virtual Format), January 2020. *Presentation accepted, not delivered due to COVID-19.*

Stewart, L., Houle Vaughn, M., and Ross, D. L. Science teachers' perceptions of their increasing use of Professional Noticing during instruction. Association for Science Teacher Education (ASTE) International Conference, Savannah, GA. January 2019.

Houle Vaughn, M., **Stewart, L.**, D'Errico, M., and Ross, D. L. Science Teacher Professional Noticing: What do "expert" teachers notice and how does professional development change their noticing ability?. Association for Science Teacher Education (ASTE) International Conference, Baltimore, MD. January 2018.

Houle Vaughn, M., **Stewart, L.**, D'Errico, M., and Ross, D. L. Attending and Responding to Students' Ideas: Developing Professional Noticing in Expert Secondary Science Teachers. National Association of Research in Science Teaching (NARST) Annual Conference, Atlanta, GA. March 2018.

D'Errico, M., **Stewart, L.**, Ross, D. & Vaughn, M. Characterizing teachers' professional noticing of students' scientific ideas and extending it to earth science teaching. Geological Society of America GSA, Seattle, WA. October 2018.

Stewart, L. N., Dye, P. S., and Spady, T. J. Does coitus induce ovulation in American black bears? International Bear Association 2016 Annual Conference, Anchorage, AK. June 2016.

AWARDS

Sowder Research Award, San Diego State University	2018-19
University Graduate Fellowship, San Diego State University	2017-18
International Bear Association Travel Grant Recipient	June 2016
Graduate Dissemination Funds Travel Grant Recipient, CSU San Marcos	June 2016
State University Grant Recipient, CSU San Marcos	2014-16
Breese's Academic Scholarship Recipient, Point Loma Nazarene University	2011-14
R.H. Fox, Jr. Scholarship Recipient	2011-14

MEMBERSHIPS

National Science Teaching Association	August 2019-Present
National Association for Research in Science Teaching	2018-Present
Association for Science Teacher Education	2018-Present
Tri-Beta Biological Honor Society, Omicron Delta Chapter	2013-Present
International Bear Association	2016