

SHELLI L. CASLER-FAILING

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EDUCATION

University at Albany – Albany, NY

Ph.D. – Curriculum and Instruction in Science and Mathematics Education **Anticipated December 2015**

University at Albany – Albany, NY

M.S. – Secondary Education in Mathematics **December 2008**

University at Albany – Albany, NY

B.S. Mathematics **December 2006**

Hudson-Valley Community College – Troy, NY

A.S. Liberal Arts – Mathematics and Science **May 2005**

CERTIFICATION

NYS Initial Certification, Mathematics, Grades 7-12	February 2009 – January 2014
NYS Initial Certification, Mathematics, Grades 5-6 Extension	September 2009 – January 2014
NYS Initial Certification, Physics Grades, 7-12	February 2009 – January 2014
MA Initial Certification, Mathematics, Grades 8-12	Received April 2009
MA Initial Certification, Mathematics, Grades 5-8	Received April 2009

TEACHING EXPERIENCE

Mathematics Instructor, Grades 5-8 **September 2008 - present**

Technology Director/Advisor

Robert C. Parker School - Wynantskill, NY

- Responsible for creating curriculum and facilitating mathematics learning for students in grades 5, 6, and 7 as well as creating a differentiated curriculum for NYS Algebra I for all 8th grade students.
- Worked collaboratively with the Science and Language Arts Instructors to create two (2) one-week STEM curricula for students in grades 6-7
- Coach for First LEGO League Challenge (1 team in 2011 and 2 teams in 2012)
- Conduct after school LEGO Robotics sessions for students in Grades 2-8
- Community Service Advisor - Grade 6
- Co-Advisor - Yearbook Committee
- Facilitated the creation of a revised Scope and Sequence of the K-8 Mathematics Curriculum (Summer 2010)
- Responsible for the proper functioning and purchasing of all technology – software and hardware
- Responsible for maintaining current knowledge of, transferring knowledge to other faculty, and implementing various technological applications as they become available

Center for Initiatives in Pre-College Education **Summer 2012**

Rensselaer Polytechnic Institute – Troy, NY

Worked in collaboration with members of the CIPCE staff, college students, and several area elementary and middle school teachers to design mathematics and science lessons, aligned to current Common Core State Standards, incorporating the use of LEGO Robotics

Center for Initiatives in Pre-College Education **Summer 2013**

Rensselaer Polytechnic Institute – Troy, NY

Worked in collaboration with members of the CIPCE staff and college students to create summer camp curricula for the instruction of LEGO Robotics and VEX Robotics and was an instructor at four different camps during the summer.

Internship Fall 2011**Co-Instructor – Mathematics Teaching Seminar (ETAP690M)**

University at Albany - Albany, NY

- Co-developer of curriculum for pre-service teachers' seminar course
- Co-taught classes throughout the semester
- Designed lessons and readings pertinent to current pedagogical and best practices in mathematics education
- Created classes that utilized both face-to-face and online instruction

Instructor 2008, 2009, 2010, 2011**ExxonMobil Bernard Harris Summer Science Camp**

Rensselaer Polytechnic Institute – Troy, NY

- Collaborated with teachers of several disciplines to design an integrated STEM curriculum
- Designed science and mathematics lessons appropriate to the curricular topic (*The Quest for Life*)
- Co-taught in a collaborative, hands-on environment throughout the two-week camp (one camp each year)

Instructor**NYS STEM Summer Camp at RPI 2008 and 2009**

Rensselaer Polytechnic Institute – Troy, NY

- Collaborated with a science teacher to design a one-week curriculum focused on renewable energy and engineering designs for students in Grades 7-8
- Created lessons integrating science, technology, engineering, and mathematics
- Co-taught the curriculum over two (2) one-week sessions each summer

RESEARCH EXPERIENCE

University at Albany – Albany, NY

Researcher January 2013 – May 2013**Pilot Study – “Transactional Writing and Its Effect on Student Attitudes and Understandings in the Middle School Mathematics Classroom”**

- Responsible for creating, conducting, and reporting all aspects of the research

PUBLICATIONS AND PAPERS

- Casler-Failing, S. (in press). Journaling – Out with the old. *Mathematics Teaching in the Middle School*.
- Meskill, C., Rogers, P., Casler-Failing, S., Clegg, S., & Huang, X. (in review). Models of mind in YouTube how-to videos.

CONFERENCE PRESENTATIONS

Casler-Failing, S. (2012, November). *Transactional writing and its effects on students' attitudes*. Presentation at Association of Mathematics Teachers of New York State Annual Conference, Rye Brook, NY.

Casler-Failing, S. (2012, November). *How do we get there from here?* Presentation at Association of Mathematics Teachers of New York State Annual Conference, Rye Brook, NY.

Casler-Failing, S. (2012, November). *What is my rate? A LEGO Robotics mathematics lesson*. Presentation at Association of Mathematics Teachers of New York State Annual Conference, Rye Brook, NY.

Meskill, C., Rogers, P., Casler-Failing, S., Clegg, S., & Huang, X. (2012, May). *Models of mind in YouTube teaching*. Presentation at 21st Annual Conference in Instruction and Technology, Stony Brook, NY.

Casler-Failing, S. (2012, March). *Transactional writing and its effects on students' attitudes*. Presentation at Association of Mathematics Teachers of New York State Regional Conference, Guilderland, NY.

Casler-Failing, S. and Falk, E. (2012, March). *STEM – What is it and how do we do it?* Presentation at Association of Mathematics Teachers of New York State Regional Conference, Guilderland, NY.

Casler-Failing, S. (2012, March). *How do we get there from here?* Presentation at Association of Mathematics Teachers of New York State Regional Conference, Guilderland, NY.

Casler-Failing, S. (2012, February). *Was my speed constant? A LEGO Robotics mathematics lesson*. Presentation at New York State Association of Independent Schools Conference, New York, NY.

Casler-Failing, S. (2011, August). *How do we get there from here?* Presentation at Association of Mathematics Teachers of New York State Summer STEM Institute, Loudonville, NY.

Casler-Failing, S. (2011, August). *Where will we live? Creating un-Earthly homes*. Presentation at Association of Mathematics Teachers of New York State Summer STEM Institute, Loudonville, NY.

Casler-Failing, S. (2010, November). *Transactional writing and its effects on students' attitudes*. Presentation at Association of Mathematics Teachers of New York State Annual Conference, Saratoga Springs, NY.

MEMBERSHIPS/TITLES

Association of Mathematics Teachers of New York State

National Council of Teachers of Mathematics

Association of Mathematics Teachers of New York State – STEM Committee Middle School Representative

Notary Public – State of New York