

## Curriculum Vitae

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## EDUCATION

Colorado State University

Ph.D. *Education and Human Resource Studies with Interdisciplinary Specialization in Mathematics Education*, 2014

Colorado State University

M.S. *Mathematics*, 2005

University of Illinois-Chicago

M.S.T. *Teaching of Mathematics*, 1998

Michigan State University

B.S. *Computational Mathematics*, 1992

## PROFESSIONAL EXPERIENCE

Mathematics & Science Teaching Institute	Outreach Coordinator & Mathematics Instructor	2008-
Colorado State University	Doctoral Research Fellow	2005-2008
Individualized Mathematics Program	Assistant Director	2004-2005
Colorado State University	Mathematics Instructor	2003-2007
Front Range Community College	Mathematics Instructor	2002-2003
Mountain View High School	Secondary Mathematics (9-12) Teacher	2000-2002
Chicago Public Schools	Secondary Mathematics (9-12) Teacher	1998-2000

## COURSES TAUGHT

## University of Northern Colorado

*Mathematics Collaborative to Support Teacher Quality MED 513* This course is part of a program providing professional development on building mathematical and teaching knowledge by understanding and using Common Core State Standards and formative assessments.

*Tools and Technology for Mathematics MED 508* Teachers explore and create lesson plans from an assortment of technological tools for 21<sup>st</sup> century mathematics teaching and learning.

*Fundamentals of Mathematics II: Algebra, Probability and Data MATH 182* Second of three courses designed for prospective elementary teachers. Emphasizes algebra, probability, and data analysis. Explorations focus on representing, analyzing, generalizing, formalizing, and communicating patterns and probabilities.

*Fundamentals of Mathematics I: Numbers and Operations MATH 181* First of three courses designed for prospective elementary teachers. Emphasizes the real number system and arithmetic operations. Explorations focus on mathematical structures and subsets of real numbers, via patterns, relationships, and properties. Content presented using problem solving and exploration.

*Calculus I for Life Sciences MATH 171* Differentiation and related concepts, applications of derivatives, including exponential, logarithmic and trigonometric functions. Introduction to integration. Emphasis on applications to the life sciences.

*Calculus I MATH 131* First course in a three course sequence in calculus. Differentiation and related concepts, applications of derivatives, including exponential, logarithmic and trigonometric functions.

*College Algebra MATH 124* Topics covered in this course include linear, quadratic, exponential and logarithmic functions, matrices, theory of equations.

## Colorado State University

*Methods and Materials in Teaching Mathematics EDUC 464* Problems and techniques of teaching secondary mathematics; evaluation of student achievement and teacher effectiveness.

*Supervised College Teaching MATH 384* Skills for effective tutoring of pre-calculus mathematics; design and implementation of the Individualized Mathematics Program.

*Calculus for Physical Scientists MATH 261* Vector functions, partial differentiation, cylindrical and spherical coordinates, multiple integrals, line integrals, Green's theorem.

*Calculus for Physical Scientists MATH 160* Limits, continuity, differentiation, and integration of elementary functions with applications; conic sections.

*Calculus in Management Sciences MATH 141* Analytic geometry, limits, equilibrium of supply and demand, differentiation, integration, applications of the derivative, integral.

*Analytic Trigonometry MATH 126* Inverse trigonometric functions, trigonometric identities, solving trigonometric equations.

*Numerical Trigonometry MATH 125* Definition and graphs of trigonometric functions, laws of sines and cosines, solutions of right and oblique triangles, applications.

*Logarithmic and Exponential Functions MATH 124* Definition and graphs of exponential and logarithmic functions, properties of logarithmic functions, exponential and logarithmic equations, applications.

*College Algebra in Context II MATH 118* Reciprocals of linear functions, rational functions, and power functions considered symbolically, graphically, numerically, and contextually.

*College Algebra in Context I MATH 117* Functions as mathematical models. Linear, quadratic, and polynomial functions considered symbolically, graphically, numerically, and contextually.

### Front Range Community College

*College Algebra MAT 121* Includes a brief review of intermediate algebra, equations and inequalities, functions and their graphs, exponential and logarithmic functions, linear and non-linear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations.

*Career Mathematics MAT 107* Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs, and/or finance. These are presented on an introductory level and the emphasis is on applications.

*Algebraic Literacy MAT 055* Develops algebraic skills necessary for manipulating expressions and solving equations. Topics in the course include radicals, complex numbers, polynomials, factoring, rational expressions, quadratic equations, absolute value equations and inequalities, systems of linear equations, related applications, and math learning strategies. This course prepares students for College Algebra and Finite Math.

### High School

Algebra I, Algebra II and Geometry, using College Preparatory Mathematics (CPM) program, Interactive Mathematics Program (IMP) and traditional curriculum.

## SCHOLARLY/CREATIVE ACTIVITIES

## Articles

Overmyer, J. (2015). Research on Flipping College Algebra: Lessons Learned and Practical Advice for Flipping Multiple Sections. *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies*. 25(9-10) 792-802.

Overmyer, G.R. (2014). The Flipped Classroom Model for College Algebra: Effects on Student Achievement. Doctoral Dissertation.

Overmyer, J. (2013). The Flipped Classroom Model for College Algebra: Effects on Student Achievement. SIGMAA on RUME 16th Annual Conference on Research in Undergraduate Mathematics Education, Conference Proceedings Paper.

Overmyer, J. (2012). Flipped Classrooms 101. *Principal*. September/October 2012.

Bennett, B.E., Bergmann, J., Cockrum, T., Fisch, K., Musallam, R., Overmyer, J., Sams, A., Spencer, D., (2011). *The Flipped Class Manifest*. The Daily Riff.

Bergmann, J., Overmyer, J., Willie, B. (2011). *The Flipped Class: What It Is and What It Is Not*. The Daily Riff.

Overmyer, G.R. (2007). The Digital Divide: Issues of Leadership and Equity. (Professional Paper).

Overmyer, G.R. (2005). A Review of Recent Literature on Cooperative Learning and Achievement in Undergraduate Mathematics. (M.S. Thesis Paper).

## Other Academic Activities

Creator and facilitator for the *Flipped Learning Community*- a 28,000+ member professional learning network for teachers using the flipped teaching model.

Board of Directors, Colorado Council of Teachers of Mathematics - Technology Integration Specialist

Manuscript reviewer for PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies, 2014-2015

Science Review Committee (SRC), Longs Peak Science and Engineering Fair, 2009-present

Reviewer for McNair Scholars undergraduate research competition, July 2010, July 2014

Co-creator and facilitator for the Colorado Mathematics Teachers Network - an online network for Colorado mathematics teachers and educators

Peer Reviewer of Educator Preparation Programs, Colorado Department of Education – part of a team of reviewers of university mathematics educator programs

Volunteer for mathnerds.com. MathNerds provides free, discovery-based, mathematical guidance via an international, volunteer network of mathematicians

Reviewer for McNair Scholars undergraduate research competition, October 2010

Technology specialist and member of planning committee for “Equity in Mathematics and Science Education: Critical Issues in Leadership Development” conference, Portland, OR, 2007

Curriculum Development. Involved with a complete redesign of the online pre-calculus program at Colorado State University. 2005-2006

Assisted work on “A Systematic Review of Effective Interventions in Secondary Mathematics with At-Risk Students”

Emerging Scholars Training, Austin, TX, Summer 2006

AP Calculus Reader, Summer 2004

Upward Bound Mathematics Instructor, Summer 2004

### Grants and Awards

Recipient of the University of Northern Colorado, *IDEA Innovation Award* in Recognition of Outstanding Contributions to Innovation, 2016

Director - Innovation@UNC *Flipped Learning Academy*, 2014-2016

Project Coordinator and Main Instructor, Colorado Department of Higher Education funded ESEA Title II, Part A Grant, *Northern Colorado Mathematics Collaboration to Support Teacher Quality*, 2013-2014

Principal Investigator and Director, Colorado Department of Higher Education funded ESEA Title II, Part A Grant, *Tools and Technology for Rural Colorado Mathematics: Improving Teacher Quality Project*, 2012-2013

Recipient of the Frontiers of Science Institute, *Teaching Service Award, Web Design Instructor*, 2014

Recipient of the Colorado Council of Teachers of Mathematics, *Mathematics Leadership Award*, 2013

Nominated for eLearning Consortium of Colorado, *Educator of the Year*, 2014

### Professional Presentations

International Society for Technology in Education Conference, *Thinking Inquiry-Based First, Flipped Second*, Denver, CO, June 28, 2016

Higher Education Flipped Learning Conference, *Tools and Technology for Flipped Learning*, Greeley, CO, June 10, 2016

Higher Education Flipped Learning Conference, *Preparing Faculty for Flipped Learning*, Greeley, CO, June 9, 2016

Center for Instruction, Technology & Innovation, *Flipped Learning and Mathematics Professional Development*, Mexico, NY, June 3, 2016

National Council of Teachers of Mathematics Conference, *Thinking Inquiry-Based First, Flipped Second*, San Francisco, CA, April 15, 2016

Teaching and Learning Fair, *Flipping Do's and Don'ts*, Greeley, CO, April 8, 2016

eSchool Media, *Teaching Faculty to Flip - Best Practices from the MAST Institute at the University of Northern Colorado*, Webinar, February 3, 2016

STEAMfest, *Easy and Practical Ways to Use Flipped Learning Methods – Using Screencasts for Everyday Communication*, Boulder, CO, September 6, 2015

FlipCon15, *Flipped Learning Academy – PD for Flipped Instructors*, East Lansing, MI, July 15, 2015

FlipCon15, *FLN's Professional Learning Community*, East Lansing, MI, July 15, 2015

FlipCon15, *Higher Education-Job Alike Networking Seminar*, East Lansing, MI, July 14, 2015

Accelerating Innovation in Education Showcase, Facilitator/Organizer for *Flipped/Blended Learning*, Edcamp, Snowmass, CO, June 24, 2015

National Council of Teachers of Mathematics, *Using Flipped Learning to Significantly Improve Mathematics Education*, Boston, MA, April 17, 2015

Graduate Student Professional Development Workshops, *Poster Presentation and Design*, Greeley, CO, March 25, 2015

Boulder Mini Maker Faire, *Flipped Learning – using online video to free up class time for design thinking, problem solving, and inquiry learning*, Boulder, CO, January 31, 2015

Faculty Forum, *Flipped Learning and the Rapidly Changing Dynamics in Education*, Greeley, CO, October 16, 2014

Colorado Council of Teacher of Mathematics, *Using Flipped Learning To Significantly Improve Mathematics Education*, Denver, CO, September 25, 2015

CU Denver Succeed Program, *Using Flipped Learning to Significantly Improve Mathematics Instruction*, Denver, July 27, 2014

eLearning Consortium of Colorado, 25<sup>th</sup> Annual Conference, *Flipping the Classroom: Using Screencasting to Revolutionize Learning*. Breckenridge, CO, April 17, 2014

International Conference on Technology in Collegiate Mathematics conference, *Research on Flipping College Algebra: Lessons Learned and Practical Advice for Flipping Multiple Sections*, San Antonio, March 20, 2014

Beyond Giftedness Conference XXI, *Using Flipped Learning to Bring Out the Best in Your Students*. Denver on February 21, 2014

32<sup>nd</sup> Annual High School-University Chemistry Teachers' Conference, *Flipping Chemistry – How the Flipped Classroom is Revolutionizing Chemistry Education*, Boulder, CO, November 2, 2013

CU Denver CU Succeed Conference, *Using Flipped Learning to Significantly Improve Mathematics Instruction*. Denver, CO on July 26, 2013

International Society for Technology in Education (ISTE) Conference, *Digital-Age Teaching & Learning: Innovative Learning Technologies*, PBS Learning Media, San Antonio on June 25, 2013

FlipCon13, *Research on Flipping College Algebra: Lessons Learned and Practical Advice for Flipping Multiple Sections*, Stillwater, MN on June 18, 2013

Bryan University/Bryan College – All Faculty In-Service, *Flipping Online Learning: Is that even flipping possible?* Webinar, June 14, 2013

Morgridge Family Foundation Share Fair, *Using Teacher Created Online Video to Increase Student Achievement*, Denver on May 4, 2013

University of the Philippines, Diliman College of Education, 2<sup>nd</sup> ECUC Webinar Series, *Flipped Learning: Using screencasting to revolutionize learning*, March 30, 2013

High Schools That Work, Ohio College Tech Prep, Presenter, *Flipping the Classroom: Using screencasting to revolutionize learning*, Akron, Ohio on December 5, 2012

Center for the Enhancement of Teaching and Learning, The Flipped Classroom – Using Teacher Created Video to Increase Student Engagement, Greeley, CO, November 15, 2012

Critical Issues and Best Practices Forum, *Flipping-It: Reach Every Student in Every Class Every Day*, Denver, July 23, 2012

5th Annual Flipped Conference, *The Flipped Classroom - Using Video Podcasting to Revolutionize the Classroom: Past, Present and Future*, Chicago, June 20, 2012

Project Advance, *The Flipped Classroom* for teachers in New York City and Syracuse University, May 14 & 15, 2012

Keynote Speaker for the SMART Consortium's professional development workshop *Flipping The Classroom: Turning The Classroom Upside Down* in Cleveland, Ohio on December 14, 2011

Colorado Council of Teachers of Mathematics (CCTM) 2011 Conference, *The Flipped Class Model: Creating a 21st Century Mathematics Classroom*, Denver, CO, October 28, 2011

Colorado Science Educators Network meeting *The Flipped Classroom*, Poudre Learning Center, Sept, 27, 2011

Flipped Conference, *History of the Flipped Classroom*, Woodland Park, CO, June 17th, 2011

Facilitator for District In-Service on Mathematics Curriculum Maps and New Standards Training, Johnstown, CO, January 21, 2011

Colorado/Wyoming Junior Academy of Science, *Optical Illusions and Mathematical Paradoxes*, Greeley, CO, January 11, 2011

Colorado Council of Teachers of Mathematics Conference, *Pre-Vodcasting and the Inquiry-Based Mathematics Classroom*, Denver, CO, October 19, 2009

12th Annual Legacy of R.L. Moore Conference: Inquiry-Based Learning in Different Contexts, *Pre-Vodcasting and the Moore Method*, Austin, TX, July 17, 2009



Colorado Science Education Network meeting, *MAST WebConnect: A Web Portal to Connect Educators to Filtered Internet Resources*, Poudre Learning Center, April 14, 2009

Mathematics Colloquium, *Mathnerds Mentoring Networks: Providing Inquiry-Based Mathematics Tutoring Over the Internet*, University of Northern Colorado, January 23, 2009

Center for Learning and Teaching in the West, *Navigating Through Number and Operation in Secondary Mathematics*, Colorado State University, June 3, 2007

CLTW Research Forum, *A Meta-Analysis of Recent Literature on the Effects of Cooperative Learning on Achievement in Undergraduate Mathematics*, Colorado, April 9, 2007

Center for Learning and Teaching in the West, *Using Technology to Promote Guided Inquiry in Secondary Mathematics*, Colorado State University, June 26, 2006

#### Professional Organizations

National Council of Teachers of Mathematics

International Society for Technology in Education

Mathematical Association of America

Colorado Council of Teachers of Mathematics – Board Member 2011-2015