

R. Benjamin Moulton, PhD
Associate Professor, Developmental Mathematics
Utah Valley University

EDUCATION:

Ph.D. Education: Curriculum, Instruction, and Assessment

Dissertation: Research-Based Strategies of Developmental Mathematics

Courses Taught Using Mediated Instruction

Walden University, 2014

M.S. Civil/Environmental Engineering, Brigham Young University, 1999

B.S. Mathematics, Montana State University, 1995

B.A. Modern Languages, Montana State University, 1995

AWARDS:

2016 Wolverine Club Athletics Professor of the Year

2016 University College Faculty Excellence Award

2014 Alumni Outstanding Education from University College Award

2013 Utah Valley University Student Advocate Award

2007 Alumni Outstanding Educator from the School of General Academics Award

2005 School of General Academics Faculty Excellence Award

CURRENT RESEARCH:

The effects of embedded mentors in developmental mathematics

Students with autism and/or dyslexia taking developmental mathematics in higher education.

Modeling environmental issues using a piecewise function approach.

CONFERENCE PRESENTATIONS:

- Presentation titled *Strategies to Promote Student Engagement with Student-Faculty Interaction*, presented at the American Mathematical Association of Two-Year Colleges, Toronto, Ontario, Canada, November, 2022.

- Presentation titled *Math Mentoring During the COVID-19 Era*, presented at the American Mathematical Association of Two-Year Colleges, Phoenix, Arizona, October, 2021.

- Presentation titled *Using James Bond as a Central Theme in a Quantitative Literacy Course*, presented at the American Mathematical Association of Two-Year Colleges, Phoenix, Arizona, October, 2021.

- Presentation titled *Using Freshmen Reading Materials to Create a Mathematical Model for the Ebbs and Flows of Life*, presented at the Utah Mathematical Association of Two-Year Colleges, Orem, Utah, November 2019.

- Presentation titled *Learning from Failure and Success from a Hegelian Perspective*, presented at the UVU University College Conference on Student Success, Orem, Utah, September, 2019.

- Presentation titled *Autism in the Classroom*, presented at the conference of the American Mathematics Association of Two-Year Colleges, Orlando, Florida, November, 2018.
- Presentation titled *Time To Get a Job!*, presented at the conference of the American Mathematics Association of Two-Year Colleges, San Diego, California, November, 2017.
- Presentation titled *Environmental Initiative in Mathematics: Engaging Students in Environmental Projects*, presented at the conference of the American Mathematics Association of Two-Year Colleges, Denver, Colorado, November, 2016.
- Presentation titled *Jazzing Up Your Mathematics Fundamentals Course*, presented at the conference of the American Mathematics Association of Two-Year Colleges, New Orleans, Louisiana, November, 2015.
- Presentation titled *Research-Based Strategies of Developmental Mathematics Courses Taught Using Mediated Instruction*, presented at the conference of the American Mathematics Association of Two-Year Colleges, Nashville, Tennessee, November, 2014.
- Poster presentation titled *Brock's Theorem: An Alternative to the Binomial Theorem*, presented at the conference of the American Mathematics Association of Two-Year Colleges, Anaheim, California, November, 2013.
- Presentation titled *Learning From Failure and Success, From a Hegelian Perspective*, presented as part of the Freshman Reading Series, Utah Valley University, November, 2013.
- Presentation titled *SUMM: Success Through Math Mentoring*, presented at the 2011 Mentoring Conference, University of New Mexico, October, 2011.
- Presentation titled *Math Mentoring: The Future for Developmental Mathematics?*, presented at the conference of the American Mathematics Association of Two-Year Colleges, Boston, Massachusetts, November, 2010.
- Presentation titled *Full-Time and Adjunct Faculty Relations, a Followup*, presented at the conference of the American Mathematics Association of Two-Year Colleges, Las Vegas, Nevada, November, 2009.
- Presentation titled *Affiliate Sharing Session*, presented at the conference of the American Mathematics Association of Two-Year Colleges, Las Vegas, Nevada, November, 2009.
- Poster presentation titled *Freaks of Nature → Hot Air Balloons: Dimensional Experimentation*, presented at the conference of the American Mathematics Association of Two-Year Colleges, Las Vegas, Nevada, November, 2009.
- Poster presentation titled *The Beatles Have Revolution #9, Math has "Math and the Revolution"* presented at the conference of the National Association of Developmental Education in Boston, Massachusetts, February, 2008.
- Presentation titled *Math and Rock-n-Roll* presented at the College Reading and Learning Association conference, Orem, Utah, March, 2007.
- Presentation titled *Full-Time and Adjunct Faculty Relation*, presented at the conference of the American Mathematics Association of Two-Year Colleges, San Diego, California, November, 2006.

- Presentation titled *Math Is Fun! Reaching Out to Students Who Hate Mathematics*, presented at the conference of the American Mathematics Association of Two-Year Colleges, Orlando, Florida, November, 2004.
- Presentation titled *A Summary of Water Plans for Sevier, San Pete, and Duchesne Counties*, presented at the conference of the Rural Water Association of Utah, St George, Utah, November, 2000.

PUBLICATIONS:

- Joung, E., & Moulton, B. (2023). Peer support, math progress: Investigating the effects of peer mentoring in developmental math courses. Manuscript submitted for publication.
- Moulton, B. (2023). Addressing environmental issues using piece-wise functions. Manuscript submitted for publication.
- Moulton, B. (2015). Conceptual framework and literature review of developmental mathematics courses taught using online instruction. Manuscript submitted for publication.
- Moulton, B. (2014). *Research-based strategies of developmental mathematics courses taught using mediated instruction*. Doctoral Dissertation, Walden University, Minneapolis, MN.
- Moulton, B., & Brown, B. (February, 2014). A user-friendly approach to binomial sums coefficient. *MathAMATYC Educator*, 5(2).
- Moulton, B., Colvin, J., & Tobler, N. (December, 2012). *Math mentoring: An emerging model to aid college student success in developmental mathematics*. Manuscript submitted for publication.
- Brown, C., Lambert, L., Moulton, B., & Sanft, M. (October, 2011). *SUccess through math mentoring (SUMM)*. Unpublished paper presented at the 2011 Mentoring Conference, University of New Mexico, Albuquerque, NM.
- Moulton, B. (1999). *Optimal flow rates in sanitary sewers*. Master's Project for the Department of Civil/Environmental Engineering, Brigham Young University, Provo, UT.

GRANTS:

- University College Student Engagement, Retention, and Success Grant: *Math Mentoring During the COVID Era*, (2021), \$1,300
- Faculty Advisor Students Awarded the University College Grant for Undergraduate Research, (2021), \$2,000.
- Community for Engaged Learning Grant, UVU, (2011), \$15,000: *Math Mentoring*
- Grant for Engaged Learning, UVU, (2015), \$30,000: *Environmental Initiative in the Classroom*
- First in the World Grant, USDOE, (2015), \$2,000,000: *General Education Environmental Research Enhancement Project* (Submitted, not awarded)

LEADERSHIP:

Math Mentor Director 2008-present

Department Rank, Tenure and Promotion Chair 2022-2023

UVU Curriculum Committee Chair 2022-present
UVU Curriculum Committee Chair-Elect 2021-2022
Tenure Criteria Committee Chair 2013-2015
Faculty Connections Committee Chair 2011-2012
Faculty Connections Committee Co-Chair 2010-2011
Assistant Department Chair 2007-2010
Utah Mathematics Association of Two-Year Colleges President 2008-2009
National Association of Developmental Education Certification Chair 2006-2009
Textbook Search Committee Chair 2007
School Curriculum Chair 2003-2007
Faculty Excellence Award Committee, Chair 2006
Faculty Search Committee Chair 2005, 2012
Utah Mathematics Association of Two-Year Colleges Secretary 2004-2005

SERVICE:

Utah Valley University

UVU Faculty Senate Executive Committee 2021-present
UVU Advisory Rank, Tenure, and Promotion Committee 2016-2020
Environmental Awareness Committee 2015-2017
UVU Autism Initiative Committee 2014-2020
University Tenure Board of Review Committee 2013-2014
University Planning Advisory Committee (UPAC) 2013-2015, 2019-2021
Student Success and Retention Committee 2011-2012
Faculty Connections Committee 2009-2015
UVU Business Advisory Council 2008
Math Awareness Week Committee 2006-2013, 2015 - 2017
Tutoring Excellence Committee 2006
Math Task Force Committee 2005-2006
College Curriculum Committee 2003-2007
Faculty Senate Standing Committee for Intercollegiate Athletics 2004-2005

College of Science

College of Science Online Course Reviewer 2022-present

University College

Technology Specialist Search Committee 2011
Learning Strategist Search Committee 2008
School of General Academics Accreditation Committee 2004

Mathematics and Quantitative Reasoning Department

Quantitative Reasoning Course Committee 2020-present
Rank, Tenure, and Promotion Committee 2010-2019, 2022-present
Department Research Committee 2015
Department Executive Committee 2013-2014

National Association of Developmental Education Certification Committee 2010-2011
Department Research Committee 2008-2012
Website Committee 2008
Intermediate Algebra Course Coordinator 2007
Outcomes Assessment Committee 2007
Post-Tenure Policy Committee 2007
Mentor to Tenure-Track Faculty 2005-2019
Developmental Math Public Relations Committee 2005
Department Accreditation Committee 2004-2005
Evening Coordinator 2003-2005

Profession

National Fostering Community College Collaboration with Disciplinary Societies Initiative 2023-present
UMATYC Board of Directors 2022-present
AMATYC Mathematical Leadership Excellence Committee 2022 - present
AMATYC Nominations Committee 2021 - present
AMATYC Developmental Mathematics Committee 2016 - present
Multi-State Faculty Collaborative 2016
AMATYC Mathematics Excellence Award Committee 2012 - 2014
LUMINA Task Force Committee 2011-2012
Board of Regents Developmental Mathematics Majors Committee, Utah System of Higher Education 2007-2010

Community

Melisa Nelleson Center for Autism Parent Advisory Board 2015 - present
Colonial Heritage Festival Planning Committee 2016 - present
Board of Directors Chairman for Ignite Entrepreneurship Academy 2017 - 2018
Board of Directors Assistant Chair for Ignite Entrepreneurship Academy 2015 - 2017
Utah County Delegate 2016 - 2018

EXPERIENCE:

2002 - Present, Utah Valley University, Orem, UT

Professor of Developmental Mathematics

1999 - 2002, Franson Engineering, American Fork, UT

Civil/Environmental Engineer

1996 - 1999, Brigham Young University, Provo, UT

Graduate Assistant Math Instructor

1995 - 1996, Houston High School, Houston, MN

Math/Spanish Instructor

1993 - 1997, Concordia Languages Village, Bemidji, MN

Spanish Instructor

PROFESSIONAL AFFILIATIONS:

American Mathematics Association of Two-Year Colleges
Utah Mathematics Association of Two-Year Colleges
American Education Research Association