


# Curriculum Vitae

Shannon Olson (formerly Shannon Ference)

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## **EDUCATION:**

M.S., Educational Leadership, Western Governors University, 2021

Completed coursework towards Ph.D., Educational Inquiry, Measurement and Evaluation, Brigham Young University, 2014-2015

M.Ed., Education, Southern Utah University, 2009

B.S., Elementary Education, Brigham Young University, 2007

Awards: BYU Academic Scholarship, Fritz B. Burns Foundation Scholar, Praxis ETS Recognition of Excellence Award

## **CERTIFICATIONS:**

School Leadership License, Utah State Board of Education

Elementary License, Utah State Board of Education

Endorsements, Utah State Board of Education: Elementary Mathematics, Elementary Mathematics Specialist, Gifted and Talented, Instructional Coaching

Acadience Math Mentor, Acadience Learning

Yoga Teacher Training Certification, University of Utah

## **EXPERIENCE:**

Olson Educational Services, LLC, Educational Consultant & Professional Learning Provider, 2021-present

Alpine School District, Elementary Mathematics Specialist, 2021-2022

Alpine School District, School Leadership Intern (Lehi Elementary, Willowcreek Middle), 2020-2021

Utah State Board of Education, Elementary Mathematics & Gifted Specialist, 2017-2021

Salt Lake City School District, Mathematics Coach, 2012-2014, 2015-2016

Brigham Young University, Doctoral Research Assistant, 2014-2015

Fairfax County Public Schools, Elementary Teacher & Math Teacher Leader, 2009-2012

Nebo School District, Elementary Teacher, 2007-2009

## **PROFESSIONAL ASSOCIATION MEMBERSHIPS AND SERVICE:**

Association of State Supervisors of Mathematics (ASSM), 2017-present

(Finance Committee, 2023; Elementary Issues Special Interest Group Co-lead, 2019-2021; Program Committee Member, 2018-2020)

National Association for Educators of Young Children (NAEYC), 2023-present

National Council of Supervisors of Mathematics (NCSM), 2017-present

(Regional Team Leader-Utah, 2017-2021; Conference Proposal Reviewer, 2018)

National Council of Teachers of Mathematics (NCTM), 2010-present  
(Regional Conference Volunteer-Salt Lake City, 2019)  
Utah Association for Educators of Young Children (UAEYC), 2023-present  
Utah Council of Teachers of Mathematics (UCTM), 2012-present  
(USBE Liaison, 2017-2021; K-3 Representative, 2015-2017)  
Council of Chief State School Officers (CCSSO) State Collaborative on Assessment and Student Standards  
(SCASS) in Mathematics, 2017-2021  
(STEM Special Interest Group Co-lead, 2018-2019)  
Council of State Directors of Programs for the Gifted (CSDPG), 2017-2021  
National Association for Gifted Children (NAGC), 2017-2021  
Utah Association for Gifted Children (UAGC), 2017-2021  
(USBE Liaison, 2017-2021)  
Utah Association of Mathematics Teacher Educators (UAMTE), 2017-2021  
Association of Mathematics Teacher Educators (AMTE), 2015

## **PUBLICATIONS AND CONTRIBUTIONS TO PUBLICATIONS:**

Contributor: National Council of Supervisors of Mathematics (NCSM). (2023). *Position Paper: Improving Student Achievement through Flexible Grouping Practices*.  
<https://www.mathedleadership.org/position-papers/>  
Olson, S. (2023). *Blog*. <https://www.shannonolson.com/blog>  
Olson, S. (2023). How learning progressions and learning trajectories can inform mathematics instruction. *Utah Mathematics Teacher: Exploration*, 15, 51-60. <https://www.utahctm.com/journal>  
Olson, S. (2021). Professional learning for elementary mathematics specialists. *Utah Mathematics Teacher: Making Mathematics Flourish*, 14, 28-43. <https://www.utahctm.com/journal>  
Contributor: ULEAD Education. (2021). Leadership for mathematics. *ULEAD effectiveness and innovation working summits*. <https://www.schools.utah.gov/ulead>  
Contributor: Utah State Board of Education. (2019). *Mathematics major works*.  
<https://www.schools.utah.gov/curr/mathematics/core>  
Contributor: Utah State Board of Education. (2018). *Mathematics core guides*.  
<https://www.schools.utah.gov/curr/mathematics/core>  
Contributor: Utah State Board of Education. (2018). *Utah's multi-tiered system of supports for mathematics*.  
<https://www.schools.utah.gov/curr/mathematics/umtss>  
Contributor: Baker, C. K., Bailey, P., Larsen, S., & Galanti, T. (2017). A critical analysis of emerging high-leverage practices for mathematics coaches. *Elementary Mathematics Specialists: Developing, Refining, and Examining Programs That Support Mathematics Teaching and Learning*.

## **EDUCATIONAL AND LEADERSHIP CONSULTING:**

Mountainville Academy, 2022-2025  
Murray City School District, 2023-2025  
Trailside Elementary, Alpine School District, 2023-2025  
Washington County School District, 2023-2025  
Canyons School District, 2023-2024  
Hawthorn Academy, 2023-2024  
Hillcrest Elementary, Logan City School District, 2022-2023  
Trailside Elementary, Park City School District, 2023

## **PROFESSIONAL LEARNING DESIGN AND FACILITATION:**

Effective Mathematics Teaching Practices, Trailside Elementary, Alpine School District, 2023-2025  
Mathematics Tasks, Discourse, and Fluency, Mountainville Academy, 2023-2025  
ULEAD Innovation Professional Learning Project, Middle Grades (5-8) Math, Utah State Board of Education, 2023-2025  
Utah Early Mathematics Coaching Institute, Utah State Board of Education, 2023-2025  
Mathematics Planning and Coaching, Washington County School District, 2023-2025  
Early Math Intervention, Davis School District, 2023-2024  
Math Practices with Fractions, Mountain Point Elementary, Jordan School District, 2024  
Mathematics Tasks and Discourse, Canyons School District, 2023-2024  
Mathematics Content and Instruction (Grade 4, Grade 5, & Grade 6), Murray School District, 2023-2024  
Mathematics Concepts and Standards for Grades 4-5, Park City School District, 2023  
Mathematics Coaching: Selected Topics, Davis School District, 2022-2023  
Elementary Mathematics Standards and Progressions, Wasatch Peak Academy, 2022-2023  
Success Criteria in Mathematics, Hawthorn Academy, 2023  
Coaches Mathematics Meetings, Alpine School District, 2021-2022  
Early Mathematics Intervention, Park City School District, 2022  
Mathematics Unit Planning Sessions, Alpine School District, 2021-2022  
Skyline Mathematics Curriculum Professional Learning Grades 2-3, Emerald Education Inc. for Chicago Public Schools, 2021-2022  
Comprehensive Mathematics Instruction (CMI), Brookhaven Elementary, Alpine School District, 2021  
Catalyzing Change in Early Childhood and Elementary Mathematics, Utah State Board of Education, 2020-2021  
Critical Issues and Practices in Gifted Education, Utah State Board of Education, 2020-2021  
Elementary Mathematics Specialist Institute, Utah State Board of Education, 2019-2021  
Elementary Mathematics Standards Progression Courses, Utah State Board of Education, 2018-2021  
Excellence Gaps in Education: Expanding Opportunities for Talented Students, Utah State Board of Education, 2020-2021  
Gifted and Talented Coordinator Meetings, Utah State Board of Education, 2017-2021  
Gifted and Talented Endorsement Framework Trainings, Utah State Board of Education, 2021  
K-5 Math Summer Elevation Curriculum Professional Learning, Emerald Education Inc. for Montgomery Public Schools, 2021  
Phase Behavior Training, Lehi Elementary, Alpine School District, 2021  
State Mathematics Education Coordinating Committee (SMECC), Utah State Board of Education, 2017-2021  
Equity Lab, Utah State Board of Education, 2019-2020  
K-12 Mathematics Coaching Institute, Utah State Board of Education, 2017-2020  
Standards Implementation Institute: Elementary Mathematics (Maximum Impact: Reaching All Students in Tier 1 Mathematics Instruction) & Elementary Integrated, Utah State Board of Education, 2019-2020  
STEM Institute for Administrators, Utah State Board of Education, 2016-2020  
Math Summer Professional Learning Training for Facilitators, Utah State Board of Education, 2019  
Progressions in Elementary Mathematics, Legacy Preparatory Academy, 2017-2018  
Task-based Mathematics Instruction, Daggett School District, 2017-2018

Kindergarten Entry and Exit Profile (KEEP) Teacher Training, Utah State Board of Education, 2017  
Principles to Actions: Access and Equity, Utah State Board of Education, 2015-2017  
Principles to Actions, Meadowlark Elementary, Salt Lake City School District, 2016-2017  
Effective Mathematics Instruction, Washington Elementary, Salt Lake City School District, 2016  
Writing Math Learning Targets, Meadowlark Elementary, Salt Lake City School District, 2016  
Writing Math Learning Targets, Washington Elementary, Salt Lake City School District, 2016  
Principles to Actions, Utah State Board of Education, 2015  
Utah Core Academy: Elementary Mathematics, Utah State Board of Education, 2013-2014  
Mathematics Leadership Team, Laurel Hill Elementary, Fairfax County Public Schools, 2010-2012  
Goal Setting and Reflection Seminar, Fairfax County Public Schools, 2012  
Mathematics Summer Institute, Fairfax County Public Schools, 2011

## **PROJECTS AND COMMITTEES:**

Math for All Institute Steering Committee Member, Utah State Board of Education, 2021-2022  
Presidential Awards for Excellence in Mathematics and Science Teaching, National Science Foundation on behalf of The White House Office of Science and Technology Policy (Utah Finalist Mentor, 2022; Utah State Coordinator, 2017-2021; National Review Committee, 2018)  
ULEAD Effectiveness and Innovation Working Summits: Leadership for Mathematics Team Member, ULEAD Education, Utah State Board of Education, 2020-2022  
Cross Departmental Implementation Team Member, Utah State Board of Education, 2017-2021  
Early Mathematics Benchmark Assessment (Acadience Math) Adoption Lead, Utah State Board of Education, 2020-2021  
Elementary Mathematics Competency-based Endorsement Lead, Utah State Board of Education, 2020-2021  
Elementary Mathematics Microcredentials Lead, Utah State Board of Education, 2021  
Elementary Mathematics Specialist Competency-based Endorsement Lead, Utah State Board of Education, 2020-2021  
Elementary STEM Endorsement Committee Member, Utah State Board of Education, 2018-2021  
Gifted and Talented Endorsement Competency-based Endorsement Lead, Utah State Board of Education, 2020-2021  
Instructional Materials for Elementary Mathematics Committee Selector, Utah State Board of Education, 2017-2021  
Mathematics Advisory Team Co-lead, Utah State Board of Education, 2020-2021  
New Employee Mentor, Utah State Board of Education, 2020-2021  
Paraeducator Manual and Professional Learning Module Committee Member, Utah State Board of Education, 2017-2021  
Readiness Improvement Success Empowerment (RISE) Supported Mathematics Assessment Specialist with Committees and Items, Utah State Board of Education, 2017-2021  
Strategic Plan Early Learning Strategy Co-lead, Utah State Board of Education, 2019-2021  
Agency-wide STEM Committee Member, Utah State Board of Education, 2018-2020  
New Employee Handbook Committee Member, Utah State Board of Education, 2018-2020  
Elementary Mathematics Endorsement Framework Revision Lead, Utah State Board of Education, 2018-2019  
Elementary Mathematics Specialist Endorsement Creation and Framework Development Lead, Utah State Board of Education, 2018-2019  
Gifted and Talented Endorsement Framework Development Lead, Utah State Board of Education, 2019

Grades 1 and 2 Mathematics Formative Assessment Development Lead, Utah State Board of Education, 2018-2019

Kindergarten Entry and Exit Profile (KEEP) Development and Standards Setting Team Member and Mathematics Lead, Utah State Board of Education, 2017-2019

Mathematics Major Works Co-Lead, Utah State Board of Education, 2018-2019

Elementary Mathematics Core Guide Revision Lead, Utah State Board of Education, 2017-2018

Kindergarten Entry and Exit Profile (KEEP) Alternate Standards Setting Team Member and Mathematics Lead, Utah State Board of Education, 2018

Open Educational Resources (OER) Collective Committee Member, Utah State Board of Education, 2017

Interim Assessment Development Committee Member, Salt Lake City School District, 2013-2016

School Improvement Plan Team Member, Meadowlark Elementary, Salt Lake City School District, 2015-2016

Utah Core Standards Revision Steering Committee Member, Utah State Board of Education, 2016

West Hawaii English Language Learner Data Collector, Catapult Learning LLC for Hawaii Public Schools Maui District, 2016

Student Assessment of Growth and Excellence (SAGE) Development Committee Member (Item Writing, Item Review, Rubric Validation, Data Review, Standards Setting), Utah State Board of Education, 2014-2015

Elementary Mathematics Endorsement Common Assessment Committee Member, Utah State Board of Education, 2013

Family Math Night Committee Lead, Laurel Hill Elementary, Fairfax County Public Schools, 2010-2012

Mathematics Leadership Team Lead, Laurel Hill Elementary, Fairfax County Public Schools, 2010-2012

School Improvement Plan Team Member, Laurel Hill Elementary, Fairfax County Public Schools, 2010-2012

School Leadership Team Member, Laurel Hill Elementary, Fairfax County Public Schools, 2010-2012

Mathematics Curriculum Adoption Committee Member, Fairfax County Public Schools, 2011

Before School Math Intervention Teacher, Laurel Hill Elementary, Fairfax County Public Schools, 2010

Inaugural Year Staff Member, Laurel Hill Elementary, Fairfax County Public Schools, 2009-2010

Reading Summer School Teacher, Nebo School District, 2008

Migrant Summer School Teacher, Nebo School District, 2007

## **UNIVERSITY AND COLLEGE COURSE INSTRUCTION:**

Elementary Mathematics Specialist Endorsement: Curriculum, Instruction, and Assessment for Elementary Mathematics Leaders, Southern Utah University, 2023; Alpine School District & Utah Valley University, 2022; Utah State Board of Education & Southern Utah University, 2019

Elementary Mathematics Specialist Endorsement: Elementary Mathematics Education Leadership for School Change, Southern Utah University, 2023; Alpine School District & Utah Valley University, 2023; Southwest Educational Development Center & Utah Valley University, 2022-2023; Utah State Board of Education & Southern Utah University, 2020

Elementary STEM Endorsement: STEM for Teaching K-6 Mathematics, Southern Utah University, 2023

Master of Arts in Teaching: Elementary Methods 5 - Speaking, Listening, & Writing, Relay Graduate School of Education, 2023

Master of Arts in Teaching: Elementary Methods 4 - Inquiry in the Elementary Classroom, Relay Graduate School of Education, 2022

Transition to Teaching: Elementary Mathematics Methods, Salt Lake Community College, 2020-2021

Elementary Mathematics Endorsement: Assessment and Intervention, Brigham Young University, 2015-2019; Utah State Board of Education & Southern Utah University, 2017; Salt Lake City School District & Southern Utah University, 2013-2016  
Elementary Mathematics Methods, Brigham Young University, 2015

## **PROFESSIONAL PRESENTATIONS:**

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- Olson, S. (2024, April 10). *Using progressions and learning trajectories to guide intervention in multiplication and division* [Pre-recorded session]. National Council of Teachers of Mathematics Virtual Conference, virtual. <https://www.nctm.org/virtual2024/>
- Olson, S. (2024, March 19). *Revealing the complexities of coaching mathematics* [Pre-recorded session]. Utah Coalition for Educational Technology Annual Conference, Salt Lake City, UT. <https://ucet2024.sched.com/>
- Olson, S. (2024, March 9). *Using progressions and learning trajectories to guide intervention in multiplication and division* [Conference session]. Delaware Council for Mathematics Leaders 5th Annual Triple Crown Conference, virtual.
- Olson, S. (2024, February 24). *Using progressions and learning trajectories to guide intervention in multiplication and division* [Pre-recorded session]. Build Math Minds 8th Annual virtual Math Summit, virtual. <https://virtualmathsummit.com/>
- Olson, S. (2024, January 31). *Revealing the complexities of coaching mathematics* [Conference session]. Utah Council of Teachers of Mathematics Annual Conference, Provo, UT. <https://uctm2024conference.sched.com/>
- Olson, S. (2024, January 30). *Using progressions and learning trajectories to guide intervention in multiplication and division* [Conference session]. Utah Council of Teachers of Mathematics Annual Conference, Provo, UT. <https://uctm2024conference.sched.com/>
- Olson, S. (2023, November 17). *Math content, standards, practices, and number sense*. [School-based professional development]. Cottonwood Elementary, Emery School District, Orangeville, UT.
- Bennett, C. & Olson, S. (2023, October 30). *Supporting all students through flexible grouping practices* [Conference session]. National Council of Supervisors of Mathematics 55th Annual Conference, Washington, DC. <https://www.mathedleadership.org/55th-annual-conference-sessions/>
- Olson, S. (2023, October 27). *Using progressions and learning trajectories to guide intervention in addition and subtraction* [Conference session]. National Council of Teachers of Mathematics 102nd Annual Meeting & Exposition, Washington, DC. <https://www.nctm.org/dc2023/>
- Olson, S. (2023, September 23). *Student thinking within progressions & learning trajectories for addition & subtraction* [Conference session]. Arizona Association of Teachers of Mathematics, virtual.
- Mackley, J. & Olson, S. (2023, August 22). *Davis early childhood program math professional learning*. [District-based professional development]. Davis School District Preschool Professional Development, Clearfield, UT.
- Olson, S. (2023, August 15). *Essentials of sixth grade mathematics* [District-based professional development]. Jordan School District Summer Conference, Herriman, UT.
- Olson, S. (2023, March 17). *Using progressions and learning trajectories to guide intervention in addition and subtraction* [Conference session]. Utah Association for the Education of Young Children: Utah Early Childhood Annual Conference, Salt Lake City, UT. <https://uaeyc.org/utah-early-childhood-conf>
- Olson, S. (2023, March 15). *UTedchats from ULEAD: Innovating with evidence-based practices in mathematics* [TED Talk style presentation]. Utah Coalition for Educational Technology Annual Conference, UCET 2023: Together, Provo, UT. <https://ucet2023.sched.com/>

- Olson, S. (2023, March 14). *UTedchats on leadership: Learning, leading, and leveraging opportunities throughout your career* [TED Talk style presentation]. Utah Coalition for Educational Technology Annual Conference, UCET 2023: Together, Provo, UT. <https://ucet2023.sched.com/>
- Olson, S. (2023, February 25). *Using progressions and learning trajectories to guide intervention in addition and subtraction* [Pre-recorded session]. Build Math Minds 7th Annual virtual Math Summit, virtual. <https://virtualmathsummit.com/>
- Olson, S. (2023, February 1). *Using progressions and learning trajectories to guide intervention in addition and subtraction* [Conference session]. Utah Council of Teachers of Mathematics Annual Conference, Provo, UT. <https://uctm2023conference.sched.com/>
- Olson, S. (2022, September 25). *ASSM Perspectives: What has Being an ASSM Member Meant to You? Learning, Leading, and Leveraging Opportunities as a Member of ASSM* [TED Talk style presentation]. Association of State Supervisors of Mathematics 2022 Annual Meeting: Asset-based Systems-Finding Coherence in Student Strengths, Costa Mesa, CA. <https://assm.wildapricot.org/Annual-Meetings>
- Johnson, M. & Olson, S. (2022, February 25). *Planning for the 5 practices for orchestrating productive mathematics discussions* [Conference session]. Utah Council of Teachers of Mathematics Annual Conference, Kaysville, UT. <https://uctm2022conference.sched.com/>
- Olson, S. (2022, February 25). *Maximizing leadership by building teacher capacity: The balance of building individuals and systems* [Conference session]. Utah Council of Teachers of Mathematics Leadership Conference, West Jordan, UT.
- Olson, S. (2021, October 18). *Preparing for mathematical discourse as a priority for instruction* [School-based professional development]. Harbor Point Elementary, Alpine School District, Saratoga Springs, UT.
- Bouwhuis, L. & Olson, S. (2021, October 18). *Engaging students in mathematical thinking and learning* [School-based professional development]. Westfield Elementary, Alpine School District, Alpine, UT.
- Clark, J., Elegante, C., Hotelling, K., Olson, S. & Wiebke, S. (2021, June 1-2 & 10-11). *LIT (Learning Innovation Team) Training* [Statewide training]. Utah State Board of Education Annual Training, virtual.
- Olson, S. (2021, March 20). *Early learning of mathematics* [Conference session]. Utah Association of Mathematics Teacher Educators Annual Conference, virtual. <http://uamte.math.byu.edu/Conference>
- Olson, S. & Smith, J. (2021, January). *Preschoolers as mathematicians* [Conference session]. Utah State Board of Education Annual Preschool Professional Conference, virtual.
- Olson, S. (2020, September). *Elementary mathematics in Utah* [Guest presentation]. University of Utah Elementary Mathematics Methods Course, virtual.
- Olson, S. (2020, June). *Mathematical discourse in the elementary classroom* [Conferences session]. Utah Rural Schools Annual Conference, virtual.
- Olson, S. (2020, June). *Mathematical discourse in the elementary classroom* [School-based professional development]. Lehi Elementary, Alpine School District, virtual.
- Olson, S. & Unker, B. (2020, March 12). *Accessible mathematics for students with disabilities* [District-based professional development]. Davis School District Elementary Mathematics Coaches Meeting, Layton, UT.
- Honey, J. & Olson, S. (2020, February 13). *Multi-tiered system of supports in mathematics* [Region-based professional development]. Southeast Regional Mathematics Meeting, San Juan School District, Blanding, UT.
- Auck, N. & Olson, S. (2020, February). *Navigating legislation connected to mathematics education* [Webinar]. Utah Council of Teachers of Mathematics Webinar Series, virtual.

- Ference, S. & Unker, B. (2019, October 18). *Math for ALL students really means ALL students* [Conference session]. National Council of Teachers of Mathematics Regional Conference, Salt Lake City, UT. <https://www.nctm.org/Conferences-and-Professional-Development/Regional-Conferences-and-Expositions/Past-and-Future/2019-SaltLakeCity/>
- Auck, N. & Olson, S. (2019, September). *Enhancement for accelerated students program* [Meeting presentation]. Utah State Board of Education Curriculum Directors Meeting, Salt Lake City, UT.
- Olson, S. (2019, September). *Elementary mathematics in Utah* [Guest presentation]. University of Utah Elementary Mathematics Methods Course, Salt Lake City, UT.
- Olson, S. (2019, September). *Mathematics for students with disabilities* [Guest presentation]. Utah Valley University Special Education Mathematics Methods Course, Orem, UT.
- Auck, N. & Olson, S. (2019, July). *Equity for all accelerated students* [Conference session]. Utah Rural Schools Annual Conference, Price, UT.
- Olson, S. (2019, July). *Mathematics for all students* [Conference session]. Utah Rural Schools Annual Conference, Price, UT.
- Ference, S. (2019, June 12). *Effective teaching practices in mathematics for gifted students* [Conference session]. Utah Association for Gifted Children Annual Conference, Murray, UT.
- Ference, S. (2019, June 12). *Utah State Board of Education welcome* [Conference welcome]. Utah Association for Gifted Children Annual Conference, Murray, UT.
- Ference, S. (2019, February). *Math tasks in STEM* [Conference Session]. Utah Afterschool Network STEM Saturday, Salt Lake City, UT.
- Ference, S. (2018, November). *STEM: What it is and what it is not* [Conference Session]. Utah Afterschool Network Jump Start Conference, Ogden, UT.
- Ference, S. & Taylor, S. (2018, November). *Gifted and talented education in Utah* [Guest presentation]. American Fork Junior High, Alpine School District, American Fork, UT.
- Ference, S. (2018, October 13). *Team-based problem solving: A deep dive into the multi-tiered system of supports in mathematics framework* [Conference session]. Utah Council of Teachers of Mathematics Annual Conference, Draper, UT. <https://www.utahctm.com/pastevents>
- Ference, S. (2018, September 21). *Mathematics in preschool* [Conference session]. State Preschool Annual Worksop, Utah State Board of Education, St. George, UT.
- Barlow, W. & Ference, S. (2018, July). *Making mathematical tasks work in your classroom* [Conference session]. Utah Rural Schools Annual Conference, Cedar City, UT.
- Barlow, W. & Ference, S. (2018, July). *Power in mathematics progressions: K-6*. [Conference session]. Utah Rural Schools Annual Conference, Cedar City, UT.
- Ference, S. (2018, June 18). *Mathematics and movement* [Conference session]. Healthy Bodies, Healthy Minds Annual Conference, Layton, UT.
- Ference, S. (2018, June). *Utah State Board of Education welcome* [Conference welcome]. Utah Association for Gifted Children Annual Conference, Park City, UT.
- Ference, S. (2018, June). *Multi-tiered system of supports in mathematics framework deep dive: Team-based problem solving* [Conference session]. Utah Multi-Tiered System of Supports Annual Conference, Provo, UT.
- Ference, S. & Honey, J. (2018, January). *Strategies to engage every student* [Conference session]. Sevier School District Professional Conference, Richfield, UT.
- Ference, S. (2017, August). *Power in mathematics progressions (K-6)* [Conference session]. Utah Council of Teachers of Mathematics Annual Conference, Ogden, UT. <https://www.utahctm.com/pastevents>
- Ference, S. (2017, August). *An overview of NCTM's principles to actions effective mathematics teaching practices (K-12)* [Conference session]. Wasatch Back Teaching and Learning Conference, Heber City, UT. <https://wback2017.sched.com/>



- Ference, S. (2017, August). *Power in progressions: Why are math progressions so important? (K-6)* [Conference session]. Wasatch Back Teaching and Learning Conference, Heber City, UT. <https://wback2017.sched.com/>
- Ference, S. & Honey, J. (2017, June). *Mathematics framework for MTSS: Examine a framework developed by USBE describing critical components for implementation* [Conference session]. Utah Multi-Tiered System of Supports Annual Conference, Provo, UT.
- Ference, S. (2017, March). *Effective mathematics teaching practices* [Meeting presentation]. Utah State Board of Education Curriculum Directors Meeting, Orem, UT.
- Ference, S. (2017, January). *Effective mathematics teaching practices* [Conference session]. Provo School District Professional Conference, Provo, UT.
- Ference, S. (2016, November). *Leveraging work through systems and structures that support instructional improvement in mathematics communities* [Conference session]. Utah Council of Teachers of Mathematics Leadership Conference, Salt Lake City, UT. <https://www.utahctm.com/pastevents>
- Ference, S. (2016, August). *Tools for teacher observation* [Conference session]. Salt Lake City School District Professional Development Conference, Salt Lake City, UT.
- Ference, S., Simpson, B. & Ziegler, C. *Common formative assessments in mathematics* [District-based professional development]. Salt Lake City School District Math Workshop, Salt Lake City, UT.
- Ference, S. (2015, November). *Let them discover* [Ignite session]. Utah Council of Teachers of Mathematics Annual Conference, Salt Lake City, UT. <https://www.youtube.com/watch?v=sohCzydCxVU>
- Ference, S. (2015, November). *Use and connect mathematical representations* [Conference session]. Utah Council of Teachers of Mathematics Annual Conference, Salt Lake City, UT. <https://www.utahctm.com/pastevents>
- Ference, S. (2015, August). *Modifying mathematics curriculum to be more task-based* [Conference session]. Salt Lake City School District Professional Development Conference, Salt Lake City, UT.
- Ference, S. (2014, April). *Rigor in mathematics* [Webinar]. Utah Education Network Webinar Series, virtual.
- Ference, S. (2013, December). *Self-assessment and reflection in mathematics* [School-based professional development]. Lincoln Elementary, Salt Lake City School District, Salt Lake City, UT.
- Ference, S. & Kreuger, J. (2013, November). *Knowing what they understand* [Conference session]. Utah Council of Teachers of Mathematics Annual Conference, Salt Lake City, UT.
- Ference, S. & Kreuger, J. (2013, September). *Knowing what they understand* [Conference session]. Salt Lake City School District Professional Development Conference: Professional Growth Using the Utah Effective Teaching Standards, Salt Lake City, UT.
- Ference, S. (2013, September). *Instructional shifts and focus in the Utah core state standards in mathematics*. [School-based professional development]. Lincoln Elementary, Salt Lake City School District, Salt Lake City, UT.
- Ference, S. (2013, August). *Effective professional learning communities for mathematics*. [School-based professional development]. Highland Elementary, Salt Lake City School District, Salt Lake City, UT.
- Ference, S. & Kreuger, J. (2013, June). *The power of assessment in guiding student learning* [Conference session]. Utah Multi-Tiered System of Supports Annual Conference, Layton, UT.
- Ference, S. & Kreuger, J. (2013, March). *The power of assessment in guiding student learning* [Conference session]. Salt Lake City School District Professional Development Conference: Take Teaching to the Next Level: Utah Effective Teaching Standards. Salt Lake City, UT.
- Ference, S. & Kreuger, J. (2013, March). *Utah effective teaching standards* [Conference session]. Salt Lake City School District Professional Development Conference. Salt Lake City, UT.
- Ference, S. (2013, January). *Clear learning goals in mathematics* [School-based professional development]. Dilworth Elementary, Salt Lake City School District, Salt Lake City, UT.
- Ference, S. & Honey, J. (2013, January). *Instructional time in mathematics* [School-based professional

development]. Lincoln Elementary, Salt Lake City School District, Salt Lake City, UT.  
FERENCE, S. (2012, August). *District resources for mathematics instruction* [Conference session]. Salt Lake City School District Professional Development Conference, Salt Lake City, UT.

## **CURRICULUM DEVELOPMENT:**

### **K-8 Curriculum Development**

Amplify Education, Inc.,

Curriculum Manager Mathematics Supplementals, 2022-2023

Emerald Education Inc.,

Grades 2-4 Skyline Mathematics Curriculum Mini Lessons for English Learners Writer, 2021-2022

Grade 3 Math Summer Elevation Curriculum Reviser, 2022

Grades 2-3 Math Summer Elevation Curriculum Lesson Selector, 2021

Grade 3 Skyline Mathematics Curriculum Primary Writer, 2019-2021

Grade 5 Skyline Mathematics Curriculum Primary Writer, 2020-2021

K-5 Skyline Mathematics Curriculum Scope and Sequence Reviewer, 2019-2021

Fairfax County Public Schools,

Grade 6 Assessment Item Writer, 2010-2012

Grade 6 Curriculum Writer, 2010

### **Higher Education Course Curriculum Development**

Southern Utah University, Elementary Mathematics Endorsement: Assessment and Intervention, 2023

Southern Utah University, Elementary Mathematics Specialist Endorsement: Curriculum, Instruction, and Assessment for Elementary Mathematics Leaders, 2023

Southern Utah University, Elementary Mathematics Specialist Endorsement: Elementary Mathematics Education Leadership for School Change, 2023

Southern Utah University, Elementary STEM Endorsement: STEM for Teaching K-6 Mathematics, 2023

Utah State Board of Education/SEDC (Southern Utah University & Utah Valley University), Elementary Mathematics Education Leadership for School Change, 2020-2023

Utah State Board of Education/SEDC (Southern Utah University & Utah Valley University), Curriculum, Instruction, and Assessment for Elementary Mathematics Leaders, 2019-2022

Salt Lake Community College, Transition to Teaching: Elementary Mathematics Methods, 2020-2021

Salt Lake City School District (Southern Utah University), Elementary Mathematics Endorsement: Assessment and Intervention, 2013-2016

## **GRANT MANAGEMENT:**

Utah State Board of Education, Early Learning Professional Learning, Approximate amount: \$4,000,000, 2020-2021

Utah State Board of Education, Enhancement for Accelerated Students Program, Approximate amount: \$3,500,000, 2018-2021

## **GRANT WRITING:**

Utah STEM Action Center, Professional Learning Grant

Hawthorn Academy, awarded 2023

Mountainville Academy, awarded 2023

Trailside Elementary, Alpine School District, awarded 2023  
Washington County School District, awarded 2023  
Utah STEM Action Center, Math Innovation Grant  
Mountainville Academy, awarded 2023

## **PROFESSIONAL LEARNING PARTICIPATION:**

Association of State Supervisors of Mathematics (ASSM) Annual Meeting, April 2017, San Antonio, TX; April 2018, Washington, DC; April 2019, Sandiego, CA; October 2020, virtual; September 2021, virtual; September 2022, Costa Mesa, CA; October 2023, Washington, DC  
National Council of Teachers of Mathematics (NCTM) Annual Conference, October 2023, Washington, DC  
National Council of Teachers of Mathematics (NCTM) Pre-Conference: The Math Pact: A Team Approach to Supporting All Students (Elementary), October 2023, Washington, DC  
Arizona Association of Teachers of Mathematics (AATM) Fall Conference, September 2023, virtual.  
Utah Coalition for Educational Technology (UCET) Annual Conference, 2018, 2022, 2023, Provo, UT; 2024, Salt Lake City, UT  
Utah Council of Teachers of Mathematics (UCTM) Annual Conference, 2013, Salt Lake City; 2015, Lehi, UT; 2016, Salt Lake City, UT; 2017, Ogden, UT; 2018, Draper, UT; 2022, Kaysville, UT; 2023, 2024, Provo, UT  
Early Mathematics Coaching Institute: Exploring the 8 Effective Practices for Teaching Mathematics, Utah State Board of Education & Dr. Mike Flynn, 2022-2023, Salt Lake City, UT & virtual  
LIT (Learning Innovation Team) Training. Utah State Board of Education Annual Training, 2021-2023, virtual  
State Mathematics Education Coordinating Committee (SMECC), Utah State Board of Education, 2017-2023, Salt Lake City, UT & virtual  
National Council of Supervisors of Mathematics (NCSM) Annual Conference, April 2017, San Antonio, TX; April 2018, Washington, DC; April 2019, Sandiego, CA; March 2020, virtual; September 2022, Anaheim, CA  
Tips and Tools for Professional Learning, Learning Forward Texas, April-May 2022, virtual  
Utah Council of Teachers of Mathematics (UCTM) Leadership Conference, 2015, Orem, UT; 2016, Salt Lake City, UT; 2018, Sandy, UT; 2022, West Jordan, UT  
Acadience Math Data Interpretation Workshop, Utah State Board of Education & Acadience Learning Inc., September 29, 2021, Salt Lake City, UT  
Curriculum Directors Meetings, Utah State Board of Education, 2017-2021, various locations  
State Collaborative on Assessment and Student Standards (SCASS) in Mathematics Triannual Conferences, Council of Chief State School Officers (CCSSO), 2017-2021, various locations  
Acadience Math Essential Workshop, Acadience Learning Inc., July 2020, virtual  
Acadience Math Data Interpretation Workshop, Acadience Learning Inc., July 2020, virtual  
Acadience Mentor Workshop, Acadience Learning Inc., July 2020, virtual  
Assessment Capable Learners, Utah State Board of Education, 2019-2020, Salt Lake City, UT  
Council of State Directors of Programs for the Gifted (CSDPG) Annual Meeting, 2017, Charlotte, NC; 2018, Minneapolis, MN; 2019, Albuquerque, NM; 2020, virtual  
Utah Association for Gifted Children (UAGC) Winter Symposium, February 2020, Salt Lake City, UT  
Presidential Awards for Excellence in Mathematics and Science Teaching State Coordinator Meeting, National Science Foundation, November 2017, January 2020, Washington, DC  
Universal Design for Learning (UDL) Training, Utah State Board of Education & CAST, January 2020, Cottonwood Heights, UT

National Association for Gifted Children (NAGC) Annual Conference, 2018, Minneapolis, MN; 2019, Albuquerque, NM

National Council of Teachers of Mathematics (NCTM) Regional Conference, October 2019, Salt Lake City, UT

Title I and Related State Initiatives Conference, Utah State Board of Education, August 2019, Salt Lake City, UT

Learning Forward Summer Institute, Learning Forward, July 2019, Boston, MA

Canvas Training, Utah State Board of Education, May 2019, Salt Lake City, UT

The Opportunity Myth, The New Teacher Project (TNTP), March 2019, Salt Lake City, UT

Peter Dewitt Coaching Institute on Cognitive Engagement, Utah State Board of Education & Peter Dewitt, October 2018, Salt Lake City, UT

Digital Teaching and Learning Summit, Utah State Board of Education, September 2018, Provo, UT

STEM Leadership Alliance Summit, The STEM Leadership Alliance, July 2018, Orlando, FL

West Ed, State Personnel Development Network (SPDG) Meeting, April 2018, Minneapolis, MN

Assessment to Achievement, Utah State Board of Education & Ed Direction, 2015-2016, Salt Lake City, UT

Academic Services Professional Development, Salt Lake City School District, 2012-2016, Salt Lake City, UT

Mathematics Coaches Meetings, Salt Lake City School District, 2012-2016, Salt Lake City, UT

Research and Development Conference: Preparing and Sustaining Successful Mathematics Coaching Programs, Virginia Mathematics Specialist Initiative, National Science Foundation, Brookhill Institute of Mathematics, Virginia Commonwealth University, Virginia Mathematics and Science Coalition, & Virginia Council of Mathematics, June 2016, Richmond, VA

Elementary Mathematics Specialists Research Conference, Association of Mathematics Teacher Educators & Brookhill Institute of Mathematics, May 2015, Milwaukee, WI

Association of Mathematics Teacher Educators Annual Conference, AMTE, 2015, February 2015, Orlando, FL

Culturally Conscious Coaching, EDEquity & Salt Lake City School District, 2013-2014, Salt Lake City, UT

Title I Instructional Coaching Institute: Language of Coaching, Utah State Board of Education, 2012-2013, Salt Lake City, UT

K-6 Mathematics Mini-Conference, Fairfax County Public Schools, January 2012, Fairfax County, VA

Elementary Mathematics Lead Teacher Meetings, Fairfax County Public Schools, 2010-2012, Fairfax County, VA

Teaching Advanced Mathematics, Fairfax County Public Schools, 2011-2012, Fairfax County, VA

Mathematics Vertical Articulation, Fairfax County Public Schools, December 2011, Fairfax County, VA

South County Pyramid Assessment Leaders: Seven Strategies of Assessment for Learning, Fairfax County Public Schools, 2010-2011, Fairfax County, VA

Elementary Mathematics Lead Teacher Course, Fairfax County Public Schools, September-December 2010, Fairfax County, VA

Kagan Cooperative Learning, Fairfax County Public Schools, February 2010, Fairfax County, VA

Building Lessons for the SmartBoard Interactive Whiteboard, Fairfax County Public Schools, September-November 2009, Fairfax County, VA

Comprehensive Mathematics Instruction (CMI), Brigham Young University & Nebo School District, Brockbank Elementary, 2007-2009, Spanish Fork, UT

Utah State Core Academy, Utah State Board of Education, July 2008, Springville, UT