

JOSEPH STEVEN KOZLOWSKI

Business Address:

Utah State University
Edith Bowen Laboratory School
6700 Old Main Hill
Logan, UT 84322
Email: joseph.kozlowski@usu.edu

Home Address:

332 East 300 South
Logan, UT 84341
(319)541-9992

EDUCATION

Ph.D. Utah State University; Spring 2022
Ph.D. in Education
Specialization: Curriculum and Instruction
Concentration: Mathematics Education and Leadership

Kozlowski, J. S. (2022). *Children's mathematical engagement based on their awareness of different coding toys' design features* (Publication No. 8420) [Doctoral dissertation, Utah State University].
<https://digitalcommons.usu.edu/etd/8420>

M.S. University of Wyoming; June 2018
Master of Science
Concentration: Middle Level Mathematics Education

B.S. University of Wyoming; May 2014
Bachelor of Elementary Education
Minor: Early Childhood Education
Wyoming State Endorsement PreK-6
Wyoming State Endorsement Early Childhood Education

EMPLOYMENT HISTORY

Utah State University

Elementary Teacher, Preservice Teacher Trainer, and Researcher (2021-present)

Edith Bowen Laboratory School

Three main roles of this position are providing high quality instruction to elementary students, mentoring and training future teachers who are enrolled in Utah State Universities Teacher Education and Leadership program, and engaging in and conducting educational research.

Teacher and Design Team Member (2023-Present).

NSF-Funded Position, Investigating Early Elementary Students' Computational Thinking Development in Integrated Mathematics-Coding Instruction. Award# DRL- 2300357. PIs: Jessica F. Shumway and Jody Clarke-Midura; College of Education and Human Services, Utah State University.

Responsibilities include working with an interdisciplinary team to: develop and teach curriculum, collect data, analyze data, write research papers, and inform the research project on the practicality of research methods and result implications.

Research Assistant (2019-2021).

NSF-Funded Position, Coding in Kindergarten Project. Award# DRL-1842116. PIs: Jody Clarke-Midura and Jessica Shumway, Utah State University; Victor Lee, Stanford University. College of Education and Human Services, Utah State University.

Research responsibilities include working with an interdisciplinary team and assisting with research tasks that include, but are not limited to: develop and teach curriculum, collect data (administer assessments, conduct clinical

interviews with students, and/or videotape teaching episodes), analyze data, write research papers, assist with professional development for teachers, prepare materials, and present at research conferences. Leadership roles on the research team include: serve as a mentor for undergraduate research assistants, manage the literature database, lead monthly team discussions about current literature, and coordinate teaching and observation schedules.

Adjunct Faculty (Spring 2019)

School of Teacher Education and Leadership.

College of Education and Human Services, Utah State University.

Teaching responsibilities include but are not limited to: plan, prepare, present, and assess lessons; organize practicum experiences; supervise practicum experiences. Instruct a mathematical methods course to develop pre-service teacher skills in mathematics education.

Research and Teaching Assistant (Fall 2018).

School of Teacher Education and Leadership.

College of Education and Human Services, Utah State University.

Teaching responsibilities include but are not limited to: plan, prepare, present, and assess lessons; organize practicum experiences; supervise practicum experiences. Instruct a mathematical methods course to develop pre-service teacher skills in mathematics education.

Research responsibilities include: assist supervising professor with any research-based tasks that include, but are not limited to: collect, organize, and code data; write reports; run statistical analysis; analyze emergent themes; interview research participants; and present at conferences.

Public School Teaching Experience

Elementary School Teacher, Grade 3, All subjects (2014-2018).

Sheridan County School District #1, Ranchester, Wyoming.

Teaching responsibilities include but are not limited to: plan lessons, present lessons, administer assessments, participate in Professional Learning Communities, conduct parent/teacher conferences, organize school activities, develop district curriculum (i.e., create common assessments, validate assessments, develop outcomes/components, construct proficiency scales).

Early Childhood Teaching Experience

Classroom Assistant Teacher, Ages 1-6, All subjects (2011-2014).

Basic Beginnings Early Childhood Education Center, Laramie, Wyoming

Teaching responsibilities include but are not limited to: plan lessons, present lessons, administer assessments. Further responsibilities include: communicate with parents, organize student portfolios, and assist with parent/teacher conference.

AWARDS & PROFESSIONAL RECOGNITION

- **Utah Mathematics Teacher of the Month** (April, 2023). Utah State Board of Education
- **Outstanding Doctoral Researcher Award** (2020). Department of Teacher Education and Leadership
- **Outstanding Graduate Student Reviewer Award** (2020). AERA SIG-RME
- **NSF Grant Funded Assistantship** (2019-2021). Utah State University
- **Department Level Graduate Research and Teaching Assistantship** (2018). Utah State University
- **Cowboy State Highly Effective Literacy Teacher** (2018). University of Wyoming
- **Anderson, Rex, and Florence Scholarship** (2016-2018). Science and Math Teaching Center, University of Wyoming
- **Sigrid See Scholarship** (2016-2018). Science and Math Teaching Center, University of Wyoming
- **Teacher of the Month** (2016). Sheridan County School District #1, Ranchester, WY

RESEARCH

Research Interests:

- Mathematical creativity
- Early childhood mathematical thinking in coding contexts
- Early childhood computational thinking

Research Projects:

Investigating Early Elementary Students' Computational Thinking Development in Integrated Mathematics-Coding Instruction. (2023-present). Utah State University (with lead PI - Jessica F. Shumway and Jody Clarke-Midura). My roles: working with an interdisciplinary team to develop and teach curriculum, collect data, analyze data, write research papers, and inform the research project on the practicality of research methods and result implications.

Coding in Kindergarten: An Exploratory Study of Coding Toys in Kindergarten Classrooms – NSF Grant-Funded Project. (2019-2023). Utah State University (with Lead PI – Jody Clarke-Midura, Utah State University; and Co-PIs – Jessica Shumway, Utah State University; Victor Lee, Stanford University). My role: develop and teach curriculum, collect data (administer assessments, conduct clinical interviews with students, and/or videotape teaching episodes), analyze data, write research papers, assist with professional development for teachers, prepare materials, and present at research conferences. Leadership roles on the research team include: serve as a mentor for an undergraduate research assistant, manage the literature database, lead monthly team discussions about current literature, and coordinate teaching and observation schedules.

Affordances of Virtual Manipulatives Grades 3-6. (2018-2021). Utah State University (with PI Dr. Patricia Moyer-Packenham and the Virtual Manipulatives Research Group). My role: conduct iPad-based interviews with participants; collect and code data; analyze data; author and co-author collaborative presentations and publications.

PUBLICATIONS

Journal Articles (Refereed)

1. **Kozlowski, J. S.**, Shumway, J. F., Moyer-Packenham, P., Clarke-Midura, J., & Lee, V. R. (Accepted, June 19th 2024). Children's mathematical engagement based on their awareness of coding toy design features. *Mathematical Thinking and Learning*.
2. **Kozlowski, J. S.**, & Ross, S. (2024). A new twist on an old friend: A partitive model for dividing fractions. *Utah Mathematics Teacher*, 16, 34-43. Available at <https://static1.squarespace.com/static/6091ab3dda83fe458b61dd44/t/65b90f2a3d7286103533232f/1706626870899/UCTM+Journal+2024.pdf>
3. Mecham, E., **Kozlowski, J. S.**, Messervy, F., Player, C., Lopez, J., Reina, L., & Justis, N. (2023). Onboarding experienced teachers in a new school. *Educational Research: Theory and Practice*, 34(3), 117-132.
4. Clarke-Midura, J., Lee, V. R., Shumway, J. F., Silvis, D., **Kozlowski, J. S.**, & Peterson, R. (2023). Designing formative assessments of early childhood computational thinking. *Early Childhood Research Quarterly*, 65(4), 68-80. <https://doi.org/10.1016/j.ecresq.2023.05.013>
5. Shumway, J. F., Welch, L. E., **Kozlowski, J. S.**, Clarke-Midura, J., & Lee, V. R. (2023). Kindergarten students' mathematics knowledge at work: the mathematics knowledge for programming robot toys. *Mathematical Thinking and Learning*. doi:1080/10986065.2021.1982666.
6. Moyer-Packenham, P. S., Roxburgh, A. L., Litster, K., & **Kozlowski, J. S.** (2021). Relationships between semiotic representations and mathematical outcomes in digital games. *Technology, Knowledge, and Learning*. <https://doi.org/10.1007/s10758-021-09506-5>
7. Clarke-Midura, J., Silvis, D., Shumway, J. S., Lee, V. R., & **Kozlowski J. S.** (2021). Integrated computational thinking and mathematical assessment for young children with coding robots. *Computer Science Education; Special Issue, Assessment of Computational Thinking*, 1-24. doi: 10.1080/08993408.2021.1877988

8. Clarke-Midura, J., **Kozlowski, J. S.**, Shumway, J. F., Lee, V. R., Silvis, D., & Welch, L. (2021). How young children engage in and shift between reference frames when playing with coding toys. *International Journal of Child-Computer Interaction*, 28(100250), 1-12. <https://doi.org/10.1016/j.ijcci.2021.100250>
9. **Kozlowski, J. S.**, Jenkins, J., & Baggaley, S. (2020). A math RTI structure to support equity and learning for all students. *Utah Mathematics Teacher*, 13, 33-49. Available at https://drive.google.com/file/d/1TSaQhgnbdjCDRnX8A1GzW8001KmfAes_/view
10. Moyer-Packenham, P. S., Ashby, M. J., Litster, K., Roxburgh, A. L., & **Kozlowski, J. S.** (2020). Examining how design features promote children's awareness of affordances in digital math games. *Journal of Computers in Mathematics and Science Teaching*, 39(2), 169-180.
11. **Kozlowski, J. S.**, & Chamberlin, S. A., (2019). Raising the bar for gifted students in mathematics through a creativity-based teaching approach. *Gifted and Talented International*, 33(1-2), doi: 10.1080/15332276.2019.1690954
12. **Kozlowski, J. S.**, & Si, Shouqing. (2019). Mathematical creativity: A vehicle to foster equity. *Thinking Skills and Creativity*, 33, 1-8, doi: 10.1016/j.tsc.2019.100579
13. **Kozlowski, J. S.**, Chamberlin, S. A., & Mann, E. L. (2019). Factors that influence mathematical creativity. *The Mathematics Enthusiast*, 16(26), 505-540. <https://scholarworks.umt.edu/tme/vol16/iss1/26>

Book Chapters (Refereed)

1. Shumway, J. F., Clarke-Midura, J., Lee, V. R., Silvis, D., Welch, L., & **Kozlowski, J. S.** (2022). Teaching coding in kindergarten: Supporting students' activity with robot coding toys. In T. Keane & A.E. Fluck (Eds.), *Teaching Coding K-12 Schools*, 23-38. Springer Cham. <https://doi.org/10.1007/978-3-031-21970-23>
2. **Kozlowski, J. S.**, & Chamberlin, S. A. (2022). Mathematical creativity research in the elementary grades (pp. 65-80). In M. Savic, P. Liljedahl, & S. Chamberlin (Eds.), *Mathematical Creativity: A Developmental Perspective*. Springer. In J. Cai, & J. A. Middleton (Series Eds.), *Research in Mathematics Education*.
3. **Kozlowski, J. S.**, & Chamberlin, S. A. (2020). Creativity-based mathematical instruction: Fostering a holistically creative mathematical environment. In S. A. Chamberlin & E. L. Mann (Eds.), *Creativity and Affect in Mathematics* (pp. 97-119). Prufrock Press
4. Moyer-Packenham, P. S., Litster, K., Roxburgh, A. L., **Kozlowski, J. S.**, & Ashby, M. J. (2019). Relationships between mathematical language, representation connections, and learning outcomes in digital games. In D. C. Gibson & M. N. Ochoa (Eds.), *Research highlights in technology and teacher education 2019* (pp. 55-64). Association for the Advancement of Computing in Education (AACE).

Conference Proceedings (Refereed)

1. Silvis, D., Lee, V. R., Clarke-Midura, J., Shumway, J., & **Kozlowski, J. S.** (2020, April). Blending Everyday Movement and Representational Infrastructure: An Interaction Analysis of Kindergarteners Coding Robot Routes. In Gresalfi, M. & Horn I. S. (Eds.), *The Interdisciplinarity of the Learning Sciences, International Conference for the Learning Sciences (ICLS) 2020*, Volume 1 (pp.98-105). Nashville, TN, United States: International Society of the Learning Sciences.

- Litster, K., Moyer-Packenham, P. S., Ashby, M. J., Roxburgh, A. L., & **Kozłowski, J. S.** (2019). Digital math games: Importance of strategy and perseverance on elementary children's learning opportunities. In K. Graziano (Ed.), *Proceedings of the Society for Information Technology and Teacher Education (SITE) International Conference* (pp. 2157-2162). Las Vegas, NV, United States: Association for the Advancement of Computing in Education (AACE).
- Moyer-Packenham, P. S., Ashby, M. J., Litster, K., Roxburgh, A. L., & **Kozłowski, J. S.** (2019). How design features promote children's awareness of affordances in digital math games. In K. Graziano (Ed.), *Proceedings of the Society for Information Technology and Teacher Education (SITE) International Conference* (pp. 2192-2200). Las Vegas, NV, United States: Association for the Advancement of Computing in Education (AACE).

Other Publications

- Kozłowski, J. S.** (2022). *Children's mathematical engagement based on their awareness of different coding toys' design features* (Publication No. 8420) [Doctoral dissertation, Utah State University]. <https://digitalcommons.usu.edu/etd/8420>
- Kozłowski, J. S.** (2022). Possibilities for coding robot toys to support early childhood mathematical creativity and giftedness. *International Group for Creativity and Giftedness, Newsletter 18, 27-34.*

Unpublished Manuscripts

- Kozłowski, J. S.**, Shumway, J. F., Moyer-Packenham, P., Clarke-Midura, J., & Lee, V. (April, 2024; Revise and Resubmit). Children's mathematical engagement based on their awareness of coding toy design features. *Mathematical Teaching and Learning*
- Kozłowski, J. S.**, Clarke-Midura, J., Shumway, J. F., & Lee, V. (In Development). One-to-One Correspondence Between Coding Robot Instructions and Spatial Movements. *Intended outlet; International Journal of Child-Computer Interaction*

GRANTS, CONTRACTS, & PRIVATE FUNDING

\$3,500. *Utah Child Outdoor Recreational Education* (2024). Utah Division of Outdoor Recreation. Funds to support the purchase of a class set of high-quality binoculars, as well as 5 sets for the local public library. These resources support a birding curriculum that has students studying, identifying, reading about, and using the world of birding as a context to integrate all school subjects.

\$700. *Teacher Classroom Grant.* (2023). Bridgerland Audubon Society. Funds used to purchase quality spotting scope for innovative birding curriculum to engage student in outdoor experiential learning opportunities.

\$1.5 Million. *Teacher and Design Team Member for Investigating Early Elementary Students' Computational Thinking Development in Integrated Mathematics-Coding Instruction.* (2023-present). National Science Foundation DRL#-2300357. Project Goal: (with lead PIs – Jessica F. Shumway and Jody Clarke-Midura; College of Education and Human Services, Utah State University).

\$1,000. *Disc Golf and Ultimate Frisbee Club.* Utah Department of Education. Engaging students in after-school social experiences through disc golf and ultimate frisbee. State funded allocations to get the startup equipment needed to start an after-school club.

\$1.6 Million. *Research Assistant for Coding in Kindergarten: An Exploratory Study of Coding Toys in Kindergarten Classrooms.* (2019-2022). National Science Foundation DRL#1842116. Project goal: Design and validate a computational thinking assessment for early childhood-aged students. To develop understanding of how early-childhood aged students learn mathematics and computational thinking skills through interaction with coding robots. (with Lead PI – Jody Clarke-Midura, Utah State University; and Co-PIs – Jessica Shumway, Utah State University; Victor Lee, Stanford University).

\$300. Travel Grant. (2021). Utah State University. Research and Graduate Studies. Presentation at Psychology of Mathematics Education – North America’s annual meeting (PME-NA). Philadelphia, PA

\$300. Travel Grant. (2021). Utah State University. School of Teacher Education and Leadership (TEAL). Presentation at Psychology of Mathematics Education – North America’s annual meeting (PME-NA). Philadelphia, PA

\$300. Travel Grant. (2020). Utah State University. Research and Graduate Studies. Presentations at American Educational Research Associations annual meeting (AERA). San Francisco, CA.

\$300. Travel Grant. (2020). Utah State University. School of Teacher Education and Leadership (TEAL). Presentations at American Educational Research Associations annual meeting (AERA). San Francisco, CA.

\$300. Travel Grant. (2018). Utah State University. Research and Graduate Studies. Presentation at National Association of Gifted Children (NAGC). Minneapolis, MN.

\$300. Travel Grant. (2018). Utah State University. School of Teacher Education and Leadership (TEAL). Presentation at National Association of Gifted Children (NAGC). Minneapolis, MN.

\$1,000. Newcomb Grant. (2015). University of Wyoming. College of Education. Project goal: Further development of educator knowledge and pedagogic skill.

Proposals Submitted

UNIVERSITY TEACHING

Utah State University, Logan, Utah – 2 semesters; (2018-2019). College of Education and Human Services

Courses Taught – Utah State University

ELED 4062 – Teaching Elementary School Mathematics II: Number, Operations, and Algebraic Reasoning Undergraduate course. Development of pedagogical content knowledge in number, operations, and algebraic reasoning for teaching grades preschool to grade 6. Methods for designing and implementing mathematics instruction, assessment, remediation, and intervention will be applied in a field-based placement. Face-to-Face Course combined with Practicum In-school Supervision.

- IDEA Course Evaluation Scores: 2018 (63, top 20% of university instructors); 2019 (65, top 10% of university of instructors).

Guest Lecturer

Guest Lecture on Elementary Data Use, ELED 4062 Mathematics Methods (2021, April). For Dr. Jessica Shumway, Utah State University

Guest Lecture on Elementary Data Use, ELED 4062 Mathematics Methods (2021, April). For Dr. Beth MacDonald, Utah State University

Guest Lecture on Measurement and Data, ELED 4062 Mathematics Methods (2020, December). For Dr. Jessica Shumway, Utah State University

Guest Lecture on Place Value and Place Value Manipulatives, ELED 4062 Mathematics Methods (2020, January). For Dr. Jessica Shumway, Utah State University

Guest Lecture on Coding Robots for Integrating Mathematics and Computational Thinking, ELED 4062 Mathematics Methods (2019, November). For Dr. Jessica Shumway, Utah State University

Guest Lecture on Coding Robots for Integrating Mathematics and Computational Thinking, ELED 4062 Mathematics Methods (2019, October). For Rachel Reeder, Utah State University

PRESENTATIONS

International and National Presentations – Scholarship

National Council of Teachers of Mathematics – (NCTM)

Kozłowski, J. S., Nix, L. (October 27, 2023). *Using Screen-Free Coding Robots as a Learning Tool to Teach Early Childhood Mathematics*. [Workshop Presentation]. National Council for Teachers of Mathematics (NCTM), Washington DC.

International Society for the Learning Sciences – (ISLS)

Welch, L. E., Silvis, D., Clarke-Midura, J., D., Shumway, J. F., **Kozłowski, J. S.**, & Lee, V. R. (2022, June 6-10). *Assessment Designs that Elicit Multimodal Strategies: What We Can Learn about Early Childhood CT by Design*. [Poster Session]. The International Society for the Learning Sciences (ISLS), Hiroshima, Japan.

International Group for Mathematical Creativity and Giftedness Conference– (IGMCG)

Chamberlin, S. A., Payne, A., & **Kozłowski, J. S.** (2022, September 25-28). *The Five Legs of Creativity*. [Research Report]. 12th International Group for Mathematical Creativity and Giftedness Conference (IGMCG), Las Vegas, NV.

Psychology of Mathematics Education – North America (PME-NA)

Kozłowski, J. S., Shumway, J. F., Clarke-Midura, J., & Lee, V. (2021, October 15-17). *Eliciting kindergarten students' mathematics with a coding toy: A pilot study on design features* [Poster presentation]. 43rd Annual Conference for Psychology of Mathematics Education – North America (PME-NA), Philadelphia, PA.

American Education Research Association (AERA)

Welch, L. E., **Kozłowski, J. S.**, Silvis, D., Clarke-Midura, J., D., Shumway, J. F., & Lee, V. R. (2022, April 21-26). *Identifying Kindergarten Students' Strategies as they Solve Computational Thinking Performance Assessment Tasks*. [Paper Session]. Annual Meeting of the American Educational Research Association (AERA), San Diego, CA.

Clarke-Midura, J. E., **Kozłowski, J. S.**, Shumway, J. G., Evans, H., Lee, V. R., & Welch, L. E. (2020, April 17-21) *Perspectives and Shifts of Young Children Playing with Coding Toys* [Paper Session]. AERA Annual Meeting San Francisco, CA. <http://tinyurl.com/rkhhbka> (Conference Canceled)

Lee, V. R., Clarke-Midura, J. E., Shumway, J. F., **Kozłowski, J.**, Welch, L. E. & Evans, H. (2020, Apr 17 - 21) *Capturing Kindergarteners' Computational Thinking Through Commercial Toy-Centered Task and Assessment Development* [Symposium]. AERA Annual Meeting San Francisco, CA. <http://tinyurl.com/yx2wzh53> (Conference Canceled)

Shumway, J. F., Clarke-Midura, J. E., Lee, V. R., Welch, L. E., **Kozłowski, J.** & Evans, H. (2020, Apr 17 - 21) *Identifying the Mathematics in Kindergarteners' Play with Coding Toys* [Paper Session]. AERA Annual Meeting San Francisco, CA. <http://tinyurl.com/shh4hle> (Conference Canceled)

Moyer-Packenham, P. S., Roxburgh, A. L., Litster, K. & **Kozłowski, J.** (2020, Apr 17 - 21) *Students Connections Among Semiotic Representations in Digital Games and Their Impact on Mathematics Learning* [Paper Session]. AERA Annual Meeting San Francisco, CA. <http://tinyurl.com/t6bxst7> (Conference Canceled)

School Science and Mathematics Association (SSMA)

Moyer-Packenham, P., Roxburgh, A. L., & **Kozłowski, J. S.** (November 2019). *Students' Uses of Mathematical Representations and Their Learning Outcomes in Digital Games*. Research Presentation, School Science and Mathematics Association National Convention (SSMA), Salt Lake City, Utah.

Shumway, J. F., Clarke-Midura, J., **Kozłowski, J. S.**, Welch, L. E., & Evans, H. (November 2019). *Coding and Math: Playing with Screen-Free Robots to Develop Spatial and Measurement Reasoning*. Workshop Presentation, School Science and Mathematics Association National Convention (SSMA), Salt Lake City, Utah.

Clarke-Midura, J., Shumway, J. F., Welch, L. E., **Kozlowski, J. S.**, & Evans, H. (November 2019). *Integrated STEM: Using Coding Toys in Kindergarten Mathematics Lessons*. Presentation, School Science and Mathematics Association National Convention (SSMA), Salt Lake City, Utah.

National Association for Gifted Children (NAGC)

Chamberlin, S. A., & **Kozlowski, J. S.**, Payne, A. (2021, November). *The relationship between creativity and affect in mathematics*. Research Presentation, 68th Annual Convention of the National Association for Gifted Children (NAGC), Aurora, CO.

Chamberlin, S. A., & **Kozlowski, J. S.** (2018, November). *What can be done to facilitate creativity in elementary mathematics classrooms?* Research Presentation, 65th Annual Convention of the National Association for Gifted Children (NAGC), Minneapolis, MN.

Society for Information Technology and Teacher Education (SITE)

Litster, K., Moyer-Packenham, P. S., Ashby, M. J., Roxburgh, A. L., & **Kozlowski, J. S.** (2019, March). *Digital Math Games: Importance of Strategy and Perseverance on Elementary Children's Learning Opportunities*. Research Paper Presentation, Society for Information Technology and Teacher Education (SITE), Las Vegas, NV.

Moyer-Packenham, P. S., Ashby, M. J., Litster, K., Roxburgh, A. L., & **Kozlowski, J. S.** (2019, March). *How Design Features Promote Children's awareness of Affordances in Digital Math Games*. Research Paper Presentation, Society for Information Technology and Teacher Education (SITE), Las Vegas, NV.

Moyer-Packenham, P. S., Litster, K., Roxburgh, A. L., **Kozlowski, J. S.**, & Ashby, M. J. (2019, March). *Relationships between Mathematical Language, Representation Connections, and Learning Outcomes in Digital Games*. Research Paper Presentation, Society for Information Technology and Teacher Education (SITE), Las Vegas, NV.

NSF, STEM+C PI Assembly

Clarke-Midura, J., Shumway, F. J., Lee, R. V., Silvis, D., **Kozlowski, J. S.**, Welch, L., Evans, H., & Peterson, R. (2019, October). *Coding in kindergarten: Research on the development of an assessment to measure kindergarten children's abilities to reason computationally with mathematical problem-solving skills*. Poster Presentation, National Science Foundation, STEM+C PI Assembly, Washington, DC.

State & Regional Presentations

UtahLEARNS Conference

Kozlowski, J. S. (June, 2024). *Birding: An Integrated Approach to Teaching Early Literacy*. [Practitioner Report]. UtahLEARNS Conference hosted at Edith Bowen Laboratory School. Logan, UT.

Placed-Based Symposium hosted by Teton Science School

Larsen, L., Rhodes, S., **Kozlowski, J. S.**, & Newell, E. (April, 2022). *Developing a Place-Based Program for Early Childhood Classrooms*. [Practitioner Report]. Place-Based Symposium hosted by Teton Science School. Jackson, WY.

NCTM Regional

Kozlowski, J. S., Nix, L. (2024, February). *Teaching Early Childhood Math with Coding Toys*. [Workshop Presentation]. Utah Council for Teachers of Mathematics (UCTM), Provo, UT.

Welsh-Bond, L., Beck., K., Basham, M., **Kozlowski, J. S.**, & Shumway, J. F. (2023, January). *Math and Coding Connections in Elementary*. Workshop Presentation. Utah Council for Teachers of Mathematics (UCTM), Provo, UT.

Kozlowski, J. S., Shumway, J. F., & Roxburgh, A. L. (2019, October). *How Do I Make My Textbook Lessons More Inquiry-Oriented? Some Simple Adaptations*. Burst Presentation, National Council for Teachers for Mathematics (NCTM), Salt Lake City, UT.

Roxburgh, A. L., & **Kozlowski, J. S.** (2019, October). *Fostering Mathematical Discourse Through Inquiry-Based Tasks*. Burst Presentation, National Council for Teachers for Mathematics (NCTM), Salt Lake City, UT.

Wyoming Innovations in Learning

Kozlowski, J. S., & Ross, S. (2020, November). *Creative Mathematical Journaling for Student Success*. Teaching Method Presentation. 4th Annual Wyoming Innovations in Learning. Wyoming State Office of Education. Online Conference.

Kozlowski, J. S., & Hayward, M. C. (2018, November). *Innovating Methods to Teach Conceptual Mathematics*. Teaching Method Presentation. 2nd Annual Wyoming Innovations in Learning. Wyoming State Office of Education. Evanston, WY.

Utah State University Research Symposium

*Nix, L., & **Kozlowski, J. S.** (2022, April). *2nd Grader Being Creative with an Open-Ended Coding Robot Geometrical Math Task*. Oral Presentation, Utah State Research Symposium, Logan, UT.

Kozlowski, J. S., Welch, L. E., & Evans, H. Mentors: Shumway, J. F., Clarke-Midura, J., & Lee, V. R. (2019, April). *An Exploration of Kindergarten Students' Use of Perspective and Computational Thinking*. Oral Presentation, Utah State Research Symposium, Logan, UT.

Welch, L. E., **Kozlowski, J. S.**, & Evans, H. Mentors: Shumway, J. F., Clarke-Midura, J., & Lee, V. R (2019, April). *Coding to Develop Early Mathematical and Computational Thinking in Kindergarten: A Case Study*. Oral Presentation, Utah State Research Symposium, Logan, UT.

University of Wyoming College of Education Research Symposium

Kozlowski, J. S., & Chamberlin, S. A. (2018, March). *Factors that Influence Creative Output in Mathematical Problem-Solving Episodes*. Research Paper Presentation. College of Education Research Symposium. Laramie, WY.

Proposals Submitted

Kozlowski, J. S., Ross, S. (Accepted, January, 2024). *A New Twist on an Old Friend: Partitive Model for Dividing Fractions* [Workshop Presentation]. Utah Council for Teachers of Mathematics (UCTM), Provo, UT.

PROFESSIONAL SERVICE – INSTITUTIONAL

Institutional Service – University Level Utah State University

Founder/President, Utah State Students for Life, USUSA Club (2019-2021)

Founded a USUSA sponsored club and acted as the first president. Founding the club involved recruiting members; drafting a mission and constitution; coordinating with the university-, state-, and national-level stakeholders for support; fundraising; organizing events; and leading and guiding the club with a shared mission.

Student Mock Job interviewer, Aggies Elevated (2020)

Served as a mock job interviewer for students in the USU Aggies Elevated program. This helped the students get feedback on their interviewing skills, their application materials, and their communication skills.

Volunteer, USU Food Recovery Program (2019-2020)

Supported this program through various roles including picking up leftover food from various on-campus dining services and sorting and organizing the food to make available to individuals who needed it.

**Institutional Service – College Level
College of Education, University of Wyoming**

Mentor Teacher (2017-Present)

Served as a full-time mentor teacher to provide guidance, instruction, and feedback on pedagogic skills.

Alyssa Brown – 2018

Kylie Wilcox – 2021

Lauren Nix – 2022

Karley Ralphs – 2022

Kaitlyn Anderson – 2023

McKenzie Griffin – 2023

Kristle Jensen - 2024

Institutional Service – National Level

National Public Radio (NPR); Utah Public Radio (UPR); Radio Segments

Bi-Monthly Wild About Utah Radio Segments on Outdoor Education

Segments archived at <https://wildaboututah.org/?s=joseph+kozlowski>.

Segment titles: Mundane to Magical; Antler Math and Memories; Slow Down, Paddle Backwards! An Educators Reflection on Instructional Style; Mallard Musings; Learning Through Birding; Frisbee Fun; Winter Wonders of Utah; An Ice Fishing Learning Journey.

Journal Reviewer Mentoring Program

Journal for Research in Mathematics Education (JRME; 2020-Present)

Selected from a large applicant pool of doctoral candidates to work with a veteran reviewer for JRME to co-review manuscripts in order to support the development of high-quality journal reviewers for mathematics education research.

Conference Submissions Reviewer

American Education Research Association – Awarded Outstanding Graduate Student Reviewer (AERA; 2020)

Served as a presentation submission reviewer. Synthesize, critique, and offer recommendations for revisions for proposal submissions.

Peer Reviewed Journals

Journal for Research in Mathematics Education (JRME; 2020-2021) – 2 manuscripts

Served as an article reviewer. Synthesize, critique, and offer recommendations for revisions of this peer reviewed journal.

Creativity Research Journal (CRJ; 2021) – 1 manuscript

Served as an article reviewer. Synthesize, critique, and offer recommendations for revisions of this peer reviewed journal.

Gifted and Talented International (GTI; 2021) – 1 manuscript

Served as an article reviewer. Synthesize, critique, and offer recommendations for revisions of this peer reviewed journal.

Journal of Empowering Teaching Excellence (JETE; 2019-2020) – 2 manuscripts

Served as an article reviewer. Synthesize, critique, and offer recommendations for revisions of this peer reviewed journal.

International Journal of Evaluation and Research in Education (IJERE; 2019) – 1 manuscript

Served as an article reviewer. Synthesize, critique, and offer recommendations for revisions of this peer reviewed journal.

Journal on Mathematics Education (JME; 2019) – 1 manuscript

Served as an article reviewer. Synthesize, critique, and offer recommendations for revisions of this peer reviewed journal.

Utah Council of Teachers of Mathematics Journal (2023) – 2 manuscripts

Served as an article reviewer. Synthesize, critique, and offer recommendations for revisions of this peer reviewed journal.

**Institutional Service – Public School Systems
Tongue River Elementary, Sheridan County School District #1**

Mathematics Professional Development (2015-2016)

Provided professional development to colleagues, centered on hands-on mathematics instruction. The 2-hour district day sessions involved embedding manipulatives into mathematics instruction for various ages of students.

John Oliver’s ABC’s of Life Staff Development (2018)

Introduced new staff members to the Self-Control module of the John Oliver’s classroom management program. New staff who were learning how to implement this session as well as veteran teachers reviewing the protocol attended.

Edith Bowen Laboratory School, Utah State University

Mathematics RTI Program Evaluator and Advisor (2019-2021)

Collaborated with 6th grade teachers, instructional specialists, special education specialists, and administration team to develop new mathematics pedagogy structure to meet academic goals of all students and of school. The 6th-grade team and myself published an article based on this work together.

PROFESSIONAL AFFILIATIONS & LEADERSHIP ROLES

State of Utah

Special Leadership Consultant Assignment

Utah Council of Teacher of Mathematics Board Member, Leadership Committee. (2020)

Edith Bowen Laboratory School

Disc Golf and Ultimate Club Coordinator (2021-present)

Founded this club for 3rd-6th grade students at Edith Bowen Laboratory School. Taught approximately 50 students every session how to play the two sports, partnered with local organizations (Cache Valley Ultimate), recruited members, and acquired a \$1,000 start up grant from the Utah Department of Education.

Sheridan County School District #1

Adventure Club Coordinator (2017-2018)

Coordinated with stakeholders to fundraise for, plan, recruit students and teachers, and implement single-day and multi-day experiential learning trips with the 3rd-5th-grade elementary school students. These trips included extensive planning to ensure trips related students’ experiences to learning. Some trips included: Buffalo Bill Center of the West Museum and river rafting on the Shoshone River in Cody, WY; History at Devil’s Tower and Mt. Rushmore, Black Hills, SD; and Wyoming History and Dog Sled Races, Casper, WY.

Adventure Club Co-Coordinator (2016-2017)

Assisted the principal (Deb Hofmeier) in all activities listed under *Adventure Club Coordinator*.

Head Wrestling Coach (2016-2018)

Recruited athletes, planned and facilitated practices, organized trips, and managed team finances. Throughout my tenure as head coach, the program increased from 7 to 18 athletes. We were a new team in the state, and we became

affiliated with a district. We greatly improved our team standing in district rankings during my coaching tenure. Most importantly, our student athletes found individual success both in their academics and in their competitions.

Assistant Wrestling Coach (2015-2016)

Assisted the head wrestling coach with all activities listed under *Head Wrestling Coach*.

Memberships

American Education Research Association (AERA)

School Science and Mathematics Association (SSMA)

National Association for Gifted Children (NAGC)

Utah Council of Teachers of Mathematics (UCTM)

SPECIAL TRAININGS & CERTIFICATIONS

Research on Early Mathematics Assessment - REMA (2019)

Trained and certified with the extensive REMA. Underwent a two-day training and passed an administration-based examination to certify as an assessor.

Successful Grant Writing Workshop – AtKisson Training Group (2019)

The one-day extensive workshop detailed successful grant writing techniques with a focus on large scale grants (e.g., NFS, IES, NIH)