00-2001). oo School District, l	ayson, Utah		

difference in the way children interact with the design features depending on the available platform and how do these

The Effects of Student Literature Review Research on Preservice El Procedural Knowledge. (2018-2019). Principal Investigator. This action research project evaluates the impact of a student literature review research project as part of a freshman Math 1384 course on preservice elementary

Making Sense of Division of Fractions: What Affords Understanding among Undergraduate Pre-Service Elementary Teachers? (2018-2019). Co-Principal Investigator. This action research project explores an intervention for teaching the justification for the invert-and-multiply rule for scenario through the lens of Affordance Theory.

Learning of Definite Integrals. (2018-2019). Co-Principal Investigator. This action research project explores the features of GeoGebra which are intended to afford understanding of definite integral concepts in a university fundamentals of calculus course for pre-service middle school teachers.

MATH 4367 Evolutions in Mathematics. Students are introduced to the historical development of fundamental mathematical ideas from antiquity to the present. Writing Enhanced.

MATH 3381 Foundations for Mathematics for Elementary Teachers (III). This course is the third in a series of courses designed to develop the necessary foundations in mathematics for prospective elementary teachers. Students are expected to practice communications skills and participate in hands-on activities, including the use of math manipulatives and technology. Topics include National and Texas standards for teaching mathematics, problem solving, discrete mathematics, probability, and data analysis. Throughout the course, the four main themes recommended by the NCTM Principles and Standards (problem solving, reasoning, communication, and connections) are emphasized.

MATH 3377 Introduction to Linear Algebra and Matrices. Topics include solving systems of linear equations, fundamental matrix theory (invertibility theorems, determinants), eigenvectors, and properties of linear transformations. Remaining topics are chosen from: Properties of general vector spaces, inner product spaces, and/or diagonalization of symmetric matrices.

MATH 2385 Fundamentals of Calculus. This course introduces

which included homework hel Arts (MA) in M	Concepts in Probability and Statistics. arse in an online format, used feedback to create completely online course containing 15 modules divideo presentations, slides, readings, learning activities, solutions to worked out problems, discussion, p and assessments. Available Spring 2019 Mathematics degree program. This course includes topics from probability theory, distribution criptive statistics, and inferential statistics.
MATH 5360	Concepts in Linear Algebra. This second course in Linear Algebra includes topics such as vector

GRANTS FUNDED (Over \$211,000 Doll

Division A Senior Graduate Representative (AERA) (\$1800). <i>AERA 2017 Annual Meeting and Central Committee Meeting Travel Funding Stipend.</i> (2016-17) American Educational Research Association (AERA).							
Division A Junior Graduate Representative (AERA) (\$800). AERA 2016 Annual Meeting Travel Funding Stipend.							
Page 13 - CV	Z Emma Bullock						
	Ziiiii Ziiiii Ziiii Ziiiii Ziiii Ziiii Ziiii Ziiii Ziiii Ziiii Ziiii Ziiii Ziii Ziiii Ziii						

- 7. **Bullock, E. P.** (2016, July). Preliminary Results of an Explanatory Sequential Mixed Methods Study of the Mathematics Achievement Through the Lens of Chaos and Complexity Theory. 25th Annual International Society for Chaos Theory in Psychology & Life Sciences (SCTPLS), Salt Lake City, Utah.
- 8. Moyer-Packenham, P. S., Shumway, J. F., **Bullock, E.**, Anderson-Pence, K., Tucker, S. I., Westenskow, A., Boyer-Thurgood, J., Gulkilik H., Watts, C. M., & Jordan, K., The Virtual Manipulatives Research Group at Utah State University. (2016, July). *Using Virtual Manipulatives on IPads to Promote Young Childre*

28. Moyer-Packenham, P. S., Shumway, J., Tucker, S., Boyer-Thurgood, J., Hunt, J., & **Bullock, E**. (2014, April).

. Paper Presentation, National Council of Teachers of Mathematics (NCTM) Research Conference, New Orleans, Louisiana.

State & Regional Presentations

- 1. **Bullock, E.P.** (2022, February). *Do MORE than Just Finish: How to Thrive During the Dissertation Process and Write a Well-Funded, Award-Winning Dissertation that Propels You into A Sustainable Research Agenda and Career.* Paid Workshop Session. Southwest Educational Research Association (SERA) Annual Meeting. New Orleans, LA.
- 2. **Bullock, E.P.,** Choquette, J., Morales, E. (2022, February). *Ranking Design Features of Commercially Available 6th-8th grade Digital Math Games: Ongoing Preliminary Results*. Paper Session. Southwest Educational Research Association (SERA) Annual Conference. New Orleans, LA.
- 3. **Bullock, E.P.,** Ray, A., Herron, J., Cory, B. (2022, February). *PHiSMAOS: Promoting Higher Mathematics Achievement in Online Settings.* Paper Session. Southwest Educational Research Association (SERA) Annual Conference. New Orleans, LA.
- 4. **Bullock, E.P.**, (2021, December). *The Linguistic Challenges of Writing (or Selecting) Reliable Contextualized Word Problems in School Settings*. Workshop Session. Conference for the Advancement of Mathematics Teaching (CAMT). Online.
- Bullock, E.P., Cory, B., & Herron, J. (2021, September). Promoting Higher Mathematics Achievement in Online Settings: Introducing the PHiSMAOS Conceptual Framework. Research Session. Association for Mathematics Teacher Educators-Texas (AMTE-TX) Annual Meeting. Online.
- 6. **Bullock, E.P.**, (2021, August). *Grading for Growth While Promoting Higher Student Mathematics Achievement in Online Settings*. Regular Session. 18th Annual SHSU Teaching and Learning Conference, Huntsville, TX.
- 7. **Bullock, E.P.** (2021, June). *Strategies for Success When Teaching Math in a Digital Environment.* Grassroots Webinar Session. Texas State University System (TSUS) Faculty Development Day for Digital Education. Online.
- 8. **Bullock, E.P.** (2021, February). *Do MORE than Just Finish: How to Thrive During the Dissertation Process and Write a Well-Funded, Award-Winning Dissertation that Propels You into A Sustainable Research Agenda and Career.* Paid Workshop Session. Southwest Educational Research Association (SERA) Annual Meeting. Online.
- 9. **Bullock, E.P.**, Choquette, J., McCormick, P., Goodman, R. (2021, February). *Ranking Design Features of Commercially Available 6th-8th Grade Digital Math Games: Preliminary Results of a Pilot Study*. Paper Session. Southwest Educational Research Association (SERA) Annual Meeting. Online.
- 10. **Bullock, E. P.** (2020, August). *Grading for Growth: A Pragmatic Approach to Increasing Student Success and Teacher Satisfaction*. 17th Annual SHSU Teaching and Learning Conference, Huntsville, TX.
- 11. Webster, J. S. and **Bullock, E.P.** (2020, February). Affording Conceptual Understanding of Definite Integrals: A Paper Session. Southeast Educational Research Association (SERA) Annual Meeting. Arlington, TX.
- 12. **Bullock, E.P.** (2019, September). *Implementing Research Projects in Freshman Preservice Teacher Mathematics Courses: A Practical Guide. Workshop Session.* Association for Mathematics Teacher Educators-Texas (AMTE-TX) Annual Meeting. Waco, TX.
- 13. Van Raalte, L., **Bullock, E. P.**, Doleshal, Z., Pecan, R. (2019, August). *Evaluating High Impact Research Assignments for Undergraduates: Incorporating Research in Freshman/Sophomore Classes*. 16th Annual SHSU Teaching and Learning Conference, Huntsville, TX.

- 14. **Bullock, E.P.** and Swarthout, M. B. (2019, July). *Affording a Transparent Justification for the Invert-and-Multiply Procedure of Division of Fractions Among Pre-Service Teachers*. Workshop Session. Conference for the Advancement of Mathematics Teaching (CAMT), San Antonio, TX.
- 15. **Bullock, E.P.** (2019, February). *The Role of School Leaders in Student Mathematics Achievement: An Argument for Random Forests and Variable Importance Plots.* Paper Session. Southeast Educational Research Association (SERA) Annual Meeting, San Antonio, Texas, USA.
- 16. Van Raalte, L., Pecen, R., **Bullock, E.P.**, Murfin, A. (2018, August). *Incorporating High Impact Research for Undergraduates: A First Introduction to the Research Process for Novice Students*. Workshop Presentation. Sam Houston State University (SHSU) Teaching & Learning Conference, Huntsville, TX.
- 17. **Bullock, E.P.** (2018, February). *Touch-Screen Math Apps.* Paper Session. Southwest Educational Research Association (SERA) Annual Meeting, New Orleans, LA.
- 18. **Bullock, E.P.** (2016, November). *Addressing the Standards Equitably in a Multi-Grade Expeditionary Setting*. Workshop Presentation. The Utah Council of Teachers of Mathematics (UCTM) Annual Conference, Salt Lake City area, Utah.
- 19. **Bullock, E. P.** (2016, June). *Effective Teaching with Technology: Managing Affordances in iPad Apps to* 10th Annual Utah Association of Public Charter Schools (UAPCS) Conference, Layton, Utah.
- 20. **Bullock, E.P.** (2016, June). *Teaching Algebraic Reasoning Through the Criteria for Representation-Based Proof.* 10th Annual Utah Association of Public Charter Schools (UAPCS) Conference, Layton, Utah.
- 21. **Bullock, E.P** & Kidd, J. (2015, Nov.). *Mathematics Pedagogical Content Knowledge Through Action Research Results so Far*, Workshop Presentation, Utah Council of Teachers of Mathematics Annual State Conference (UCTM), Lehi, Utah.
- 22. **Bullock, E.P**. and Kidd, J. (2015, June).

 Content Knowledge Through Saxon Math and Action Research in the Classroom, Workshop Presentation, Utah Association of Public Charter Schools (UAPCS) Annual Conference, Provo, Utah.
- 23. hi, Utah.

28.	28. Bullock, E.P. and Fountaine, C. (2008, June). <i>Ability Grouping: The Good, the Bad, and the Ugly: Mathematics Ability Grouping at Mountainville Academy: A Case Study</i> , Workshop Presentation, Utah Association of Public Charter Schools (UAPCS) Annual State Conference, Provo, Utah.								
	Professional Presentations Panels								
1.	Panelist, (2019, August). New Faculty Investment (NFI). Sam Houston State								
	Page 20 CV Emma Bullock								

Elif Bektas (2017-present); Sam Houston State Univ Concepts: The Role of GeoGebra Features in Studen	ersity, Rese at Learning of	arch Pr of Defir	ojects: Affor nite Integral	ding Under s, Making S	rstanding o Sense of Div	f Calculus vision of
	Page 22	CV	Emma Bulloc	rk		

(2014-2017) Achievement Committee) Help oversee the fidelity of charter implementation,

ensure fiscal responsibly, practice sound governance, and ensure adherence to laws and charter requirements regarding employees, students, and the school

environment. P

organizationally stable. Chair: Academic Excellence Committee

Committee Member (2013-2014)

Utah State Office of Education Policy Advisory Committee on Assessment. Represent Utah Public Charter Schools at state meetings. Collaborate with traditional public-school representatives, state office representatives, and political representatives in the development and implementation of state-wide assessment systems. Meet monthly, or as needed to advise on state standardized assessment needs and/or changes.

PROFESSIONAL SERVICE INTITUTIONAL

SAM HOUSTON STATE UNIVERSITY Institutional Service University Level

Search Committees

 Search Committee Member: Mathematics Education Faculty, Mathematics and Statistics Department, College of Science and Engineering (COSET) (2019-2020).

Guest Lectures

- Guest Lecture, EDPY 604 Mixed Methods Approaches to Educational Research (2021, February). For Cheryl Poth, Professor, Department of Educational Psychology, University of Alberta, Edmonton.
- Guest Lecture, EDPY 604 Mixed Methods Approaches to Educational Research (2020, January). For Cheryl Poth, Professor, Department of Educational Psychology, University of Alberta, Edmonton.
- Guest Lecture, EDPY 604 Mixed Methods Approaches to Educational Research (2019, January). For Cheryl Poth, Professor, Department of Educational Psychology, University of Alberta, Edmonton.

Institutional Service College/Department Level College of Science and Technology (COSET)

Graduate Coordinator, MA in Mathematics Program (2019-present)

Responsibilities include directing the MA in Mathematics Program, which include 36 hours of coursework, a graduate research capstone project, and a comprehensive oral examination; marketing the programs and recruiting students to the programs; advising graduate students; and direct oversight for course development and program evaluation and assessment.

Committee Membership

- COSET Assessment Advisory Group Member (2021-present)
- COSET Diversity, Equity, and Inclusion Committee Member (2020-present)
- Policy Committee Member: Mathematics and Statistics Department (2019-present).

Guest Lectures

 Guest Lecture, ANMLTEC 3131T Equine Nutrition and Feeding (2018, September). For Jessica Bedore, Assistant Professor, Department of Agricultural Sciences

PROFESSIONAL AFFILIATIONS & LEADERSHIP ROLES

- LaTek
- Wolfram Mathematica

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- GeoGebra
- Desmos
- R