

**Southwest  
Educational  
Research  
Association**



**46<sup>th</sup> Annual Meeting**

**February 15-17, 2023**

**Menger Hotel, San Antonio, TX**

THE HISTORIC  
**MENGER**  
 HOTEL

BONHAM ST. / CROCKETT ST.

ALAMO PLAZA



THE SHOPS OF THE MENGER

ALAMO PLAZA ENTRANCE

LOBBY PLAZA (Ground Floor)

SHOPS AT RIVERCENTER

**Southwest Educational  
Research Association**

**[www.sera-edresearch.org](http://www.sera-edresearch.org)**



**2023 Annual Meeting  
Program and Abstracts**

# Menger Hotel, San Antonio, TX

## February 15-17, 2023

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# SERA Foundation

As part of the celebration of SERA's 20th anniversary, the Executive Council invited all members to contribute to the Memorial Fund's 20/20 Vision (now called the SERA Foundation) by contributing \$20.00 to the fund during the association's 20th year. This fund has been designated as a resource for providing services to the membership, with priority given to the needs of graduate student members.

To maximize the long-term potential for the fund, the Executive Council took the position that a substantial fund be established so that "interest-only" disbursements may be made from the fund without depleting the fund's principal. In 2006, the foundation made its inaugural award.

Your modest gift of \$20.00 (or any amount you wish) will greatly help achieve the foundation's vision. Contact Kim Nimon ([knimon@uttyler.edu](mailto:knimon@uttyler.edu)) for further information or to make contributions.

## **Front Cover**

Photo's courtesy of Visit San Antonio

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## **Printing**

Program printing courtesy of Sam Houston State University

College of Science and Engineering Technology (COSET)



**Sam Houston State University**

## A Brief History of SERA

By John J. Hedl, Jr. - February 16, 2009

*Editor's Note. John J. Hedl, Jr. was one of the Founders of SERA in 1977, was the third President of SERA, had attended every previous annual meeting until his death, and served as SERA Historian. John earned his Ph.D. in the psychology department at Florida State University. He subsequently accepted an appointment to the allied health faculty of the UT Southwestern Medical Center at Dallas. He later rose to the rank of Professor of Health Education and Research and served for many years as a department chairman prior to his retirement. He was a licensed psychologist (TX #20959) for many years. His research involved issues such as test anxiety. At the 1998 annual SERA meeting, the SERA Board created the association's first service award—the John J. Hedl, Jr. Lifetime Service Award—and announced John as the first recipient of the award. John passed away in June 2014.*



The first meeting related to SERA was held in spring 1977 at the Faculty Club on the campus of Southern Methodist University in Dallas. The basic question was "Did we want or need a state or regional research association?" and "Should it be along the lines of AERA?" After considerable discussion, the answer to the first question was "Yes," but a resounding "No" to the second. We wanted a kinder, gentler AERA. The first SERA meeting followed in 1978 in Austin. Our original goals were to:

1. Conduct a meeting for researchers to present and discuss current research;
2. Provide an opportunity to actually learn new things;
3. Provide an opportunity for professional networking;
4. Provide a forum for mentoring future educational researchers and SERA leaders (graduate students); and
5. Provide a place to have some fun.

Have we met these goals? I would say "Yes" to all 5. Next year, we celebrate well past our third decade of meeting, and we are still going strong. SERA is a terrific place to meet and talk with researchers of all likes. The social events are a great way to network and have fun. Of our 30+ presidents, I believe at least 11 started as graduate students. In fact, six of the last seven started that way with SERA.

And I believe strongly that we have created a sense of family. As such, we rejoice in the professional and personal successes of our members, and we grieve when we lose our long-standing friends. In recent years, there have been several that have left us for a better place.

And so, remembering them and our current membership, we continue to strive to improve things for our membership. Recent changes include:

- We have added website updates;
- We have improved ways to submit papers and receive notifications;
- We have added a graduate student representative to the executive council;

- We have restructured the executive council and added an executive director;
- The treasurer is now appointed as well.

What does it take to become involved? (Remember, no one is paid.) Just volunteer your time. It now takes a small army to conduct our annual meeting. Attend the social functions, meet, and greet. Talk with our council members and let them know your interests. That's how easy it is to become involved.

On a personal note, I have never missed a SERA meeting in its history. I receive too much from my association on both a professional and personal level. SERA is full of terrific colleagues and friends. I hope to see everyone next year at our annual meeting. Mark your calendars now.

## **SERA Linda Reichwein Zientek Outstanding Paper Award**

During its 45th Annual Meeting, February 23-25, 2022, Sam Houston State University Professor of Mathematics, **Linda Reichwein Zientek**, was honored by the Southwest Educational Research Award (SERA). At the annual business luncheon a surprise announcement was made that SERA had renamed in perpetuity its SERA Outstanding Paper Award the “SERA Linda Reichwein Zientek Outstanding Paper Award,” in recognition of Professor Zientek’s numerous contributions to educational research and to SERA.



Dr. Linda Zientek is a Professor in the Department of Mathematics and Statistics at Sam Houston State University. Prior to joining SHSU in 2007, Linda served for ten years as a community college mathematics instructor. Her research interests include mathematics education, the preparation of mathematics teachers, community college initiatives, and quantitative research methods. Her interests include students' self-efficacy beliefs and how those beliefs impact academic achievement. Zientek has served as SERA executive director since 2014. She also has served as SERA deputy executive director (2011-2014), president (2010-2011), and newsletter editor (2007-2008). Zientek also previously received the SERA Extended Service Award in 2013.

## SERA Bruce Thompson Extended Service Award

In 2022, the SERA Board renamed the SERA Extended Service Award the “SERA Bruce Thompson Extended Service Award” in recognition of Bruce’s career-long contributions to the Southwest Educational Research Association.

**Bruce Thompson** was among the first members of SERA and continuously attended 40+ SERA annual meetings. Bruce has served as an At-Large Member of the SERA Board. Prior to the time that SERA combined the Program Chair role with the office of President-Elect, Bruce first served as Program Chair and then later as SERA President. In the early 1990s Bruce served as Editor of the SERA annual book series, which was an edited commercially-published volume containing selected SERA conference papers chosen by peer review. Bruce began service as inaugural SERA Executive Director when the By-Laws were accordingly amended in 2000, and this position was first created, until he ended service as Executive Director in 2014. Bruce continues to serve now as SERA Executive Director Emeritus, and as SERA Historian. In 2006, Bruce was awarded the SERA Extended Service Award. Bruce was three times recipient of the SERA Outstanding Paper Award, an award for which officers of the Association are not eligible during service in elected or appointed SERA Board roles.

Before his retirement, Bruce Thompson was Distinguished Professor and College Distinguished Research fellow of Educational Psychology, Distinguished Professor of Library Science, Texas A&M University, and Adjunct Professor of Allied Health Sciences, Baylor College of Medicine (Houston). He was Co-Editor of the Teaching, Learning, and Human Development section of the American Educational Research Journal (AERJ:TLHD), and past editor for 9 years of



Educational & Psychological Measurement, the series, Advances in Social Science Methodology, and two other journals. He is the author of 220 journal articles, author/editor of 11 books, including Foundations of Behavioral Statistics and Exploratory & Confirmatory Factor Analysis, and the author of 20 book chapters. His contributions have been especially influential in moving the field regarding greater emphasis on effect size reporting and interpretation and promoting improved understanding of score reliability.

## Awards

### SERA OUTSTANDING PAPER WINNERS

- 2022 Rebecca DeLozier\*
- 2021 Noah Padgett\*\*
- 2020 Gang Zhu\*\*
- 2019 Ehsan Ghasemi, Hansel Burley & Parviz Safadel\*\*
- 2018 Emma Bullock\*\*
- 2017 Peter Boedeker\*\*
- 2016 Katherine L. Wright & Tracey S. Hodges\*\*
- 2015 Kara M. Styck & Grant Morgan\*\*
- 2014 Kary A. Johnson\*\*
- 2013 Grant Morgan & Aaron Baggett\*\*
- 2012 Forrest C. Lane & Robin K. Henson\*\*
- 2011 Celia M. Wilson\*\*
- 2011 Anthony J. Onwuegbuzie, Rebecca K. Frels, Nancy L. Leech, & Kathleen M. T. Collins\*\*
- 2010 Terence Fung\*\*
- 2009 Prathiba Natesan, Patricia F. Roberts–Walter, Gwendolyn Webb–Johnson, & Norvella P. Carter\*\*
- 2008 Susan Troncoso Skidmore\*\*
- 2007 Meixia Ding & Xiaobao Li
- 2006 Carmen Fies
- 2005 Helenrose Fives & Michelle M. Buehl
- 2004 Anthony J. Onwuegbuzie
- 2003 Anthony J. Onwuegbuzie & Nancy Leech
- 2002 Lilia M. Ruban
- 2001 Stephen Caldas & Carl Bankston, III
- 2000 Bruce Thompson & Colleen Cook

- 1998 Katherine Friedrich
- 1996 Shari L. Davis
- 1995 Debra A. King
- 1994 Bruce Thompson, John Wasserman, James Gyurke, Kathleen Matula, & Blaine Carr
- 1993 Patricia Synder, Bruce Thompson, & James David Sexton
- 1992 Dianne L. Taylor & Ira E. Bogotch
- 1989 H.C. Waxman, Y.N. Patron, S.L. Knight, E. W. Owens, & K. Ebner
- 1988 Stephanie L. Knight
- 1987 P.A. Alexander, M.K. Tallent, V.L. Willson, & C.S. White
- 1986 Mary K. Tallent
- 1985 Walter C. Parker
- 1984 Ralph A. Hanson
- 1983 William C. Kyle, Jr., & James A. Shymanasky

**SERA EXTENDED SERVICE AWARD**

2020	Forrest Lane	2014	Mary Margaret Capraro
2019	Lesley Leach	2013	Linda R. Zientek
2018	Shirley M. Matteson	2012	Gilbert Naizer
2016	Susan Troncoso Skidmore	2010	Sonya Carr
2015	Kim Nimon	2007	Kathleen Cage Mittag

**JOHN J. HEDL, JR. LIFETIME SERVICE AWARD**

2018	Sonya Centanni Carr	2005	Vince Paredes
2012	Victor L. Willson	2001	Tommie–Ann Hill Van Natter
2010	Kathleen Mittag	1998	John J. Hedl, Jr.
2006	Bruce Thompson		

# Southwest Educational Research Association

2022-2023

## Executive Council

***President***

Wendi Zimmer

***President-Elect & Program Chair***

Emma Bullock

***Immediate Past President***

Celia Wilson Scott

***Treasurer***

Kim Nimon

***Secretary***

Audrey Meador

***Deputy Treasurer***

Grant Morgan

***Graduate Student Advisors***

Ryan Glaman

Katherine Vela

***Graduate Student Representative***

Susanne Gaal

***Executive Director Emeritus/Historian***

Bruce Thompson

***Deputy Historian***

Victor Willson

***Newsletter Editor***

Wendi Zimmer

***Director of Information Technology***

Susan Troncoso Skidmore

***Council Members-At-Large***

Faye Bruun  
Aaron Zimmerman  
Lynn Burlbaw

Chrissy Cross  
Tonya Jeffery  
Katherine Vela

Ryan Glaman  
Michelle Peters  
Shaun Hutchins

## Program Division Chairs – 2023

The Division Chairs are instrumental in making the program a success and deserve special recognition. They have proposals peer-reviewed, write acceptance letters, forward reviewer commentary, and serve as primary points of contact. This year's division chairs are:

### I. Educational Administration, Policy, Leadership, & Program Evaluation

*Ken Helvey*  
*Texas Wesleyan University*  
*jkhelvey@txwes.edu*

*Audrey Meador*  
*West Texas A&M University*  
*ameador@wtamu.edu*

### II. Instruction, Learning & Cognition

*Laura Isbell*  
*Texas A&M University-Commerce*  
*Laura.Isbell@tamuc.edu*

*Sandra Nite*  
*Texas A&M University*  
*snite@math.tamu.edu*

### III. Methodology, Measurement & Evaluation

*Tommy De Vaney*  
*Southeastern Louisiana*  
*tdevaney@selu.edu*

*Lisa Dryden*  
*Texas Wesleyan University*  
*ldryden@txwes.edu*

### IV. Teachers & Teacher Education

*Bob Elliot*  
*Eastern New Mexico University*  
*Robert.Elliott@enmu.edu*

*Julia Yoo*  
*Lamar University*  
*hyoo@lamar.edu*

### V. Special Populations & Counseling

*Nara Martirosyan*  
*Sam Houston State University*  
*nxm021@SHSU.EDU*

*Monica Wong-Ratcliff*  
*Texas A&M University – Kingsville*  
*Monica.Ratcliff@tamuk.edu*

### VI. Graduate Student Seminars for Work in Progress

*Julie Smit*  
*Texas Tech University*  
*julie.smit@ttu.edu*

*Elizabeth Stewart*  
*Texas Tech University*  
*Elizabeth.Stewart@ttu.edu*

## SERA Past Presidents

Celia Wilson Scott	2021-22	Nancy Martin	1999-00
Grant Morgan	2020-21	Arturo Olivarez	1998-99
Shirley Matteson	2019-20	Max Martin	1997-98
Forrest Lane	2018-19	Mark Lewis	1996-97
LaVonne Williams-Fedynich	2017-18	Larry G. Daniel	1995-96
Pratheba Natesan	2016-17	Mary K. Tallent-Runnels	1994-95
Shirley Matteson	2015-16	Stephanie L. Knight	1993-94
Susan Troncoso Skidmore	2014-15	Elaine Jackson	1992-93
Stacey Edmondson	2013-14	Victor L. Willson	1991-92
Kim Nimon	2012-13	Glynn D. Ligon	1990-91
Willam A. Jasper	2011-12	Hersholt C. Waxman	1989-90
Linda R. Zientek	2010-11	Patricia A. Alexander	1988-89
Mary M. Capraro	2009-10	Michael J. Ash	1987-88
Robert M. Capraro	2008-09	Deberie L. Gomez-Grobe	1986-87
Gilbert Naizer	2007-08	Claire Ellen Weinstein	1985-86
J. Kyle Roberts	2006-07	Bruce Thompson	1984-85
M. Janine Scott	2005-06	Jon J. Denton	1983-84
Kathleen Cage Mittag	2004-05	Douglas M. Brooks	1982-83
Ron McBride	2003-04	John J. Hedl Jr.	1981-82
Randall E. Schumacker	2002-03	Wayne R. Applebaum	1980-81
Dianne Taylor	2001-02	Robert M. Caldwell	1979-80
Vince Paredes	2000-01		

# Foreword

As President of the Southwest Educational Research Association (SERA), I warmly welcome you to the 46th Annual Conference. We have over 375 members, and there will be approximately 220 research presentations, workshops, symposia, and innovative sessions at the 2023 conference. Plan to attend as many sessions as possible to take advantage of the wide variety of learning and networking opportunities.

SERA is a professional regional education association that is dedicated to advancing the field of educational research. The association takes pride in its intimate and nurturing environment that supports both researchers and practitioners, novice and experienced. The SERA Annual Conference offers an excellent forum for attendees to share their research findings with SERA members across the Southwest and beyond, network with colleagues, and collaborate with researchers in their field. SERA also offers fantastic experiences for graduate students and works hard to ensure students have a positive conference experience.

If this is your first SERA conference, we recommend that you attend the *Navigating Through & Getting the Most from SERA* Session provided by Linda Reichwein Zientek and Susan Troncoso Skidmore on Thursday morning during the annual meeting. Cheryl Poth, professor at the University of Alberta in the research-intensive Centre for Applied Research in Assessment and Measurement in Education in the Measurement, Evaluation, and Cognition program area of the Department of Educational Psychology, is the Presidential Invited Speaker on Thursday. Linda Zientek, with colleagues Kim Nimon and Julia Fulmore, as well as Emma Bullock, are offering ticketed workshops on the General Linear Model and thriving during the dissertation writing process. More information about these sessions can be found in the front matter of this program.

The conference arrangements chair is the person who truly makes the SERA conference possible, and this year we would like to extend a very special “thank you” to *Linda Reichwein Zientek* for doing an incredible job as local arrangements chair. Tremendous appreciation is also extended to our President-Elect/Program Chair, *Emma Bullock*, for organizing and compiling this year’s conference program; to Executive Director *Linda Reichwein Zientek*, who keeps us updated throughout the year; to Historian and Executive Director Emeritus *Bruce Thompson* who provides us with a historical perspective; and to all SERA board members. Graduate student participation in SERA continues to increase, and many thanks are extended to the graduate student representative, *Susanne Gaal*. We also extend a special “thank you” to our Division Chairs and the numerous proposal reviewers who assisted in the proposal review process. Thank you for choosing to attend the 2023 SERA Annual Conference in San Antonio, TX. We are glad you are here and look forward to sharing this experience with you. Enjoy!

Wendi Zimmer  
SERA President

## The Program

There was an incredible number of diverse proposals submitted and accepted this year. The sessions are organized by themes. For most of the themes, proposals are within a specific division; however, in some cases, proposals from various divisions overlap and are grouped in selected program sessions. The session schedule format is provided on the next page, followed by the program highlights on pages 3-4. The first session on Wednesday begins at 1:00 p.m. On Thursday and Friday mornings, the sessions begin at 8:30 and are 1 hour long. The sessions are 1 hour and 15 minutes long in the afternoon. There is a 5-minute break between sessions. A continental breakfast is offered Thursday and Friday from 8-9 a.m.

Session IDs begin with a letter that signifies the day of the week the session is offered. For example, “W1.2” is the second session on Wednesday in the first time slot. If a presenter identified as a graduate student, special efforts were made to schedule that session to not correspond with the fireside chat and the graduate student meeting. Our Presidential Invited Speaker is Professor Cheryl Poth, and her presentation will immediately follow the luncheon at 1:35 p.m. in Ballrooms A-B on Thursday. The Fireside Chat on Thursday afternoon in the Minuet is for graduate students only and is an excellent opportunity to visit with Professor Poth in an informal setting; students are welcome to bring up any profession- or education-related questions or topics of interest to them.

On Thursday, the graduate student meeting begins at 5:25 pm in the Minuet. It provides graduate students with the opportunity to meet with people from various higher education institutions and form collaborations and support systems with people in their research area. During the graduate meeting, graduate representatives are elected.

I hope you enjoy this SERA opportunity to share research findings and form collaborations with researchers in your field. SERA is dedicated to improving research. In an endeavor to fulfill this goal, excellent ticketed research training sessions will be offered on Wednesday morning and afternoon. A description of these sessions is provided on page 10. Do not forget to check out and attend the various free workshops, innovative sessions, and symposia scheduled throughout the program.

Thank you for attending and supporting SERA!

Emma Bullock  
SERA President-Elect & Program Chair

# Program Session Schedule

## Wednesday

11:00a – 5:00p	Registration
12:30p – 2:30p	Training Session: <b>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</b> (Ticket Required, Minuet)
1:00p – 2:15p	Sessions (W1)
2:20p – 3:35p	Sessions (W2)
3:40p – 4:55p	Sessions (W3)
3:00p – 5:00p	Training Session: <b>Learning and Teaching the General Linear Model Through Gamification and an Open-Source Shiny Application</b> (Ticket Required, Ballroom B)

## Thursday

8:00a – 5:00p	Registration (Closed during business luncheon)
8:00a – 9:00a	Continental Breakfast
8:30a – 9:30a	Sessions (T1)
9:35a – 10:35a	Sessions (T2)
10:40a – 11:55a	Sessions (T3)
<b>12:00p – 1:30p</b>	<b>Luncheon</b> (Ticket Required, T4)
<b>1:35p – 2:40p</b>	<b>Presidential Speaker – Professor Cheryl Poth (T5)</b>
2:45p – 4:00p	<b>Fireside Chat with Cheryl Poth – Graduate Students Only (T6.1)</b>
2:45p – 4:00p	Sessions (T6) SERA Junior Faculty Mentoring Initiative – Part 1 (T6.5)
4:05p – 5:20p	Sessions (T7) SERA Junior Faculty Mentoring Initiative – Part 2 (T7.5)
5:25p – 6:30p	Graduate Student Meeting & Election of Representatives (T8.1)

## Friday

8:00a – 12:00p	Registration
8:00a – 9:00a	Continental Breakfast
8:45a – 10:00a	Sessions (F1)
10:05a – 11:20a	Sessions (F2)
11:25a – 12:40p	Sessions (F3)

## Program Highlights

An important goal of the SERA is the mentoring of graduate student members. Several sessions and events have been planned that should be of *particular interest* to the SERA *graduate student* members.

**The Annual Luncheon and Business Meeting** (T4.0 Thursday 12:00-1:30 – Ballroom A-B). The luncheon includes announcing the winners of the graduate student travel awards and the Outstanding Student Paper competition.

**REMEMBER:** “Student Travel Awards” are awarded by lottery drawing during the Thursday business luncheon **only** to students who are **both** (a) officially registered in the hotel and (b) in paid attendance at the luncheon.

**Presidential Invited Address** (T5.0 Thursday 1:35 – 2:45 – Minuet) immediately following the luncheon.

**Fireside Chat Professor Cheryl Poth** (T6.1 Thursday 2:45 – 4:00 – Minuet)

### Graduate Students Only.

**Graduate Student Meeting** (T8.1 Thursday, 5:25 – 6:30 – Minuet)

An opportunity to discuss student concerns and elect the 2023–2024 graduate student representative to the SERA Executive Council and university-level representatives who comprise the Graduate Leadership Council.

**Graduate Student Leadership Meeting** (F0.3 Friday, 8:00 – 8:45 – Renaissance)

### **Graduate Student Division VI Paper Sessions**

There are 66 graduate student Division VI paper sessions included in this year’s program. Each Division VI paper features presentations of **work in progress** by graduate students followed by feedback from an experienced faculty member discussant.

The following workshops may be of special interest to **graduate student members**. These sessions are open to all SERA members.

<i>Developing a Literature Crosswalk: A Tool for Critiquing the Available Literature</i>	<i>W1.3</i>
<i>Becoming a Professor of Education</i>	<i>W2.6</i>
<i>Oral History as a Research Tool</i>	<i>W3.5</i>
<i>Navigating and Getting the Most from SERA</i>	<i>T1.1</i>
<i>Introduction to Propensity Score and Difference-in-Differences Methods for Treatment Effect Estimation</i>	<i>T1.4</i>

<i>Qualitative Data Analysis: The Chex Mix™ Analogy</i>	<i>T1.5</i>
<i>Applying the Delphi Method to Studies in Education</i>	<i>T2.5</i>
<i>On the Use of Normal Replacement Scores when Normality Assumption is Violated</i>	<i>T3.2</i>
<i>Exploring Researcher Identity Development</i>	<i>T6.4</i>
<i>How to Collaborate with a Methodologist</i>	<i>T7.6</i>

Graduate student work area is available throughout the annual meeting in the Renaissance.

## SERA Junior Faculty Mentoring Initiative Part 1 & 2

*Part 1: Thursday, 2:45-4:00 (Session T6.5)*

*Part 2: Thursday, 4:05-5:20 (Session T7.5)*

Michelle Peters and Tonya Jeffery

An important initiative of the SERA is mentoring recent graduate and early career members. A number of sessions and events have been planned that should be of *special interest* to the SERA recent graduate and early career members.

**The Annual Luncheon and Business Meeting** (T4.0 Thursday 12:00-1:30 – Ballrooms A-B). The luncheon includes announcing the winners of the graduate student travel awards and the Outstanding Student Paper competition.

**Presidential Invited Address** (T5.0 Thursday 1:35 – 2:40 – Minuet) immediately following the luncheon.

Be sure to join our **SERA Early Career Mentoring Group** on **LinkedIn**.

**The following sessions may be of *special interest* to the SERA recent graduates and early career members.** These sessions are open to all SERA members.

<i>Developing a Literature Crosswalk: A Tool for Critiquing the Available Literature</i>	<i>W1.3</i>
<i>Oral History as a Research Tool</i>	<i>W3.5</i>
<i>Navigating and Getting the Most from SERA</i>	<i>T1.1</i>
<i>Introduction to Propensity Score and Difference-in-Differences Methods for Treatment Effect Estimation</i>	<i>T1.4</i>
<i>Qualitative Data Analysis: The Chex Mix™ Analogy</i>	<i>T1.5</i>
<i>Applying the Delphi Method to Studies in Education</i>	<i>T2.5</i>
<i>SERA 2023 Early Career Research Award</i>	<i>T2.6</i>
<i>On the Use of Normal Replacement Scores when Normality Assumption is Violated</i>	<i>T3.2</i>
<i>How to Collaborate with a Methodologist</i>	<i>T7.6</i>

# Session Chairs

**PLEASE NOTE: An asterisk indicates session chairs in the program.** If you are designated as a Session Chair, please keep track of the time for presenters and introduce each presenter in your session. It is **imperative** that each speaker be allotted the designated time (**12 – 13 minutes per speaker**), so the time-keeping duty is essential. You may want to delay questions for all presentations until the end of the session.

In addition, please have the presenters remain in the order in which they appear in the program. This process will allow conference attendees to hear the papers of particular interest in various sessions.

The organizer or the organizer's designee will serve as chair for symposia, innovative sessions, and training sessions. For graduate student paper and proposal development seminars that include discussants, the discussant may serve as chair.

## Division VI Discussants

Name	Institution
Faye Bruun	Texas A&M University—Corpus Christi
Lynn M Burlbaw	Texas A&M University
Victor Cifarelli	University of North Caroline – Charlotte
Jane McIntosh Cooper	University of Houston—Clear Lake
Chrissy Cross	Stephen F. Austin State University
D. Scott Eliff	Texas A&M University—Corpus Christi
Andrea Foster	Sam Houston State University
Ryan Glaman	Tarleton State University
Stephen Gruber	University of Houston—Clear Lake
Lynn Hemmer	Texas A&M University—Corpus Christi
Shaun Hutchins	Texas A&M University
Bill Jasper	Sam Houston State University
Jarod Lambert	Sam Houston State University
Forrest Lane	Sam Houston State University
Audrey Meador	West Texas A&M University

Grant Morgan

Baylor University

Bethanie Pletcher

Texas A&M University—Corpus Christi

Amy Ray

Sam Houston State University

Juanita Reyes

Tarleton State University

Celia Scott

Texas Wesleyan University

James Telese

University of Texas—Rio Grande Valley

Carol Waters

University of Houston—Clear Lake

## **Thank You**

A special “thank you” to all of the division chairs and proposal reviewers for dedicating their time and expertise to the reviewer process, the SERA Board for reviewing the program and helping run the conference, to Linda Zientek for running the proposal submission system and her guidance throughout the program development stages and for serving as Local Arrangements Chair, to Susan Skidmore for coordinating the Conference Registration system.

Also, thank you to Sam Houston State University for printing the 2023 SERA conference programs.

# **SERA 2023 Presidential Invited Address**

## **Cheryl Poth**

### **Why Mixed Methods in Educational Research? Exploring Possibilities and Avoiding Pitfalls**



Cheryl Poth is Professor in the Centre for Research and Applied Measurement and Evaluation, McCalla Professor, and Associate Dean (Research) in the Faculty of Education at the University of Alberta, Edmonton, Alberta, Canada. She teaches mixed methods research courses and workshops around the globe and served as the fourth president of the Mixed Methods International Research Association. She is the editor of the forthcoming SAGE Handbook of Mixed Methods Research Design and serves as associate editor of the impactful Journal of Mixed Methods Research (Sage). Her specific research interests include enhancing research quality and collaborative research teams in the fields of education and the health sciences. She has guest edited several mixed methods-focused special issues including two in the International Journal of Qualitative Inquiry and authored works that appear across a wide variety of scholarly and practitioner journals, encyclopedias, and books advancing educational, evaluation, and health sciences research practices.

She has served several past leadership roles including as Associate Director (Assessment) at the Centre of Teaching and Learning, Associate Chair (Undergraduate) of the Department of Educational Psychology, and Coordinator of the Measurement, Evaluation, and Data Science Program. Dr. Poth has an adjunct appointment in the Faculty of Medicine and Dentistry and contributes as the methodologist on several cross-disciplinary research teams. Her award-winning books, the 4th edition of the *Qualitative Inquiry & Research Design* with John Creswell (2017, Sage), *Innovation in Mixed Methods Research: Guiding Practices for Integrative Thinking with Complexity* (2018, Sage), and *Research Ethics* (2021, Sage) are inspired by the practice dilemmas experienced in the field.

Abstract: We find many instances in educational research where study insights lead to more questions; for example, would we see the same trends in a different sample or what would happen if we asked about particular participant experiences? While some questions would benefit from similar methodological approaches, others can only be answered using insights gleaned from the integration of qualitative and quantitative perspectives. While you might recognize this integration as a distinguishing feature of mixed methods research, what might be less familiar is the extent of possibilities afforded by mixed methods in educational research. We will examine why mixed methods research is optimal for solving some of the most pressing educational research issues we face and how we can avoid some of the pitfalls that are commonly experienced by researchers. We will conclude by imagining future possibilities for how new combinations of data and approaches might offer researchers a better way to make sense of the complex realities of educational contexts and generate impactful insights.

## **2-Hour Training Session**

(Ticket Required)

### **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**

*Emma P. Bullock*

As the winner of five major dissertation awards and six additional graduate student research awards, while procuring over \$20,000 in funding to support her dissertation scholarship, Dr. Emma Bullock, Ph.D. (2018 SERA Bruce Thompson Outstanding Paper Award), knows how to approach the dissertation process, so you earn multiple job interviews (Dr. Bullock had 25 phone interviews and 10 on-campus interview requests in her last year of grad school) and propel your career. From conceptualization to defense and the job interview, Dr. Bullock will share how to effectively and efficiently select your committee, select your topic and research question(s), hone your research skills, write a literature review, pilot your ideas, build your academic network, procure funding, use the resources your school and professional organizations offer, write in 30-minute increments, present and defend your findings, solicit spectacular letters of recommendation, and apply for awards that will propel you into a successful job interview process that promotes your research agenda and future career. You do not need to settle for just finishing. Bring YOUR dissertation ideas and learn how to use the dissertation process as the means toward accomplishing your academic and professional dreams in this interactive and fun workshop.

Emma P. Bullock is an Assistant Professor of Mathematics Education at Sam Houston State University.

### **Learning and Teaching the General Linear Model Through Gamification and an Open-Source Shiny Application**

*Kim Nimon, Linda Zientek & Julia Fulmore*

The importance of understanding the general linear model (GLM) dates back decades. Using the backdrop of canonical correlation analysis (CCA) as a general analytic model and the shiny application canCORRgam (<https://profnimon.com/canCORRgam/>), this interactive workshop will test participants' knowledge regarding the parsimony of analyses subsumed by CCA and the hierarchical nature of parametric tests. Participants will be asked to question their knowledge about the hierarchy of the GLM and will leave with an understanding of the transitive properties within the GLM map by data type. Participants will utilize canCORRgam to explore with real data the hierarchical path of analyses subsumed by CCA for 15 different models. In addition, the application promotes participants' understanding of relevant effect sizes and test statistics by providing a repository of conversion formulas. This workshop is based on information introduced in the 2021 Online First article: A Hierarchical Map and Application to Traverse and

Unify Analyses Subsumed by Canonical Correlation (A Hierarchical Map and Application to Traverse and Unify Analyses Subsumed by Canonical Correlation).

Kim Nimon is a Professor at University of Texas-Tyler. Linda Zientek is a Professor at Sam Houston State University. Julia Fulmore is an Assistant Professor at University of Dallas.

## WEDNESDAY, FEBRUARY 15

**W0.1**

**11:00a-5:00p**

**Foyer Ballrooms A-C**

*Registration*

**W0.2 Training Session**

**12:30p-2:30p**

**Minuet**

*Training Session*

### **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**

*Emma Bullock — Sam Houston State University*

As the winner of five major dissertation awards and six additional graduate student research awards, while procuring over \$20,000 in funding to support her dissertation scholarship, Dr. Emma Bullock, Ph.D. (2018 SERA Bruce Thompson Outstanding Paper Award), knows how to approach the dissertation process, so you earn multiple job interviews (Dr. Bullock had 25 phone interviews and ten on-campus interview requests in her last year of grad school) and propel your career. From conceptualization to defense and the job interview, Dr. Bullock will share how to effectively and efficiently select your committee, select your topic and research question(s), hone your research skills, write a literature review, pilot your ideas, build your academic network, procure funding, use the resources your school and professional organizations offer, write in 30-minute increments, present and defend your findings, solicit spectacular letters of recommendation, and apply for awards that will propel you into a successful job interview process that promotes your research agenda and future career. You do not need to settle for just finishing. Bring YOUR dissertation ideas and learn how to use the dissertation process as the means toward accomplishing your academic and professional dreams in this interactive and fun workshop.

**W1.1 Paper Session**

**1:00p-2:15p**

**Poolside 1**

*Higher Education*

### **A Closer Look at a Regional Superintendent Program: A Narrative Inquiry**

*\*Teresa Farler, Melissa Arrambide & Elsa Villarreal — Texas A&M University-Commerce*

Globally, school districts continue seeking new norms to address instructional losses and the required procedural pivots due to the pandemic. Current superintendents reveal the new roles they have acquired mid and post pandemic and refer to them as “unexpected and difficult” (Jacobson, 2022). As institutions of higher education develop programs to prepare aspiring leaders for the Superintendency, it is critical to understand the facets of learning needed to effectively prepare students. The purpose of this qualitative narrative inquiry study was to explore the perceptions of graduate students enrolled in face-to-face superintendent certification courses and the preparation for the superintendency.

**Voices of Black Leadership: Town-gown Relationships and the Black Community**

*Teranda Donatto, Kenzalia Bryant-Scott & Dave Louis— University of Houston*

This study explores the perspectives of twenty-seven Black community leaders from Black communities in the United States about the town-gown relationship in their communities. Utilizing a basic thematic analysis. Their responses address issues of mistrust, division, desire for community improvement, and the hope brought on by Black colleges and universities. The researchers also offer suggestions to university administrators, community engagement coordinators, and institutions about their approach to create meaningful partnerships with Black communities.

**14 Day Writing Challenge**

*Ron Rhone & Nicole Mishnick— Tarleton State University*

According to Cassuto (2013) approximately 50% of students that enroll in a doctoral program do not successfully complete the program. To support and “jump start” student writing practices a 14 day writing challenge was created. Previous researchers have found that self-awareness, motivation and self-regulation positively impact dissertation completion (Kelly & Salisbury-Glennon, 2016; Roderick, 2019). Since many students do not possess the self-regulation skills necessary to successfully complete their dissertations faculty have the responsibility to teach self regulation (Kelly & Salisbury-Glennon, 2017; Roderick, 2019). We hypothesize the 14-day writing challenge will serve as a medium for teaching self regulation, as students will engage in the challenge.

**W1.2 Paper Session**

**1:00p-2:15p**

**Poolside 2**

*Measurement*

**Determination of Misconceptions by Developing the Two-Stage Multiple-Choice Test for 7th Grade Digestive System: A Rasch and Factor Models Analysis of the Digestive System Concept Scale (DSCS)**

*Fatih Ozkan — Baylor University*

The present study provides a detailed psychometric analysis of the Digestive System Two-Stage Conception Scale (DSCS), a 20-item of determination of misconceptions about the digestive system in science education. From the perspective of a Rasch model, from a sample of 413 adults, the reliability of the instrument, its dimensionality, item fit, item difficulty, and test information were analyzed. Besides performing EFA (Exploratory Factor Analysis) and CFA (Confirmatory Factor Analysis), the purpose of this study was to look at the nature and differences between both EFA (Exploratory Factor Analysis) and CFA (Confirmatory Factor Analysis) along with a comparison between the analysis processes and results between the two methods. This study finds good evidence supporting the reliability of the DSCS and that the scale appears to be one-dimensional; a cluster of misfitting and locally dependent items which may have challenged the scale's unidimensionality. It was moderately difficult for the scale and suited the intended population and purpose. Using recursive Rasch tree recursive partitioning methods,

we estimated differences in item functioning based on gender and did not find a significant difference. Thus, the DSCS possesses a variety of psychometric qualities. Lastly, some potential avenues for future scale improvement are discussed.

### **A Relationship Between Everyday Creativity-Little-C and Mood: A Multilevel Analysis**

*Fatih Ozkan — Baylor University*

Everyday creativity (little-c) and mood are popular subjects in psychological and organizational studies. The recent literature presented mixed perspectives about the nature of the relationship between the two. Everyday creativity is influenced by interpersonal and intrapersonal factors, such as emotion and personality. Positive emotions are the most consistent predictors of creativity, suggesting that thinking positively may increase one's ability to engage in creative activities. The author of this meta-analysis searched several databases and analyzed the titles and abstracts of 987 studies to identify studies that examined the relationship between everyday creativity and mood (See Fig.1). They then removed 78 studies that contained data previously published in other studies and screened the remaining 305 studies for inclusion. A meta-analysis was conducted to examine the relationship between students' everyday creativity and mood. Analyses with multilevel modeling yielded a mean effect of  $r = .14$ . Meta-analyses were conducted using the metafor package in R to compute necessary statistical values. Heterogeneity was evaluated using the Q statistic and I<sup>2</sup>, and residual heterogeneity was investigated using metaregression and subgroup analyses. The included studies reported multiple outcomes and/or outcomes for multiple subgroups, and multilevel models were used to account for the nonindependence among the effect sizes. The sampling errors within the clustered groups or outcomes were uncorrelated, and only one effect size per cluster was included. We tested for publication bias with Rosenthal's fail-safe test, Egger's regression test, and Begg's rank correlation. This meta-analysis examined the relationship between everyday creativity and mood using 151 effect sizes from 28 studies. The overall mean effect size was .1766,  $p < .001$ . Everyday creativity has been found to increase reflection, engender thought, and improve emotion regulation. It has also been found that neural networks that predict facets of intelligence overlap with areas within brain networks that predict creative ability.

### **Mixture Item Response Theory in Different Response Styles**

*\*Hiroki Matsuo & Grant Morgan — Baylor University*

The Item Response Theory (IRT) framework has been adapted for diverse modern practices such as psychological testing, cognitive diagnostics, and marketing research. Mixture IRT modeling is the extension of this framework for identifying the underlying subpopulation(s) that cannot be directly observed. Identification of response style is one of the critical aspects in IRT framework. This simulation-based study explores the potential use of mixture IRT modeling when different response styles exist, specifically when a dominant response model and an ideal-response model are included.

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**W1.3 Workshop**

**1:00p-2:15p**

**Patio**

*Free Workshop*

### **Developing a Literature Crosswalk: A Tool for Critiquing the Available Literature**

*Shirley Matteson & Aaron Zimmerman— Texas Tech University*

This workshop focuses on the development and use of a literature crosswalk, a way of organizing information while conducting a literature review. The literature crosswalk tool allows for the comparing of characteristics across many studies, which can facilitate the identification of gaps when reviewing literature. Additionally, the crosswalk also can provide information about the history or trends in a specific area of interest. A crosswalk allows graduate students and other researchers also become more competent in their ability to identify strong and weak studies based on the information or lack of information given in a journal article.

**W1.4 Paper Session**

**1:00p-2:15p**

**Poolside 3**

*Preservice Education*

### **Negotiating Beliefs Within the 5th Estate: An All Hands on Deck Effort to Encourage Professionalism in Social Media Among Preservice Teachers**

*Crystal Rose, Nicole Mishnick & Josh Jones — Tarleton State University*

Even though an educator preparation program may fully train and assess a preservice teacher on the aspects of teaching and learning in the classroom, if a preservice teacher cannot engage effectively, fully, or professionally in the Fifth Estate, the realm of social media spaces, he or she may not achieve or retain employment following graduation. This study utilizes school district administrators (current educational leadership doctoral students), and educational technology doctoral students in order to better understand how the beliefs of district administrators are similar or different from the beliefs of preservice teachers concerning professionalism on social media. The authors led a team of doctoral students through the creation of instructional supports, a self evaluation, and a Professionalism in Social Media Survey report from administrators for undergraduate preservice teachers to use to build a professional identity and participate fully in the Fifth Estate before their quickly approaching graduation. Although preservice teachers had mixed feelings concerning administrators peering into their "private" social media spaces, their understanding of the 5th estate and professionalism throughout the project. The authors will share findings regarding all three aspects of the project-data from administrators, supports from educational technology graduate students, and the impact of these supports on preservice teachers curation of their social media presence.

### **Pre-Service Teachers' Perceptions of World Englishes**

*\*Tahereh Boroughani & Roya Pashmforoosh — Texas A&M University*

Despite the prominence of world Englishes (WE), few studies have promoted pre-service teachers' awareness of language and cultural diversity among English users. We sought to reflect on how pre-service teachers perceive the status of the WE. Classroom observations and

## WEDNESDAY, FEBRUARY 15

checklists, post-study interviews, and follow-up reflection practice were used to assess pre-service teachers' perceptions. The findings indicated: (1) pre-service teachers' awareness of the status of WE; (2) pre-service teachers' sensitivity toward language and cultural diversity; and (3) pre-service teachers' recognition of the legitimacy of WE. The findings contribute to reappraisal of English language teaching (ELT) practices and the premises underpinning ELT.

### **Perceptions of Novice Elementary School Teachers on Their Preparation for Teaching Inclusive Classrooms**

*Holly Moore — Sam Houston State University*

Researchers have reported preservice teachers are not prepared for teaching in inclusive classrooms. The purpose of this qualitative study was to analyze novice elementary educators' perceptions on their preparedness to teach inclusive classrooms. For this study, a qualitative phenomenological approach was used to highlight the experiences of novice teachers in inclusive classrooms. Participants are novice teachers, who graduated from the same four-year university, and are currently teaching in a general education classroom. Using Clark Moustakas's 1994 process for analyzing phenomenological research, I analyzed the transcripts of the interviews to identify common themes. Descriptions of novice teacher experiences will provide an opportunity to better understand how elementary teachers were prepared to work with students with disabilities and what additional support they may need.

**W1.5 Symposium Session**

**1:00p-2:15p**

**Ballroom C**

*Best Practices in Community College Operations*

### **Student Services in the Comprehensive Community College**

*Anthony Edwards, Rachel Alfred, Karin Cenicerros-Prado, Amber Kearney, Marah Portier, Elexus Trenkle & Karen Ward — Tarleton State University*

The purpose of this study was to determine best practices in student services at the community college level. After reviewing the literature, higher education leaders were observed at work or through social media. Next, higher education leaders were interviewed. Based on this information, best practices related to collaboration and student success emerged.

### **Community College Finance**

*Anthony Edwards, Tyra Bradford, Leslee Ramon, Charles Anderson — Tarleton State University*

The purpose of this study was to determine best practices in community college finance. After reviewing the literature, higher education leaders were observed at work or through social media. Next, higher education leaders were interviewed. Based on this information, best practices related to performance-based funding and community stakeholder engagement. Although the NCAA reclassification process is common among higher education institutions, scholars have yet to examine how the transition from Division II to Division I impacts the clustering phenomenon. This study longitudinally analyzes clustering at institutions that recently

transitioned from Division II to Division I athletics.

**Community College Instruction**

*Anthony Edwards, Raven Battles, Yuridia Navarro Escobedo & Jasmine Rodriguez — Tarleton State University*

The purpose of this study was to determine best practices in instruction at the community college level. After reviewing the literature, higher education leaders were observed at work or through social media. Next, higher education leaders were interviewed. Based on this information, best practices related to faculty evaluations, faculty professional development, and peer learning emerged.

**Community College Leadership**

*Anthony Edwards, Mchayla Ansay, Elida Martinez, Malik Miles & Rosemary Ward — Tarleton State University*

The purpose of this study was to determine best practices in community college leadership. After reviewing the literature, higher education leaders were observed at work or through social media. Next, higher education leaders were interviewed. Based on this information, best practices related to social media use, mentorship, and stakeholder engagement for community college leaders emerged.

**A Workforce To Be Reckoned With: An In-Depth Analysis of Community College’s Workforce Development Past, Present, and Future**

*Anthony Edwards, Camryn Jordan & Courtney Weeks — Tarleton State University*

The purpose of this study was to determine best practices in student services at the community college level. After reviewing the literature, higher education leaders were observed at work or through social media. Next, higher education leaders were interviewed. Based on this information, best practices related to collaboration, data use, and program evaluation emerged.

**W1.6 Paper Session**

**1:00p-2:15p**

**Cavalier**

*Historical Perspectives in Education*

*Discussant: Chrissy Cross*

**A Decolonial Analysis and Interpretation of English Curriculum and Pedagogies in Brazil**

*Karina Oliveira De Paula — Texas Tech University*

English instructors are affected by issues of coloniality implicitly or explicitly in Brazil. What qualifies an English teacher to teach within the context of Brazil and Latin America in general. How and why is there discrimination regarding non-native speakers? Why are English instructions affected implicitly or explicitly by coloniality? In order to answer these questions, this study will briefly describe the context of English teaching in Brazil, explicate decolonial theory and coloniality, and discuss how a decolonial pedagogy can be implemented in language

teaching.

**Literacy in Mathematics: A Historical Analysis of Existing Gaps Over the Course of Five Decades**

*Michele Cantera — Texas A&M University-Corpus Christi*

This research explores the relation to mathematics and literacy instruction as it pertains to representation in two prominent journals, Reading Research Quarterly (RRQ) and the Journal of Research in Mathematics Education (JRME). The history of mathematics and literacy integration in the field of education is reviewed, and it is shown that over the decades of 1970-2020, there was a steady increase and representation of literacy in the mathematics journals and mathematics in the literacy journals. A review of the literature as well as a historical analysis of the education in the United States during these decades, suggests that perhaps governmental influence and funding, is a motivator for publications geared towards integration of such areas as mathematics and literacy. The research concludes with a number of suggestions on the integration of mathematics and literacy in the field of education, and how that transcends into the classroom. Further, there are implications as it pertains to standardized testing and the push for improving tests for high-stakes accountability vs teaching content areas such as mathematics and literacy cross-curricular.

**Examining the Disproportionate Representation of Asian Americans in Special Education**

*Gillian Benedetti — Texas A&M University-Corpus Christi*

As the disproportionate representation of Asian Americans in special education persists and the population of this minoritized group continues to increase exponentially, many questions rise to the surface including how the model minority myth may influence this racial disparity. The ill-conceived notion of Asian American students being model minorities has existed for quite some time and, it can have many effects on students. While some researchers reveal that the myth can positively impact Asian American students through “stereotype lifting” (Walton et al., 2003), others indicate that it “masks concrete everyday challenges” for this racial and ethnic group (Yi et al., 2020, p. 561). This paper examines the literature on the experiences of Asian American students through the model minority lens.

**W2.1 Training Session**

**2:00p-4:00p**

**Ballroom B**

**Learning and Teaching the General Linear Model Through Gamification and an Open-Source Shiny Application**

*Kim Nimon — University of Texas-Tyler*

*Linda Zientek—Sam Houston State University*

*Julia Fulmore—University of Dallas*

## WEDNESDAY, FEBRUARY 15

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**W2.2 Paper Session**

**2:20p-3:35p**

**Poolside 1**

*Culture*

### **Latina Superintendents in Rural South Texas and the Social and Cultural Values Impacting Their Success in the Superintendency**

*\*Barbara Buckley Greses, Gerri Maxwell & Bernadine Cervantes — Texas A&M University-Corpus Christi*

One focus for the Texas Education Agency (TEA) has been serving the needs of small and rural sites as they comprise more than 50% of the state's districts. In South Texas, a number of these rural districts are highly Latino/a, with the majority of low-socioeconomic students. Latina superintendents are not serving districts where most Latino/a students attend. This study explored the intersection of Latina social capital, and rural community cultural capital, and the impact on successful Latina leadership (Murphy, 2015). Dominant themes supported in the superintendency, Latina leadership, and capacity of rural leaders, and Latina's barriers to the superintendency

### **Qualitative Phenomenological Qualitative Study of Reflections on Leaders' Cultural Intelligence Self-Assessment**

*Don Beach, Ron Rhone & Juanita Reyes — Tarleton State University  
Jesse Brock — University of West Georgia*

The concept of cultural intelligence can provide an awareness for educational leaders of the behaviors associated with making equitable and socially just decisions. Using the "Cultural Intelligence Self-Assessment" educational leaders were asked to take the assessment to determine their personal level of awareness and understanding of cultural difference. Once the assessment was scored, the educational leaders engaged in writing a reflection of what they discovered about themselves as a result of taking the assessment. Students submitted their reflections without their names, and using qualitative protocols of hand scoring, the reflections

were examined for common themes and dispositions.

**The Area that Continues to be Unaddressed in Public-Schools: Teacher Bias in the EC-12 Setting**

*Shawn Verow — University of Houston-Clear Lake*

The purpose of this study was to examine the relationship between a teacher’s level of implicit and explicit bias, as well as teacher perceptions of the role bias plays in the school setting. A purposeful sample of 374 teachers working in the EC-12 setting in the southeast region of Texas completed a race Implicit Association Test (IAT) as well as the RIVEC Prejudice Scale.

Additionally, 12 were selected to participate in one-on-one interviews. Findings indicated that the Hispanic and White participants have a higher implicit bias against Black people than the Black participants did against White people. In contrast, all three racial groups, on average, held the same level of explicit bias. Findings from the interviews identified the following themes related to the role bias plays in the school setting: (a) implicit bias reactions, (b) explicit bias reactions, (c) lack of preparation and professional development, (d) bias in the academic setting, and (e) bias in discipline practices.

**W2.3 Paper Session**

**2:20p-3:35p**

**Cavalier**

*Literacy & Reading*

**“Okay, Miss, I Want to Talk It Out”: Metacognitive Dialogue to Promote Success in Reading**

*Kelli Bippert — Texas A&M University-Corpus Christi*

This study examines one adolescent student's behaviors while reading challenging texts. Robert (pseudonym) was found to increasingly rely on dialogue with self and others to support reading comprehension. Over the course of 11 weeks, Robert improved his success rate on an online reading intervention program from 3 successful attempts mid-year to 31 successful attempts by the end of the academic year. Using a comprehension-as-sense-making theoretical frame, findings suggest that providing at-risk adolescents opportunities to engage in dialogic strategic behaviors could encourage successful problem solving when working with challenging texts.

**The “Others” in Us: Multimodal Literacy Development Using Anthropomorphs in Animated Films to Foster Coping with Fear, Hate, and Violence**

*Craig Brashears — Texas A&M University-Corpus Christi*

Literacy learning, through multimodal texts, relies on social interaction to help children make sense of their world. The media-infused world of children make animated films a familiar modality for exploring dark emotions or themes such as fear, hate, and violence. These emotions can manifest in a relatable form as anthropomorphs. This analysis sought to examine animated films to understand how dark emotions are conveyed through anthropomorphs and how these films could be used as an effective multimodal instructional tool. Initial results showed that anthropomorphs had similar appearances and fear was the principal emotion human characters

must overcome to begin coping.

**A Psycholinguistic Model of Reading Comprehension Process: Structural Equation Modeling**

*\*Leily Ziglari — Texas A&M University*

This research study aimed to design a model of reading comprehension for children with a reading disability by incorporating both linguistic and cognitive components into the model. Simple View of Reading(SVR) claims reading comprehension is the product of decoding and listening comprehension; however, reading comprehension is also affected by cognitive components. I analyzed a pre-existing dataset from 360 students with a reading disability and analyzed with PLS Structural Equation Modeling. The results provided potential evidence base through which to revise SVR for a more impactful intervention. The proposed model will have the accountability potential for children with a comprehension disability.

**Implementation of a Cyrano de Bergerac Coaching Model in a Virtual Reading Clinic**

*Bethanie Pletcher, Marilyn Nicol & Gillian Benedetti — Texas A&M University-Corpus Christi*

The instructor of a Reading Assessment and Intervention course piloted a study using “bug-in-ear” technology to deliver teaching prompts to preservice teacher tutors while they listened to children read in a virtual tutorial setting. The instructor joined virtual tutorial sessions over Zoom and communicated with the tutors via phone, through a Bluetooth earpiece. The coaching sessions were recorded, transcribed, and analyzed. Other forms of collected data included field notes and a transcript from a focus group interview with the tutors. The pilot was successful in terms of technology use and the ways in which the tutors learned from the experience.

**W2.4 Paper Session**

**2:20p-3:35p**

**Poolside 2**

*Effective Schools*

*Discussant: Faye Bruun*

**Teacher Knowledge of Student Trauma**

*Amber Akhtar — University of Houston-Clear Lake*

This mixed methods exploratory study will examine teacher knowledge of student trauma in their classroom. This information will be used to support classroom instruction and behavior management systems used in the classroom. Based on teacher knowledge of student trauma, qualitative data will be collected to analyze how teachers gather information on student trauma and how this information guides student instruction.

**The Effectiveness and Characteristics of K-12 Asynchronous and Synchronous Instruction**

*Thelma Forte— Texas A&M University-Texarkana*

K-12 virtual education rose to unprecedented heights during a global pandemic forcing educational leaders to implement emergency plans that included virtual platforms. However,

## WEDNESDAY, FEBRUARY 15

current research shows K-12 virtual programs did not prepare students academically or socially during the pandemic (Pitts et al., 2022). Therefore, the proposed study examines the effectiveness of K-12 virtual instruction from the lens of the Community of Inquiry Theoretical Framework. Through a mixed method approach, teachers and administrators taking part in virtual programs will share perceptions regarding effectiveness; and identify characteristics of quality asynchronous and synchronous instruction.

### **Examining the Relationship Between Principal Culturally Responsive Self-Efficacy and Their Leadership Behaviors**

*Rogelio Cardona — University of Houston-Clear Lake*

Principals must understand and practice leadership behaviors that encourage school achievement by acknowledging cultural diversity. These behaviors fall within culturally responsive leadership, where studies reveal the importance of developing and analyzing it as a learning and academic achievement dimension. This study will examine the relationship between principals' culturally responsive self-efficacy and their leadership behaviors. There has been limited research on principal culturally responsive leadership practices. This correlational study will add to the body of knowledge by quantifying a relationship between culturally responsive self-efficacy and using it to predict leadership behaviors.

**W2.5 Workshop**

**2:20p-3:35p**

**Ballroom C**

*Free Workshop*

### **Practice Tips for Building a Faculty-Led Study Abroad Program**

*Monica Wong-Ratliff & Elvira Sanatullova — Texas A&M University-Kingsville*

The presenters of this training session are university faculty who have successfully developed and led several study abroad programs and service-learning projects. This training session will provide the audience with a step-by-step guide and practical suggestions on how to build a faculty-led study abroad program, which will help students to grow academically, professionally, and personally.

**W2.6 Workshop**

**2:20p-3:35p**

**Minuet**

*Free Workshop*

### **Becoming a Professor of Education**

*Julie Combs & William Jasper — Sam Houston State University*

*Gilbert Naizer — Texas A&M University-Commerce*

In this discussion-based workshop, we explore what college of education faculty positions involve and the transition from doctoral student to faculty member. Topics to be discussed are preparing your vita, highlighting your areas of expertise, matching your applications to job postings, and negotiating the job offer. Balancing the requirements for scholarly work, grants, research, service, and teaching and becoming a part of your faculty community will be

addressed.

**W2.7 Paper Session**

**2:20p-3:35p**

**Patio**

*Gender Issues*

*Discussant: Audrey Meador*

**Navigating Motherhood Through Shifting Identities: A Duoethnography Case Study of Working Mothers in Graduate School**

*Taylor Darwin, Elizabeth Goldberg, Lisa Flannery, Miranda Mullins, Olivia Perez, Cassandra Rose, Christi Whitworth — Texas Tech University*

Working mothers in doctoral programs face many unique challenges, such as juggling family commitments with work and academia. However, there is little research on the experiences of these women and how to support them. This in-progress research will use a duoethnography case study to explore the identities of six working mothers enrolled in an online Ph.D. program to answer the questions: (1) how do working mothers in an online doctoral program make sense of their multiple intersecting identities? (2) what affordances and challenges do these doctoral student working mothers describe when attempting to transition between their multiple identities?

**Roadblocks and Barriers to the Superintendency: Through the Lens of Minorities and Females**

*Rodney Louis — Sam Houston State University*

Most career educators get into the profession to make a difference in the lives of children and their communities. Many educators spend an enormous amount of money and time earning advanced degrees in the hopes of becoming campus-level principals, central office administrators, or district-level superintendents. However, because of gender, racism, and cultural biases, many females and people of color are denied the opportunity to the superintendency. The study aims to gain insight into the disparity of females and minorities recruited and selected for the superintendency.

**Safety and Inclusion in Schools for LGBTQ Students**

*Valerie Shirley — Texas A&M University-Texarkana*

Education leaders establish environments that are equitable and safe for all learners. While bullying is not uncommon, victimization targeting LGBTQ students is substantially higher. The purpose of the proposed qualitative research is to capture the experience of LGBTQ young adults and educators to understand their experiences. Two theories, minority stress theory and social ties theory, provide a theoretical framework explaining the phenomenon of study. Negative circumstances for LGBTQ students will continue until inclusive policies are implemented on school campuses and professional development for educators becomes mainstream thereby allowing LGBTQ students to feel both valued and protected in the learning environment.

**Finding Ourselves in Others: Identify Formation in Graduate School Working Mothers Through Round-Robin Duoethnography**

*Elizabeth Goldberg, Taylor Darwin, Lisa Flannery, Miranda Mullins, Olivia Perez, Cassandra Rose & Christi Whitworth — Texas Tech University*

This in-progress research will explore the intersectionality of working mothers enrolled in an online Ph.D. program. Often working mothers face many unique challenges with being primary caregivers coupled with unrealistic expectations from academia and the workforce. All these factors cause women to frequently navigate and negotiate their many identities. This study seeks to explore and understand the complex identity of motherhood combined with the identity of full-time workers and doctoral students, utilizing a unique methodological approach to answer the question: when working mother graduate students engage in a round-robin duoethnography, how does this influence their individual and group identities?

**W3.1 Paper Session**

**3:40p-4:55p**

**Poolside 1**

*Mathematics Education*

**Training Volunteer Health Professions Students to Promote Self-Regulated Learning in an Academic Coaching Middle School Math Program**

*\*Alana Newell & Beatriz Perez-Sweeney — Baylor College of Medicine*

Self-regulated (SRL) learning skills are needed both for future STEM career fields and are also relevant to immediate academic success. This study investigates the initial stages of an academic coaching program in which volunteer health professions students provide explicit SRL support and one-on-one math tutoring for struggling middle school students. Findings indicate that while some coaches found the training, support and strategies provided effective and were able to see explicit SRL behaviors in their students, those who did not had difficulties related to scheduling or the communication between themselves, their middle school student, and the math teachers.

**“I wanted to do them all!” Student Perceptions of the Gamification of College Algebra Course Material**

*Elizabeth Goldberg & Taylor Darwin — Texas Tech University*

Texas is transitioning to a corequisite model, where college students take developmental and traditional mathematics classes concurrently. However, little is known about how to support mathematical motivation among corequisite students (CRS). The purpose of this research study is to examine how gamification influences online and face-to-face CRS and traditional algebra students through the three elements of Self-Determination Theory (competence, relatedness, and autonomy). The results of this study demonstrated that college algebra students enjoyed gamification regardless of modality or placement. These results suggest incorporating the elements of SDT into gamification can be effective in increasing mathematical motivation among college algebra students.

**Influence of Gamification on Mathematical Self-Efficacy among Online and In-Person College Algebra Corequisite Students**

*Taylor Darwin & Elizabeth Goldberg — Texas Tech University*

Texas higher education is transitioning to a corequisite model, where students take developmental and traditional mathematics classes concurrently. However, little is known about supporting corequisite students (CRS), particularly minorities and first-generation college students (FGCS). This study examined the impact of gamification on CRS mathematical self-efficacy (MSE) and games self-efficacy (GSE) in both online and in-person courses. Based on the course survey data, students exhibited gains in MSE and GSE overall, in the online modality, and among FGCS and female students. The results suggest that gamification has the potential to support algebra CRSs, particularly females, FGCS, and online students.

**W3.2 Paper Session**

**3:40p-4:55p**

**Poolside 2**

*Higher Education*

**Corequisite Developmental Mathematics: Learner Engagement Strategies and Course Characteristics as Described by Faculty**

*Nara Martirosyan & D. Patrick Saxon — Sam Houston State University*

The purpose of this study was to identify learner engagement strategies and a few important course characteristics applied in teaching Corequisite Developmental Mathematics (CDM). Analyzing survey data received from 42 faculty members who teach CDM in 2- and 4-year colleges, researchers identified the five most frequently applied active learning strategies in CDM, as well as the top five study strategies in CDM courses. Based on the findings, practical implications were drawn for future practice in CDM instruction.

**Empowering Students in the Employment Process through Increased Self-Efficacy: Developing Culminating Experience Opportunities to Increase Marketability.**

*Paul Keiper & Wendi Zimmer — Texas A&M University*

Faculty in higher education face numerous challenges to increase program value. Value centers on relevancy, rigor, and student success. With a program of over 600 undergraduate students, our faculty set out to redesign our curriculum, focused on strengthening student self-efficacy and marketability through experience. This study used a mixed methods design with results from the qualitative interview process and the mixed methods survey questionnaire revealing four categories relating to the implementation of a culminating experience within the curriculum – Undergraduate Research, Global Learning, Internships, and Capstone. Integrating HIPs into the educational setting is valued for student success (Kuh et al., 2017).

**Understanding College Student Barriers to Online Learning Success: Preliminary Results on the Quality of the Literature**

## WEDNESDAY, FEBRUARY 15

*\*Emma Bullock, Jamille Forcelini, Ashlyn Segovia, Emilio Morales, Christina Bumpus & Bayley Turner — Sam Houston State University*

The purpose of this paper is to examine the research quality of the global literature on the topic of understanding college student barriers to online learning success. Congruent to our global approach, we utilized the Comprehensive Literature Review (CLR) methodology as proposed by Onwuegbuzie and Frels (2016). Over four phases of coding, we identified 139 articles of sufficient methodological quality to include thus far, 42.7% are qualitative, 10.1% are quantitative, 16.7% are mixed methods and 30.4% are literature reviews. The quality of the research methodologies in the selected literature will be discussed.

**W3.3 Paper Session**

**3:40p-4:55p**

**Poolside 3**

*Improving Instruction*

*Discussant: Amy Ray*

### **The Implementation of Response to Intervention (RTI) to Close Reading Gaps in Middle School**

*Julie Mathew — University of Houston-Clear Lake*

A student is expected to read purposefully in their classes by the time they get to middle school; teachers say that the students either come in saying, “can’t read, won’t read, or will read but fail to comprehend the text” (Bintz, 1997, p. 20). Response to intervention (RTI) has been developed as a prevention and remediation framework to provide universal screening and ongoing progress monitoring with research-based instruction (VandDerHeyden & Burns, 2010; Vaughn & Fuchs, 2003). The alignment of RTI instruction and intervention promotes a cohesive education program that can result in higher student achievement (Mellard & Johnson, 2008).

### **College and Career Readiness Intervention as Part of a Multi-Tiered Intervention Model**

*Robert Hicks — Sam Houston State University*

The purpose of this study is to identify intervention methods employed at the high-school level to assist students achieve college and career readiness measurement indicators. The research was conducted in a case study format. Participants in the study were college and career readiness program administrators who were tasked with assisting students prepare for the transition from high school to college. Data were collected from questionnaires, interviews, and the review of college and career readiness artifacts. Results will be beneficial to campus and district program administrators.

### **A Study of Certification Programs and Mathematical Teaching Efficacy of In-service Elementary School Teachers**

*Kacie Cooper — University of Houston-Clear Lake*

The purpose of this study is to investigate how teacher certification programs impact a teacher’s

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efficacy in teaching mathematics in grades PreK-5. This study will investigate whether there a difference in mathematics teaching efficacy between in-service PreK – 5 teachers who participated in traditional certification and alternative certification programs, and, if so, what teachers experiences are that may have led to those differences. The study will use the Mathematics Teaching Efficacy Belief Instrument (Enochs et al. 2000) and then teachers will be asked if they will be willing to participate in interviews about their experiences in their certification programs.

**W3.4 Paper Session**

**3:40p-4:55p**

**Cavalier**

*Multicultural Education*  
*Discussant: Victor Cifarelli*

### **Assessing and Developing Cultural Competence in Texas Schools**

*Lauren Dyal — Sam Houston State University*

Driven by intentional recruitment or population dynamics, increasingly diverse schools can enrich education. However, without systemic, sustained cultural competence, numerical diversity may undermine educational goals when student needs are not met in relevant, inclusive ways. Since student experience and engagement drive educational effectiveness, student cultural perceptions can provide necessary feedback to evaluate cultural competence development strategies. The purpose of this study is to examine the relationship between cultural competence staff training and student perceptions of school culture. This proposed mixed methods study will employ both correlational research design and qualitative analysis to examine this relationship following staff cultural competence training.

### **Discipline Disparities and the Reading Opportunity Gap in Black Boys in Grades 3-5**

*Alexandria Harrison — University of Houston-Clear Lake*

Zero-tolerance discipline practices can be detrimental to Black boys' educational journeys by exposing them to the school-to-prison pipeline. Once introduced to the pipeline, the course of Black boys' lives can be negatively altered. Exclusionary discipline is an obstacle that students from marginalized populations are subjected to. It also leads to the opportunity gap which keeps students from achieving academically. The purpose of this study is to examine the relationship between exclusionary discipline practice, discipline disparities, and reading achievement in Black boys in third through fifth grades, and how these Black boys perceive themselves as readers.

### **Exploring the Role of African American Culture in College Choice**

*Teranda Donatto — University of Houston*

College choice is the process of students deciding whether to go to college then searching for and choosing an institution. While research outlines the influences and barriers African Americans have through this process, it is limited because it does not take the role of these students' culture

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into account. The proposed qualitative study explores how African American cultural characteristics shape students' perceptions of who is influential in college choice. With this understanding, researchers and practitioners can draw on the strengths of African American culture to develop solutions to barriers students may face in this process.

**W3.5 Workshop**

**3:40p-4:55p**

**Minuet**

*Free Workshop*

**Oral History as a Research Tool**

*Lynn Burlbaw —Texas A&M University*

This workshop on oral history as a research tool consists of three parts: The what and why of oral history, the process of planning and conducting an oral history project, and how oral history information can be used in a research project.

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<b>T0.1</b>	<b>8:00a-5:00p</b>	<b>Foyer Ballrooms A-C</b>
	<i>Registration</i>	

**Closed During Business Luncheon**

<b>T0.2</b>	<b>8:00a-9:00a</b>	<b>Foyer Ballrooms A-C</b>
	<i>Continental Breakfast</i>	

<b>T1.1 Workshop</b>	<b>8:30a-9:30a</b>	<b>Cavalier</b>
	<i>Free Workshop</i>	

### ***Navigating and Getting the Most from SERA***

*Linda Reichwein Zientek & Susan Troncoso Skidmore – Sam Houston State University*

<b>T1.2 Paper Session</b>	<b>8:30a-9:30a</b>	<b>Poolside 1</b>
	<i>Technology</i>	

### **Lighting Effects for Learning with Spectral Shaping**

*Michael Mott, Regan Morse & Lauren Saltzman — The University of Mississippi*  
*Daniel Robinson — The University of Texas at Arlington*

The current experiment compares two light conditions with similar luminosity levels, an increased blue wavelength with a cooler color temperature and normal blue wavelength with increased warm color temperature. Four classrooms of high school students experienced the two conditions from August to November and were tested twice with different versions of the ACT Reading subtest, a short reading quiz, a motivation survey and an on-task checklist. Results will inform designers of school environments seeking optimal learning light conditions.

### **Current Perceptions Regarding Educational Video Games Held by Students, Administrators, Teachers, and Parents**

*\*Addison Zipter, Jared Yost, Lenny Tanui, Sherry Nguyen, Emma Ko, Anthony Jones, Madison Hall, Yanwen Chen & Michael Rugh, — Texas A&M University*

Educational video games (EVGs) have proven to be useful and important for education in different subject areas. Although there are still several potential drawbacks, most studies reveal that EVGs promote students' motivation, engagement, retention, and learning performance. Despite the potential benefits outweighing the risks, EVGs remain uncommon in classroom settings. Therefore, we conducted an extensive literature review to identify current perceptions regarding EVGs held by various stakeholders in terms of students, administrators, teachers, and parents. Findings indicated concerns but also positive beliefs about EVGs. Concerned stakeholder groups are open to EVGs if their worries are mitigated.

**Adapting Repeated Teaching Experiences for an Online Elementary Science Methods Course**

*Franklin Allaire — University of Houston-Downtown*

Repeated microteaching rehearsals (RMTR) enable teacher candidates to plan, teach, reflect, revise, and reteach the same lesson to a different group of students. RMTR has shown evidence of improving science content knowledge and understanding and increasing confidence in science teaching. Internet-based courses before, during, and following the COVID-19 pandemic have necessitated the adaptation of pedagogical practices for online environments. This presentation describes the adaptation and implementation of RMTR for an online elementary science methods course and its impact on teacher candidates (N = 221). Elementary teacher candidates' reflections and surveys showed appreciation for the RMTR as part of their science methods coursework, improvement in their understanding of content knowledge, and increased confidence to plan and teach science.

**T1.3 Paper Session**

**8:30a-9:30a**

**Poolside 2**

*Preservice Education*

**Defining Teacher Dispositions: A Phenomenological Investigation of Teacher Evaluators**

*Carlee Byrd & Ryan Glaman — Tarleton State University*

Preservice teachers are expected to learn instructional strategies, essential knowledge, and skills based on developmental appropriateness, pedagogical background, psychology, data management, and many others. Disposition, a somewhat intangible quality, helps teachers juggle the profession's facets and create student success. The purpose of the current study is to determine what dispositions are prevalent in successful teachers; the results from the present study will subsequently aid in the creation of a quantitative tool to measure these dispositions. The primary research question that this study will address is: what do teacher evaluators perceive as positive personality characteristics, behaviors, and beliefs of effective teachers?

**Collaborative Reflection on Beliefs, Practices, and Identities as Teacher Educators**

*Aaron Zimmerman, Taylor Darwin & Elizabeth Goldberg — Texas Tech University*

In this presentation, we describe how doctoral coursework can help early-career teacher educators to reflect upon and consolidate their beliefs about teaching and teacher education. Drawing on reflections from doctoral students, we discuss how reflection on eight essential questions, presented in the context of a doctoral seminar on teacher education scholarship, can scaffold doctoral students towards professional growth as teacher educators.

**Art as Metaphor: A Tool for Assessing Pre-service Teachers' Emotions about Learning and Teaching Mathematics**

*\*Melanie Fields, Julie Mills & Laura Isbell — Texas A&M University-Commerce*

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In this paper session, the researchers will report on a method of analyzing pre-service teacher perceptions of their journey to become a teacher. The pre-service teachers chose pieces of art to express and represent their emotions and feelings based on their early field experiences throughout their preparation program. Specifically, secondary STEM pre-service teachers utilized the art as a metaphor to describe how they felt about becoming a STEM teacher.

**T1.4 Workshop**

**8:30a-9:30a**

**Patio**

*Free Workshop*

### **Introduction to Propensity Score and Difference-in-Differences Methods for Treatment Effect Estimation**

*Peter Boedeker — Baylor College of Medicine*

Quasi-experimental methods can provide an internally valid treatment effect estimate when randomization is not possible. In this workshop, attendees are introduced to the problem of confounding and the need for quasi-experimental methods. Two families of methods (propensity score and difference-in-differences) are introduced with a brief overview of their assumptions. A worked example is presented throughout the discussion to illustrate application of each method (i.e., a simulated dataset to which each method is applied). Reference list by topic is provided. R code and an example dataset are available for use.

**T1.5 Workshop**

**8:30a-9:30a**

**Minuet**

*Free Workshop*

### **Qualitative Data Analysis: The Chex Mix™ Analogy**

*Shirley Matteson — Texas Tech University*

*Audrey Meador—West Texas A&M University*

This workshop session presents an innovative strategy for conducting qualitative data analysis. Usually, more emphasis is spent in qualitative methods courses on the data collection skills of interviewing and observations. However, developing strong data analysis skills are just as important as cultivating one's data collection competencies. This workshop demonstrates how a Chex Mix™ activity can support the development of qualitative data analysis skills. Specifically, attendees will experience coding and recoding of data multiple times, write descriptions of data groupings, develop themes and categories from the coded descriptions, and identify similarities and differences in codes developed from different data sets.

**T1.6 Paper Session**

**8:30a-9:30a**

**Poolside 3**

*Higher Education*

*Discussant: Juanita Reyes*

### **Workplace Bullying in Higher Education: Assessing Impact on Job Performance**

*Marisol Loredó & Daniella Varela — Texas A&M University-Kingsville*

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Workplace bullying is a significant problem that is often overlooked in higher education institutions. There is a gap in the literature regarding workplace bullying in higher education institutions on victims' job performance. This correlational research study aims to understand the effect of bullying in the workplace and job performance in higher education. The Negative Acts Questionnaire-Revised (NAQ-R) instrument will measure the employee exposure levels to bullying incidents and the Job Descriptive Index (JDI) instrument will measure job performance. A random sample of 200 staff and faculty will be recruited from public institutions of higher education in Texas. The results will help college and university administrators understand how bullying in the workplace affects job performance and in effect, workplace culture, and research implications aim to highlight what higher education institutions can do to diminish workplace bullying.

### **Dual Credit, Advanced Placement, and the Need for Developmental Education**

*Jennifer Trejo — Sam Houston State University*

Because having some college education has benefits at the personal and societal level, states have started to include college readiness standards in their accountability measures. One way secondary schools have responded to these requirements is by increasing their AP and dual credit offerings. Numerous studies have shown their usefulness regarding high school graduation, GPA, college admission, enrollment, persistence, credit accumulation and degree attainment. Since there are students who complete these programs in high school and subsequently require developmental education, it is important to investigate where the programs are lacking and what can be done to correct the issue.

### **The Impact of the Student Services on the Success of International Students in University**

*Mona Farokhian — University of Houston-Clear Lake*

Many immigrants to the United States arrive with a wide range of professional qualifications, educational experiences, and linguistic backgrounds. Yet highly educated and undereducated immigrants are often placed in ESL classes together, leaving instructors with the tremendous challenge of simultaneously teaching students with advanced degrees and those with only a primary education. The goals of recent immigrants enrolled in higher education can also vary depending upon their prior education and career plans. Higher education administrators should use technology to address the diverse needs of the three different ELL profiles (international, immigrant, and Generation 1.5), ensure that learning is individualized, relevant, and meaningful for students, and link qualified educators with learners, assess students and collect data about outcomes (Bergey et al. 2018).

**T2.1 Paper Session**

**9:35a-10:35a**

**Poolside 1**

*Methodology*

### **Reading Mathematics, Say What? A Scoping Review**

*\*Kimberly Ann Currens — Texas A&M University*

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This scoping review provides an overview of reading mathematics in education literature using the Arksey and O'Malley framework. Beginning with a search conducted in four bibliographic databases, 775 records and professional mathematics organizations were identified. Eleven ad hoc categories based on title and abstract were identified for characterization and elimination purposes. Eighty-three eligible records were read and reread for the selection and further characterization. The remaining 11 records varied in terms of purpose, methodology, and detail of reporting. This scoping will help researchers and practitioners find the most relevant or recent studies using the written word to learn mathematics.

### **A Comparison of Parameter Estimate Bias in Non-linear Mixed Effects Models and Structured Latent Curve Models**

*Kevin Wells — The University of Southern Mississippi*

This simulation study examines the bias present when recovering parameter estimates within non-linear mixed effects models and structured latent curve models under varying conditions. Previous research has provided recommendations on situations where each of these models is preferred, however, to date there has been no discussion of the amount of parameter estimate bias present under differing conditions. Manipulated design factors for this study include sample size, repeated measures, inflection point, and rate of change at the inflection point. Results and implications of the findings are discussed, and recommendations are made on which method is preferred to minimize bias.

### **A Bayesian Network as a Model Assessing Complex Semantic Explanations and Learning**

*Zhidong Zhang — University of Texas Rio Grande Valley*

This study explored a diagnostically cognitive assessment (DCA) model for an ANOVA score model, in which the ANOVA score model was decomposed into measurable components. The data were transferred to a quantitative representation via the Bayesian network ANOVA score model. The DCA consists of 28 variables: explanatory and evidence variables. Nineteen evidence variables were used to collect students' learning information. Twelve students practiced the ANOVA Score Model for the semantic explanation, indicating the scores were diverse. Two students were at a low level of semantic explanations. One student was at the medium level, and 9 students were at the high level.

**T2.2 Paper Session**

**9:35a-10:35a**

**Poolside 2**

*Mathematics Education*

### **Multiplication Facts in High School Mathematics Course**

*Antonia Collett — Baytown Christian Academy*

*Linda Zientek—Sam Houston State University*

Ability to perform fraction operations has been identified as problematic for many students. High school mathematics problems often contain fraction operations. Thus, teachers must review those

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skills prior to teaching new content. Given that multiplication fact automaticity (MFA) has been shown to be related to fraction ability in middle school, a successful review of fractions would not be as effective if MFA has not been attained. Therefore, as a part of high school mathematics courses, time should be given to reinforce students' MFA. This study sought to examine high school students' ability to perform multiplication facts at a parochial school in Texas.

### **Exploring Function Graphs in Different Axis Orientations: The Case of Quadratic Functions**

*\*Volkan Sevim — University of South Carolina Beaufort*

This qualitative research study investigates the role of non-conventional axis orientations in helping students develop a covariational understanding of quadratic functions. Particular attention is given to the meaning of the “vertical line test,” the concepts of domain and range, and inverse functions. Increased knowledge of how students reason with non-conventional axis orientations will contribute to ongoing research on students' understanding of the concept of function.

### **Analyzing the Effects of Math Track Placement on High School Students' Perceptions of Math Teacher Treatment over Time**

*Kristian Edosomwan — Texas A&M University*

Tracking has been shown to have negative effects on students' academic and life outcomes. This study investigates if the level of math course a student takes affects their viewpoints on their teacher's treatment of students and how that relationship changes from the beginning to the end of high school. Using the High School Longitudinal Study of 2009 (HSLs:09), I found that accelerated math students had more positive perceptions of how their math teachers treated them and that perception becomes even more positive as they transition from freshman to junior year.

**T2.3 Workshop**

**9:35a-10:35a**

**Patio**

*Free Workshop*

### **Adjusting Leadership Styles to Increase Differentiation of Teacher Training**

*LaKenya Lockett — University of North Florida*

School-based administrators serve as instructional leaders, and there are three styles of leadership that may be used to support teachers: autocratic, democratic, and laissez-faire. There are positive connections related to each style, if they are aligned with the level of expertise for teachers. The three levels of teacher expertise to be dissected are: beginner, competent, and proficient. Session participants will be able to identify individuals and their level of expertise, as it pertains to non-negotiables in a school's setting. Then, adjustments to leadership styles will be shared, ensuring that teachers are productive and leaders are utilizing their time wisely.

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**T2.4 Paper Session**

**9:35a-10:35a**

**Poolside 3**

*Higher Education*

*Discussant: Lynn Burlbaw*

### **Building Resiliency and Professionalism in Nursing Students: Research in Progress**

*Holly Scrogins — Texas A&M University-Texarkana*

Nursing students are experiencing a lack of resiliency and professionalism in the clinical setting, leading to burnout. Increasing resiliency factors can help students manage incivility and minimize uncivil behavior in the clinical environment. The study will explore how students can flourish in the uncivil setting by increasing resiliency factors. The proposed study adds to the literature regarding the role of resiliency in nursing by testing resiliency interventions. Stephens Nursing Resilience Model (2013) and the Growth Mindset Theory will be used for nurse educator interventions. The quasi-experimental design will assess how practiced interventions to build resiliency skills influence the student.

### **Developing a Counseling Psychology Course Elective at an Osteopathic Medical School**

*Ritvik Bhattacharjee, Willard Williams, Alektra Arauzo & Luis Banuelos — Sam Houston State University*

Counseling psychology is a field of healthcare that uses culturally-informed practices to assist individuals with their mental health. Though mental illness is similarly prevalent in metropolitan and rural areas, this service is often inaccessible to individuals in rural and medically underserved communities. Consequently, primary care physicians in these areas serve as first-line mental healthcare providers, though they lack a strong psychotherapy education. Our study aims to create a counseling psychology clerkship elective for undergraduate medical students and determine whether this course will better prepare them to address the mental healthcare shortage in rural and medically underserved areas..

### **Self-Regulation in Developmental Education: Implications for Application**

*Gabrielle Castro — Sam Houston State University*

The purpose of this literature review was to explore how self-regulation is described in the literature through research and as a theoretical construct. This paper presents Wambach et al.'s (2000) theory as a framework, designed for developmental education to foster self-regulation among students. We then review 15 primary sources of research ranging in publication date from 2010 to 2022. By understanding this noncognitive variable, developmental education faculty and staff can learn to incorporate it and improve upon traditional measures of student success.

**T2.5 Workshop**

**9:35a-10:35a**

**Minuet**

*Free Workshop*

### **Applying the Delphi Method to Studies in Education**

*Jarod Lambert & Julie Combs — Sam Houston State University*

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As compared to other disciplines, there is a dearth of Delphi studies in education literature. Delphi studies are particularly useful for addressing problems of practice in schools. The purpose of this workshop is to describe the Delphi method for conducting studies in school settings. Participants will (a) identify key features of a Delphi study, (b) participate in a simulation of a Delphi study, and (c) discuss the application and limitations of Delphi studies.

**T2.6 Symposium Session**

**9:35a-10:35a**

**Cavalier**

*SERA 2023 Early Career Research Award*

### **Defining Moments for Minoritized Women\* Leaders in P-20 Education Spaces**

*Katrina Struleoff — Drexel University*

The overarching goal of this research is to illuminate the multidimensional, complex, and often unspoken barriers that impede, inhibit, and affect minoritized women from seeking, attaining, and remaining in P-20 educational leadership roles, and identify components that assist in seeking, navigating, and staying in those roles. By focusing specifically on New Orleans, LA and Philadelphia, PA, a unique analysis using an Ecological-Intersectional model will explore experiences, systems, and perspectives in spaces with a history of state led educational reform, large minority populations, and a current educational policy focus on the full P-20 educational system.

### **Conceptualizing “Others” in Student Work Tasks: Exploring Whose Mathematical Reasoning is Evident in Curriculum Materials for Elementary PSTs**

*Amy Ray — Sam Houston State University*

One way curriculum writers have created opportunities for students to engage in “critiquing the reasoning of others” is by using student work tasks in their materials (SMP3b, CCSS, 2010, p.6). Student work tasks present a person in a problem, evidence of this person’s mathematical thinking, and asks the reader of the task to engage in analyzing the person’s thinking. In previous analyses of middle grades materials, researchers found that students’ opportunities to engage in analyzing someone else’s mathematical thinking often extended beyond error analysis, but the types of critiques required in assessment materials were often less varied than those provided in student textbooks (e.g., Gilbertson et al., 2016; Ray, 2020). In this proposed project, I will extend existing coding frameworks used to conduct analyses of student work tasks with a new focus on curriculum and assessment materials for elementary pre-service teachers (PSTs). A key goal of this project is to explore whose mathematical work is worthy of critique as evidenced by the “others” that appear in student work tasks.

### **Information about applying for the SERA Early Career Research Awards**

*Shirley Matteson — Texas Tech University*

*Chrissy Cross — Stephen F. Austin State University*

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Annually the Southwest Education Research Association holds two competitions for research awards for its members. SERA is dedicated to furthering the advancement of graduate student and junior faculty educational research. Two competitive Research Grants for up to \$1000 for 1-year projects will be awarded annually at the annual Conference to a doctoral student and assistant professor at a 4-year institution. Grant proposals are due May 1st, following the annual conference. Grant awardees will be notified by June 1st. Awardees then present at the next annual conference. This symposium will highlight the research of the 2023 Early Career Research Awards, and also provide a platform for doctoral students and early career faculty to gather information about how to submit a successful proposal.

**T3.1 Paper Session**

**10:40a-11:55a**

**Cavalier**

*Science Education*

### **The Science Learning via A Bayesian Network Representation**

*\*Zhidong Zhang and Angelica Guanzon— The University of Texas Rio Grande Valley*

The Assessment of Problem-Solving in Chemistry Learning as a model represented students' mastery of chemistry study. The data was analyzed through the cognitive task analysis. A student model was established which represents the qualitative information in a structure and provides a potential framework for the assessment model and the quantitative representation—a Bayesian network assessment model. The student's performance was assessed via the Bayesian network assessment model, and classified into three categories: low level, middle level, and high level. The mastery level should be scored at and above 90.51/100 for Declarative, Procedural, and Strategic Knowledge respectively.

### **The Effects of Attendance Type On Science STAAR and Growth Scores During COVID**

*Samara Simons & Emma Bullock — Sam Houston State University*

This study sought to understand if attendance type whether online, in person, or hybrid had any effect on students' science State of Texas Assessments of Academic Readiness (STAAR) and growth scores during the 2020-21 year of the COVID pandemic. Using a quantitative, non-equivalent group, quasi-experimental design, 381 8th graders participated on the Measures of Academic Progress (MAP) tests and the STAAR assessments. Students who attended fully online, fully in person, or a hybrid of the two performed about the same on STAAR tests and showed similar rates of growth.

### **Learning by Scientific Design: Using Cognitive Science to Improve Teacher Candidates' Thinking About Teaching Science and Math**

*Andrea Foster & Kristi Martin — Sam Houston State University*

This research draws out the implications of a Learning by Scientific Design (LbSD) initiative to improve teacher candidates' thinking about their teaching and children's learning. LbSD emphasizes a cognitive science approach to prepare future science and mathematics teachers

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with a deeper understanding of how students learn so they can make instructional decisions that lead to deeper and more equitable learning for generations of PK-12 students.

### **Reflective Practice and Teacher Growth in Literacy, A Case Study**

*Meagan Hill Foster — Texas Tech University*

This proposal highlights the findings of a case study which focuses on the reflective practice of three life science teachers in urban Texas. Various data sources including classroom observations, documents and interviews were analyzed using coding to uncover the teachers' reflective practices. The results indicate that a teacher's reflection falls into several categories including ways to make curriculum interesting and engaging, obstacles to student motivation and learning, personal teacher growth, measuring a student's understanding and learning process. This study reinforces Shulman's theory of pedagogical content knowledge and Senese's definition of reflective practice.

**T3.2 Workshop**

**10:40a-11:55a**

**Minuet**

*Free Workshop*

### **On the Use of Normal Replacement Scores when Normality Assumption is Violated**

*Grant Morgan & Hiroki Matsuo — Baylor University*

The purpose of this workshop is to introduce (1) the basic ideas of nonparametric analysis and (2) demonstrate the use of van der Waerden normal replacement scores. In the case of violated parametric assumptions, nonparametric analysis via normal replacement scores often yield identical power as the parametric analog. We will present the normal replacement score analog for the one sample t test, independent samples t test, Kruskal-Wallis test as an analog for the one-way ANOVA. Replacement score theory and asymptotic relative efficiency will be briefly discussed. Attendees need only have basic familiarity with statistical concepts and comparisons of group means.

**T3.3 Paper Session**

**10:40a-11:55a**

**Ballroom C**

Policy, Achievement, and Educational Reform

### **Toocommon Schools: A Critical Policy Analysis of the Proliferation of Uncommon Schools**

*Matthew McCluskey — Texas A&M University-San Antonio*

*Madhu Narayanan — Portland State University*

Since 1994, "no-excuses" charter practices have spread widely. This project seeks to uncover the influence of one charter management organization (CMO): Uncommon Schools. Knowledge reflects networks of power; charting its spread can reveal how dynamics of power structure policy (Diem et al., 2014). Using a systematic search of publicly-available documents, this study identifies Uncommon's reach at four levels: state, local, university, and private organization. We found evidence of Uncommon's practices across all levels, ranging from evaluation systems to teaching practices. This influence extends beyond the network's scale or success, suggesting a

growth driven by ideological stance rather than evidence.

**A Mixed Methods Needs Analysis to Support Community Families in School Readiness**

*Ruthie Walker & Shaun Hutchins — Texas A&M University*

Townview Primary (PK-K) has partnered with a local early learning coalition focused on prenatal to age five children to create a comprehensive support system to ensure families access available programs and resources to help their children get ready for school. While both organizations have a shared vision to help increase school readiness, there is a gap in understanding the resources that local families need and the local capacity to meet those needs. Mixed methods action research was used to examine the services families wanted and the local capacity to serve them. Recommendations are provided to improve collaboration.

**Dismantling Damage Centeredness: A Pilot Study**

*\*Marilyn Nicol & Faye Bruun — Texas A&M University-Corpus Christi*

Child development research has focused on middle class, Eurocentric families to decipher typical child-rearing practices that lead to healthy, thriving outcomes for young children. This research sought to examine the relationship between specific parent behaviors across a spectrum of socioeconomic backgrounds and student achievement in the following research question: Is there an interactive effect of parents arguing heatedly in the home and needing professional mental health help on student achievement? The significance of this study is not to downplay the effects of domestic violence and adversity at home however giant gaps in access to opportunities for marginalized students, and that should become the center of the conversation.

**Closing the Achievement Gap in Urban Elementary Schools for Minority Students**

*Lou Sabina & Debra Touchton — Stetson University*

The differences between the academic performances of socioeconomic, racial, ethnic groups to others defines the achievement gap. However, *Brown v. Board of Education* shined the light on the racial disparities of people of color. After decades of school desegregation efforts, during which the gap between blacks and whites closed substantially, progress has stalled. (Johnston & Viadero, 2000) Closing the achievement gaps in urban elementary schools has become an even larger problem since the days of segregation. The governmental involvement and initiative of No Child Left Behind, preparation, perception and expectations of teachers in urban schools, socioeconomic status and home life, and the availability of equal equitable resources have profound impact on widening the achievement gap between minorities and Caucasian students, even beyond the classroom. The research suggests that the achievement gap is widening and the effects of the gaps are reaching beyond the classrooms. This study on the achievement gap examined three urban elementary schools in a rural school district in Central Florida whose student demographics and socioeconomic are similar in nature. Information gained from this study will shine the light on trends on the achievement gaps between minorities and Caucasian students in urban elementary schools while potentially leading to solutions of narrowing this gap.

**Career Development: The Career Counseling Needs of Black Undergraduate Students**

*Kristelle Walls — Sam Houston State University*

In this study, I will compare the perspectives of Black college students and college career counselors to gain an understanding of the career counseling needs of Black undergraduate students regarding career decision-making. Students and career counselors from universities in the Southeast Region of Texas will be asked to interview for this research. Interview questions will be formulated to gain insight into students' needs based on McClelland's Needs Theory. New practical implications drawn from this research will assist higher education professionals in the further development of Black undergraduate student success.

**Perception of Educational Leaders and Educators on College Readiness Through Analysis of Graduation Rates with an Associate Degree Among Five Early College High Schools**

*Vijaya Bobba — University of Houston-Clear Lake*

The Early College High School (ECHS) model began as a pilot study for The Bill & Melinda Gates Foundation Initiative to improve college readiness among high school students (Edmunds et al., 2020). Educational leaders such as Principals, Assistant principals, and educators play a key role in student achievement towards college readiness. Yet few studies have reported their perceptions of college readiness in ECHS model. The graduation rates with associate degree among five Early College High Schools will be analyzed for the quantitative component. The qualitative component will include the phenomenological concept of interviewing educational leaders and educators.

**Perceptions of Mathematics Instructors' Technology Acceptance for Engaging Remote Learning During COVID-19**

*Kendis Smith — Sam Houston State University*

During the arduous period of COVID-19, postsecondary instructors were forced to make significant adjustments to their pedagogical practices. Utilization of technology was no longer an option but a requirement to engage education. As such, varying levels of technology efficacies of stakeholders were revealed, which prompted this study. Given that mathematics has been identified as a challenge to deliver remotely, this multi-case study will qualitatively explore the perceptions of six mathematics instructors at a southeast university regarding their technology acceptance levels. The expectation is to understand their usage behavior toward instructional technology based on the extended Technology Acceptance Model.

*School Improvement*  
*Discussant: Stephen Gruber*

**Capitalizing on Social Capital: Analyzing Award Winning Teaching Strategies Through the Lens of Social Capital Theory**

*Neil Laminack — Sam Houston State University*

Gaps in educational achievement for marginalized populations seem to rise annually. Acquiring bridging and linking capital offers the potential for ethnic and socio-economic equity. By exploring case studies through the lens of social capital theory, institutional agents gain information that can impact organizational behaviors and outcomes. This study is research in progress, so the results are undetermined.

**Research on the Impact of Family-Community-School Partnerships on Student Achievement**

*Suzan Yesil — Texas Tech University*

This article provides a review of the most recent theoretical and empirical literature on family and community involvement in schools with the goal of fostering a greater understanding of the most important practices in this area. The article discusses a variety of ways that families and communities get involved in their schools. In addition to this, it discusses the major categories of school-community partnerships, as well as the factors that influence how they are implemented and the outcomes they produce. Based on the findings, the author outlines the significance of the study as a way to strengthen the capacity of community involvement in schools to increase the likelihood of beneficial impacts for students, education professionals, families, and communities.

**Teacher Experience Levels and Student Discipline Placements**

*William Thompson — Sam Houston State University*

First-year teachers do not receive adequate training regarding classroom management techniques and are less prepared than any other pedagogical skills when entering the workforce. Less experienced teachers are more likely to have ineffective classroom management techniques resulting in higher punitive discipline efforts including but not limited to out of school suspension. According to the U.S. Department of Education (2018), almost 11% of all students in the United States received one or more days of in-school suspension and 10% of students received one or more days of out-of-school suspension.

*Improving Teaching*  
*Discussant: William Jasper*

**Qualitative Study Proposal of Teacher Beliefs and Practices for Grading**

*Carol Nix — Texas A&M University-Texarkana*

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Teachers' grading practices are influenced by tradition and their personal beliefs. The reluctance by educators to implement research-based grading methods has led to a grading system that is insufficient. The purpose of this qualitative study is to identify grading practices of middle and high school teachers and determine how their beliefs and tradition inform their practices. Change and equity theories structure this study. The qualitative design allows for interviews of teachers to explore why and how grades are assigned. The study will contribute to the literature in educational leadership to address the need for change in grading practices.

### **New Teachers Experience of a Yearlong Residency Program**

*Norbertha Zavala — Sam Houston State University*

Retaining teachers continues to be a problematic issue districts are facing. Finding partnerships that support schools can have a direct impact on the retention of teachers. Learning from university partnerships that give new teachers a yearlong residency experience versus a traditional residency can impact the retention for that individual. In this study the perceptions and experiences of new teachers are explored. The benefits, opportunities for growth, and best practices of a yearlong residency are presented as well.

### **Teacher Burnout and the Effect on New to Profession Secondary Teachers**

*Coralynne Carson — Sam Houston State University*

The purpose of this paper is to identify reasons for teacher burnout in new to the profession of secondary teachers. Through the use of interviews and surveys, this qualitative study will look at new teachers who are alternatively certified and have five years of experience or less in the educational field. This is research in progress, and therefore may not exclusively answer all areas of this topic.

**T4.0**

**12:00p-1:30p**

**Ballrooms A-B**

*Lunch & Business Meeting*

Special Ticketed Event

**T5.0**

**1:35p-2:40p**

**Minuet**

*Presidential Invited Address*

**T6.1**

**2:45p-4:00p**

**Minuet**

*Fireside Chat*

**T6.2 Paper Session**

**2:45p-4:00p**

**Cavalier**

*Factor Analysis*

### **Factor Analysis: Manual Extraction vs SPSS Extraction**

*\*Kevin Barlow & Erica Hummel — University of Mary Hardin-Baylor*

Software, such as the Statistical Package for the Social Sciences (SPSS), makes running statistical analyses very easy, leaving the bulk of the researcher's role to interpreting the results. This is a positive improvement over the intensive manual calculations needed to do such analyses before today's easy access to modern day computers. However, sometimes there is a need to understand the mathematical algorithms behind the software, which are not always so evident. This paper aims to provide some insight into those mathematical algorithms of factor analysis.

### **Measuring Little-c Creativity: A Rasch Model Analysis of the Creative Achievement Questionnaire (CAQ) scale**

*Fatih Ozkan — Baylor University*

Research on everyday creativity—the “little c” creative activities people do in their everyday lives—commonly uses self-report scales to assess people's engagement in different activities. The present research presents a detailed psychometric analysis of the Creative Achievement Questionnaire (CAQ), a 96-item yes/no checklist of common creative activities that has become one of the most popular self-report measures of everyday creative behaviors. Based on a sample of 8,397 adults, the reliability, dimensionality, item fit, item difficulty, and test information were evaluated from a Rasch model perspective. Overall, the CAQ shows good evidence for score reliability and appears essentially unidimensional; a small cluster of misfitting and locally dependent items were flagged for impairing unidimensionality. The items' difficulty level was generally moderate and suitable for the scale's intended populations and purposes. Differential item functioning (DIF) based on gender and age, estimated via Rasch tree recursive partitioning methods, found notable gender-based DIF (generally reflecting culturally gendered qualities of some creative activities) but little age-based DIF. Taken together, the CAQ has many psychometric strengths. Some opportunities for future scale refinement are discussed.

### **Class Enumeration Accuracy of Double Cross-Validated Fit Indices in Latent Profile Analysis**

*Hiroki Matsuo & Grant Morgan — Baylor University*

This study examines the use of double cross validated fit indices to aid in the selection of the correct number of latent profiles. The current study extends the work presented in 2022 and employed the population structure with known characteristics including the number of latent profiles, mixing weights, class means, and class variances. In this study we evaluated the performance of the (1) Double Cross-Validated AIC, (2) Double Cross-Validated BIC, (3) Double Cross-Validated NBIC, (4) Cross-Validated LRT, (5) Double Cross-Validated LRT, (6) Cross-Validated -2LL, and (7) Double Cross-Validated -2LL.

### **Generalized Linear Modeling a Cooperative Learning with Semantic Representations**

*Zhidong Zhang — University of Texas Rio Grand Valley*

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This study explored a mixed methods research design by analysis of a set of interview data. Saldana's model was utilized to complete the opening and thematic coding. Three themes were recognized supporting the cooperative learning models: Knowing by Undergone Events and Contexts, Implementation and Action, and Opinions and Perceptions, which consisted of a Cooperative Learning Model (CLM). The frequencies of the terms and phrases consisted of the evidence variables. A generalized linear model (GeLM) was utilized to examine the relationship between the three themes and the CLM. The GeLM analysis reported the relationships between the CeLM and three themes.

**T6.3 Paper Session**

**2:45p-4:00p**

**Poolside 1**

*Education Reform and Attitudes*

### **Should I Stay or Should I Go? Why Teachers are Staying in Urban Schools**

*Terre Evans — University of Mary Hardin-Baylor*

The national teacher vacancy rate in May of 2022 showed 380,000 openings compared to 155,000 vacancies in 2019, an increase of 70% from pre-pandemic data (Leech, 2022). In Texas alone, the number of teacher openings went from 36,473 in 2018-2019 to 42,839 in the 2020-2021 school year (Joy, 2022). As the numbers continue to rise for professionals leaving the field, there are many remaining even in the toughest of times. This session will share the reasons why teachers in a large urban school district in Texas are choosing to stay in the profession.

### **Effects of A STEM Summer Camp on Secondary School Students' STEM Career Interest**

*Niyazi Erdogan, Miriam Sanders, Luciana Barroso — Texas A&M University*

In this study, researchers are interested in students' STEM career interests in informal learning environments. A Likert type instrument consisting of ten statements was developed and administered. Paired sample t-test was used to analyze the data. Preliminary results showed that there was not a statistically significance between students' pre and post attitude mean scores. However, mean scores of post survey ( $\bar{X} = 83.49$ ) was higher than the mean scores of pre survey ( $\bar{X} = 82.36$ ). More results regarding the correlation coefficients between gender, ethnicity, age, and pre-post survey scores will be presented at the conference.

### **A Closer Look at the Rewriting of School Performance History in Texas by Marlin ISD**

*\*Daniel Robinson & Emily Cole — University of Texas at Arlington*

Marlin Independent School District (Marlin ISD) hosted a parade on September 1, 2022 to celebrate its best grade by the Texas Education Agency (TEA) in 10 years. The score jumped from 56 in 2019 to 86 in 2022. How did school grades increase considerably in Texas over the pandemic when most other states experienced a drop in test scores? A closer look at the data revealed that Marlin ISD did not improve their STAAR test scores. Rather, their College, Career, and Military Readiness score increased dramatically due to 49 students taking a college prep course.

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### **Education During the Pandemic and Beyond: The Perceptions of PreK -12 Educators, School Leaders, and Student Teachers**

*\*Daniella Varela & Mike Desiderio — Texas A&M University-Kingsville*

The extent of the impact of the COVID-19 pandemic on the education system is yet to be seen. Turn on the local news and there are nightly stories about the public's concerns for student achievement gaps, learning loss, and the projected frailty of students' mental, social, and emotional health. In addition to students, a critically important population to study are those who will need to respond to students' issues: school leaders, teachers, and pre-service teachers. In an effort to triangulate an understanding of the impact on these groups, this study used the findings of three research initiatives, each of which sought to determine the bearing of the pandemic on the future of the education workforce. Synthesized results of qualitative research from the perspective of school leaders, teachers, and pre-service teachers revealed a consistency of themes across the three populations studied: a persistent and frustrating lack of preparation and resources, concerns about the future of their students, professional careers, and education, but above all, a sense of resiliency and determination to persevere. These common themes are discussed as a call to action because the findings provide implications for policy, practice, additional research, and a meaningful response to what was learned during this time of transition in K-12 education.

**T6.4 Workshop**

**2:45p-4:00p**

**Patio**

*Free Workshop*

### **Exploring Researcher Identity Development**

*Susan Skidmore, Maribeth Jorgensen & Adebola Omogunwa — Sam Houston State University*

Whether we are new to doctoral studies or are seasoned faculty members, understanding our researcher identity is critical to our doctoral and career research engagement and experience. In this session, a senior, mid-career, and graduate student will provide an overview of researcher identity development, why it is important, as well as associated barriers and opportunities that can shape our researcher identity. A list of both associated scholarly literature and concrete strategies for growing our researcher identity will also be distributed.

**T6.5 Workshop**

**2:45p-4:00p**

**Ballroom C**

*Free Workshop*

### **SERA Junior Mentoring Initiative – Part I**

*Michelle Peters — University of Houston-Clear Lake*

*Tonya Jeffery — University of Houston—Downtown*

The SERA Junior Faculty Mentoring Initiative will be discussed during the session. Presenters will share the rationale for the initiative, describe the program's purpose and goals, and explain the application process. Interested persons will have an opportunity to ask questions and meet

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potential mentors/mentees. Part I will address teaching, research, and service expectations for junior faculty.

**T7.1 Paper Session**

**4:05p-5:20p**

**Poolside 1**

*Classroom Management*

### **Teachers' Humor Ignites Engagement**

*\*Dina Geumei — University of Houston-Clear Lake*

Studies show how engagement is a great indicator of students' learning, grades, achievement, test scores, retention, and graduation (Finn, 1993; Fredricks et al., 2004; Newmann et al., 1992; Tight, 2020). Classroom engagement is heavily dependent on teacher-student interaction. Havik & Westergård (2020) found that students who perceived high-quality classroom interactions were more engaged in school. Schlechty (2011) stated that genuine student engagement created through teachers' well-crafted activities enhances students' ability to problem solve and boost their creativity. However, having students from different ethnicity and socioeconomic background and with different capabilities all within the same class makes student engagement a puzzle. Such a puzzle can only be solved by a universal language: the language of humor. Humor is a social instrument that provides an effective way to reduce psychological distress, communicate a range of feelings and ideas, and enhance relationships (Baldwin, 2007). Helping students become lifelong learners is only an achievable goal if educators are empowered with the knowledge of the facilitators of engagement. Facilitators, like humor, ensure student engagement in the learning process (Nienaber et al., 2019). Rainsberger (1994) concluded from the results of his study that well over 50% of all subjects (teachers and students) reported that using humor reduces stress and tension and agreed with its effectiveness as an intervention in this regard. Baumgartner and Morris (2008) showed that humor-based teaching is more engaging and interesting for the students. Humor can be used by the teacher to help connect with the students if, and only if, the teacher used the appropriate type of humor. A teacher's knowledge of the appropriate type of humor to be used is a key to humor's success as a facilitator of student engagement. Affiliative & self-enhancing humor increases student engagement, while the aggressive and sarcastic style of humor inhibits student engagement (Nienaber et al., 2019). Cushman (2014) asserted that humor is a teaching tool that warrants further investigation.

### **A Qualitative analysis of Culturally Responsive Classroom Management Practices of Urban Elementary Teachers**

*Karen Graham McIntush — University of Houston*

This qualitative analysis of 15 urban novice teachers explores culturally responsive classroom management (CRCM) perspectives on teacher practices. Teachers had 1-3 years of experience and taught a variety of levels and content. Novice teachers struggled initially with explicitly and consistently communicating and enforcing expectations and procedures. Additionally, teachers struggled with a range of behaviors, especially extreme misbehaviors. Teachers found the need to adjust their mindset to guide their understanding of the diverse students, which in turn

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impacting their classroom management practices. Implications include explicit training in CRCM as well as continued novice teacher supports beyond the first year of teaching.

### **Pre-service STEM Teachers' Perceptions of Cultural Responsiveness: A Qualitative Analysis of a Culturally Responsive Classroom Management Course**

*Ramona Mateer, Karen Graham McIntush & Paige Evans — University of Houston*

Pre-service teachers often lack training in classroom management, with gaps in culturally responsive classroom management (CRCM). This qualitative analysis explores the experiences of fifteen novice student teachers placed in urban classrooms while concurrently taking a CRCM course. The students attended a Tier 1 research university in a diverse urban center. The companion CRCM course explored topics of student culture, CRCM, and building community. Three key themes, student needs, student voice, and community building, emerged for course artifacts, shedding light on the value of the course and its practical application. Implications for teacher education classroom management courses will be explored.

**T7.2 Paper Session**

**4:05p-5:20p**

**Poolside 2**

*Higher Education*

### **Critical Issues in STEM Education: Understanding STEM Teacher Educators' Critical Consciousness**

*Jessica Gehrtz & Uchenna Emenaha — University of Texas at San Antonio*

Culturally responsive pedagogy (CRP) is student-centered teaching that utilizes students' culture to support academic development and critical thinking. Our work aims to understand the thinking processes of STEM teacher educators (STEs) in the teaching of CRP to pre-service teachers as well as the development STEs own culturally responsive practices. We interviewed ten STEs and analyzed transcripts using thematic analysis. Results highlighting the third tenet of CRP, critical consciousness, revealed STEs' personal experiences, awareness of how content can address injustices, personal reflection, and belief that becoming culturally responsive is a continuous journey were central to STEs' thinking and use of CRP.

### **Evaluation Study of a Combined Undergraduate/Masters Program**

*\*Robin Rackley & Radhika Viruru — Texas A&M University*

This paper presents the results of an evaluation study of a combined undergraduate/Masters program in curriculum and instruction at a large public university in the southwestern United States. Students were asked to evaluate the program in the areas of transferability of skills, levels of satisfaction, opportunities for professional growth provided within the program and personal growth experienced. Data was collected through open ended surveys that encouraged students to reflect on the above areas. Qualitative analyses of the data revealed high levels of student satisfaction as well as high levels of participation in the teaching profession at various levels.

**A Critical Analysis on the Use of Mentorship to Aid in the Success of Latina Doctoral Students**

*Angela Perez — Texas A&M University-Corpus Christi*

This study focused on the examination of how faculty mentorship of advanced Latina doctoral students' aids in a sense of belonging, persistence, navigational capital, and aspirational capital in their respective doctoral program at an HSI. Three themes emerged from the analysis of the data including, recognizing the desired need for mentorship. The second theme that emerged was regarding the differing approaches to mentorship that Latina doctoral students experience. The third and final theme that presented itself from the data analysis highlighted key aspects and characteristics that participants believe make a great mentor.

**T7.3 Paper Session**

**4:05p-5:20p**

**Poolside 3**

*Culture*

*Discussant: Carol Waters*

**School Leaders' perceptions of Cultural and Linguistic Barriers to Identification and Provision of Special Education Services**

*Christin Murphy — Sam Houston State University*

Many cultural and sociodemographic factors can be perceived as barriers to the identification of students for special education services. Continued research is needed about educational leaders and their responses to families from Culturally and Linguistically Diverse backgrounds. This study is to explore the perceptions and experiences of educational leaders as they identify students for special education from Culturally and Linguistically Diverse (CLD) backgrounds and their ability to respond to the cultural needs of these students. School leaders are in need of more training and resources to meet the needs of CLD students in need of special education services.

**Eliminating Lifelines: Banning Books in our School System**

*Alexandria Perez — Texas A&M University-Corpus Christi*

The aim of this study is a qualitative multimodal content analysis to categorize the 850 children's books that were listed by a Texas lawmaker and have been removed from schools because of this. The researcher will use an analytical tool that focuses on the features of characters, setting, objects, and key words to determine what the book is about and the intended audience. What topics and populations are being targeted when these books are called into question? Foci of the study include book banning, censorship, hidden curriculum, and a youth lens.

**Intersectionality and the Model Minority Myth: A Study of Female Asian American College Students' Sense of Belonging**

*Lisa Shen — Sam Houston State University*

Higher education research and practices have predominately been treating all Asian Americans (AA) as a homogeneous group, despite the complex cultural, historic, and social forces that

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divide and marginalize AA students of different demographics, ethnic heritage, and socioeconomic standings through intersecting systems of power. This proposed study aims to examine female AA students' involvement in leadership roles in an ethnicity-based student organization in relation to their sense of belonging. Semi-structured interviews will be used to explore students' experience of navigating campus spaces while negotiating between the intra and intergroup dynamics of their ethnic, racial, and gender identities.

**T7.4 Paper Session**

**4:05p-5:20p**

**Cavalier**

*School Environment*

*Discussant: James Telese*

### **Using Emancipatory Leadership and Collective Impact to Support Functional Literacy in Sebastian County, Arkansas**

*Jenny Walker — Texas A&M University-Texarkana*

By using emancipatory leadership and following the collective impact model, the 100 Families Alliance in Sebastian County, Arkansas improved functional literacy among adults in crisis situations during its first year in practice. This critical discourse analysis explores the way words and language were used to harness the power of existing resources to rebuild a community and restore hope to families impacted in 13 different areas of concern.

### **Grade Configurations and Social Context: Stakeholders' Perceptions of a Title 1 Middle School Concept**

*Alison Brown — Sam Houston State University*

Researchers are analyzing academic, social, and emotional data to determine the most effective grade configuration that will prove to bring the biggest results. Research related to the effectiveness of various grade configurations is limited in regards to a Title 1 setting and in reference to the role the social environment plays in student achievement. The perceptions of various stakeholders of a Title 1 school with a 5-6 grade configuration will be analyzed using an interview scenario with common questions. The perceptions gained will assist researchers in determining possible next steps for improvement for one particular Title 1 intermediate campus.

### **Social Emotional Learning and Student-Teacher Relationships in Rural Arkansas**

*Amanda Jones — Texas A&M University-Texarkana*

The pandemic exposed social-emotional issues for individuals creating a mental health crisis. This directly impacted schools, especially ones in more vulnerable communities like those in rural areas. Social emotional learning (SEL) supports children in developing positive relationships and making responsible decisions. Attachment theory and relational-cultural theory provide a lens to explore outcomes from SEL programming in schools. The proposed qualitative research study explores how Capturing Kids' Hearts, a SEL program, has impacted school culture and student outcomes in a rural middle school in Southwest Arkansas. This study will contribute to the literature regarding the impact of social emotional learning on youth in public schools.

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**T7.5 Workshop**

**4:05p-5:20p**

**Ballroom C**

*Free Workshop*

### **SERA Junior Mentoring Initiative – Part 2**

*Tonya Jeffery — University of Houston—Downtown*

*Michelle Peters — University of Houston—Clear Lake*

The SERA Junior Faculty Mentoring Initiative will be discussed during the session. Presenters will share the rationale for the initiative, describe the program purpose and goals, and explain the application process. Interested persons will have an opportunity to ask questions and meet potential mentors/mentees. Part II will expand into how to find and obtain grants that support faculty research.

**T7.6 Workshop**

**4:05p-5:20p**

**Patio**

*Free Workshop*

### **How to Collaborate with a Methodologist**

*Shaun Hutchins — Texas A&M University*

*Grant Morgan—Baylor University*

In this workshop we will discuss considerations for getting the most out of positive working relationships with methodologists. We will begin by unpacking a twofold definition of the term methodology (discipline and subject-matter) and then position the methodologist within the twofold space. Given this framing, we'll then explore the constellation of methodological decisions that methodologists of varying expertise areas may provide guidance. Key topics of presentation include discussion of methodological decisions relating to worldviews and ways of knowing, inquiry quality criteria, ways to structure the social world to interrogate it, and specific techniques to manipulate and interpret data.

**T8.1**

**5:25p-6:30p**

**Minuet**

*Graduate Student Meeting*

Elect the new graduate student representative to the board, raffle, and giveaways, and elect this year's graduate leadership council.

**FRIDAY, FEBRUARY 17**

**F0.1**

**8:00a-12:00p**

**Foyer Ballrooms A-C**

*Registration*

**F0.2**

**8:00a-9:00a**

**Ballrooms A-B**

*Continental Breakfast*

**F0.3**

**8:00a-8:45a**

**Renaissance**

*Graduate Leadership Council*

Plan for the coming year and set priorities for incoming graduate leadership council members.

**F1.1 Paper Session**

**8:45a-10:00a**

**Poolside 1**

*At-Risk Students*

*Discussant: Jane McIntosh Cooper*

**Examining Inclusive Education for Students with Intellectual Disabilities**

*Erika Kalsi — University of Houston Clear Lake*

Students with disabilities have increasingly been educated in the inclusive educational setting as determined by the least restrictive environment (LRE) on their individualized education program (IEP). Students with disabilities who are underrepresented in the inclusive environment are students with intellectual disabilities. This study intends to gain insight into teachers' attitudes toward students with disabilities and supports given to students with disabilities in the general education environment. Through these findings, the researcher intends to examine attitudes and supports in hopes of increasing viable practices for the inclusion of students with intellectual disabilities in the general education classroom.

**The American Dream Deferred: The Student Loan Debt Crisis in Black America**

*Marina Ealy — Sam Houston State University*

Promises of higher education as a way out of poverty have both benefited and hurt many Americans. The purpose of this study is to explore the experiences of first-generation Black American college graduates with student loan debt of more than \$50,000. Critical race theory serves as the theoretical framework of this qualitative study. I will design an interview protocol and gather data from four to eight participants and will stop when I reach data saturation. More research needs to be done to identify whether wealth-building barriers are the cause of Black students using more student loans than any other race/ethnicity.

**Trauma Informed Care in the Classroom: A Qualitative Study of Teachers Who Effectively Address Students with Trauma in the Classroom**

*Alison Trimper — Baylor University*

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Adolescents' mental health is a growing concern which continues to escalate. This problem has negatively impacted many aspects of adolescents' lives, especially their ability to attain academic success. Many teachers are aware of Social Emotional Learning (SEL) and its positive impacts on their students' lives. Teachers, however, are not therapists or social workers. They cannot diagnose a child in crisis, so they need to have proven strategies that they know will work in the classroom for all students. A study that investigates teachers' success using skills in the trauma-informed framework to support students' SEL needs could remedy the situation.

**F1.2 Paper Session**

**8:45a-10:00a**

**Cavalier**

*Principals and Superintendents*

### **Navigating Becoming: Latina Leaders Speak Out**

*Cristina Esparza, Gerri Maxwell, D. Scott Eliff & Bernadine Cervantes — Texas A&M University-Corpus Christi*

This qualitative, narrative study's purpose is to give Latinas a voice in leadership. In the last few decades, more women have entered the educational administrative field, but minority females continue to evidence smaller amounts in participation. Although a few studies have reported the number of Latinas in administrative positions, the study of their administrative experiences is limited. Given an ever-emerging diverse student population, developing Latina leaders is urgent. Research advocates that Latinas offer opportunities to best serve minority students due to their qualities, culture, and encounters. Thus, this topic is vital for education research, education policy, and educational leadership practice.

### **Hermanidad: Perspectives of the Journey of Latina Superintendents in School Districts**

*\*Nora Rivas-Garza, Gerri Maxwell, Bernadine Cervantes & D. Scott Eliff — Texas A&M University-Corpus Christi*

The qualitative study revealed the perceived challenges and justice, in support of increasing the number of Latina superintendent in South Texas school districts public non-charter K-12 school districts in regions 1 and/or 2 and unveiled Latina superintendents' aspirations and resiliency when in the role of superintendent. The study brought to light the lived experiences of Latina superintendents that have been omitted in the research and their contributions excluded.

### **Portraits of Female Crisis Leadership**

*Kimberly Donaldson James & Lynn Hemmer — Texas A&M University-Corpus Christi*

Missing from the crisis leadership literature is an exploration of the manifestation of female crisis leadership. The purpose of this study was to explore through stories and conversations the intersection of sensemaking and crisis leadership as shared by three female PK-12 educational leaders. Findings include that while female crisis leadership varies due to personal, historical, and internal contexts, portraits included sketches of faith, vulnerability, centeredness and in one

portrait, the painting remains unfinished.

**F1.3 Paper Session**

**8:45a-10:00a**

**Patio**

*Efficacy*

*Discussant: Celia Scott*

**Examining the Perceptions of Self-Efficacy of Principals on English Learner Student Achievement in K-12 Public Schools**

*Janie Jimenez — University of Houston-Clear Lake*

English Learner achievement is a significant problem school districts must address (NCES, 2022). The difference in student achievement between ELs and other groups becomes more significant as students enter middle and high school. The graduation gap continues to increase between ELs and monolinguals (NCES, 2022; TEA, 2021). Principals must be highly efficacious to lead others to perform at high levels to engage in improving research-based organizational learning strategies that can impact student performance (Grissom et al. 2021; Hesbol, 2019). However, there is limited research regarding principals' impact on ELs achievement across the elementary, middle, and high schools in public schools.

**The Self-Efficacy of Novice Alternately Certified Teachers in Classroom Management**

*Julia Wright — University of Houston-Clear Lake*

A shortage of teachers has been an issue in the United States and worldwide since the mid-2000s. Teacher shortages birthed another avenue for certification; alternative certification. Are alternative certification programs preparing teachers with the self-efficacy needed in the classroom when facing classroom management?

**A Case Study Exploring Instructors of Color Contribution Towards Latinx Community College Mathematics Students Self-Efficacy**

*Taylor Darwin — Texas Tech University*

Texas is transitioning to a corequisite model, where college students take developmental and traditional mathematics classes concurrently. However, little is known about supporting corequisite students, particularly minorities. Using a self-efficacy framework, this case study explored the perceptions of Latinx students taking corequisite mathematics courses. Students mentioned the instructor towards their success in the course, which warrants greater explanation. Building off the previous study, experiences from instructors of color are necessary to acquire a holistic idea of how to best support these students.

**Using Self-Efficacy Theory to Understand How and Why Faculty Apply Digital Accessibility Standards**

*Teresa O'Dowd — Texas Tech University*

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School leadership is ranked second to teaching as a school-related factor that impacts student learning (Wallace Foundation 2021). Effectiveness of our nation's public schools is significantly impacted by the level of quality of the school administrator (Anderson and Turnbull 2016). Across the nation, studies consistently report that a strong and stable administrator is critical for successful schools (Levin et al., 2020). Multiple measures influence principal ratings, but defining the high-performing principal remains a challenge (Grissom 2019). Ensuring an effective evaluation system is vital to the role of today's principal's expectations as instructional leaders and change agents (Alkaabi & Almaamari 2021).

**F1.4 Paper Session**

**8:45a-10:00a**

**Ballroom C**

*Higher Education*

*Discussant: Ryan Glaman*

### **Understanding the Post-COVID Technology Gaps at Hispanic-Serving Community Colleges**

*Luis Reyes — University of Houston-Clear Lake*

The COVID-19 Pandemic greatly influenced how Hispanic-serving institutions (HSIs) provided their academic services to students. Numerous colleges and universities braced for a major transition to online teaching and learning regardless of whether these institutions were ready for the unexpected technological shift. Approximately three years since the start of the pandemic, many HSI instructors and students have experienced various challenges and opportunities as their reliance on using technology for education increased. This study seeks to understand the post-COVID technology gaps at Hispanic-serving community colleges by analyzing the relationship between online technology readiness and technology challenges experienced by students and faculty.

### **The Effects of Learning Assistants on Undergraduate Sense of Belonging in an Anatomy and Physiology Lab Course**

*Sarah Darhower — Texas A&M University*

There is a global nursing shortage largely due to an increase in the number of available nursing positions and enrollment into nursing programs failing to keep pace; there is not enough supply to meet the demand. The shortage underscores the role higher education plays in the professional pipeline into nursing. It's important that institutions of higher education find ways to better support students, especially in gateway courses. Anatomy and Physiology is a gateway course for students planning to major in nursing. Learning Assistants (LA) were implemented to support student sense of belonging in the classroom and ultimately improve student success.

### **Advanced Placement Programs: College Readiness and the Underrepresented Student**

*Amber Clark & Tiara Gatewood — Sam Houston State University*

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Prospective undergraduate students must satisfy academic standards to be considered college ready upon entering postsecondary institutions. Advanced placement (AP) programs at secondary schools have facilitated the transition of students from high school to college. However, previous studies have revealed underrepresented students have less access and knowledge to AP courses, making them less likely to be deemed college ready. Using a qualitative approach, we will investigate the inequities between White and marginalized students regarding college preparation. Furthermore, we will recommend useful approaches to inform underrepresented students of the benefits of AP courses. and its essentialness to college preparedness.

### **University Student Engagement and Learning Through the use of Various Technologies and Techniques During a Pandemic**

*Kimberly Philippi — Sam Houston State University*

The COVID-19 pandemic caused institutions to abruptly transition to remote learning environments. The purpose of this case study is to determine, from the perspective of undergraduate students enrolled at the same private Texas university during fall 2020, what technological mediums and communication techniques fostered engagement and minimized distractions during remote instruction. This qualitative investigation will follow a collective case study design. In-depth interviews will provide comprehensive data on the personal perspectives and experiences of students. Class syllabi and calendars will also be collected and compared to the interview transcripts. Results and discussion are forthcoming, as this is research in progress.

**F1.5 Paper Session**

**8:45a-10:00a**

**Minuet**

*Improving Instruction*  
*Discussant: Grant Morgan*

### **Perceived Stress in Gifted High School Students in a Post-Covid World**

*Kasi Baklashev — University of Houston-Clear Lake*

The COVID-19 Pandemic forced 5.1 billion American students out of traditional learning environments and into improvised at-home learning situations (Education Week, 2020). Students were also forced to adapt to new learning methods, particularly online learning. Recent studies connect increasing perceived stress in school-aged students to the pandemic (Radwan, 2021), but post-pandemic research has not extended to gifted students. This work aims to identify if stress of gifted students is greater than stress before the education disruption. If research shows there are lasting, detrimental effects, educators can develop strategies and implement changes for gifted students to positively impact emotional well-being and academic outcomes.

### **The Impact of a Mind, Brain, Education Training on Teachers' Instructional and Affective Decisions**

*Sameera Massey — Texas A&M University-Corpus Christi*

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Contributing to Mind, Brain, and Education (MBE) discourse, this future study will develop grounded theory about the impacts of MBE training on teachers' instructional and affective decisions. Participants will engage in multiple professional development sessions over the academic year focused on Neuroscience Core Concepts and Dubinsky's Teaching and Learning Concepts. During this period, the researcher will collect data from interviews, planning sessions, classroom observations, and artifacts for ongoing analysis and informing future data collection. This researcher hopes the study will provide insight about the impact of translational MBE work on teacher practice.

### **Taking Care of Our Teachers: A Systematic Literature Review of Coaching Interactions in Secondary Mathematics Classrooms**

*Kassidy Wagner — Texas Tech University*

Social emotional learning (SEL) continues to gain popularity as research points to promising academic and behavioral outcomes for students. However, growing students' SEL depends mainly on teachers who receive ongoing SEL professional development (PD). Therefore, this systematic literature review aims to examine an existing form of PD, instructional coaching, to determine how coach-teacher interactions can be leveraged to support teachers in growing their SEL skills. The research results will advance understanding of this topic by illuminating opportunities for instructional coaches to support teachers in growing their SEL skills for their students and themselves.

### **Instructional Coaching as a Catalyst for Transformative Learning**

*Chrissy Eubank — Texas Tech University*

This study explores instructional coaching relationships with novice teachers to analyze how instructional decisions are impacted, using the theoretical lens of transformational learning. A multiple case study approach will investigate each relationship/case, including three coach and teacher pairs in districts within the United States contracted with Innovation company to incorporate formalized coaching in the school setting. Data sources include: interviews, recorded conversations, coaching and observation logs, and anecdotal notes. It is hypothesized that relational qualities do influence a teacher's desire to engage in coaching relationships which leads to changes in classroom practices, and the teacher's beliefs about teaching and learning.

**F2.1 Paper Session**

**10:05a-11:20a**

**Poolside 1**

*At-Risk Students and Educational Reform*

*Discussant: Lynn Hemmer*

### **Additional Days School Year (ADSY): A Cross Sectional Study of Additional Instructional Days on Low Socio-Economic Students**

*Erik Torres — Sam Houston State University*

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Hispanic students are academically behind their White peers by the time they reach fourth grade (NAEP, 2011). Not only is there an achievement gap among the two races, but income is an additional variable. Does additional instruction help address the low achievement typically seen in Hispanic majority Title 1 campuses? The purpose of this study is to describe Grade 3 and Grade 4 students' achievement who participate in extended year programs.

### **Reading Achievement in First Grade: Does Early Schooling Help? The Effects of Prekindergarten Programs on First Grade Reading Achievement**

*Erika Torres — Texas A&M University-Corpus Christi*

This study seeks to prove the effectiveness of a district's prekindergarten program on the first-grade literacy skills of those who attended as measured by the Texas Primary Reading Inventory (TPRI). Determining the effectiveness of the prekindergarten program on equipping students with the literacy skills needed upon first-grade entry will add to the existing literature that allows states to advocate support for the prekindergarten initiatives. The impact of different prekindergarten program types on early literacy skills and teacher knowledge is a relevant topic in today's educational setting.

### **Are They Ready for High School? Academic Achievement of Grade 8 Emergent Bilingual Students**

*Teresa De Alba — Sam Houston State University*

The purpose of this study is to examine the academic achievement of Grade 8 Emergent Bilingual students by gender and bilingual model.

**F2.2 Paper Session**

**10:05a-11:20a**

**Poolside 2**

*Literacy*

*Discussant: Bethanie Pletcher*

### **Supporting Instructional Leaders: What Leads to Greatest Growth in Reading?**

*Randi Marshall — University of Houston-Clear Lake*

Low performance in reading is a critical issue in the United States. Texas' House Bill 3 was developed requiring all kindergarten through third-grade teachers and instructional support staff to attend a teacher literacy achievement academy. The goal of the Texas Reading Academies is "to increase teacher knowledge and implementation of evidence-based practices to positively impact student literacy achievement". Despite these new initiatives and new instructional leaders on campus, students continue to struggle. The present study is designed to investigate what Reading Interventionists and Instructional Coaches, feel contributes to student growth in reading.

### **SMART Moves: An Examination of Changes in Literacy Instruction Based on Increases in Foundational Knowledge**

*Bethany Gochnour — Baylor University*

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Research shows that elementary educators lack knowledge of foundational literacy constructs. The SMART program—sponsored by Idaho’s State Department of Education—provides instruction to current K-3 teachers interested in increasing their knowledge in the science of reading (SOR). The current study utilizes an explanatory sequential mixed methods design to examine growth in knowledge and explain attitudinal and behavioral changes based on high growth from pre-test to post-test. Therefore, this study addresses a gap in the literature by examining how increasing knowledge of language constructs affects teachers’ attitudes and classroom practices.

### **Using Critical World-Building to Understand the Metaphors of Dark Worlds in Animated Films**

*Craig Brashears — Texas A&M University-Corpus Christi*

Multimodal texts, including animated films, are widely called for to diversify traditional text offerings and help educators initiate conversations about social issues. Films may include dark worlds that serve as metaphors, such as forced migration in the animated film *Wind*. Conceptual Metaphor Theory affords a range of contextual conceptualization for analyzing metaphors. Critical World-Building examines how story worlds are constructed as the story unfolds. This multimodal content analysis proposal for future research seeks to understand how *Wind*’s filmic modes are used to build the story world and how the story’s world-building supports the metaphor of immigration from a war-torn country.

**F2.3 Paper Session**

**10:05a-11:20a**

**Poolside 3**

*Multicultural Education*  
*Discussant: Jarod Lambert*

### **Teacher Effectiveness with Professional Development impacting Emergent Bilinguals**

*Sheena Blain — University of Houston-Clear Lake*

The purpose of the study is to aim to examine teacher effectiveness with Emergent Bilingual students through effective professional development strategies. How are Emergent Bilingual students successful with the support their teachers receive from professional development? This study is a mixed method design which allows for a more in-depth exploration of the survey results by following up with observations and focus group interviews. Texas is the second highest in the United States with 18.7% Emergent Bilinguals with 3.8 million Hispanic students currently identified as English Language Learners (2018) Studies have found teachers feel unprepared or underprepared to support their students.

### **Uncovering Barriers to Teacher Recruitment and Retention**

*Erica Douglas — Sam Houston State University*

The purpose of this research in progress is to explore the perceptions of the career field from the perspective of teachers of color in order to provide school administrators with tools for

recruitment and retention. In this qualitative study, teachers of color who entered the profession through alternative educator preparation programs will be interviewed to determine their perceptions, experiences, and concerns about the profession. There is an abundance of research on teachers of color, educator preparation programs, and the racial injustices associated with the field of education, but more inquiries need to be launched into the perceptions of teachers of color.

**A Different Lens: A Qualitative Case Study to Understand STEM Perspectives Developed by Middle-School Black Girls**

*Kimberly Gasaway — Baylor University*

Fewer Black girls participate in STEM programs due to environmental and cognitive determinants such as gender stereotypes, cultural identity, family support, teacher influence, peer influence, sense of belonging, and confidence. This qualitative case study acknowledges the problems associated with middle-school Black girls' perspectives on STEM, how they view people associated with STEM, and their choices about STEM participation. This study also compares the differences in support that middle-school Black girls receive regarding STEM if they are from a military family.

**F2.4 Paper Session**

**10:05a-11:20a**

**Patio**

*Principals*

*Discussant: Shaun Hutchins*

**Dehumanized: A Phenomenological Mixed Methods Study Addressing the Unmet Needs of Texas Public School Principals**

*Bethany Ivie — Texas A&M University-Texarkana*

The lack of literature regarding Texas public school principals is evidence of their dehumanization. Their needs have historically gone unmet due to a demanding workload, poor self-care, and limited coping skills. The phenomenon is exacerbated by political and social changes. This phenomenological study explores principal dehumanization using social reciprocity, Maslow's Theory of Human Motivation, and Siegrist's Effort-Reward Imbalance. Interview and survey data are collected concurrently, combined, and analyzed for themes. Recommendations for reform based on these emerging themes are published to assist legislators and educational leaders in decision-making regarding the role and responsibilities of principals in Texas.

**Mentoring, Coaching, and Evaluating: Perceptions of Elementary Principals at Bilingual Campuses in the Greater Houston Area**

*Esther Bothwell — Sam Houston State University*

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School principals are the second most influential school-based factor that can positively impact student results, such as achievement, attendance, and graduation. Aside from these significant student outcomes, principals affect a host of other factors associated to school success, including teacher retention and parent/guardian engagement (Buckman, 2021). The purpose of this study is to explore the perceptions of elementary principals at bilingual campuses in the greater Houston area regarding mentoring, coaching, and evaluation using qualitative methods. This paper will not have results and conclusions as I am submitting this as research in progress.

### **Principal Preparedness: The Pathway to the Principalship**

*Shantelle Louis — Sam Houston State University*

Principal Preparedness is a growing concern and will continue to be a concern if we do not address the need for improvement in how we prepare them. Researchers vary in their reasons why principals are not prepared but agree that change is necessary. Some researchers believe that the assistant principalship is the pathway to the principalship, therefore how we prepare them is critical. Because of the few studies conducted, it is important to further study this topic to assist in the improvement of preparing school leaders.

**F2.5 Paper Session**

**10:05a-11:20a**

**Cavalier**

*Evaluating Standardized Testing and Processes*

### **The Guiding STAAR of Texas: Examining the Hidden Curriculum in the State Assessment**

*\*Ricardo Martinez & Marsha Sowell — Texas A&M University-Kingsville*

Society has become increasingly aware that public schools not only teach content knowledge but also guide students in learning the values and skills necessary to live as citizens in the world around them. With this realization, questions of what values are and should be taught in public schools have increased in recent years. The purpose of the current study is to identify the values that are presented as “hidden curriculum” within the released STAAR tests from 2013 to 2022. Values identified will be discussed according to the 4 Core Goals of Anti-bias education.

### **Person-Environment Fit Theory and Student Transition from Elementary to Middle Grades**

*Mary Kinard, Lou Sabina & Debra Touchton — Stetson University*

The traditional education environment is one that has long since been structured to educate the masses, not to individualize based on student needs. The multitude of challenges that can occur in the early adolescent stages of growth, coupled with the transition from elementary grade levels to middle school campuses, has consistently shown a decline in academic performance and overall student success. Despite a stronger awareness of self and learning needs, it is found that students in middle school have less input in day-to-day learning than they do in elementary school (Sagan, 2010), contributing to a poor person-environment fit. This study on person environment fit theory and the transition of students from elementary school to middle school,

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examined three schools of similar demographics and socioeconomic status across three school districts in rural North Florida. Participants interviewed were teachers of varying subject matter and years of experience, but had primarily taught across 5th, 6th, and 7th grade. Information collected from each interview helped to determine factors and elements that consistently help shape a successful academic, social, and emotional environment for student transition from elementary school to middle school grade levels.

### **Differences in Advanced Placement Exam Performance of Asian and White Students: A Multiyear Nationwide Analysis**

*Cynthia Martinez-Garcia & Clare Resilla — Sam Houston State University*

*Xiaohong Li—Taft College*

The purpose of this study was to analyze ethnic (i.e., Asian, White) students' differences in the overall Advanced Placement (AP) exam performance from the 2002 - 2019 school years. A causal-comparative research design was used to compare the AP exam performance of Asian students and White students. Archival data for the 2012 school year through the 2019 school years were downloaded from the College Board website. Pearson chi-square tests were performed. Based on the results of the comparisons of the eight years of overall AP exam performance, Asian students had higher overall average AP exam scores than White students.

**F2.6 Paper Session**

**10:05a-11:20a**

**Ballroom C**

*Instruction and Curriculum*

### **Implementing Social and Emotional Learning Texts to Support Student Achievement Post Pandemic**

*April Edwards, Rebecca Piper & Karen Kohler — Texas A&M University-San Antonio*

The covid-19 pandemic disrupted learning for students and teachers across the United States during the 2020 – 2021 school year. In many cases, educators struggled to support student academic success and navigate the classroom procedures as students returned to the classroom. With a shift in how students interacted with their peers and teachers, a need to support students social and emotional learning became central to instructional practices. This paper provides a content analysis of social and emotional learning materials and resources available for teachers to utilize within the context of K-5 classrooms in an effort to support whole child development.

### **Navigating “Normal” Amidst COVID-19: A Longitudinal Qualitative Investigation of Teacher Experiences**

*\*Karen Graham McIntush — University of Houston*

In a longitudinal qualitative study investigating teacher experiences through the COVID-19 pandemic, this study highlights the third year of a three study, commencing Spring 2020 and culminating at the end of the 2021-2022 school year. Semi-structured interviews and a focus group was conducted with public school teachers (n-11) regarding their concerns and the impact

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of COVID-19 on education. Emergent themes included student concerns such as learning gaps, social maturity, and mental health concerns, and structural changes, including concern for the state of education and the welfare of teacher mental health. Implications regarding teacher their value in decision-making will be discussed.

### **Lights, Camera, Action! Cultivating Future-Focused Learning Endeavors through Collaborative Digital Storytelling**

*Katie Alaniz — Houston Christian University*

Digital storytelling, particularly in partnership with others, is a learning endeavor that necessitates future-focused skills such as creativity, communication, critical thinking, citizenship, character, and collaboration. This qualitative research study focuses upon determining the effectiveness of collaborative digital storytelling within a graduate-level educational course for preparing students to design meaningful, applicable learning experiences involving collaborative content creation. Qualitative data includes analysis of this topic through interaction in a discussion forum, reflection statements after engaging in collaborative digital storytelling, and course evaluations. This research overviews the impacts of engaging in collaborative digital storytelling upon applications regarding content creation in partnership with co-learners.

### **STEM Interest in Secondary School Students**

*Sandra Nite — Texas A&M University*

*Jihu Lee—University of Texas at Austin*

There are many initiatives in formal and informal learning that are designed to increase STEM interest in students. This meta-analysis summarizes the results from a study of manuscripts that provide results from long-term programs, including formal and informal learning experiences, showing increases STEM interest.

**F3.1 Paper Session**

**11:25a-12:40p**

**Cavalier**

*Principals*

*Discussant: D. Scott Eliff*

### **School Defender Programs and Affects from Adverse Events**

*Jared Smith — Texas A&M University-Texarana*

Many school districts have taken to adding extra security measures, such as arming teachers and administrators, with guns. However, more than 30 mishaps involving police officers and educators with guns have been reported since 2014. The proposed research examines the impact adverse events on mindsets of teachers and students. Cognitive and routine activity theories provide a lens to examine external and internal factors affecting students and teachers resulting from adverse events. A qualitative content analysis will explore the impact of adverse events on teachers and students.

**Coaching and Modeling for Teacher Preparation and Development in Educating English Language Learners**

*Chele Ashley — Texas A&M University-Texarkana*

Teacher training and professional development often leave teachers feeling unprepared to teach cultural perspectives that will support academic needs of bilingual students and English language learners. Further, campus leaders are often unprepared to coach and mentor teachers with implementing training in the classroom. Using the framework of Bandura’s theory of self-efficacy, a case study investigating teachers' effective at teaching bilingual or English language learners will provide campus leaders strategies for coaching and mentoring teachers in providing cultural perspectives that will support bilingual, English language learners, and general education students.

**Exploring Novice Principal Perception on Whether Sufficient Alignment Exists Between Their Principal Development Program and Their Principal Evaluation Rubric**

*Rachel Alex — University of Houston-Clear Lake*

It is unknown whether Principal Development Programs (PDPs) are sufficiently aligned to the evaluation criteria in their principal evaluation rubrics. DeMatthews et al. (2020) reported that many of the evaluation tools currently being utilized are unmethodical, due to their lack of actionable feedback. This is problematic since principal evaluations have the potential to be an essential tool for enhancing leadership practices (DeMatthews et al., 2020). Discovery of novice principals’ perceptions is one way principal supervisors can evaluate their developmental impact in ways that are clearly outlined in the principal evaluation rubric.

**F3.2 Paper Session**

**11:25a-12:40p**

**Patio**

*Technology & Vocational Education*

*Discussant: Andrea Foster*

**The Physiological and Psychological Effects of Students Playing Short and Intense Video Games**

*Chris Zuniga, Sean Tran, Luana Rodrigues do Sacramento, Katherine Kristofek, Daniel Chai, Dana Billman, Samuel Falade, Yanwen Chen, & Michael Rugh — Texas A&M University*

In this research-in-progress, we plan to examine the cognitive and affective effects of playing Freedom Bridge on emotions and learning. Freedom Bridge is an emotionally intense, short video game where the student suddenly loses control. We hypothesize that playing Freedom Bridge will cause students to experience an increase in motivation and retention of knowledge. We plan to conduct an experimental study with 80 undergraduate students. We will give them a pre/posttest and observe brain activity using an electroencephalogram, or EEG, to identify whether playing the game has a positive effect on motivation to learn and retention of knowledge.

**Investigating the impact an underwater robotics competition has on self-efficacy and future career interest in STEM**

*Karin Marshall — University of Houston-Clear Lake*

Women only represent 29% of the STEM workforce (NCES, 2019). The basic problem-solving, engineering and coding skills learned through robotics competitions can help to prepare young women for future careers in the STEM field (Craig, 2014). The purpose of this study is to investigate the impact of the MATE center’s underwater robotics competition on female alumni’s perceived attitudes on STEM before and after the competition and if the roles these students took on within their teams predicted a change in perceived attitudes. Survey data will be collected using a retrospective pre-post design and follow-up interviews will be conducted.

**Medical Radiology Technology Students and the Need for Cultural Humility and Implicit Biases Training**

*Lawrence Norris — Sam Houston State University*

Radiology students face challenges when they report to clinical training for hands-on training. College-based radiology programs rely on non-college-associated hospitals, imaging centers, or doctor’s offices. This can be challenging when students have not been taught the skills to be accepted into the facility. Cultural humility training before they report to the clinical setting can assure students can manage the interpersonal challenges they may face when they enter the clinical location. This will be a quasi-experimental study with a sample of 24 non-random medical radiology students, utilizing a pretest-posttest control group design.

**Effective Transition Planning for Culturally Diverse Students with Disabilities**

*Tiffany Mayes — Sam Houston State University*

Although transition planning is a vital component of IDEA 2004, students with disabilities continue to lag behind their non-disabled peers in achieving post school success. Culturally and linguistically diverse students have even more challenges. There continues to be a need for more research to improve post school outcomes for culturally diverse and economically disadvantaged students with disabilities. The purpose of this study is to examine factors that may be attributed to challenges with effective transition planning for students with culturally diverse backgrounds. Special education teacher interviews will be transcribed and coded using qualitative techniques. This proposal is research in progress.

**F3.3 Paper Session**

**11:25a-12:40p**

**Poolside 1**

*Professional Development*

**On Common Ground: A Study of Teacher Leadership in the Rio Grande Valley Post Pandemic**

*Celena Hoglund — Pharr-San Juan-Alamo ISD*

*Gerri Maxwell & Bernadine Cervantes—Texas A&M University-Corpus Christi*

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Crises often bring about educational change (Stewart, 2012). A global pandemic highlighted the need for school systems to further support teachers. Between May and October 2020, the increase in stress and teacher burnout rose from 25 percent to 57 percent, per a RAND Corporation study (Gewertz, 2021). Previously, few studies focused on how teacher leadership development aids capacity-building efforts during unexpected events. A high concentration of minoritized and low-income students in the Rio Grande Valley amplified the need to study this South Texas region. The themes that emerged from the participants' responses include leadership identification, adult learning, and crisis leadership.

### **Application of a Retrospective Pretest-Posttest Design to the Evaluation and Continuous Improvement of Professional Development**

*\*Shaun Hutchins & Nicholas Duffield — Texas A&M University  
Kim Wright—Rice University*

Data collected from traditional pretest-posttest designs for measuring change in participant perceptions from before to after professional development can be negatively affected by survey attrition and response shift. In addition to reducing attrition and response shift, the retrospective pretest-posttest design is logistically simpler to administer and less burdensome for participants. We present the methodological process for an iterative evaluation of a 9-module learning curriculum where survey attrition and response shift drove a midcourse pivot from a pretest-posttest framework to a retrospective pretest-posttest framework. We further highlight some of the benefits of the overall approach for rapid evaluation and continuous improvement.

### **Lost and Found: A Narrative Inquiry Approach to How the Impostor Phenomenon Colors Teacher Professional Development**

*Elizabeth Goldberg — Texas Tech University*

In Oliver Jeffers', *Lost and Found*, a boy finds a lost penguin on his doorstep and sails to the South Pole, only to realize that the penguin is not lost, just lonely. Similarly, many TPDs assume teachers' problems and offer solutions but fail to ask, are you lost or lonely? This paper explored how the Impostor Phenomenon colored a participant's experience in an online STEM induction course. Three Lost narratives demonstrating novice teacher insecurities were juxtaposed with three Found narratives demonstrating hidden competency, initially unrecognized by teachers and TPDs. Showcasing novice teachers maybe not be as lost as they seem.

**F3.4 Paper Session**

**11:25a-12:40p**

**Poolside 2**

*Minority Retention*

### **Guiding Light: Addressing the Stories behind the Lack of African American Male Educators in Early Education**

*\*Ugochi Emenaha — Baylor University*

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Exploring four male teachers' life experiences can help understand why African American male teachers choose certification in specific grade levels. The study results showed three recommendations that could increase the number of African American male teachers in K-8 classrooms. In their narratives, I found that their experiences can be categorized into three main categories: African American male teachers as disciplinarians, socially responsible curriculum developers, and diverse educators in that grade level. Based on these findings, recommendations were made to increase the number of mentors, the opportunities for professional and financial growth, and the opportunities for teachers to connect.

### **Bilingual Education Teachers' Recruitment and Retention: A Comparison Study of Principals' and Teachers' Perspectives**

*Juanita Reyes — Tarleton State University*

*Tian Chen & Sandra Acosta—Texas A&M University*

The purpose of this study is to investigate bilingual education teacher recruitment and retention. Preliminary survey data were collected and analyzed to identify factors that influence bilingual education teachers' decision making from teachers' and principals' perspectives. A secondary purpose of the study is to build a conceptual framework for defining the variables that impact bilingual education teachers' decisions to remain or leave the profession, and the relationship between those variables using cultural historical activity theory (CHAT). The current research study is part of a larger project to be conducted in schools located in areas with traditionally large English learner populations, specifically the Southwest states and Florida.

### **Latino Male's Sense of Belonging Experiences in a Community College Developmental Mathematics Course**

*Luvia Rivera Valles — Sam Houston State University*

This phenomenological study aimed to examine the sense of belonging of first-generation Latino males enrolled in a developmental mathematics course at a Hispanic Serving Institution in the southwest. Students enrolled in a college algebra prep course were identified as the participants of this study. The interview data was analyzed to find the themes of Latino males' sense of belonging experiences. The analysis results informed faculty on experiences that created a sense of belonging within a mathematics classroom. Identified themes were discussed within the context of previous literature. Implications for practice were addressed, and recommendations for future research were made.

**F3.5 Paper Session**

**11:25a-12:40p**

**Poolside 3**

*Mathematics Education*

### **Integrating Content and Language for ELLs: An Analysis of Pre-Service Teachers**

*Lu Guo — Texas Tech University*

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Integrating content and language for English language learners (ELLs) is a challenge for pre-service teachers, especially for pre-service teachers. Because it requires pre-service teachers' mathematics content knowledge and pedagogy knowledge of ELLs. However, little research has explored how pre-service teachers develop ELLs' language skills in writing, speaking, listening, and reading. This study uses the Cognitive Academic Language Learning Approach (CALLA) as a framework to analyze how pre-service mathematics and ELA teachers develop ELLs' language skills (writing, speaking, listening, and reading) with metacognitive, cognitive, and social strategies.

### **Finally, Someone Who Believes in Me: Black Girls Perceptions of their Math Teachers as a Moderator for their Math Identity**

*\*Aminah Crawford & Kristian Edosomwan — Texas A&M University*

Higher education institutions have a long history of creating, sustaining, and perpetuating barriers for people of color, specifically Black women and girls, to pursue academic careers in STEM. Research indicates that one way to mitigate these systemic and systematic barriers is to help Black girls develop positive attitudes toward mathematics. This paper utilizes the High School Longitudinal Survey of 2009 to chart the impact of Black female students' perceptions of teacher attitudes and pedagogical practices in mathematics and their math identity, finding a positive relationship between teacher attitudes and pedagogical practices and Black female students' math identities.

### **Response to Intervention in Elementary Mathematics to Achieve Learning Gains**

*Kim Quigley & Lou Sabina — Stetson University*

*Debra Touchton—University of Florida*

Many school-aged children tend to struggle with math. Struggles are seen among students both with and without disabilities. In 2013, the National Assessment of Educational Progress found that only 42% of fourth grade students were proficient in math. Out of those students, only 85% were able to show mastery in addition, 81% in subtraction and 50% in multiplication and division (Fuchs & Fuchs, 2001). The literature referenced highlights the importance of effective math interventions in order to maintain achievement and learning gains using standardized assessment data. The study on intervention, and the factors that build an effective intervention program was examined through the data of three schools with similar demographics and socio-economic status in a large public school district in Central Florida. Participants interviewed had various years of experience, however their most recent teaching experiences were in a non-Title I school and were teaching in a departmentalized setting. Information derived from each interview was used to determine trends and factors that influence effective intervention resulting in high mathematics achievement and learning gains.**Relationships of Implicit and Explicit Balanced**

**F3.6 Paper Session**

**11:25a-12:40p**

**Ballroom C**

*Learning*

**A Qualitative Study: Perspectives of Bilingual Education Teachers at a Local School District**

*Marisela Martinez — Texas A&M University-Texarkana*

Continuously, there are changes taking place as well as improvements in the field of bilingual education. As a result of the continuous changes in the field of bilingual education, there has been a significant increase in the demand for bilingual education teachers. Currently, administrators in school districts are presented with the challenge of finding highly qualified bilingual teachers and have the difficult task of assuring they stay at their local school districts. The objective of this qualitative study is to analyze the perspectives of bilingual education teachers' regarding the characteristics of highly qualified teachers, the structure of high-quality instruction in bilingual education classrooms, and to discover if teachers in bilingual education have considered leaving their school district or bilingual education.

**A Comparative Study with Mandarin Learners of English Monolinguals and English-Spanish Bilinguals**

*\*Liang Ward — Middle Tennessee State University*

Based on a mixed methods research design, this project is to explore the differences and similarities of learning impacts between Mandarin learners of English monolinguals and English-Spanish bilinguals.

**Designing a Systematic Framework for the Profile of Hyperlexia: A Reading Condition in Children with ASD**

*Leily Ziglari — Chicago State University*

The purpose is to define the syndrome of hyperlexia across various perspectives in relation to the linguistic/cognitive abilities including Autism Spectrum Disorder to propose a theoretical framework. Theoretical Framework: Hyperlexia is the syndrome of spontaneous and precocious reading skills that occur in some children before age three. Significance: This study will enable researchers to analyze their results on hyperlexia more systematically and with a reduction in construct variation. Method: Research studies about hyperlexia during the time-period of 1967-2019 were collected for the current meta-synthesis research. The results proposed a comprehensive framework for a scientific definition of the profile of hyperlexia.

**Problem Solving to Support Elementary Students' STEM Understanding and Development of Engineering Design Process Skills**

*Niyazi Erdogan, Julie Barrett, Miriam Sanders, Luciana Barroso — Texas A&M University*

The integration of engineering design throughout science and mathematics can address the engineering deficit in K-5 classrooms. The EDP connects each discipline in STEM. It also helps students gain problem solving skills along with higher-order thinking skills. Elementary students who attended a STEM summer camp were asked on their survey how they used problem solving

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during camp. We sorted the answers into three themes: problem solving use during specific activities, problem solving as an element of the engineering process, and equating problem solving with difficulties. Some campers equated problem solving with the engineering design process and engaging in difficult situations.

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