



Southwest Educational Research Association 45th Annual Meeting Conference Program

February 23-25, 2022 • Hotel Monteleone • New Orleans, LA

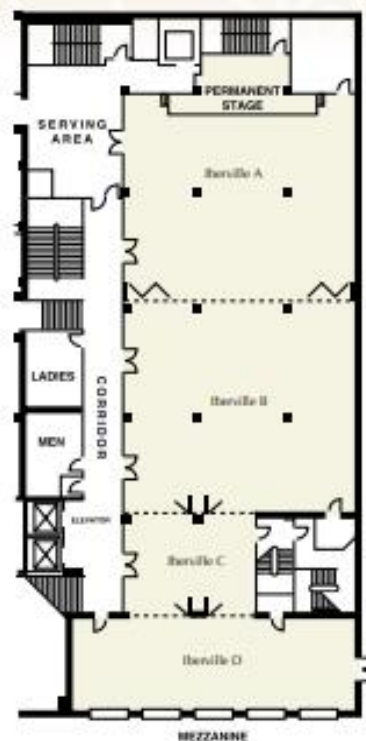


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Southwest Educational Research Association

www.sera-edresearch.org



2022 Annual Meeting Program and Abstracts

Hotel Monteleone, New Orleans, LA

February 23-25, 2022

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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) for further information or to make contributions.

Front Cover

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Printing

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College of Education and Human Development



TEXAS A&M UNIVERSITY
**Education &
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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 notification;
- 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 Bruce Thompson Outstanding Paper Award

In 2012, the SERA Board renamed the SERA Outstanding Paper Award the "SERA Bruce Thompson Outstanding Paper 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 35+ SERA conferences. 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 a Program Chair and later as SERA President. In the early 1990s, Bruce served as Editor of the SERA book series, which was an edited volume containing selected SERA conference papers chosen through peer review and was published by a commercial publisher. Bruce began service as the inaugural SERA Executive Director when the By-Laws were amended in 2000, and this position was first created. Bruce continues to serve as SERA Historian. In 2006 Bruce was awarded the SERA

John J. Hedl, Jr. Lifetime Service Award. Bruce was three times a co-recipient of the SERA Outstanding Paper Award, an award for which officers of the association are not eligible during service in these elected or appointed roles.

Before his retirement, Bruce Thompson was a Distinguished Professor and College Distinguished Research Fellow of Educational Psychology, Distinguished Professor of Library Sciences, 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 nine years of *Educational & Psychological Measurement*, the series, *Advances in Social Science Methodology*, and two other journals. He is the author of 216 articles, author/editor of 11 books, including the recently published *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 forward regarding greater emphasis on effect size reporting and interpretation and promoting improved understanding of score reliability.

Awards

SERA BRUCE THOMPSON OUTSTANDING PAPER WINNERS

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

Southwest Educational Research Association

2021-2022

Executive Council

President

Celia Wilson Scott

President-Elect & Program Chair

Wendi Zimmer

Immediate Past President

Grant Morgan

Treasurer

Kim Nimon

Secretary

Audrey Meador

Deputy Treasurer

Grant Morgan

Graduate Student Advisors

Tonya Jeffery
Michelle Peters

Graduate Student Representative

Courtney Matthews

Executive Director Emeritus/Historian

Bruce Thompson

Deputy Historian

Victor Willson

Newsletter Editor

Kevin Kalinowski

Director of Information Technology

Susan Troncoso Skidmore

Council Members-At-Large

Faye Bruun
Emma Bullock
Lynn Burlbaw

Chrissy Cross
Tonya Jeffery
Katherine Vela

George Moore
Michelle Peters
Juanita Reyes

Executive Director

Linda Zientek

Program Division Chairs – 2022

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

Kevin E Kalinowski
Sam Houston State University
kevin.kalinowski@shsu.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

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

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

JOHN J. HEDL, JR. LIFETIME SERVICE AWARD

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

SERA Past Presidents

Grant Morgan	2020-21	Nancy Martin	1999-00
Shirley Matteson	2019-20	Arturo Olivarez	1998-99
Forrest Lane	2018-19	Max Martin	1997-98
LaVonne Williams-Fedynich	2017-18	Mark Lewis	1996-97
Pratheba Natesan	2016-17	Larry G. Daniel	1995-96
Shirley Matteson	2015-16	Mary K. Tallent-Runnels	1994-95
Susan Troncoso Skidmore	2014-15	Stephanie L. Knight	1993-94
Stacey Edmondson	2013-14	Elaine Jackson	1992-93
Kim Nimon	2012-13	Victor L. Willson	1991-92
Willam A. Jasper	2011-12	Glynn D. Ligon	1990-91
Linda R. Zientek	2010-11	Hersholt C. Waxman	1989-90
Mary M. Capraro	2009-10	Patricia A. Alexander	1988-89
Robert M. Capraro	2008-09	Michael J. Ash	1987-88
Gilbert Naizer	2007-08	Deberie L. Gomez-Grobe	1986-87

J. Kyle Roberts	2006-07	Claire Ellen Weinstein	1985-86
M. Janine Scott	2005-06	Bruce Thompson	1984-85
Kathleen Cage Mittag	2004-05	Jon J. Denton	1983-84
Ron McBride	2003-04	Douglas M. Brooks	1982-83
Randall E. Schumacker	2002-03	John J. Hedl Jr.	1981-82
Dianne Taylor	2001-02	Wayne R. Applebaum	1980-81
Vince Paredes	2000-01	Robert M. Caldwell	1979-80

Foreword

As President of the Southwest Educational Research Association (SERA), I warmly welcome you to the 45th Annual Conference. We have over 375 members, and there will be approximately 200 research presentations, workshops, symposia, and innovative sessions at the 2022 conference. Plan to attend as many sessions as possible to take advantage of the wide variety of learning 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 from across the Southwest and beyond, network with colleagues, and form collaborations with researchers in their field. SERA also offers fantastic experiences for graduate students and works hard to ensure that 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. Gregory Hancock, Distinguished Scholar-Teacher, and Director of the Measurement, Statistics and Evaluation program in the Department of Human Development and Quantitative Methodology at the University of Maryland, College Park, and Director of the Center for Integrated Latent Variable Research (CILVR), is the Presidential Invited Speaker on Thursday. Wendi Zimmer and Emma Bullock are offering ticketed workshops on writing productivity and thriving during the dissertation writing process. More information about these sessions can be found in the front matter of the 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 *Sonya Carr* for doing an incredible job as local arrangements chair. Tremendous appreciation is also extended to our President-Elect/Program Chair *Wendi Zimmer* for organizing and compiling this year’s conference program; to *Kevin Kalinowski*, who serves as our SERA Newsletter editor; 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, *Courtney Matthews*. 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 2022 SERA Annual Conference in New Orleans, LA. We are glad you are here and look forward to sharing this experience with you. Enjoy!

Celia Scott
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 3-5. 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 Gregory Hancock, and his presentation will immediately follow the luncheon at 1:35 p.m. in the Royal Salon on Thursday. The Fireside Chat on Thursday afternoon in the Royal Salon is for graduate students only and is an excellent opportunity to visit with Professor Hancock 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 Queen Anne Ballroom. 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!

Wendi Zimmer
SERA President-Elect & Program Chair

Program Session Schedule

Wednesday

11:00a – 5:00p	Registration
12:30p – 2:30p	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 (Ticket Required, Royal Salon)
1:00p – 2:15p	Sessions (W1)
2:20p – 3:35p	Sessions (W2)
3:40p – 4:55p	Sessions (W3)
3:00p – 5:00p	Training Session: Writing with P.O.W.E.R - Increasing Your Writing Habits to Powerfully Enhance Your Writing Productivity (Ticket Required, Royal Salon)

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)
12:00p – 1:30p	Luncheon (Ticket Required, T4)
1:35p – 2:40p	Presidential Speaker – Professor Gregory Hancock (T5)
2:45p – 4:00p	Fireside Chat with Gregory Hancock – Graduate Students Only (T6.1)
2:45p – 4:00p	Sessions (T6) SERA Junior Mentoring Initiative – Part 1 (T6.6)
4:05p – 5:20p	Sessions (T7) SERA Junior Mentoring Initiative – Part 2 (T7.4)
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 – Queen Anne Ballroom). 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 – Royal Salon) immediately following the luncheon.

Fireside Chat Professor Gregory Hancock (T6.1 Thursday 2:45 – 4:00 – Royal Salon)
Graduate Students Only.

Graduate Student Meeting (T8.1 Thursday, 5:25 – 6:30 – Queen Anne Ballroom)
An opportunity to discuss student concerns and elect the 2022–2023 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 – Royal C)

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>Leveraging Malleable Intrapersonal Competency Data to Close Equity Gaps</i>	W1.3
<i>A Guide to Propensity Score Analysis</i>	W2.4
<i>Becoming a Professor of Education</i>	W2.5
<i>Using a Research Model to Build Your Research Proposal</i>	W3.5
<i>Publish, Don’t Perish: Advice from An Editor, Reviewer, and Author</i>	T1.5

<i>Introduction to Bayesian Methods: On Making Inferences when Conducting Confirmatory Factor Analysis</i>	<i>T2.3</i>
<i>Reliability 101</i>	<i>T2.5</i>
<i>Planning for Research Productivity</i>	<i>T3.2</i>
<i>Strategies for Lessening the Stress of Completing Writing Projects</i>	<i>T6.4</i>
<i>Adjusting Leadership Styles to Increase Differentiation of Teacher Training</i>	<i>F3.4</i>

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

SERA Junior Faculty Mentoring Initiative Part 1 & 2

Part 1: Thursday, 2:45-4:00 (Session T6.6)

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

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 – Queen Anne Ballroom). 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 – Royal Salon) 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>Leveraging Malleable Intrapersonal Competency Data to Close Equity Gaps</i>	W1.3
<i>A Guide to Propensity Score Analysis</i>	W2.4
<i>Using a Research Model to Build Your Research Proposal</i>	W3.5
<i>Publish, Don't Perish: Advice from An Editor, Reviewer, and Author</i>	T1.5
<i>Reliability 101</i>	T2.5
<i>Planning for Research Productivity</i>	T3.2
<i>Strategies for Lessening the Stress of Completing Writing Projects</i>	T6.4

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
Emma Bullock	Sam Houston State University
Faye Bruun	Texas A&M University Corpus Christi
Lynn M Burlbaw	Texas A&M University
Victor Cifarelli	University of North Caroline – Charlotte
Julie Combs	Sam Houston State University
Chrissy Cross	Stephen F. Austin State University
Stephen Gruber	University of Houston – Clear Lake
Dittika Gupta	Midwestern State University
Bill Jasper	Sam Houston State University
Tonya Jeffery	Stephen F. Austin State University
Forrest Lane	Sam Houston State University
Audrey Meador	West Texas A&M University
Grant Morgan	Baylor University
Juanita Reyes	Tarleton State University
Celia Wilson Scott	University of North Texas Health Science Center
Susan Troncoso Skidmore	Sam Houston State University
Katherine Vela	Utah State University
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 Reichwein Zientek for running the proposal submission system and her guidance throughout the program development stages, to Susan Skidmore for coordinating the Conference Registration system, and to Sonya Carr for serving as Local Arrangements Chair.

Also, thank you to Texas A&M University for printing the 2022 SERA conference programs.

SERA 2022 Presidential Invited Address Gregory Hancock

Stop Being So Mean!: Complementary Analytical Methods for Research Questions Focused On Variability



Gregory R. Hancock is Professor, Distinguished Scholar-Teacher, and Director of the Measurement, Statistics, and Evaluation program in the Department of Human Development and Quantitative Methodology at the University of Maryland, College Park, and Director of the Center for Integrated Latent Variable Research (CILVR). His research interests include structural equation modeling and latent growth models and the use of latent variables in (quasi)experimental design. His research has appeared in such journals as *Psychometrika*, *Multivariate Behavioral Research*, *Structural Equation Modeling: A Multidisciplinary Journal*, *Psychological Bulletin*, *Psychological Methods*, *British Journal of Mathematical and Statistical Psychology*, *Journal of Educational and Behavioral Statistics*, *Educational and Psychological Measurement*, *Review of Educational Research*, and *Communications in Statistics: Simulation and Computation*. He also co-edited with Ralph O. Mueller the volumes *Structural Equation Modeling: A Second Course* (2006; 2013) and *The Reviewer's Guide to Quantitative Methods in the Social Sciences* (2010), with Karen M. Samuelsen the volume *Advances in Latent Variable Mixture Models* (2008), and with Jeffrey R. Harring the volume *Advances in Longitudinal Methods in the Social and Behavioral Sciences* (2012).

He is past chair of the SEM special interest group of the American Educational Research Association (three terms), serves on the editorial board of a number of journals, including *Psychological Methods* and *Structural Equation Modeling: A Multidisciplinary Journal*, and has taught dozens of methodological workshops in the United States, Canada, and abroad. He is a Fellow of the American Educational Research Association, the American Psychological Association, and the Association for Psychological Science, and received the 2011 Jacob Cohen Award for Distinguished Contributions to Teaching and Mentoring by the American Psychological Association.

2-Hour Training Session

(Ticket Required)

"Writing with P.O.W.E.R - Increasing Your Writing Habits to Powerfully Enhance Your Writing Productivity"

Wendi Zimmer

You know your subject matter, but do you know which writing processes and habits are optimal for communicating your expertise? The ones that yield productivity, publications, and promotions? The P.O.W.E.R. ("Promoting Outstanding Writing for Excellence in Research") system, pioneered by Pat Goodson at Texas A&M University, will save you years of trial and error. During this 2-hour workshop based on P.O.W.E.R. principles, we will survey the most effective practices from leading writers (academic and non-academic) and peak performance theory that you can apply to your writing work. Show up to this workshop with a device on which you can compose and edit text, one of your works in progress, and your top three writing goals in mind. You will leave with strategies, techniques, templates, resources, reading lists, and new accountability partners for your academic writing career.

Wendi Zimmer is a Visiting Assistant Professor and Associate Director of POWER at Texas A&M University.

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 in Mathematics Education at Sam Houston State University.

WEDNESDAY, FEBRUARY 23

W0.1

11:00a-5:00p

Queen Anne Mezzanine

Registration

W0.2 Training Session

12:30p-2:30p

Royal Salon

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

Orleans D

Policy

The Complicated Ethics of a Rural School District: An Autoethnography of a School Grievance

**Chrissy Cross — Stephen F. Austin State University*

This paper is an autoethnographic study of my perspectives and experiences as a mother, former teacher, and teacher educator over the period of a year when my child was discriminated against and abused in a classroom and my attempt to file a school grievance to protect my child. As a mother scholar, I was unfortunately situated in a knowledgeable but deeply emotional place to navigate the school grievance system to advocate for my child. The purpose of this research is to create awareness in teachers, teacher educators, and administrators about the complexities of ethics and the school grievance system.

Effectiveness of New Tech Network School Whole School Implementation Model in Texas

Michael Odell & Eric Stocks — The University of Texas at Tyler

Brooke Culclasure — Furman University

Kevin Gant & Liz Bergeron — New Tech Network

This study examined the effectiveness of New Tech Network (NTN) Schools in Texas in comparison with non-New Tech Schools based on comparison groups as identified by the Texas Education Agency (TEA). An analysis of accountability data, in particular, a comparison of the awarding of distinctions, was utilized as a measure of effectiveness. New Tech schools were found to statistically significant outperform their comparison group schools and all comparison schools as a model.

The Ethical Dilemma of Closing Playgrounds During the COVID-19 Pandemic

Taylor Bunn — Hope 4 All

Leading is challenging at the best of times, but a public health crisis like COVID-19 pushed many leaders to the limit. With schools closed, citizens ventured outside to exercise, take a break in the fresh air, and safely socialize at a distance. The closure of parks and playgrounds impacted this respite from quarantine. Was closing parks and playgrounds an effective mitigation strategy? What are the consequences of closing? What are the consequences of reopening too soon? This paper explores how the Markkula Center's Framework for Ethical Decision Making could guide leaders through the decision to close playgrounds.

W1.2 Paper Session

1:00p-2:15p

Bienville C

Higher Education

Marketing Higher Education Distance Learning Programs

Anthony Edwards — Tarleton State University

The purpose of this study was to identify similarities and differences in terms of programs offered and keywords used to promote an institution's online programs. Online program websites for colleges in the Western Athletic Conference (WAC) were studied using content analysis of each institution's website for online programs. Research questions included whether WAC colleges give their online programs a brand name, whether WAC colleges differ in programs offered online, and whether WAC colleges differ in brand values communicated on their websites. Findings are relevant to improving understanding of higher education marketing in the literature as well as enrollment management practice.

College Professors' Perceived Impact Of COVID-19 on College Teaching and Instruction

Ricardo Martinez, Daniella Varela, & Maria Martinez — Texas A&M University-Kingsville

The COVID-19 pandemic posed a threat to higher education with the rapid transition to remote teaching and online instruction. This qualitative study sought to understand the impact of COVID-19 on college professors pertinent to teaching and instructional methods. The conceptual

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framework guiding the study was the Concerns-Based Adoption model developed by George Hall, which is used to explain the perceived lack of adoption of teaching innovations. Emergent themes revealed that college faculty endured profound loss as a result of their experiences but prevailed with differentiation techniques and conscientious efforts to maintain student engagement. Implications for practice and recommendations are discussed.

Assessing Physics Learning in the Online Learning Environment with a Mixed-Methods Design

**Zhidong Zhang — The University of Texas Rio Grande Valley*

This study examined an alternative assessment with qualitative data in the student model. Stated differently, this study modeled a dynamic process of physics learning behaviors with a hierarchical Bayesian approach. The data of the student model were from a mixed-methods resource. The results indicated that the mixed-methods data were effectively used in the alternative assessment and classified student learning behaviors into several categories. The students, teachers, and relevant stakeholders shared the students' progress and recognized the points that should be improved.

W1.3 Workshop

1:00p-2:15p

Royal D

Free Workshop

Leveraging Malleable Intrapersonal Competency Data to Close Equity Gaps

Marilee Bresciani Ludvik — The University of Texas at Arlington

While institutions have been investing in efforts to close achievement gaps, they still remain. With a growing emphasis on data analytics focusing on socio-cultural groupings, some institutions may benefit students while others may simply reinforce past behavior and potentially increase achievement gaps. Emerging neuroscience points to malleable intrapersonal competencies that align with desired career readiness skills that currently aren't utilized in data analytics. This session shares inquiry methodology that includes intrapersonal competency assessment to ensure institutions are not creating more harm with the use of their data analytic strategies and instead improving career readiness skills for all students while also closing achievement gaps. A process guide for institutional implementation will be shared and critiqued by participants.

W1.4 Paper Session

1:00p-2:15p

Orleans C

Professional Development

Professionalizing the Mentor's Role by Building Mentoring Capacity

Erin Singer — Texas A&M University

The We Teach Texas P12 Mentoring and Coaching Academy's vision, a new program offered by the College of Education and Human Development at Texas A&M University, is to transform the preparation of teacher mentors by providing evidence-based professional development for

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P12 mentors and coaches who support beginning teachers throughout the state. In a 45-minute presentation, attendees will (1) understand why building mentoring capacity matters, (2) discuss ways that training programs professionalize the mentor's role, and (3) examine the ways the Academy's university-based mentor training program, which is aligned to the Texas Teachers Evaluation and Support System (TTESS) rubric, can strengthen school-university partnerships.

Undergraduate Mentoring by Faculty - Systematic Review

**Jaime Basher — Baylor University*

Mentoring is a buzzword in every field currently. A simple search of "mentor" on EBSCOhost: Academic Search Complete yields over thirty-three thousand hits. And collegiate undergraduate education is not immune. The goal of this project is to ascertain how undergraduate mentoring by faculty members has been enacted and studied in the last two decades. This systematic review intends to quantify the evidence available and ascertain the current status of research on effective practices of undergraduate mentoring by faculty.

Teacher DDDM Efficacy, DDDM Anxiety, DDDM Teacher Practices, and the Role of Data Specialists: A Moderated Mediation Analysis of Teacher DDDM Practices

Kendra Nwosu — Texas Tech University

The need for data-driven decision-making (DDDM) is increasing due, in part, to high-stakes testing and learning gaps from COVID-19 disruptions. This study aimed to measure the relationship between DDDM anxiety and teachers' DDDM practices and whether DDDM efficacy served as a mediator of that relationship. The study's results suggested positive effects of a data specialist, specific DDDM efficacy areas that teachers need assistance, how DDDM can be utilized in teacher preparation programs and informs teacher leaders on how to better support teachers with DDDM efforts.

W1.5 Paper Session

1:00p-2:15p

Bienville B

Culture

Impact of School Leadership on Developing a STEM-Driven School Culture

Carol Waters — University of Houston-Clear Lake

Educators are vital in capturing students' STEM interest. An integrated approach to STEM education is necessary to promote students' interest and curiosity while building the foundation of STEM concepts needed to fuel the STEM workforce. This exploratory case study examined K-5 educators' perceptions of STEM education and STEM schools. Survey, interviews, and observational data were analyzed and coded. This presentation focuses on the emergent themes of the instructional leadership team and school culture. The significance of this study calls for a paradigm shift where embracing a STEM-driven school culture can provide an incredible explosion of academic and creative freedom.

The NCAA Reclassification Transition to Division I Athletics: An Analysis of the Academic Clustering Phenomenon

**Jesse Brock, Don Beach, & Ryan Glaman — Tarleton State University*

Research indicates academic clustering is a widespread phenomenon within the student-athlete experience, both at Division I and Division II levels. Scholars have expressed concern over the implications of clustering, as some student-athletes are clustered into academic majors that may not align with their personal, educational interests or their intended occupational careers. 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.

Empathy Empathy Wherefore Art Thou: A Multidimensional Mixed Methods Investigation

Katrina Schultz — American College of Education

Peter Zitko — Solano College

Gary Owens — Orlando Health

Empathy is more than a social media buzzword, band-aid fix, pandemic knee jerk reaction, or trendy topic of conversation. While events of the current era have heightened awareness beyond the realm of scholarly discourse, understanding empathy or the lack thereof plays a significant role in human interaction has long been recognized. Wading through empathy literature is a daunting task. While the importance of empathy is clear, clarity fades as lack of consensus muddies the water. In accordance with recommendation for researchers to employ novel inquiry approaches, a mixed methods approach was used to investigate the complexity of state and trait empathy.

W1.6 Paper Session

1:00p-2:15p

Royal A

Critical Thinking

Determining Writing and Critical Thinking Need Within the Sport Industry to Inform Education

Wendi Zimmer & Paul Keiper — Texas A&M University

Writing and critical thinking skills have been linked to educational and industry success. Data reveals that most students do not acquire skills necessary for proficient writing, including critical thinking. Higher education curriculum must be evaluated to assess effectiveness regarding writing and critical thinking instruction. To increase the effectiveness of the course curriculum, we must consult industry professionals to recognize writing and critical thinking expectations. Without this knowledge, we only make assumptions about the transferable skills incorporated into courses. This mixed-methods study aimed to determine the relevance of writing and critical thinking skills in the sport industry to inform course delivery.

A Study Exploring the Experiences of University Executive Team Members and the Relationships they Maintain as Factors that Impact Leadership and Institutions

Brett Welch — Lamar University

Alex Arceneaux — University of New Orleans

Neil Faulk — Lamar University

The purpose of this study was to gain insight into how academic executives work together as teams and how their relationships create opportunities or challenges for the team and institution. Through a series of interviews with university executives, the researcher hopes to uncover a better understanding of the relationships among university executive team members and their perceptions as to how their social and relational experiences (i.e., social capital) influence their performance.

Teaching Strategies During a Pandemic: Learnings and Reflections

**Kelly Medellin, Dittika Gupta, & Kym Acuna — Midwestern State University*

Due to the COVID-19 pandemic, teachers were faced with the insurmountable task of changing teaching methods to virtual online pedagogy that continued to provide students with quality instruction using best practices. For this study, action research was employed to answer the question: how can teachers still provide quality learning experiences that give students opportunities to collaborate in class while continuing to use best practices in an online environment? This presentation will discuss online and synchronous instruction and how Jamboard, Padlet, Mentimeter, Flipgrid, and Bitmoji Classroom were implemented to support student learning through the 4 C's of 21st century learning.

W2.1 Paper Session

2:20p-3:35p

Orleans A

School Improvement

IB MYP Language Courses Within Middle Schools in China and Taiwan: Implementation and Difficulty

**Liang Ward — The University of Texas at San Antonio*

The purpose of this study was to probe into the conditions and difficulties that impede the implementation of the International Baccalaureate (IB) Middle Years Programme (MYP) language courses within middle schools of China and Taiwan through examining the perceptions of middle school teachers from China and Taiwan. The research design for this study was based on a qualitative method using semi-structured interviews for data collection and the comparative cross-case analytic strategy for data analysis. The results from this study provide relevant information that can be a great reference for IB MYP designers, school district leaders, and educational policy makers in the implementation and development of the IB MYP within middle-school language courses in China and Taiwan.

An Analysis of District Tardy Policies for Schools from A 2019 Texas Education Agency Campus Comparison Group

Melissa Arrambide — Texas A&M University-Commerce

Zelmarian Ready — Mansfield ISD

Teresa Farler & Mei Jiang — Texas A&M University-Commerce

Students who are absent or tardy fall behind their peers and are at risk for dropout and below grade level performance (Gottfried, 2011; Tyre et al., 2011). District autonomy to develop local policy has created diversity in policy implementation, thus leading to controversial consequences for students. The purpose of this policy analysis study was to explore how the Texas Education Agency's 2019 Campus Comparison Group of schools serving students in Grades 9 through 12 implemented tardy procedures (Texas Education Agency, 2019b). The analysis was directed at school districts' policies to determine the commonalities, differences, and other themes that existed.

Phenomenological Mixed Model for Exploring Academic Challenge and Resources

Zhidong Zhang & David Smith — The University of Texas Rio Grande Valley

This study examined the relationship between academic experiences and challenges, which reflected Latino college students' learning experiences. The instrument was a mixed structural questionnaire consisting of two sections: College Student Experience and Academic Challenges. In each section, there is an open question, "if you have any other information, please specify." The open questions provide a chance to collect qualitative data, in which a phenomenological model was applied in the data analysis. Thus, a phenomenological mixed model was used to do data analysis.

W2.2 Paper Session

2:20p-3:35p

Orleans B

Multicultural Education

Professional Development for the 21st Century: Virtual Professional Learning Communities and Virtual PD

Erin Singer — Texas A&M University

Project XXX is a five-year project working toward increasing the instructional capacity of teachers, administrators, parents, and paraprofessionals who serve English learners and economically disadvantaged students using virtual professional development (VPD). The goal of Project XXX is to prepare 2500 in-service teachers, 100 administrators, 100 paraprofessionals, and 100 parents/guardians to make appropriate pedagogical decisions regarding the education of English Learner (EL) students. Project XXX was able to provide support for teachers in the form of virtual mentoring and coaching sessions through virtual professional development. While most professional development for teachers in Texas is offered online, Project XXX offers a virtual mentoring and coaching component to assist teachers with incorporating strategies into their teaching practices.

The Need for Situative Learning in EL Classrooms: Supporting Diverse and Technological Educational Environments During COVID-19

Karena Escalante, Dara Bright, & Vera Lee — Drexel University

This study embodies the concept of multicultural education and responds to the decolonial turn in education by investigating the impact of virtual technology utilized in urban middle school teachers working with ELs. In this mixed-methods sequential explanatory design study, the primary data are surveys and interviews with urban educators of English learners employed by an urban middle school located in the School District of Philadelphia. By intentionally engaging interactive technologies with ELs, teachers of multilingual communities can help improve contemporary efforts toward educational equity, specifically during the global COVID-19 pandemic.

Exploring Parents Identification of their Students' Courses as Honors

**Kristian Edosomwan — Texas A&M University*

No recent studies have explored parent knowledge of how their students are academically tracked into different course levels. This study analyzed data from the High School Longitudinal Survey of 2009 to see what factors impacted whether parents identified their students as taking honors classes. Results found that even after controlling for students' level of math course, student gender, race, socioeconomic status as well as parent education, and participation in general school meetings had significant effects on parent identification of their child's taking of honors classes. This implies a need for better parent education on their child's course placement.

Teaching in a Diversity College Course: Experiences and Learning of a Teacher Educator

Stephanie Zamora Robles — Midwestern State University

According to the Association of American Colleges and Universities, 60% of its members have created diversity course requirements as part of their general education programs (Hart Research Associates, 2016). While there is research focusing on student outcomes related to diversity courses, there is little research that focuses on the experiences of instructors, especially at higher education (Miller & Struve, 2020). This project examines the experiences and learning of a diversity course instructor, her pedagogy, and her emotional and social well-being while teaching a diversity course for the first time. This research aims to understand the experiences of instructors teaching diversity courses.

W2.3 Paper Session

2:20p-3:35p

Orleans D

Student Motivation

Teachers' Perception of Humor as a Facilitator of Student Engagement

Dina Geumei — University of Houston-Clear Lake

Student engagement is the dynamic process through which lessons are transferred into learning. Studies indicate that engagement is a great indicator of students' learning, grades, achievement, test scores, retention, and graduation (Finn, 1989; Fredricks et al., 2004; Newmann et al., 1992).

Additionally, the literature reveals a solid understanding of how teachers influence student engagement, highlighting the teacher's role as paramount to ensuring students can experience meaningful engagement (Pedler et al., 2020). For instance, Shernoff et al. (2016) state that the teacher's ability to shape students' immediate learning environment is the principal means by which to influence student engagement.

As a strong catalyst to engagement, laughter ignites students' interest in the subject taught. Embalzado and Sajampun (2020) discovered that a humorous classroom brings about physiological and emotional benefits to students as it relieves tension and stress, makes the classroom atmosphere more comfortable and less intimidating, and facilitates a better teacher-student relationship. Furthermore, Baumgartner and Morris (2008) state that humor-based teaching is more engaging and interesting for the students.

Graduate Students' Perceptions of Engaged Learning Behavior: A Qualitative Analysis

**Don Beach — Tarleton State University*

The purpose of this paper is to discuss the results of a study that asked graduate students to identify and describe their own behaviors that were indicative of engaged learners as they participated in tasks or activities during class. Twenty-three graduate students in the same class responded to 5 open-ended questions on the Student Engagement Reflection questionnaire after three different lessons during the semester. The qualitative study used hand coding to ascertain engagement behaviors as perceived by graduate students in a classroom situation. Four themes, with attendant components and assertions emerged from the written qualitative responses.

Can We Change Minds with Math Lines

Shelletta Baker — Valencia College

The purpose of this study is to examine the impact of math lines on mathematics attitudes of early learners. With ongoing research supporting the importance of establishing a solid foundation for early learners. The current study aims to utilize a reliable measure to assess the attitudes of early learners before and after constructing math lines. The results of this study will have implications for the attitudes of early learners and their mathematics achievement.

W2.4 Workshop

2:20p-3:35p

Royal D

Free Workshop

A Guide to Propensity Score Analysis

Forrest Lane — Sam Houston State University

An aim of research is to examine the effectiveness of programs and interventions. A challenge is that findings can be biased when individuals are not randomly assigned to groups. This workshop will introduce propensity score analysis as a statistical technique for mitigating bias due to non-random assignment. Participants will learn the theory behind the analysis and how to conduct it using heuristic data.

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W2.5 Workshop

2:20p-3:35p

Royal A

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.

W2.6 Paper Session

2:20p-3:35p

Bienville C

Higher Education

The S3 Initiative: Preparing Bilingual Pre-Service Teachers for the Social Studies Classroom

Gina Garza-Reyna, Brent Hedquist, & Haibin Su — Texas A&M University-Kingsville

This study explored the effectiveness of a curriculum redesign on a World Geography course that included National Geographic resources to help raise the low performance of elementary, pre-service Bilingual teachers on the EC-6 Core Subjects exam in Social Studies. In reviewing the initial survey given to participants, 85% noted not feeling prepared to teach the content area of Social Studies. In reviewing their tests, the average pre-test score was 6.14 out of 10; the post-test score was 8.87 out of 10. Over all, the students improved and showed readiness to take the EC-6 Core Subject exam.

Do First Year Students' Characterizations of Good Engineers Include Teamwork, Diversity, Equity, and Inclusion?

**Sabrina Hernandez, Niki Nguyen, Nicole Svetlov, Jose Lopez, Blaine Pedersen & Karen Rambo-Hernandez — Texas A&M University*

The culture of engineering is often hostile toward those with diverse backgrounds. Because of this, the promotion of equity, inclusive environments, and appreciation of diversity in engineering education has been a priority in the STEM community. The purpose for this research, which is only a portion of the larger P4E research program, is to determine the extent to which students' participation in the intervention activities influence their perceptions of the qualities of good engineers. Our results suggest students' conception of a good engineer along the dimensions of diversity, equity, and inclusion or teams and effective communication was mostly stable.

Formal Education Influence on STEM Majors

Sandra Nite — Texas A&M University

Roslinda Rosli — Universiti Kebangsaan Malaysia

STEM majors continue to be needed across the world in order to solve various issues in society. Knowledge about influences on student major decisions is important in recruitment. Survey results of 494 undergraduates were analyzed. It was revealed that informal education plays an important role. Within informal education, science and mathematics classes in high school were instrumental in solidifying STEM major choices. These results could be used by schools to encourage most students to consider a STEM major.

W3.1 Paper Session

3:40p-4:55p

Orleans C

Higher Education

Developing Scholarly Dispositions

Crystal Rose, Chrissy Eubank, & Aaron Zimmerman — Texas Tech University

The responsibility of developing scholarly dispositions, the specific practices and habits of mind needed in undergraduate and graduate education, traditionally fall on the faculty teaching coursework; however, there is much to learn concerning how to effectively instruct, encourage, and assess scholarly dispositions in students. The feat of becoming an independent researcher can be a challenge for doctoral students, especially when leveraging methodologies that are not well represented in published dissertations. A dissertation chair, a former student, and a current student discuss their journey of developing scholarly dispositions with guidance, support, and careful questioning throughout their journey.

The Impact of COVID-19 Pandemic on International Students Enrolled in a Public University in a Rural Community in the United States: Academic And Non-Academic Challenges

**Nara Martirosyan — Sam Houston State University*

Dana Van De Walker — Lone Star College

D. Patrick Saxon — Sam Houston State University

The purpose of this study was to explore academic and non-academic challenges faced by international students at one public university in Texas. Using an online survey, we solicited input from international students about their experiences during the pandemic. We also examined their use of support services and their satisfaction with the academic support and guidance received from the institution. The results of this study serve to educate university administrators, professors, and student services personnel on the experiences of international students during the COVID-19 pandemic and the ways in which academic and non-academic support services can be revived and expanded.

Phenomenological Mixed-Methods Designs in a Cognitive Assessment Model

Zhidong Zhang — The University of Texas Rio Grande Valley

This study examined residents' learning process and assessment procedures. This was a data-driven study; the data were obtained from the residents' learning processes. The residents developed their own learning models—the student models based on their practice in the intern and clinical practice. The learning scenario was a videotape of the Age-related Macular Degeneration (AMD). Combining the students' responses and discussions' about the AMD, the student models (Vanlehn, Niu, Siler, & Gertner, 1998) were developed, which further were taken as an assessment framework represented by a hierarchical Bayesian network, which modeled a learning and assessment process for residents in Ophthalmology.

W3.2 Paper Session

3:40p-4:55p

Bienville B

Technology

The Power of Authentic Assessment to Cultivate Meaningful Learning within Content Specific, Pedagogically Sound, Results Based Collegial Coaching Endeavors

**Katie Alaniz — Houston Baptist University*

Empowering leaders within educational contexts consistently seek out and leverage innovative professional development experiences for teachers. In today's age of swift technological expansion within academic contexts, professional development that effectively incorporates digital tools and resources encompasses an area of immense need. Collegial coaching that highlights meaningful technology integration allows educators to benefit as a result of personalized, applicable, instructionally sound professional growth opportunities within their own classroom settings. This study features one collegial coaching format in particular, namely the Coaching CPR Method. This framework focuses upon Content-Specific, Pedagogically-Sound, Results-Based coaching endeavors. Using various data sources (interviews, a post-coaching questionnaire, and analyses of journals kept by coaches and coached teachers), the current research overviews methods for evaluating the impacts of collegial coaching endeavors and reveals beneficial results from this professional development strategy.

Educator's Experiences in Utilizing Virtual Learning Technologies

Kelli Bippert, Susan Elwood, Misty Kesterson, & Debra Plowman — Texas A&M University-Corpus Christi

This paper presentation is based on a mixed-methods study conducted with educators in the Coastal Bend Region. The purpose of the study was to gather data related to educators' experiences in utilizing virtual learning technologies to provide instruction to students in local public schools. The overall objective of this study was to coordinate with partner districts by addressing efficient and effective virtual learning technology needs in our pre-service and in-service education partnerships.

Cognitive Impact of Using Dynamic, Interactive, and Automatically Generated Concept Maps: A Meta-Analysis

Michael Rugh, Donald Beyette, & Robert Capraro — Texas A&M University

Dynamic and Interactive Mathematical Expressions (DIME) maps present mathematical expressions, variables, and formulas as interrelated concepts in an interactive and dynamic concept map. This map is automatically generated from an uploaded PDF textbook chapter that focuses on mathematically based concepts. We used a random-effects meta-analysis with a Hartung-Knapp-Sidik-Jonkman adjustment and found that using DIME maps had a significant positive effect on physics cognitive outcomes. We conclude that DIME maps were an effective learning tool for students in physics. Teachers can use the online DIME Map system to automatically produce these interactive concept maps for any PDF textbook chapter.

W3.3 Paper Session

3:40p-4:55p

Orleans A

Mathematics Education

Validating a Causal Model for Mathematics Anxiety Levels and Identifying Predictors of Student Success

**Linda R. Zientek, Forrest C. Lane, & Susan Skidmore— Sam Houston State University*

High levels of mathematics anxiety can impact mathematics achievement. For this study, we examine the possible mediating effect of mathematics anxiety. Although self-efficacy has been identified as a better predictor of mathematics achievement than mathematics anxiety, Bandura had hypothesized that the method for alleviating mathematics anxiety is by increasing self-efficacy. Our study will *evaluate the extent to which* reducing mathematics anxiety can be accomplished through addressing self-efficacy and self-regulation.

Mathematics Teacher Technology Use: Results from a Professional Development Program

Sandra Nite, Kimberly Ann Currens, & Erin Singer — Texas A&M University

Mathematics teachers ($n = 57$) in Texas who participated in a professional development program completed a pre/post survey about the use of technology in their personal and professional lives, including the classroom and student technology use in their classrooms. For technologies that could be useful in teaching and learning, technology increased over the course of a year after professional development that used and emphasized technology. The increase in technology use overall was statistically significant at the 90% level ($p = .055$). The technology used in various areas will be discussed.

Validation of the Algebra Teacher Self-Efficacy Instrument for Pre-Service Mathematics Teachers

Trena Wilkerson — Baylor University

Dittika Gupta — Midwestern State University

William Jasper — Sam Houston State University

Melissa Donham — Baylor University

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The purpose of this paper is to present validation results of an instrument that measures teacher self-efficacy related to the teaching and learning of algebraic concepts in middle and high school pre-service teachers (PSTs). Though there are instruments available to measure self-efficacy, teacher self-efficacy, and mathematics and science teacher efficacy of elementary pre-service and in-service teachers, none are specific to a content area such as algebra. The validated instrument will contribute towards determining the needs of PSTs in teacher preparation programs and support their professional development.

The Role of Exploring Function Graphs in Different Axis Orientations

Volkan Sevim — University of South Carolina Beaufort

This qualitative research study investigates the role of nonconventional axis orientations in helping students develop a covariational understanding of mathematical functions. Increased knowledge of how students reason with nonconventional axis orientations will contribute to ongoing research on students' understanding of the concept of function.

W3.4 Paper Session

3:40p-4:55p

Royal A

Higher Education

Discussant: Lynn Burlbaw

Staff Experiences of Inequity During COVID-19 in Higher Education

Lisa Shen, Priscilla Arteaga, & Robert Webber — Sam Houston State University

In higher education, staff employees are often perceived as inferior to faculty and subjected to further intragroup inequities based on education credentials and positions within the institutional hierarchy (Young et al., 2015). Such treatment differentials, or rankism (Christen-Mandel, 2019), tend to intensify in organizational contexts with high ambiguities and time constraints, unclear policy options or solutions, and blurry boundaries of responsibilities and accountabilities (Herweg et al., 2018), including natural disasters or health crises. Therefore, the purpose of this study is to explore higher education academic and student affairs support staff's experience of inequity and rankism during the COVID-19 pandemic.

The Impact of Community College Teaching and Learning Resources on Language Competence and Performance of ESL Students

Mona Farokhian — University of Houston-Clear Lake

The purpose of this study is to examine the impact of the community college teaching and learning resources on language competence and performance of ESL students in Workforce and Intensive Program. Examining possible innovative strategies for teaching ESL students is critical for language acquisition and social-emotional wellbeing (Beare, 2019). The research design used for this study will be a mixed methods approach. The sample for the study is comprised of two groups of ESL students in community college, will be solicited through a survey to provide responses to the students' languages accuracy and fluency as a measure for language acquisition.

Developing an Osteopathic Medical Student-Led Scholarship of Teaching and Learning Interest Group

Ritvik Bhattacharjee & Austin Reynolds — Sam Houston State University College of Osteopathic Medicine

Scholarship of teaching and learning (SoTL) is an expanding field of academic research focusing on the effects of pedagogy and student learning outcomes. While the health science community has embraced the value of SoTL, the medical community lags behind other health science disciplines in terms of the volume of published SoTL research. Additionally, SoTL is a faculty-dominated field, lacking student researcher participation. Our study aims to establish a student-led SoTL research interest group at Sam Houston State University College of Osteopathic Medicine. We hypothesize that this group will increase student-led SoTL research productivity in the field of medical education.

W3.5 Workshop

3:40p-4:55p

Royal D

Free Workshop

Using a Research Model to Build Your Research Proposal

*Celia Scott — University of North Texas Health Science Center
Lesley Leach — Tarleton State University*

This workshop will provide attendees an introduction to using research models to visually represent the connections between various components of a research proposal. While components can vary, research models often include the purpose of a study, research question(s), theoretical or conceptual framework, components of that framework, outcomes to be investigated, and even the data to collect and methods to collect it. Information will be provided regarding creation of a research model and how to use a research model to guide construction of a research proposal.

W3.6 Training Session

3:00p-5:00p

Royal Salon

Training Session

Writing with P.O.W.E.R - Increasing Your Writing Habits to Powerfully Enhance Your Writing Productivity

Wendi Zimmer — Texas A&M University

You know your subject matter, but do you know which writing processes and habits are optimal for communicating your expertise? The P.O.W.E.R. (“Promoting Outstanding Writing for Excellence in Research”) system, pioneered by Pat Goodson at Texas A&M University, will save you years of trial and error. During this 2-hour workshop based on P.O.W.E.R. principles, we will survey the most effective practices from leading writers (academic and non-academic) and peak performance theory that you can apply to your writing work. Show up to this workshop with a device on which you can compose and edit text, one of your works in progress, and your top three writing goals in mind. You will leave with strategies, techniques, templates, resources, reading lists, and new accountability partners for your academic writing career.

THURSDAY, FEBRUARY 24

T0.1	8:00a-5:00p	Queen Anne Mezzanine
<i>Registration</i>		

Closed During Business Luncheon

T0.2	8:00a-9:00a	Queen Anne Ballroom
<i>Continental Breakfast</i>		

T1.1 Workshop	8:30a-9:30a	Orleans C
<i>Free Workshop</i>		

Navigating and Getting the Most from SERA

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

T1.2 Paper Session	8:30a-9:30a	Royal A
<i>Higher Education</i>		

Developing Spanish Language Proficiency in Pre-Service Teachers: A Mindful Reflection

Gina Garza-Reyna — Texas A&M University-Kingsville

Zulmaris Diaz — The University of Texas Rio Grande Valley

Bilingual education professors in the field of Bilingual Education are being called to prepare highly effective bilingual teachers who can perform in academic settings to support the ever-growing English Learner (ELs) population across the nation. As a result, we, two Bilingual Education professors working at two different institutions along the Texas-Mexico border, conducted a duoethnography study to explore the question: “How are our practices impacting the linguistic development of the students we teach?” In our paper, we describe the pedagogical activities we use with our students that have the greatest impact on their language and literacy development in Spanish.

Two Technology in Teacher Education Instructors Recounting their Experience Through the Pandemic

**Karla Garza & Karen McIntush — Texas A&M University*

A global pandemic caused havoc on educators around the world, forcing them to come up with innovative ways to continue instruction. As a result of the challenges, this manuscript details comparison between two teaching perspectives, teaching hybrid versus teaching remote during a global pandemic. Adapting to the instructional methods that educators are not prepared to caused teachers to find different ways to continue instruction. This narrative inquiry of two instructors' lived experiences generated thematic categories of class community, engagement, and professional learning communities. Creativity, adaptation, and constant support were deemed necessary for teaching during a pandemic.

Everyone is Lonelier: College Students' Levels Of Loneliness Before and After the COVID-19 Transition to Remote Learning

Sequoia Callahan, Donna Jaison, Lance White, Karan Watson, Tracy Hammond, Karen Rambo-Hernandez, Bimal Nepal, & Noemi Mendoza — Texas A&M University

This study analyzes the impact of COVID-19 on students' subjective feelings of loneliness and social isolation at a large public R1 university in the Southwest using data collected from a survey distributed in spring 2020, right after emergency remote precautions went into place. Further analyses explore whether students from vulnerable populations experience significantly greater increases in levels of loneliness and social isolation. Results may inform the development of a pilot intervention to support student persistence and success in STEM courses at this university, as well as inform educational professionals worldwide in the plight to regain normalcy amidst these unprecedented times.

T1.3 Paper Session

8:30a-9:30a

Royal B

Higher Education

Revisiting the Effects of First-Year Seminar Enrollment: Impacts on Students Placed Into Corequisite Remediation

Forrest Lane — Sam Houston State University

Many underprepared college students fail to complete remedial course sequences and persist to degree completion. First-Year Seminars (FYS) are one of several high-impact practices associated with increased persistence, retention, and graduation rates. Research suggests that FYSs are associated with a greater likelihood of passing college-level mathematics. The problem is that the efficacy of this approach is limited to data from traditional developmental courses when there is a growing trend toward co-requisite remediation. This study explored the effect of FYS enrollment on the academic achievement of students placed into corequisite mathematics. Results may inform strategies for better supporting this population.

The Power of Mentoring Networks to Support Diverse Graduate Students and Early Career Faculty in Stem

Rosana Moreira — Texas A&M University

Kimberle Kelly — Independent Consultant

Theresa Murphrey, Shannon Walton, Ra'sheedah Richardson, & Karen Butler-Purry — Texas A&M University

This case study of a multi-institutional alliance employs multiple mentoring strategies to improve graduate student and faculty diversity in higher education. Social network analysis quantifies interactions among participants and mentoring components of the alliance model. We employed empowerment evaluation for equitable/inclusive engagement in qualitative data analysis and interpretation of findings. Results revealed three categories of network metrics: breadth or number of unique mentoring components; depth or frequency of engagement in mentoring; and longitudinal shifts in mentoring needs over time and career stage. Mentoring network metrics can

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facilitate the design, implementation, and assessment of mentoring practices in promoting diversity in academia.

Analyzing Students' Mindfulness in Higher Education: A Pilot Study of the Effectiveness of a Training Program

**Suzanne Lindt, Tara Fox, & Emily Smith — Midwestern State University*

The purpose of this pilot study was to determine the current stress level of university students and determine how participating in a mindfulness training program may decrease students' stress and increase their mindfulness. Graduate and undergraduate students completed a pre-survey to determine stress levels and mindfulness. During the four week mindfulness training, participants completed weekly reflections. At the end of the training, participants completed the post-survey, and results suggest that over the four weeks, students' stress decreased and that students were able to utilize some of the mindfulness strategies to help them in academics.

T1.4 Innovative Session

8:30a-9:30a

Royal D

Innovative Session

No Space for Safe Spaces: Critical Qualitative Research as a Means for Promoting Social Justice in Higher Education

Alonzo Flowers — Drexel University

Rosa Banda — Texas A&M University-Corpus Christi

Katrina Struloeff — Drexel University

The aim of this innovative format session is to broaden, deepen, and engage researchers' understanding of critical qualitative research as a form of liberation. More specifically, this innovative format session will examine how qualitative researchers can develop brave spaces for sharing the various lived experiences of their participant populations.

T1.5 Workshop

8:30a-9:30a

Orleans D

Free Workshop

Publish, Don't Perish: Advice from An Editor, Reviewer, and Author

Daniel Robinson — University of Texas Arlington

Dan Robinson served as Editor of Educational Psychology Review from 2006-2015 and as Associate Editor of the Journal of Educational Psychology from 2014-2020. He has also served as an editorial board member of nine refereed international journals (e.g.,) American Educational Research Journal, Contemporary Educational Psychology, Educational Technology, Research & Development, Journal of Behavioral Education, Journal of Educational Psychology, and Reading Research and Instruction. Dan was named one of the most published authors in educational psychology journals from 1991-2002, 2003-2008, and 2009-201. In this workshop, Dan will discuss the journal submission process from the perspectives of editor, reviewer, and author.

The Effects of Self-Efficacy on High School Students in Both a Project-Based Learning and General Education Math Classroom

Alishan Lalani — University of Houston-Clear Lake

Project-Based Learning (PBL) allows students to work in groups, solve an everyday life issue using integration of multiple subject disciplines, and design an end product to provide a result to that everyday problem. Little research has been done on defining students' self-efficacy in freshman math courses at the high school level in both a PBL and General Education (GE) math classroom. This study aims to identify the differences in perception of self-efficacy with high school freshman students in both PBL and GE math classrooms. Furthermore, this research study utilizes mixed-methods research strategies, where a quantitative survey will be administered on self-efficacy using items from the Mathematics Self-Efficacy and Anxiety Questionnaire (MSEAQ), and a qualitative approach through one-on-one interviews will be conducted to evaluate students' perceptions on PBL. The data will be analyzed using two software programs to determine whether there are differences in PBL and GE instruction.

Reciprocal Relationship Between Math Self-Efficacy and Academic Achievement During High School

Anna Payne & Shan Jiang — Baylor University

Individuals with higher self-efficacy or who showed growth in self-efficacy have a positive trajectory in their academic achievement. In this study, we look at the relationship within and between mathematics self-efficacy and mathematics achievement across high school, as measured in the High School Longitudinal Study. Full results will be in the final paper.

Phismaos: Promoting Higher Mathematics Achievement in Online Settings

**Emma Bullock & Amy Ray — Sam Houston State University*

Julie Herron — Augusta University

Beth Cory — Sam Houston State University

The purpose of this presentation is to describe how we structured effective online mathematics content courses for pre-service teachers (PSTs), using the Promoting Higher Student Mathematics Achievement in Online Settings (PHiSMAOS) conceptual framework. Drawing on the Technological Pedagogical Content Knowledge (TPACK) framework, which extended Shulman's (1986) idea of Pedagogical Content Knowledge (Koehler & Mishra, 2009) along with the frameworks for Growth Mindset (Claro et al., 2016; Dweck, 2008; Yeager et al., 2019) and Productive Struggle (NCTM, 2014), this framework was developed using grounded theory techniques from seven semesters of classroom data from MATH 3381. Results show which practices resulted in higher student achievement while grading for growth and will explore examples of assessment practices, activities, and syllabi that increased student learning, diminished student anxiety, and increased course completion.

Pre-Service Teacher's Mindset and Persistence in College Algebra and Statistics Units

Amanda Meiners — Northwest Missouri State University

Anna Payne — Baylor University

Nicholas Ball — Northwest Missouri State University

Understanding the mindset (Dweck & Leggett, 1988) and persistence of pre-service teachers (PSTs) is significant as it has the impact to make the difference in future teacher engagement with classroom materials and in their future work by impacting student performance. PSTs' persistence in 2 college courses was measured, and pre- and post- course scores were compared looking at fixed/mixed/growth mindset. Full results will be in the final paper.

T2.1 Paper Session

9:35a-10:35a

Orleans B

Preservice Education

Diagnosing the Quality of and Commitment to Data Use in Teacher Education Programs

**Aaron Zimmerman — Texas Tech University*

In order to prepare academic leaders and faculty within teacher education programs for the endeavor of productive commitment to data use for program improvement, academic leaders must first be able to diagnose the quality of current data use within their respective programs. This presentation will share a specific diagnostic tool developed by the Deans for Impact coalition that was designed as a tool that stakeholders within teacher education programs can use to assess the quality of data use within their respective teacher education programs.

Principal Preparation Programs in Texas and Special Education

Julie Combs — Sam Houston State University

Most principal training programs in the United States focus very little on preparing aspiring instructional leaders to lead programs for students with disabilities. An examination of principal preparation programs and their SPED components is necessary when program revisions have occurred in Texas. To explore the presence of SPED topics in principal certification courses, we used a classical content analysis with a group of university-based principal programs. Almost half of the universities in our study required 18 semester hours or fewer for principal certification, and none of these had course titles specific to SPED. Implications for new principals are provided.

Examining the Dynamics Among the Teacher Preparation Program (TPP), Student Achievement, and Teacher Performance

Marva Rasberry — University of Houston-Clear Lake

The increasingly high teacher turnover rate imposes a plethora of burdens on campuses and districts (Sorenson & Ladd, 2020). Teacher turnover costs the nation billions of dollars annually, ultimately resulting in draining resources, diminishing teacher quality, and undermining the nation's ability to close the student achievement gap (Amos, 2007). Teachers are increasingly

held accountable for implementing research-based teaching strategies resulting in improved student achievement. This calls for investigating the effectiveness of teacher preparation programs to provide districts with data for informed decision-making. This paper examines the dynamics that exist among teacher preparation programs, teacher performance, and student achievement.

T2.2 Paper Session

9:35a-10:35a

Orleans A

Culture

The Iterative Process of Qualitative Research: Conducting Quality Equity Work as White Women

Cristina Worley, Lindsay Kutac, & Taylor Gilley — Texas A&M University

Studying diverse populations through qualitative research is vital for centering marginalized voices and the experiences of those who have been silenced by forces of oppression. Unfortunately, a long line of White women researchers in urban education have been complicit in perpetuating stereotypes and making cultural assumptions that result in less than rigorous findings. As White women researchers conducting a case study to explore the relationship between another White woman and her Black coworkers, we outline our research design process using guidelines from Black researchers. We also provide limitations and implications for other White researchers interested in responsible equity work.

Identifying Culturally Relevant Literature with Military-Connected Adolescents (McAs): A Dissertation

**Karyn Suggs — Texas Tech University*

Military-Connected Adolescents (MCAs) are an understudied population in the field of literacy research (DePedro et al., 2014), yet they reside in every state within the continental U.S. (DoD, 2018). A culturally responsive educator may find it difficult to identify culturally relevant themes when selecting texts and materials to engage MCAs in culturally responsive practices. Using a theoretical framework guided by Culturally Responsive Pedagogy (Gay, 2010, 2013; Ladson-Billings 1995, 2014), Bishop's Mirrors Metaphor (1990), and Transactional Theory (Rosenblatt, 1994), this qualitative multiple case study identifies characteristics of culturally relevant literature with seven MCAs of active-duty service members.

If it's not Santa, it's Something Else: Muslim Mothers Navigate the Crossroads of Motherhood, Islam and Western Forces

Nazneen Askari & Radhika Viruru — Texas A&M University

Muslim mothers in America have the complex task of teaching both religious and cultural norms that may conflict with the dominant western culture that they reside in. Experiences within schools may lead to feelings of isolation for Muslim youth. This study aims to explore Muslim mothers' experiences with raising children in the U.S. Preliminary results indicate that while

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most of the participants were satisfied with the academic aspect of schools, they felt that school officials lacked knowledge of the challenges Muslim families faced while raising their children. This work contributes to a deeper understanding of this often misunderstood population.

T2.3 Workshop

9:35a-10:35a

Bienville C

Free Workshop

Introduction to Bayesian Methods: On Making Inferences when Conducting Confirmatory Factor Analysis

R Noah Padgett & Grant Morgan — Baylor University

In this workshop, we will introduce the fundamentals of a Bayesian perspective to statistics, particularly factor analysis. Bayesian methods provide a flexible framework to help answer research questions across domains. We will discuss how expert knowledge can be incorporated into the analysis of data for constructing scales. Additionally, we will discuss how to evaluate the impact of prior specifications on model results. This workshop will provide resources on getting started with Bayesian methods for constructing scales and computational guides to these methods.

T2.4 Paper Session

9:35a-10:35a

Royal D

Learning

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

**Leily Ziglari — Texas A&M University*

The purpose of this study is to define the syndrome of hyperlexia across various perspectives in relation to the linguistic and cognitive abilities, including Autism Spectrum Disorder, in order to propose a theoretical framework. A theoretical framework of hyperlexia will enable researchers to analyze their results on hyperlexia more systematically and with a reduction in construct variation. 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 focused scientific definition for a better accountability of the profile of hyperlexia.

Student Engagement in STEM Summer Camp

Sandra Nite & Rachael Jones — Texas A&M University

Jihu Lee — Allen Academy

Students (n = 50) attended a STEM summer camp on a university campus in Texas and completed a survey about their interest STEM subjects and careers. They also completed reflections on their camp experiences with various mini-courses. STEM interest increased, and students reflected favorably on their experiences in various STEM activities. This study can give educators insight into ideas to encourage student participation in STEM opportunities in high school and possibly STEM majors in college.

Math Development Over Time Using ECLS K: What is the Value of Past Learning in Math?

Tracey Sulak & Kailah Hall — Baylor University

Development of math skills should show growth over time, but students who enter school with lower academic readiness and lower math skills do not appear to progress as quickly as their more advanced peers, something known as the Matthew Effect (Perc, 2014). In addition, math struggles may not be stable over time (Jordan et al., 2003). For example, students may perform at a high level in early math but reach a plateau in mid-elementary when math performance combines memorized information with processing skills. Some research has suggested that to understand development in math, analysis should include heterogeneity in individual differences as well as a person-oriented approach (Bergman, Magnusson, & El-Khoury, 2003).

Understanding trends of math development over time for individual students as well as samples should help inform math instruction in the classroom and applications of interventions for students who are not progressing along predictable trajectories.

T2.5 Workshop

9:35a-10:35a

Royal B

Free Workshop

Reliability 101

Susan Skidmore & Stacey Edmonson — Sam Houston State University

Although we recognize that perfect measures do not exist, failing to consider the implications of measurement error in a study can have detrimental consequences. In this workshop, we situate basic measurement principles within the context of an instrument used to assess pre-service teachers' teaching performance. This introductory training is for those unfamiliar with reliability testing and those who would like a refresher.

T2.6 Workshop

9:35a-10:35a

Royal A

Free Workshop

Practice Tips for Building a Faculty-Led Study Abroad Program

Monica Wong-Ratcliff & Elvira Sanatullova-Allison — 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.

Perceptions of Novice Teachers Regarding Preparation and Support with Special Education Services in a General Education Setting

Holly Moore — Sam Houston State University

General education teachers have indicated a lack of understanding and support with special education as reasons they have left the profession. In Texas, preservice teachers in the s are required to complete coursework at an approved educator preparation program and participate in a field-based experience. The purpose of this study is to understand how novice general education teachers perceive their preservice education in adequately preparing them to provide support for students with disabilities in the general education setting. Through semi-structured interviews, novice teachers will share their experiences with educator preparation programs and how they were prepared for special education.

Emancipatory Leadership and the 100 Families Alliance: Creating Pathways from Crisis to Career

Jenny Walker — Texas A&M University-Texarkana

Using a Collective Impact Model (Kania, 2011) and Maslow's Hierarchy of Needs (Taormina, 2013), an Arkansas-based non-profit developed a system that provides stability for families and a pathway that takes them from "crisis to career." In less than a decade, the 100 Families Alliance has found success with thousands of participants in five counties. Looking through the lens of Critical Pedagogy (Irby, 2013), this study aims to examine characteristics of the leaders involved in the program's success in comparison to those commonly found in emancipatory leaders (Corson, 2000), a leadership style based on the work of Paulo Freire (1972).

Can Applying the Methods of Universal Design for Learning Improve Accessibility Compliance in the Online Environment?

Linda Scott — Texas A&M University-Texarkana

Effective April 18, 2020, Texas' higher education institutions were required to meet mandated electronic and information resources accessibility compliance standards (Section 508, n.d.; Texas Secretary of State, n.d.). Under these mandates fall mission-critical learning management systems for online course delivery. Research shows accessibility compliance is a concern for administrators and instructors. Universal Design for Learning (UDL), a research-based methodology that many are unaware of or unfamiliar with, could help address numerous accessibility concerns (Hromalik et al., 2020). This paper provides current research about using UDL in the online environment to administrators and instructors seeking to improve accessibility compliance.

Identifying Policy Obstacles for Instructional Leaders Working to Implement Cultural Competency Education in a West Texas Medical School Curriculum

Michael de Leon — Texas Tech University

Cultural competency and racial bias training within U.S. medical education programs have been identified as a way to help pre-clerkship students better understand and eliminate racial and ethnic health care disparities. However, since the introduction of education standards as early as 2000, attempts at increasing the cultural proficiency of new medical students have not become standard practice. This study attempts to identify the implementation barriers instructional leaders face due to existing policies at the institutional, social, and local levels that are preventing curriculum change within a West Texas medical education program.

T3.2 Workshop

10:40a-11:55a

Orleans C

Free Workshop

Planning for Research Productivity

Julie Combs — Sam Houston State University

Pandemic blues? Limited time to write? Experienced a COVID writing slump? This free workshop is designed for new and aspiring faculty and for those wanting to examine their scholarship productivity. We will explore topics such as defining your why, using “work smarter” strategies, and creating a plan of continuous research productivity. Bring a list of current or potential research projects/topics and leave the workshop with a draft of a production plan!

T3.3 Paper Session

10:40a-11:55a

Bienville B

Mathematics Education

Ranking Design Features of Commercially Available 6th-8th Grade Digital Math Games: Ongoing Preliminary Results

Emma Bullock, Jillian Choquette, & Emilio Morales — Sam Houston State University

The purpose of this pilot study was to rank commercially available digital math games for selection in a larger future study of digital math games developed for 6th-8th grade students. This paper reports on the preliminary results found from playing and ranking the first 761 commercially available games which were identified. Overall, the findings suggest it will be difficult to find digital math games that fulfill our criteria as we play the next 200+ games. We were able to find games which fulfilled only two-three of the nine different games criteria for which we are searching.

STEM Instructional Strategies for English Learners: A Metasynthesis of Qualitative Research Since No Child Left Behind

Rebecca DeLozier — Texas Tech University

This research synthesizes qualitative research on content learning and language acquisition instructional strategies for English learners in secondary math and science classrooms since the passage of No Child Left Behind. Twenty-three studies were systematically identified, and the methodologies, underlying theories, and findings of these studies were examined through a sociocultural lens. Specific themes included the implementation of collaborative learning, critical thinking, student-centered activities, academic conversations, linguistic scaffolds, translanguaging, explicit vocabulary instruction, and clear instruction. Analysis suggests implementing content-based instructional practices in conjunction with intentional linguistic scaffolds to promote the simultaneous construction of knowledge and language acquisition.

Asking for Help is a Key to Success: The Relationship Between Student Help Seeking Skills and Mathematics Self-Efficacy

**Sandra Miles & Katherine Vela — Utah State University*

According to social cognitive theory, self-efficacy describes students' beliefs in their ability to be successful within a certain task or domain. This study uses regression analyses on a sample (n=225) of undergraduate students to examine the unique contribution that help seeking makes to mathematical self-efficacy. Results show that help seeking has a positive relationship with self-efficacy and makes a unique, positive contribution to self-efficacy when controlling for Bandura's (1997) four sources of self-efficacy. Results suggest the need for educators to improve student help seeking behaviors by purposefully teaching help seeking skills and providing more access to help.

Exploring The "Others": Who is Doing Mathematics in Student Work Tasks Embedded in Assessment Materials?

Amy Ray — Sam Houston State University

Student work tasks, tasks that present a person, their mathematical thinking, and require the reader to critique that thinking in some way, provide opportunities for the reader of the task to make sense of someone else's mathematical thinking, an important mathematical practice. This study revisits an existing framework for analyzing curriculum materials for student work tasks and digs deeper into making sense of who counts as an "other" based on the framework criteria, the justification for these criteria, and whose mathematical work the reader is tasked with critiquing when utilizing the framework to analyze middle school mathematics assessment materials.

Preparing K-8 Teachers to Pose Word Problems: Embracing the Opportunity to Promote Equity and Multiculturalism

**Ashley Williams & Rachael Welder — Texas A&M University*

When teaching through problem-solving, word problems provide an opportunity for teachers to address multiculturalism, inclusion, and the promotion of social justice through the contextual situations they pose for their students. A task designed to raise prospective K-8 teachers' awareness of potentially underlying biases embedded in word problems and support their learning to pose inclusive and culturally diverse contexts was qualitatively examined. Results showed positive effects on prospective teachers' understanding of potential implications of the language used in mathematical word problems and increased ability and motivation to create inclusive contexts for their students.

Making it Work: Preservice Teacher Coaching in a Virtual Reading Clinic

Bethanie Pletcher & Marilyn Nicol — Texas A&M University-Corpus Christi

The purpose of this self-study was to examine my coaching conversation skills in the context of individual coaching sessions held with preservice teacher (PST) tutors. Prior to virtually coaching each tutor, I viewed their lessons and used a note-taking guide to record observations. Each coaching session was recorded and transcribed for initial coding based on the literature related to coaching conversations. The codes were collapsed into themes: building rapport, reflection, consulting, and questioning. Analyzing my coaching has given me the opportunity to grow my skills as a coach and will help me encourage PSTs to be reflective and self-directed learners.

Physically Distant But Virtually Connected: Mentoring Novice Educators in Online Classrooms

Robin Rackley, Janet Hammer, & Lauren Santarelli — Texas A&M University

In the spring semester of 2021, faculty at a Tier I university collaborated with administrators at a large urban school district to place 112 preservice teachers in classes being taught virtually and face-to-face. The virtual placements served two purposes: to prepare pre-service teachers to teach in a virtual environment and to provide a field experience for pre-service teachers that otherwise was not possible due to pandemic restrictions. This research expresses the views of the faculty mentors who taught the preservice teachers, the reflective responses from preservice teachers, and the evaluations and the reflections of the mentor teachers.

A Helping Hand: How States can Expand Trauma-Informed Instruction in Educator Preparation Programs

Kaleb Clemons — The University of Texas at Austin

Many teachers enter classrooms uneducated on student trauma and trauma-informed practices; this is just one of the many reasons teachers are leaving the classroom and students fall behind. This research explores policy decisions, budgets, and existing research in Kentucky and Texas to determine the possibility for state-level support to higher education institutions to expand instruction on trauma. Policymakers regularly seek methods for improving K-12 education, and by supporting pre-service teachers, K-12 students will benefit from teachers who are prepared to meet their needs.

A Critical Review of Empathy Research: A Deficit in Evaluating the Organic Emergence of Empathy

Katrina Schultz — American College of Education

Peter Zitko — Solano College

Gary Owens — Orlando Health

The complex nature of empathy is well-established in research. Nevertheless, there is little consensus on the topic of empathy. Indeed, scholars do not even agree on a set definition of empathy. Uniform methods to evaluate synergy between the complexity of empathy and how interactions influence a variety of situations across the field are likewise unresolved. This study qualitatively explores current literature concerning empathy to reconcile the deficit in evaluating the organic emergence of empathy.

What does 60% Attendance Daily Attendance Mean: ADA in an Early 20th Century Rural Texas County

**Lynn Burlbaw — Texas A&M University*

An examination of 887 records of attendance by 739 individual students, some from multiple years, from 338 individual families (63 African American (139 students) and 275 White (600 students) families) showed patterns of attendance related to guardian occupation and extra-academic events. Many students had 100% attendance for the days they were enrolled in school; because some enrolled in school late or were withdrawn from school prior to the end of the school year, the attendance figure is less than 100%, even though the child may have been in school each day during the enrolled period.

Enrollment Impact of Leadership Decisions Made During the COVID-19 Pandemic

Anna Ingram — Texas A&M University-Texarkana

Community colleges in Texas have experienced a decrease in enrollment over the last three years, and COVID has exacerbated the problem, as evidenced by the continued trend of lower enrollments. The qualitative case study will explore the impact of leadership decisions on enrollment at a mid-sized community college. Crisis and situational leadership theories provide a lens for exploring this phenomenon of leadership decisions and its potential impact on enrollment before and during COVID. A qualitative case study design will be used in conducting interviews to explore several factors of delivery mode, communication, and campus reopening plans.

The Impact of Mode of Instruction During Covid-19 on Insomnia, Excessive Daytime Sleepiness, Sleep and Sleep Quality

Eric Hernandez — University of Houston-Clear Lake

The present study investigates the effect of instructional modality on insomnia, excessive daytime sleepiness, sleep quality, and academic performance during the Covid-19 Pandemic. The Covid-19 Pandemic has caused many schools to shift operations, including instruction, online. This study seeks to understand the impact on the sleep hygiene of college students who have been affected by the shift to online learning.

Combating Stereotype Threat in African American Male Student-Athletes

Megan Goforth — Sam Houston State University

The purpose of this study is to determine if we can use non-cognitive variables to proactively identify students who may have a negative attitude toward their racial and athletic identity and target intervention to improve those attitudes. 20 African American Male College Student-Athletes will be given the Racial Identity Attitude Scale, the Athletic Identity Measurement Scale, and the Non-Cognitive Questionnaire in order to determine the relationship between these variables both before and after a targeted intervention.

The Role of Parental Involvement in COVID-19 Pandemic Trauma Recovery in Undergraduate University Students

Suzan Yesil — Texas Tech University

This study will explore university students' perceptions of 1) university students' COVID-19 trauma experiences, and 2) the effect of parental involvement in university students' pandemic-related trauma recovery. The study will employ a qualitative case study research approach and focus groups to collect and analyze data thematically. The study population will be

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undergraduate students in a university campus in Texas. The study will contribute to theory and advocacy on the importance of involving parents to support university students who have experienced trauma and address mental health-related systemic deficiencies that affect students' educational experiences and exacerbate inequities in America's higher learning institutions.

T4.0

12:00p-1:30p

Queen Anne Ballroom

Lunch & Business Meeting

Special Ticketed Event

T5.0

1:35p-2:40p

Royal Salon

Presidential Invited Address

T6.1

2:45p-4:00p

Royal Salon

Fireside Chat

T6.2 Paper Session

2:45p-4:00p

Royal B

Literacy

Correlates of Early Character Recognition among Chinese Preschool Children with ASD

**Jialin Lai — Texas A&M University*

The present study compared early reading-related skills between Chinese-speaking children with ASD with and without early Chinese reading skills. Forty-eight Chinese children with ASD were assessed with Chinese character reco

gnition, RAN, nonverbal IQ, receptive vocabulary, phonological awareness, and orthographic awareness. Parents completed the Autism Spectrum Quotient-Children's Version to indicate children's autistic characteristic. We found that children with the ability to recognize characters before formal instruction scored higher in nonverbal IQ, orthographic awareness, and receptive vocabulary, and they also showed more autistic characteristic of detail-focused behaviors. Children's character reading skill was associated with nonverbal IQ, receptive vocabulary, RAN, and detail-focused behaviors.

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 it 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.

Explorative Study of a Teaching Method for Chinese Hanzi Character Acquisition

Liang Ward — The University of Texas at San Antonio

The purpose of this study is to examine the practice and effectiveness of Hanzi character exploration (HCE) instructional model on students' Chinese character acquisition. Based on a mixed methods research design, the results from this study will explore whether or not this teaching model increases students' interest in learning Mandarin Chinese, reduces their fear of learning Chinese Hanzi characters, and improves their character learning outcomes.

The Relationship Between Elementary Principal Certification and Student Literacy Achievement in First Grade: A Mixed Methods Study

Melba Muniz-Foster — Texas A&M University-Texarkana

The purpose of this sequential explanatory mixed methods study will be to determine if there is a relationship between the principal's undergraduate certification and student performance as measured by the Texas Education Agency on early literacy readiness assessments, specifically, the Texas Primary Reading Inventory (TPRI). This will be accomplished by examining the growth results of first grade BOY and EOY reading task scores during the 2018-2019 academic school year. The study will compare TPRI inventory student growth scores between schools whose principals possess undergraduate elementary education teaching certifications and those whose principals who do not. The study will examine the differences between principal certification and student success on TPRI beginning of the year (BOY) growth mean scores and the end of year (EOY) growth mean scores in first grade among the different campuses.

T6.3 Paper Session

2:45p-4:00p

Royal A

At-Risk Students

Attending to Portraiture from a Social Distance

Elida Balboa De Leon, Kevin Bazner, & Gerri Maxwell — Texas A&M University-Corpus Christi

The ongoing pandemic has impacted multiple facets of education, including the way educational researchers have engaged with communities and research study participants. We argue here that the use of web-based interviews can be an effective means to capture and illuminate participant experiences in a way portraiture as methodology demands if supplemented with congruent data sources and epistemological standpoints. This opens new possibilities in portraiture's utility in educational research, facilitating new cultural knowledge and additional avenues to explore historically minoritized populations.

Special Education Directors and Special Education Teachers' Self-Efficacy for Serving Students with English Learner and Special Education Needs

Juanita Reyes, James Gentry, & Stephanie Atchley — Tarleton State University

This exploratory, descriptive study sought to determine the perceptions of special education directors and their respective special education teachers regarding confidence and self-efficacy in meeting the diverse needs of students who have English learning challenges and have been identified as having special learning needs. Also, general information regarding the various programs used and ideas concerning the work and interventions with English learners who receive special education services were reviewed for possible discussion.

Motivation for Adolescent Writing: What Teachers can Learn from Fanfiction,

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

Students come to classrooms with a variety of experiences in literacies outside of the English classroom, particularly those based on students' interests in popular media. In an effort to bridge students' experiences with popular media and cultures and support creative endeavors, there is evidence that the use of fanfiction can develop secondary adolescents' in-school literacies, particularly as writers. This paper reviews the academic literature, both research-based and practitioner-centered, that can be used as a resource for secondary writing teachers.

T6.4 Workshop

2:45p-4:00p

Royal D

Free Workshop

Strategies for Lessening the Stress of Completing Writing Projects

Shirley Matteson — Texas Tech University

Major academic writing projects such as completing a dissertation or research manuscript require engaging in significant cognitive tasks. Graduate students and faculty may struggle with the demands of tasks such as completing a thorough literature review and writing major components of a research paper. Faculty may find it difficult to scaffold writing assignments so that graduate students are successful in completing each component. This workshop, appropriate for both graduate students and faculty members, presents information about the types of cognitive load and provides suggestions and strategies that can be implemented to manage the stress of academic writing tasks.

T6.5 Paper Session

2:45p-4:00p

Bienville B

Statistics

Analyzing the Effect of STEM Education on the Academic Success and Social-Emotional Development of Gifted Students

Fatih Ozkan — Baylor University

STEM education is an approach that aims to educate students, including gifted students. This research aims to provide a general framework of the effect of STEM education on academic

success and social-emotional development using the meta-analysis and meta-synthesis method related to the work done for gifted students. In this study, a total of 62 studies between 2010 and 2020 have been examined. The findings are presented under specific themes by going through the stages included in the meta-synthesis and meta-analysis research method. In combining and analyzing the results of research on STEM education in the field of gifted education, the view that STEM education positively affects gifted students' academic and social-emotional development has once again been proven through quantitative and qualitative data.

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

Hiroki Matsuo & Grant Morgan — Baylor University

Latent profile analysis has been widely used in many disciplines, including educational and psychological research, as one of the mixture modeling procedures. While the practical significance of such methods has been increasing in the empirical fields, the proper model selection often becomes a challenge to researchers. Using the conditions mirroring situations that are often found in applied research, this simulation-based study examines the performance of cross-validated fit indices for their class enumeration accuracy.

On Modeling Response Misclassification in Latent Variable Modeling

**R Noah Padgett — Baylor University*

Educational researchers often want to obtain measurements of difficult-to-measure constructs such as content knowledge, affect, motivation, among others. Scales are created using multiple items to triangulate construct measurement using information common among items. However, one source of error not often considered is response misclassification. In this study, I examine how measurement error in discrete responses can be directly incorporated into the measurement of latent traits to evaluate scale reliability. Estimates of reliability are shown to increase when additional sources of error are accounted for in the modeling process. Implications for constructing scales and finding evidence of reliability are discussed.

T6.6 Workshop

2:45p-4:00p

Orleans D

Free Workshop

SERA Junior Mentoring Initiative – Part I

Michelle Peters — University of Houston-Clear Lake

Tonya Jeffery — Stephen F. Austin State University

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

Interdependence among Organisms: An Authentic Literacy and Language (ALL) for Science First Grade Unit

**Alana Newell & Nancy Moreno — Baylor College of Medicine*

Supporting students' acquisition of science-specific disciplinary literacies can not only aid their development of science content knowledge but also potentially help learners see connections between the work of scientists and themselves. We developed the Authentic Literacy and Language (ALL) for Science framework to explicitly incorporate science disciplinary literacies into early elementary instruction. Using this framework, we developed a unit for Grade 1 and piloted it in 20 classrooms with 309 students. Students had a statistically significant increase in content knowledge related to science and disciplinary literacies from pre- to posttest, and teachers found the materials to be effective.

Supporting an edTPA Pilot with the Transparent Equitable Learning Framework

Crystal Rose — Tarleton State University

The Education Teacher Performance Assessment (edTPA) implementation is new to Texas. Faculty across our state have an increased responsibility to understand the needs of teacher candidates, how to support them through the edTPA, and to how to leverage the edTPA experience to catapult them toward readiness as an independent teacher. This faculty member uses Winkelmes's (2020) Transparent Equitable Learning Framework for her course redesign in order to study the impact on teacher candidate readiness for the field-based tasks, their scores for the edTPA ePortfolio Assessment, and the impact on challenges and successes moving forward into their careers as educators.

Geoinquiries: An Online GIS Activity Bridging STEM and Social Studies in Elementary Schools

Mary Curtis — Independent Consultant

Carol Waters — University of Houston - Clear Lake

Social studies education is critical to establishing a foundation for citizenship education. However, it receives less instructional time than other elementary subject. Social studies focus on spatial thinking, inquiry, and evidence-based claims complements the rise of geotechnologies such as geographic information systems (GIS). Acceptance of GIS in elementary schools is slow due to its complex nature and limited exposure to teachers. This study follows two elementary teachers' implementation of online GIS using GeoInquiries activities. Results identify natural, complementary areas of overlap between STEM and social studies as well as gaps in teacher knowledge and self-efficacy.

Voices in the Void: Exploring Effects of Dialogue Journaling and Bibliotherapy on Writing Attitude in Grade 4 Students

Leah Bryars & Bethanie Pletcher — Texas A&M University-Corpus Christi

Unlike other learning situations, writing requires that we create something from nothing. Writing occurs in “the void” (Grundy, 1985). Because of this, students’ struggles with writing apprehension pose a unique challenge to teachers. The responsibility to prepare students to be members of a literate society is especially difficult when students show frustration, reluctance, or avoidance when trying to express themselves in writing. This convergent parallel mixed methods study explored an intervention aimed at supporting fourth grade students who experience writing apprehension in a way that combined bibliotherapy and dialogue journaling in the context of an after-school book club.

T7.2 Paper Session

4:05p-5:20p

Royal B

Preservice Education

Engaging Preservice Teachers in Culturally Relevant Math Tasks through Multicultural Picture Books

Dittika Gupta — Midwestern State University

Alesia Moldavan — Fordham University

There is a need for preservice teachers (PSTs) to have structured learning opportunities to explore culture in the context of mathematics pedagogy and content to encourage reflection in terms of mathematical identity, cultural competence, and critical consciousness (Chappell & Thompson, 2000; Harding et al., 2017; Iwai, 2013; Leonard et al., 2014). One way to recognize culture in mathematics is by integrating multicultural children’s literature to make connections between mathematics and students’ cultural experiences (Mendoza & Reese, 2001). This action research study examines how elementary and secondary PSTs integrate multicultural literature with mathematical concepts to design culturally relevant mathematical tasks.

Instructing Students with Disabilities in General Education Classrooms by Secondary Preservice Teachers

**Donna Baumgardner — Tarleton State University*

The passage of the Education for all Handicapped Children Act in 1975 and the Individuals with Disabilities Education Act of 2004 mandates students with disabilities be educated in the least restrictive environment. Therefore, pre-service teacher candidates must be prepared with the knowledge, skills, strategies, and self-efficacy to teach all students in their classrooms. This study focused on one hundred twenty-eight secondary pre-service candidates from a regional university. Mixed results using dependent t-tests and a Pearson Correlation in conjunction with the released version of the Texas special education teacher certification exam and the Teaching Students with Disabilities Efficacy Scale were found.

Elementary Teacher Preparedness in Special Education

Holly Moore & Julie Combs — Sam Houston State University

In a survey conducted by the Texas Education Agency of new teachers in 2019, only 12% of teachers reported feeling “well prepared” to work with students receiving special education services in the general education classroom. The purpose of this study is to analyze undergraduate coursework at four-year universities to understand the special education requirements for teachers seeking a core content generalist certification in Texas. This study is a work in progress, findings and implications are not reported at this time.

Identifying Error Patterns in Prospective Elementary Teachers’ Posing of Multi-Step Arithmetic Word Problems

Rachael Welder & Ashley Williams — Texas A&M University

For decades, national and state standards have emphasized the importance of students solving and posing mathematics word problems. Thus, it is essential that prospective K-8 teachers (PTs) be prepared to pose problems for their students and facilitate problem-posing activities. However, little research has investigated how PTs develop problem-posing skills. By employing thematic qualitative text analysis, the researchers identified six distinct patterns in errors identified in PTs’ posing of two-step, arithmetic, addition, and subtraction word problems, in the context of a collegiate teacher education course. These results are being used to inform the design of an interventional task for PTs.

T7.3 Paper Session

4:05p-5:20p

Royal D

SERA Grant Recipients

Supporting Culturally Responsive Classroom Management in Urban Elementary Schools: SERA Early Career Funded Research

Karen McIntush — Texas A&M University

Poor classroom management is a primary reason teachers leave the profession (Heller et al., 2019). The need for Culturally Responsive Classroom Management (CRCM) (Weinstein et al., 2004) exists for teachers regardless of experience, with conflicts due to cultural mismatches. This mixed-methods research analyzes to what extent urban elementary teachers of varying levels of experience implement CRCM practices as well as seeks to identify gaps in implementation of CRCM. Findings from teacher and principal interviews and observational data were collected to address how better to support teachers in meeting the diverse needs of students, with implications for teacher preparation and administrators.

THURSDAY, FEBRUARY 24

Effects of Peer Tutoring on Preservice Teachers' Performance on Content Exams: SERA Early Initiative Grant Funded

**Marsha Sowell — Texas A&M University-Kingsville*

To earn Texas teacher certification, one must pass content exams in one's certification area. In the Fall of 2021, to support mastery of elementary preservice teachers' content knowledge, one Texas university piloted an intervention plan in which secondary preservice teachers tutored elementary preservice teachers through the use of face-to-face tutoring, virtual tutoring, and commercial test preparation material. The purpose of this study was to compare the effects of various interventions on preservice teachers' demonstration of content knowledge mastery through performance on content preparation exams. This research was supported by the SERA Early Career Faculty Mentoring Initiative Grant.

T7.4 Workshop

4:05p-5:20p

Orleans D

Free Workshop

SERA Junior Mentoring Initiative – Part 2

Tonya Jeffery — Stephen F. Austin State University

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.

T7.5 Workshop

4:05p-5:20p

Bienville B

Free Workshop

How to Collaborate with a Methodologist

Hiroki Matsuo & Grant Morgan — Baylor University

In this workshop, we will discuss considerations for establishing and getting the most out of positive working relationships with a methodologist. Key topics of presentation include articulating guiding theoretical or conceptual frameworks, identifying research questions and aligning questions with guiding framework, choosing which data to collect and how, and developing an analysis plan that ties the preceding elements. Examples of successful research projects and collaborations will also be provided. Although the presenters are both quantitative methodologists, the considerations provided in this workshop could easily be extended to qualitative methodology as well.

T8.1

5:25p-6:30p

Queen Anne Ballroom

Graduate Student Meeting

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

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F0.1

8:00a-12:00p

Queen Anne Mezzanine

Registration

F0.2

8:00a-9:00a

Queen Anne Ballroom

Continental Breakfast

F0.3

8:00a-8:45a

Royal C

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

Bienville C

Achievement

Discussant: Emma Bullock

Protective Factors for Academic Success: The Lived Experiences of High Achieving, African American High School Graduates of Low and High Socioeconomic Status

Beverly Jack Webb — Texas A&M University-Texarkana

Educational achievement, and its relationship with socioeconomic backgrounds, is one of the enduring issues in educational research. Socioeconomic contexts shape young people's experiences and various aspects of how they understand themselves and opportunities available to them. Critical theory in educational settings requires schools to consider perspectives of underrepresented students. Specifically, protective factors have been empirically verified in one or more published studies as a significant predictor of academic resilience (Williams et al., 2017). This paper explores the lived experiences of high achieving, African American high school graduates of low and high socioeconomic status regarding protective factors for their academic success.

Professional Development for Teachers of Students with Autism Focused on Academic Outcomes.

Kailah Hall & Tracey Sulak — Baylor University

The socio-behavioral development of children with autism spectrum disorder is an abundant field. However, investigations focused on the academic achievement of students with autism are scarce in comparison. There are no current literature reviews of professional development for teachers of students with autism that focus on the students' academic performance. A systematic review will be conducted to identify the gaps in the field and generate further discussion on the topic.

Utilizing Design-Based Learning and Sociotransformative Constructivism to Inform Engineering Professional Development for K-12 Teachers

Tajma Cameron & Sinead Meehan — Drexel University

The subjects of engineering and technology have become increasingly relevant in K-12 spaces, in part due to the incorporation of new standards, such as the Next Generation Science Standards. Unfortunately, most K-12 teachers are unequipped with the content knowledge, pedagogical knowledge, and technological knowledge necessary to effectively evaluate, design, and implement engineering curricula (Banilower et al., 2018; Hammack & Ivey, 2017). Moreover, the number of culturally relevant, technology-enhanced engineering curricula on the market is minuscule, thus calling for teachers to acquire the necessary skills to either evaluate and refine existing curricula or design and implement new engineering curricula to meet the unique needs of each student population.

Analysis of Graduation Rates Between Early College High Schools and Comprehensive High Schools

Vijaya Bobba — University of Houston-Clear Lake

Despite the availability of integrated dual credit curriculum and exposure to college level classes, there is no significant improvement in the graduation rates at an ECHS in comparison to a comprehensive high school (Haxton et al., 2016). Although the ECHS assumes that there is a correlation between the implementation of all the core principles (JFF, 2002) and student success, this correlation has not been tested (Berger et al., 2010). In terms of the impact on student success, it is not studied if ECHS would have an impact on students who are otherwise at risk for not participating in postsecondary education. Moreover, it is not clear if more academically engaged students are attracted to ECHS, thereby leading to the success of the initiative. The purpose of this study is to examine if college readiness plays an important role in graduation rates at Early College High Schools in comparison to a comprehensive high school.

F1.2 Paper Session

8:45a-10:00a

Royal B

Professional Development

Discussant: Faye Bruun

Instructional Coaching as a Transformative Relationship: A Descriptive Case Study of a Veteran Teacher's Experience

Chrissy Eubank — Texas Tech University

This study examines the value of effective professional learning for veteran teachers and its significance in developing appropriate and valuable opportunities for learning for teachers who generally require unique and targeted professional development. The study focuses on transformative learning theory in the context of the coaching relationship. Using descriptive case study to deeply examine the phenomenon of the coaching relationship offers opportunities to understand how these relationships can have a profound impact on professional growth.

The Effect of Completing Texas Bridge Courses in High School on the Need for Developmental Education Courses in College

Jennifer Trejo — Sam Houston State University

The problem under investigation is how to improve college readiness for secondary students. The study will investigate the effect of completing Texas Bridge college preparatory courses in high school on the need for developmental education courses in college. Data will be collected from participating secondary schools and colleges on Texas Bridge completion rates and the rates of enrollment in developmental education. There are no findings or conclusions yet as this is a work in progress.

Developing Pedagogical Content Knowledge in Primary Teachers through Collaborative Unit Design and Student Work Analysis

Suzanne Cottrell — Texas Tech University

Researchers point out the value of effective teachers on the achievement trajectory in mathematics of students in the primary grades and the role professional learning plays in developing effective teachers by strengthening pedagogical content knowledge. This proposed study investigates how participation in professional learning communities focused on unit design through the analysis of curriculum materials and examining student work to determine thinking levels might develop or deepen pedagogical content knowledge in kindergarten and first grade teachers. The goal of the study is to use findings to refine professional learning practices at one Central Texas school.

Case Study Proposal: Equity Centered Professional Development by Design

Therese Shields — Texas Tech University

Economic segregation occurred in the city of San Antonio, by strategic design, in 1935. The decision to create boundaries and determine which areas were “safe” or “dangerous” had to do with the people who lived there, black and LatinX families. As a result, generation after generation of students learned in a dysfunctional school system, which predetermined their outcome in life by providing a low-quality education. The purpose of this case study is to determine if a strategically designed equity professional development program within the public school system will shift the mindset and behaviors of educators, honoring students’ culture and identity.

F1.3 Paper Session

8:45a-10:00a

Royal D

Principals

Discussant: William Jasper

Growing Principal Instructional Capacity in Rural Texas Elementary Schools: An Action Research Intervention Study for Improving Principal Coaching and Feedback Knowledge and Skills to ESL Teachers of English Learners with Learning Disabilities

Edna Garcia — Texas Tech University

Given the evolving role of principals as instructional leaders, it is imperative to train, and more importantly, grow aspiring and current principals. An instructional principal will ensure that teachers use instructional strategies and response approaches that actively engage the unique needs of students identified in special programs. The interactions between students, teachers, and the content will determine the learning outcomes. English learners depend on teachers to make content comprehensible. This study aims to provide principals the knowledge and skills to coach ESL teachers and to provide feedback. The benefit of the intervention will ultimately support EL students with learning disabilities.

Leadership Coaching: Perceptions from Novice Principals in an Urban District

LaTonia Amerson — Sam Houston State University

This study will explore the perceptions of elementary, middle, and high school urban school leaders at a selected low-performing school district about their experiences with leadership coaching. Specifically, the study will focus on elementary, middle, and high school principals in Year 1 to Year 3 of their leadership and how they feel after receiving strategic mentoring and support from leadership coaches. Qualitative methods will be used to examine: (a) principal perceptions of the impact the coaching experience, (b) the focus of coaching meetings, (c) the primary area of need for leadership support, and (d) ways to improve the coaching sessions.

The Hopeful Leader: Identifying Leadership Behaviors that Inspire Hope in Education

Mary Katherine Bowen-Julio — Texas A&M University-Commerce

Quality education is dependent on quality teachers. Studies indicate that leadership effectiveness is an indicator of higher teacher retention (Nguyen et al., 2020). The idea of effectiveness, however, is not clearly defined by specific leadership behaviors. This study looks at hopeful leadership behaviors, which include opportunities for (a) teacher autonomy, (b) opportunities for teachers to achieve mastery with a task, and (c) actions that create a connection between a purpose for teaching that is greater than oneself will inspire hope in teachers, which in turn, will increase teacher job satisfaction, job performance, and teacher retention.

A Mixed Method Approach to Ascertain Texas Principal Perception of Principal Development

Rachel Alex — University of Houston-Clear Lake

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).

The Effects of School Violence on Teacher Performance

Jordan Lewis — Sam Houston State University

Most student violence studies have focused exclusively on student against student violence in schools. Student violence against teachers has been a historically under-researched area. Because of this, the effect of this type of violence on teacher performance has not been well established. The purpose of this study is to investigate the effects that student violence against teachers has on teacher performance. This quantitative study will utilize a survey to investigate the impact this violence has on teacher performance. This study is a work in progress, so results and implications will not be included.

Eradicating the Camouflage of Racism: The Impact of Historical Trauma and Racial Discrimination on the Mental Health of African Americans in New Orleans

Nathaniel Riley Jr. — Texas A&M University-Texarkana

African Americans have endured historical trauma and now racial discrimination. Current research has linked early life experiences of racial discrimination to mental health disorders for African Americans. Future research will provide effective solutions and interventions. Applying a framework of the Critical Race Theory and the Resilience Theory, the link between racial discrimination and mental health of low SES African Americans is analyzed. The purpose of this qualitative study is to tell the lived experiences of trauma and early experiences of racial discrimination that impact the mental health of low SES African American adults in New Orleans from 1965 to 1975.

English Language Learners who Beat the Odds: A Study of Factors Related to Academically Successful High School Students Classified as ELLs

Shawna Taylor — Sam Houston State University

The negative outcomes for high school English language learners (ELLs) are well-researched. It is well established that a disproportionate number of ELLs do not graduate high school. There is abundant research as to what factors are linked to dropping out. However, there is less research on the positive side. Some ELLs succeed in high school despite barriers. Why do some persevere? What are some schools, districts, and teachers doing right? How can we replicate these conditions to help more ELLs reach these outcomes? Less research exists on these questions; this study seeks to address this gap. The proposed methods include regression analysis of archival data from public educational databases and qualitative analysis of focus group findings.

Impact Analysis of Social Emotional Learning on Days of Exclusionary Discipline for Latinx Secondary Students

Zachary Bunn — University of North Texas

A common issue across the nation involves disproportionate exclusionary discipline with respect to students of color. While this has been acknowledged, no specific tactic has risen as an effective technique for addressing this issue. One model involves Positive Behavior Intervention Systems (PBIS) and Social Emotional Learning (SEL) programs to create an inclusive school culture with the goal of leveling discipline outcomes and normalizing behavior of students who are outliers in the quantity and type of discipline they receive. Specifically, the goal is to reduce recidivism in students who receive exclusionary discipline and to normalize behavior to avoid future conflict.

F1.5 Paper Session

8:45a-10:00a

Bienville B

Multicultural Education
Discussant: Chrissy Cross

Partisan Nationalism in History Education: Understanding Countermovements to Critical Approaches

Alan Prather — Texas Tech University

This paper is a research-in-progress proposal to better understand countermovements to critical approaches in secondary history education in the United States. Anti-Critical Race Theory protestors represent a more significant effort that threatens multicultural social studies pedagogy due to their use of grassroots tactics and political activism. This paper argues that an innovative understanding of this movement is necessary. Specifically, I call for developing a new term, Partisan Nationalism, and recommend a case study to understand the motivations behind counter-reformers.

Lived Experiences of Teachers of Spanish-Speaking English Learners with Disabilities

Goretti Rerri — University of Houston-Clear Lake

English learners (ELs) with disabilities are caught between two disciplines-special education and bilingual education, and neither of the disciplines can simultaneously address the students' learning needs resulting from this intersection (Umasky, 2017). Also, teachers lack the training needed to support ELs with disabilities, and research on teachers' experiences in teaching ELs with disabilities is scarce (Park, Magee, Martinez, Willner, 2016). This narrative method study will examine the experiences of four elementary teachers of Spanish-speaking ELs with disabilities. The study is designed to contribute to the emerging body of research focused on the intersection of bilingual and special education.

Black at Home: An Exploratory Examination of Black Teachers Who Teach in Their Hometown

Maiya Turner & Aminah Crawford — Texas A&M University

The low number of Black teachers in U.S. public schools lends itself to the reality that many students may have the experience of working with a Black educator despite the academic benefits that occur as a result (Klopfenstein, 2004; Milner, 2006; Villegas et al., 2012; Egalite et al., 2015; Gershenson et al., 2018; Hart 2020). The present analysis explores the experiences and motivations of ten Black educators teaching in their hometowns. Utilizing narrative inquiry, we map the lived experiences of Black educators to extrapolate their motivations as educators. This study has implications for future research on Black teacher recruitment and retention.

Deconstructing Deficit Perceptions: Teacher Perceptions of Lived Experiences of Young Children

Marilyn Nicol & Ambra Sherrod — Texas A&M University-Corpus Christi

This conceptual research article explored the pedagogical concepts of funds of knowledge (FoK) and funds of identity (FoI) in order to develop a professional development series based Ting-Toomey and Chung's (2012) value pattern analysis. Using the theoretical lens of post-colonial theory, the authors posit the need for values-based professional development for South Texas teachers for the purpose of challenging deficit perceptions of the lived experiences of cultural minority students and students with disabilities.

F1.6 Paper Session

8:45a-10:00a

Orleans A

Constructivism

Hope 4 All Spotlight on Envision Dallas: An Application of Learning from a Doctoral-Level Community Leadershipa Collaboration Course

Amy Britton — Michigan State University

Taylor Bunn — Hope 4 All

As nonprofit leaders and doctoral candidates at Baylor University, the authors continuously sought to apply their academic learning to their work lives. In this paper, they elucidate their experience planning, implementing, and evaluating a collaborative project assigned in the Community Leadership and Collaboration course. The thoughtful instructional design of the project guided students to directly connect the collaboration strategies modeled in the classroom to their strategic project design. This paper explains how the presenters planned the collaboration; details critical milestones, and highlights challenges the team faced, the impact of the collaboration, and lessons learned along the way.

Garden-Based Education at Secondary School Campuses

**Kimberly Jones — Texas Tech University*

Garden-based education (GBE) serves as an engaging milieu for interdisciplinary learning. Planning for sustainable programs and effective use of resources such as volunteers, time, and money requires knowledge gained from shared experiences of practitioners. In this collective, case study GBE educators from different regions of the United States communicate about their garden programs through digital storytelling and semi-structured interviews. Participants choose aspects of their programs to share with peers as a collaborative community of practice, seeking to improve the domain of GBE. Results will provide a baseline of the status of garden programs on secondary school campuses.

Student-Initiated Writing Groups: Impacts on Ph.D. Students of Varying Levels

Whitney Beach & Dawn Burke — Texas Tech University

Current research on doctoral writing group formation centers around students who are all in the same stage of study or in the same courses in their dissertation program. Few studies exist that investigate student-formed writing groups on the doctoral level. This exploratory case study was designed to address the isolation and other unique needs that emerge with academic writing at this level. Conducted over an 18-week period, findings showed that student isolation decreased, and positive writing behaviors and organizational tendencies emerged as well as the desire to continue meeting.

F1.7 Paper Session

8:45a-10:00a

Orleans C

Instruction

Investigating Summer STEAM Supports in a Transition to a Virtual Space when “The Whole World’s Blown Up”

Christopher Fornaro, Kimberly Sterin, Katrina Struloeff, & Alonzo Flowers — Drexel University

Due to the COVID-19 pandemic, many educational settings have suddenly moved to a virtual setting. This study seeks to provide the lived experiences of instructors and administrators as they transition from a summer STEAM program to a virtual setting. The summer STEAM program consisted of approximately 100 students from various schools in a large northeastern US city. Through interviews, participant as observer observations (Billups, 2020), and document analysis, this study details the shift in supports that administrators found to be valuable to instructors and how the supports were perceived by instructors.

Investigating Students' Career-Readiness in the Agricultural Sciences: A Phenomenological Case Study

**Jean Parrella, Holli Leggette, & Theresa Murphrey — Texas A&M University*

A disconnect exists in career readiness expectations between students and employers in agriculture-related industries. We used a qualitative phenomenological case study research

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design to investigate students' career-readiness in a college of agriculture. Using the Office of Career, Technical, and Adult Education's employability skills framework as a guide, we conducted interviews with N = 20 juniors and seniors. Open coding revealed five emergent themes—Career Advice-Seeking Behavior, Employability Skill Development, Network Establishment, Relevant Experiences, and Personal Growth. Three of the themes also had sub-themes. We provide recommendations for revamping instructional strategies and curriculum to improve students' career readiness in the agricultural sciences.

Examining the Impact Of COVID-19 on Instruction and Leadership

Norma Veguilla-Martinez — University of Houston-Clear Lake

The COVID-19 pandemic affected most of the education systems worldwide and immediately changed the way public schools conducted their daily activities. As a result, schools and teachers have had to change their approach to delivering instruction (Al Darayseh, 2020). The pandemic forced schools to deliver curriculum and assess learners with the absence of hands-on activities while fostering relationships in a virtual setting. Researchers have found that educational institutions have gone through various phases in digitizing instruction (Raza et al., 2021). Teachers have turned to online learning platforms, educational technology, and other available resources to help support their classrooms. Inevitably, COVID-19 has caused changes to instruction and how schools function on a day-to-day basis. On a lighter side, COVID-19 has provided campus leaders the unexpected opportunity to better support schoolteachers and staff while they to meet the needs of their students in their learning and growth (White, 2020). Campus leaders have had to change their behaviors and practices to strengthen their buildings while their teachers deliver instruction virtually.

The Impact of Science Teachers' Intent to Implement Inquiry

Stephen Gruber — University of Houston-Clear Lake

Current teaching methodologies do not promote understanding or encourage students to learn skills beyond memorization and vocabulary. One possible solution is inquiry-based learning (IBL), that enhances student understanding and provides the skills necessary to succeed post-high school. The findings of this study indicated that regardless of the barriers in place, it is teacher intent to implement IBL that is correlated to its use in daily lessons.

F2.1 Paper Session

10:05a-11:20a

Orleans B

Schools

Honoring Diverse Voices through Programmatic Transformation

Crystal Rose & Amber Diaz — Tarleton State University

Before our transformative journey with US PREP, Tarleton State University operated in silos without shared communication between faculty and coursework, university supervisors and the field, administrators in districts, and leadership at the university. Although our alumni have gone

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to become amazing teachers, this lack of communication across constituents prohibited programmatic growth, improvement, and transformation. As we reflect on year one of implementation, we realize this transformation would not have been possible without our intentional collection of continuous feedback from diverse voices across our program. We honored diverse voices and experiences from stakeholders, including teacher residents, faculty, cooperating teachers, principals, superintendents, and more.

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

**Shawn Verow — University of Houston-Clear Lake*

Implicit bias is evident in many settings, and education is no different. This study examines the relationship between a public-school educator's implicit bias and his or her explicit bias, also including a qualitative aspect with examining an educator's reactions to their identified implicit bias if one exists. With the recent increase of attention towards treatment of other races and ethnicity, this study adds value to the discussion of bias in education, especially teachers.

South Texas Early College High School Social Justice Principals Speak Out About Disrupting Inequitable Systems for Latino Students

Linda Uribe, Gerri Maxwell, & Bernadine Cervantes — Texas A&M University-Corpus Christi

To better understand the principals who lead for social justice with a focus on academic success and college preparedness, this study investigated the strategies implemented by social justice early college principals that disrupt inequities for the fast-growing Latino minority population.

F2.2 Paper Session

10:05a-11:20a

Bienville C

Literacy

Discussant: Audrey Meador

The Next Generation: Life Science Teacher's Pedagogical Practices for Assessing Students' Abilities to Engage in Science Practices, a Three Article Dissertation Proposal

Meagan Hill Foster — Texas Tech University

The purpose of this proposal is to outline the dissertational study currently in progress regarding disciplinary literacy as an avenue increasing students' ability to engage in scientific practices, as described in the Next Generation Science Standards. This three article dissertation will include a meta-synthesis of current literature to identify the current qualitative studies in regards to disciplinary literacy in life science classrooms, an exploratory case study of three life science teachers at Tumbleweed High School, and a professional development initiative for disciplinary literacy integration with Acromegaly ISD science teachers.

Literacy in Mathematics: A Content Analysis of Existing Gaps for Education in America over the Past 5 Decades

Michele Cantera — Texas A&M University-Corpus Christi

The National Assessment of Educational Progress (NAEP), also known as "The Nation's Report Card," is the only nationally representative and continuing assessment of what America's students know and can do in various subject areas. Since 1969, assessments have been conducted periodically in reading, mathematics, science, writing, U.S. history, civics, geography, and the arts. Over the last 25 years, the federal government has made a concerted effort to find out why so many children struggle with learning to read. This research has yielded a rough consensus on the best ways to teach reading and how to teach reading effectively across content areas.

F2.3 Paper Session

10:05a-11:20a

Orleans A

Early Childhood

Discussant: Carol Waters

Using Culturally Responsive Pedagogies to Blossom EC – 2nd Black Girls in STEM

Antionette Wash — University of Houston-Clear Lake

This study addresses a hypothesis that culturally responsive pedagogy and curriculum in Early Childhood (EC) can narrow or broaden the early sense of belongingness and STEM-disposition (Science, Technology, Engineering, Mathematics) for young Black girls. The underrepresentation of Black girls in advanced STEM disciplines and STEM careers has a robust correlation to their sense of belonging, self-perceptions, and ability to form a positive STEM disposition within the disciplines (Yoon, 2012). Hence, this mixed method research is designed to investigate Early Childhood teachers' perceptions of culturally responsive teaching practices and the parallel it can pose to the STEM-disposition of PK-2nd grade Black girls.

A Comparative Analysis on Language Efficacy and Bilingual Programs: Texas Bilingual Teachers' Perceptions on Bilingual Education

Citlaly Rivas — Texas Tech University

Bilingual teachers are the backbone of our bilingual students and affect CLDs' academic success. Texas is constantly challenged to meet the needs of its marginalized populations, and meeting the needs of CLD students is essential as our classrooms become more diverse. The study has a mixed methods approach with quantitative and qualitative measurements using interviews and surveys. The study's goal is to see how teachers' language efficacy and beliefs on bilingual education affect the way they support or disapprove of certain bilingual programs or models. The study explores if their views are aligned with the programs they work for.

The Relationship Between Mathematics Self-Efficacy and Student Achievement in African American Males Taking Eight-Grade Algebra

D'Andrea Edwards — University of Houston-Clear Lake

Algebra I serves as the gatekeeper course that allows access to upper-level mathematics courses in high school (US Department of Education, 2018). Nevertheless, research released by the US Department of Education's Office of Civil Rights (2014) states that Hispanic and African American students are behind their White and Asian peers when it comes to passing Algebra I in eighth or ninth grade. If a student takes Algebra I in eighth grade, they are on track to complete Calculus by their senior year (Fensterwald, 2015). This is research in progress.

Case Study of a University's Move to Remote Learning During COVID-19: Mathematics Instructors' Perspectives

Kendis Smith — Sam Houston State University

The COVID-19 pandemic forced educational stakeholders into a remote learning environment, which likely impacted students' academic outcomes as students and instructors navigated to different learning environments. Even though face-to-face and virtual environments share similar features, faculty members' experiences with and knowledge of remote learning environments varies. The outcome of this study will be a comprehensive review of instructors' perspectives in their pursuit to support students in the online educational environment during a pandemic and their own technology usage behavior.

Initiating Critical Change: Pre-Service Teachers' Perspectives of Mathematics Instruction Through the Lens of Ethnomathematics: A Case Study

Miriam Sanders — Texas A&M University

In this paper, we propose a case study of undergraduate students enrolled in a teacher preparation program for mathematics education to examine their perceptions of teaching mathematics through the lens of ethnomathematics. We use the theoretical framework of ethnomathematics outlined by Rosa and Orey (2016) to guide our qualitative analysis of written survey and interview responses. Findings will contribute to the extant literature by elucidating PST's views of ethnomathematics as a tool for increasing students' problem-solving creativity and mathematical cognition.

Linking Self-Efficacy, Ideological Alignment, and Enactment of Culturally Responsive Mathematics Teaching

Stephanie Welch — Texas Tech University

Culturally responsive teaching remains a popular topic for teacher education and development. However, despite the assumed benefits to students and widespread acceptance among educators, teachers of mathematics are often at a loss of how to enact these practices in their supposedly ‘culture-free’ content. The constructs of self-efficacy and ideological alignment are utilized to more deeply understand the bridge from the theory to the attempted practice of culturally relevant mathematics teaching. The proposed study utilizes a mixed-methods explanatory sequential design with a case study variant, in which initial quantitative survey data will inform selection of teacher cases for qualitative follow-up.

F2.5 Paper Session

10:05a-11:20a

Royal D

Culture

Discussant: Celia Scott

Making Meaning of Maturity Ratings in Manga: A Multimodal Analysis

Alexandria Perez — Texas A&M University-Corpus Christi

A qualitative multimodal content analysis of teen manga will examine how adolescents are portrayed within manga and as the intended audience. An analytical tool will be developed using multimodal, semiotic, social semiotic, and youth lenses to understand representations of adolescents in teen manga and how this rating is defined across brands. Further, the specifications of the teen rating from various brands will be compared and analyzed within exemplar manga for each brand.

Who Really Needs Multi-Tiered Systems of Support? A Proposal for the Study of Stress and Well-Being of Texas Principals

Bethany Ivie — Texas A&M University-Texarkana

Texas lawmakers have recently recognized the importance of social-emotional training for educators. Given that stress, trauma, and personal well-being are closely tied to student success, schools have been urged to adopt committees and form multi-tiered systems of support. Whole student support is vital, and in order for these interventions to be effective, the adults on campus must also be at their best. Grounded in Maslow’s Hierarchy of Needs and viewed through the Aesthetics of Leadership lens, the study will examine levels of stress of Texas public school principals in relation to personal well-being.

Programs Supporting African American Males for Postsecondary Success

Margo Kelley — Sam Houston State University

The purpose of this qualitative study is to explore the factors that contribute to the success of African American males persisting into their junior year of college. The research of this phenomenological study will discover supports that have been beneficial to African American males in pursuit of college readiness and completion. Participants will provide pertinent information pertaining to their experiences to maintain a 2.5 G.P.A. or higher through questionnaires and interviews. A reflexive journal will compile information from participants. This study is a work in progress, all findings and outcomes will not be revealed.

Gumbo Needs Roux: Place-Based and Shared-History Education in New Orleans

Rani Corak — Teachers College, Columbia University

Katrina Struloeff — Drexel University

Advancing equity in communities is rooted in high-quality, culturally relevant education. Place-Based (PBE) and Shared-History Education (SHE) have demonstrated improved student outcomes through context-based, culturally-immersive lessons. As the city of New Orleans pushes forward its equity mission for students, focus is placed on the essential understandings of the region's unique history, people, and land. Through this exploratory mixed methods study, the voices of current educators, community members, and cultural holders will inform a picture of the current understanding of PBE/SHE, its importance for schools, educators, students, and communities, and highlight exemplars of existing models within the community.

F2.6 Paper Session

10:05a-11:20a

Orleans D

Minority Recruitment

Discussant: Tonya Jeffery

Online STEM Mentorship for Girls: A Pipeline to Gender Equity

Kristin Mansell & Brittani Williams — Texas Tech University

STEM education and proven techniques worldwide that bolster female involvement in a male centered curriculum and career field are explored in this study, suggesting future implications for the United States. Aiming at determining the relationship between female participation in STEM mentorship programs through secondary school and persistence through STEM class choice and related field of study postsecondary, we propose that the use of online mentorship programs with identified females within STEM fields not only increases engagement within STEM coursework but promotes a sense of self-efficacy increasing female persistence in stem coursework and postsecondary career aspirations.

The Perceptions of Latinas in Attaining the Superintendency

Lidia Calderon — Sam Houston State University

Latinas are underrepresented in the superintendency role. The purpose of this study is to explore the experiences and skills that Latina superintendents in Texas perceive as those that qualified them for the position. Latina superintendents in Texas will be interviewed in this qualitative case study. This research is a work in progress; therefore, its findings and implications will not be reported.

Equity Challenges in Special Education

Tiffany Mayes — Sam Houston State University

Racial biases and cultural differences of students and their teachers have been identified as factors associated with the overrepresentation of minorities in special education (DeMatthews et al., 2018; Shippen et al., 2009; Skiba et al., 2008). The purpose of this study is to examine factors that could be attributed to disproportionality of African American students referred to special education and placed in restrictive educational environments. Teacher interviews will be transcribed and coded using qualitative techniques to explore the topic of disproportionality. This proposal is research in progress; therefore, findings and implications will not be reported.

Grade 3 Reading Scores and Superintendent Race

Matt Griffin — Sam Houston State University

This proposed quantitative study will explore the relationship between superintendent race and the performance of students on Grade 3 State of Texas Assessment of Academic Readiness exams. This study will examine data for four racial groups (All Students, White Students, African American Students, and Hispanic Students) for students who are enrolled in Texas public school districts with African American or Hispanic superintendents to determine if statistically significant differences exist. Data will be further analyzed to compare district performance with state average performance for each racial group.

F2.7 Paper Session

10:05a-11:20a

Bienville B

Effective Schools

Discussant: Forrest Lane

The Impact of Strategic Planning on Organizational Performance in Public School Systems

Chris McDavid — University of Houston-Clear Lake

Strategic planning is widely accepted as a management tool, though the study of its effects on organizational performance has generated inconclusive findings (Baker & Leidecker, 2001). While the extent of existent research on the topic is indecisive, there are some consistencies in findings that factors such as operational environment, organizational size, and industry may influence the impact of strategic planning on organizational performance (Ali, 2016). To this point, the generalization of these factors to the education industry has been widely ignored in the

greater body of strategic planning-organizational performance research. While the education industry is susceptible to external influences, it is unclear if existent findings are relevant to educational decision-makers. This mixed-methods study intends to investigate the relationship between strategic planning and the organizational performance of Texas public school systems through the analysis of strategic planning practices and perceptions of planning practitioners.

The Academic Impact of COVID-19 on Low Socioeconomic Students in an Urban Elementary School

Rachel Madison — Texas Wesleyan University

Equity and Access became a major problem with many districts around the world, especially with low socioeconomic areas. Many educators assumed equity and access, and most importantly, technology was accessible to everyone, this became a barrier for many schools, educators, parents, and students before the pandemic in the lower socioeconomic communities. Access to technology and the equity of distribution became a greater problem during the pandemic.

The educational opportunities offered by different public schools do not allow students of low-socioeconomic status to attain the same levels of academic success (Shields et al., 2017). Based on J. Luke Wood, 2007 low socio-economic students are not graduating and completing school on the same level of their higher-class classmates.

Factors that Influenced Caregivers' Decisions to Enroll their Students in Online or in Person Instruction During the COVID-19 Pandemic

Suzan Yesil — Texas Tech University

The purpose on research, this study has hypothesized possible factors, and the study will focus on the follow factors as they relate to a family's choice of schooling for their child: health concerns, political beliefs, socioeconomic considerations, lack of access to technology, refusal to comply with mandates, and concern regarding the quality of instruction. This nonexperimental research study will utilize a quantitative survey research design, which will allow the researchers to gather data regarding factors that influenced parent choice in a survey format while also targeting specific school districts which gave parents the option to have their children attend school in-person.

F3.1 Paper Session

11:25a-12:40p

Orleans C

Minority Recruitment

Discussant: Juanita Reyes

Outsiders from the Inside: Pláticas in the Hallway

Erika Nunez & Rosa Rodriguez — Texas Tech University

Using Fierros & Delgado-Bernal's (2016) pláticas methodology, through the lens of Anzaldúa's (1987) "outsider within" identity, we explore our experiences as two Chicana/Latine*, non-

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traditional students who created a knowledge base for admission into Education Ph.D. programs through hallway pláticas/chats. These stories are complicated by our professional roles within the same university, making us outsiders from within. In presenting these narratives, we provide voice and witness to prospective Latine doctoral students trying to enter academia by centering the experiences of marginalized students. Secondly, we offer vital information to institutions who have the power to create more equitable and accessible admission processes.

Critical Research Issues in Information Technology Education in a Secondary Context

Kelli Adam — Texas A&M University

The purpose of this study is to examine trends in the critical research issues in the field of information technology education in a secondary context. This study investigates current topics, trends, and issues in information technology education between 2004 and 2020. The present study proposes to use systematic content analysis. Differences between (a) types of journals and (b) results of previous studies will be analyzed and discussed. Recommendations will be made for future research in information technology education.

Experiences of Underrepresented Teachers on Campuses with Diverse Student Populations

Victoria Brinkman — Sam Houston State University

Although Houston is one of the most diverse cities in the United States of America, there are large discrepancies in the diversity of teacher populations in the region. The purpose of this phenomenological study will be to describe the experiences of minority teachers at secondary schools in the Greater Houston area with diverse student populations but low teacher diversity. With a better understanding of the experiences of underrepresented teachers who have remained in the classroom, informed decisions might be made by educational leaders to effectively improve the recruitment and retention rates of minority educators.

The Black Teacher Experience Post Summer of 2020 Racial Turmoil

Olivia Robinson — Sam Houston State University

Following the racial turmoil of the summer of 2020, school districts were being challenged to respond to the current events in the news by explaining their steps in providing support for their Black families and staff members. With the already decreasing number of Black educators around the country, the first step of change in our school system is to acknowledge and learn from the experiences of our Black teachers to foster an inclusive and equitable working environment to increase their retention rates in our schools.

F3.2 Paper Session

11:25a-12:40p

Orleans B

Evaluation

Discussant: Grant Morgan

Legislation and the Aftermath: A Study into Texas House Bill 4545 and the Impact on Student Achievement

Bridgett Null — Texas A&M University-Texarkana

The onset of the global pandemic, COVID-19, set into motion a chain of events that may be felt for years to come. The physical separation from school, coupled with the social and emotional toll that students have experienced, has resulted in significant learning deficiencies. These gaps are highly visible when standardized assessment data are analyzed. The Texas Legislature passed House Bill 4545 in an effort to close the achievement gaps. This quantitative study will examine the impact of this policy on overall student achievement.

A Critical Discourse Analysis: Patterns in Selections Published from 1970 to 2020 in Texas English Language Arts Textbook Adoptions

Jeanette Figueroa — Texas A&M University-Corpus Christi

Through a critical literature pedagogy (CLP) framework, this qualitative exploratory study is a working dissertation that will use critical discourse analysis to explore how texts published between 1970 and 2020 included in four 11th grade English Language Arts textbooks adopted in the state of Texas for the 2020-21 school year support culturally pluralistic learning environments. I will explore how texts use plot and/or setting and language to argue that textbook research has valuable contributions when critically evaluating materials for historical accuracy and inclusivity of the cultures that represent America and its history advocating access and equity for all students.

The Impact of Physical Activity During a School Day on a Students' Academic Performance

Jed Davis — Texas A&M University-Texarkana

Every year students sit down and take standardized tests over the course of multiple days. Because of the importance of those tests, schools are trying to squeeze every minute of the day into instructional time. The part of the school day hit hardest is time dedicated to physical activity and recess. School districts must ask themselves if the extra instructional time has helped improve test scores or if there are any unintended consequences of allocating all this time to testing? This paper examines the amount of time schools spend in physical activity and if there is any impact on students' academic performance.

Positive Behavioral Interventions and Supports Program Evaluation

Stephanie Argueta & Matt Griffin — Sam Houston State University

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This proposed program evaluation is intended to measure the impact of a Positive Behavior Interventions and Supports program after two years of implementation in a middle school setting. This evaluation will explore the effectiveness of the Positive Behavior Interventions and Supports program on reducing the frequency of discipline infractions committed by Grade 6, Grade 7, and Grade 8 students. This evaluation will also measure the extent to which the implementation of the Positive Behavior Interventions and Supports program has influenced the perceptions of campus administrators and staff members regarding the campus disciplinary culture.

F3.3 Paper Session

11:25a-12:40p

Bienville C

Student Motivation

Discussant: Stephen Gruber

A Review of Tutoring in Developmental Mathematics Education

Gabrielle Castro — Sam Houston State University

There are two major deficiencies in the literature on tutoring in developmental education; the details of successful tutoring strategies and a complete understanding of student motivation to utilize resources. Assessing these strategies along with student motivation to utilize tutoring services will help educators form a deeper understanding of the developmental education population and better address their diverse needs. This paper attempts to address these issues by conducting a comprehensive literature review specific to developmental mathematics education in face-to-face settings.

Concepts of Flow in Education: A Review of the Literature

Johanna Keene — Texas Tech University

The theorization of flow by Csikszentmihalyi (1990) has impacted the disciplines of psychology, communication, and education. Certainly, these fields of research can and should inform each other. In order to further the field of flow research in education, this systematic review of the literature seeks to analyze the similarities, differences, and gaps in how flow is conceptualized, operationalized, and methodologically approached in these three fields.

Community and Student Perceptions on the Impact of a Work/Scholarship Program

Mandy Smith — Texas A&M University-Texarkana

While college administrators and faculty members consistently search for creative ways to build community relationships and develop productive student involvement opportunities, their endeavors are often ineffective. However, some colleges have established positive town/gown relationships by involving community stakeholders with their core mission to increase student success. Many higher learning institutions also develop opportunities that encourage their students to connect with the local community. This qualitative narrative case study will explore community members' and students' perceptions on the impact of a donor-based work/scholarship program at a small community college in Northeast Texas.

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F3.4 Workshop

11:25a-12:40p

Royal A

Free Workshop

Adjusting Leadership Styles to Increase Differentiation of Teacher Training

LaKenya Lockett — Duval County Public Schools

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.

F3.5 Paper Session

11:25a-12:40p

Royal B

Effective Schools

Discussant: Katherine Vela

Schools Benefit from Community Partnerships

Barbara Mote — Texas A&M University-Texarkana

Educational reform is challenging and costly; finding budget-friendly solutions is complex. School leaders are often overwhelmed by conflicting information on how to make improvements and which programs will make the most significant impacts. Family and community engagement programs have become powerful tools in providing budget-friendly school improvement initiatives. Research studies reveal that community and family involvement programs lead to positive educational outcomes with low cost and high rewards. When community engagement levels increase within the school system, academic scores go up. By determining how parents perceive their role in their child's education, school districts can create robust community engagement programs.

Social and Emotional Learning in Inner-City Middle Schools

Oleavia Morris — Sam Houston State University

As some students transition from elementary to secondary school, they can become more disconnected from school because they might lack social-emotional competencies, and this disconnection negatively impacts their overall performance (Blum et al., 2004). The purpose of this qualitative study will be to explore the thoughts of middle school teachers and campus leaders on their perceptions of social and emotional learning (SEL). I am considering completing a qualitative study in the form of a case study. I propose to collect data to understand a school-wide SEL program. This proposal is being submitted as Research in Progress to Division VI

Mentorship for Female Hispanic Graduate Students: A Literature Review

Sara Villanueva — Texas Tech University

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When it comes to minoritized and marginalized graduate students, most academia will readily agree that benefits outweigh the consequences of not providing mentorship. The importance of providing informal/formal mentorship for female Hispanic graduate students in education is apparent in the findings of this systematic literature review. Three themes emerge within the literature: (a) definitions and models for mentoring vastly differ, (b) there is a need to provide minoritized and marginalized students with opportunities to grow academically and professionally through mentorship, and (c) mentorship fosters safe spaces for minoritized and marginalized students, who regularly face gender and racial discrimination.

F3.6 Paper Session

11:25a-12:40p

Royal D

Gender Issues

Grow Your Own: Savvy Approach or Masked Gender Stratification Limiting Rural Superintendent Candidate Pools?

Gina Vilches, Gerri Maxwell, & Bernadine Cervantes — Texas A&M University-Corpus Christi

This qualitative study examined the perceptions of various school administrators in South Texas rural school districts regarding their perceptions of ‘grow your own’ hiring practices. Stakeholders’ perspectives on the use of GYO hiring practices within rural school districts provide insight on potential best practices as well as pitfalls of the impacts of implementation of this approach.

Celebrating 50 Years of Title IX: New Understandings of Administrative Responses to Sexual Misconduct and Relationship Violence

Amy Britton — Michigan State University

This paper reviews the historical significance of Title IX, the current Title IX climate in higher education and presents new findings on how higher education administrations respond to related crises on campus. This paper presents research findings from a mixed methods case study of public, four-year institutions of higher education that experienced a Title IX crisis. The study found that the shared perceptions of gender disparity and conceptualizations of gender-based violence shape the administration’s crisis response. These findings provide valuable insight into a framework for understanding how organizations respond to Title IX crises and how organizational culture shapes those responses.

The Identities and Experiences of Texas High School Latina Principals: A Phenomenological Case Study

Elsa Villarreal — Texas A&M University-Commerce

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In Texas, women make up the majority of the public school principal population; nevertheless, their placement is concentrated at the elementary school level. In this phenomenological case study, I examined the life experiences seven of Texas Latina high school principals in educational leadership contexts by focusing on their educational experiences, family influences, and bilingual experiences. The application of the Latino/a critical race theory lens served as a vehicle to obtain insight into the Texas high school Latina principal experience. Implications for educational leaders and aspiring Latina principals are discussed.

Relationships of Implicit and Explicit Balanced STEM Identity Moderated by Gender

**Rachelle Pedersen & Paul Hernandez — Texas A&M University*

Gender stereotypes negatively influence implicit and explicit personal-professional identity development, contributing to the attrition of women from (male-dominated) STEM fields. Using the Balanced Identity Theory, we identified relationships between implicit and explicit central personal-professional identities (i.e., Self-Gender, Self-STEM, and STEM-Gender associations). Specifically, we assessed the moderation of these relationships by gender. Implicit association components did not significantly correlate with their explicit counterparts. However, a moderation analysis found that women, but not men, exhibited a positive relationship between implicit and explicit balance scores. Results reaffirm the importance of utilizing both implicit and explicit measures of identity.

F3.7 Paper Session

11:25a-12:40p

Orleans D

At-Risk Students

Reading Achievement and academic Self-Concept: An Ethnographic Study in a High Poverty Title I School

Alecha Sheppard — Texas Tech University

There are many factors influencing student achievement: the students' living environments, home lives, teachers, school structure, and the individual student's self-perception as a learner. To better understand the primary issues of lack of academic growth of Mesa Elementary students, while attempting to account all the factors affecting such growth, this study utilized a qualitative research approach centering on ethnography. Students, parents, and teachers were interviewed about the use of the Balanced Literacy Reading Program and impact on student Academic Self-Concept. In addition to statements about Balanced Literacy, interviews also provided positive evidence of Academic/Reading Self Concept answers.

State Accountability Testing and College Readiness for African American, Hispanic, and White Students

**Kathy Goodwin — University of Houston-Clear Lake*

This mixed methods study examined the impact of State accountability testing on the college readiness of a purposeful sample of 143 seniors from a large, diverse school district in Texas

using archived district data and an open-ended survey gaining the students' perspective of college readiness. Findings indicated that African American students are consistently behind academically compared to their Hispanic and White peers. Additionally, students commented that making goals and plans, assistance to achieve their goals and plans, advanced placement courses, and regrets aided to their college readiness.

School Choice and Further Implications for Equity: An Evaluation of the Whitehaven Empowerment Zone Intra-District Initiative in the Improvement of Literacy and Numeracy in Grades 3-5

Keyundah Coleman — Union University

The Whitehaven Empowerment Zone (WEZ) was designed to strengthen school performance. This quantitative ex post facto research study investigated the following questions: (a) To what extent is there a significant difference between WEZ implementation of TCAP literacy and numeracy scores (b) To what extent can Teacher Perception Surveys predict overall student achievement. Existing data were used from TCAP literacy and numeracy z scores for 6,035 students to analyze differences between the means in performance using a two-way ANOVA with repeated measures. Additionally, data from Teacher Perception Surveys and TCAP literacy and numeracy performance were analyzed using multinomial logistic regression.

Equity in Math and Science Classrooms: How Classroom Composition Impacts Implementation of Instructional Practices for English Learners

Rebecca DeLozier — Texas Tech University

This study analyzed the 2018 Teaching and Learning International Study (TALIS) to investigate differences in instructional practices of secondary mathematics and science teachers in relation to the composition of English learners (EL) in classrooms. A series of regression models examined if the percentage of ELs and teacher self-efficacy were predictors of clarity of instruction or cognitive activation practices. Mathematics teachers increased clarity of instruction but decreased cognitive activation practices with ELs, but no significant relationship was identified for science teachers. Teacher-self efficacy did not moderate the relationship between the percentage of ELs and instructional practices.

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