



**SOUTHWEST EDUCATIONAL RESEARCH
ASSOCIATION**
Conference Program



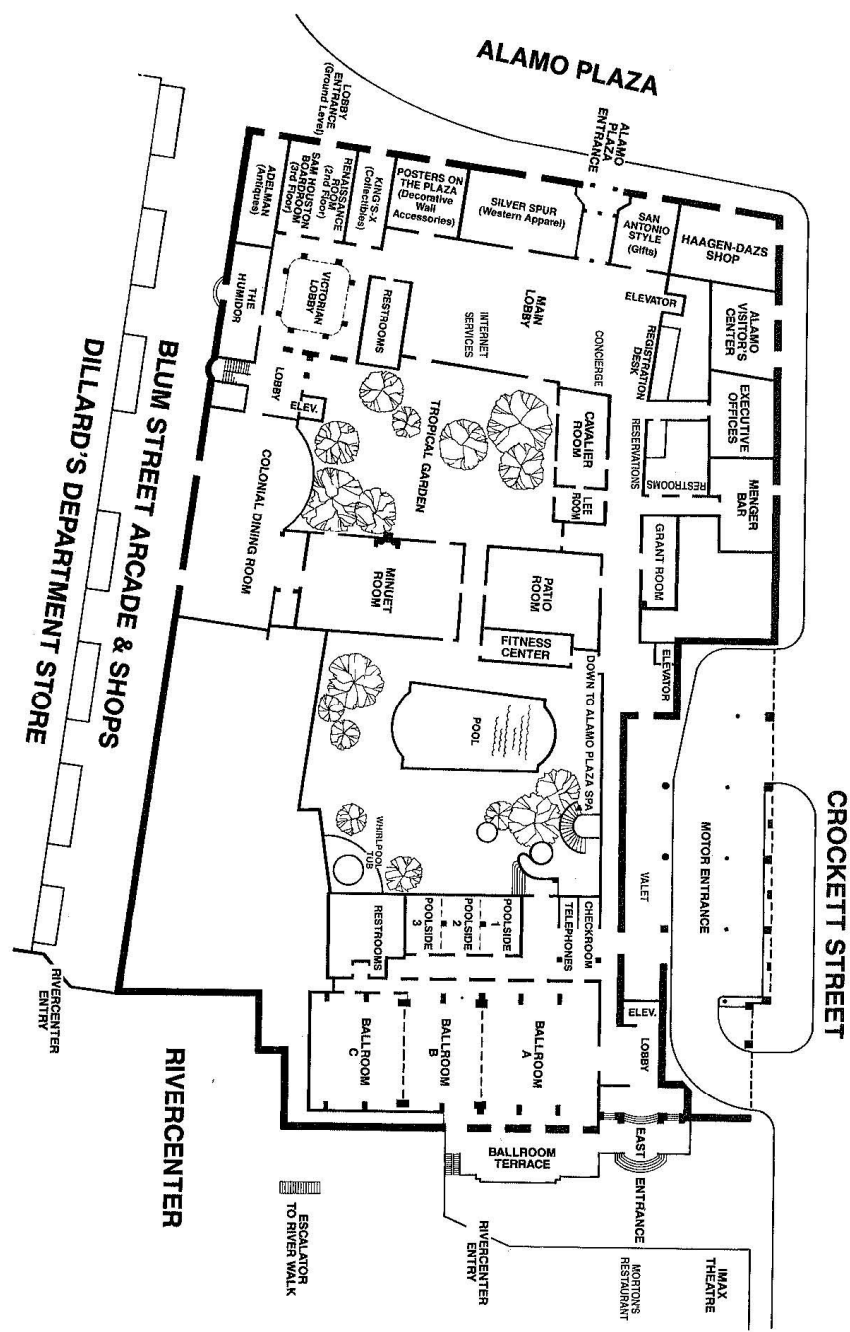
42ND Annual Meeting February 6-8, 2019

Menger Hotel San Antonio, Texas

San Antonio's MENGGER HOTEL

The Menger Hotel/204 Alamo Plaza/San Antonio, Texas 78205/Telephone (210) 223-4361/Toll Free (800) 343-9285/FAX (210) 223-1328
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THE ALAMO



**Southwest Educational
Research Association**

www.sera-edresearch.org



**2019 Annual Meeting
Program and Abstracts**

Menger Hotel, San Antonio, TX
February 6 - 8, 2019

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The Menger Hotel



In 1859, San Antonio was a time of trail rides, fast tempers, and quick triggers – and it was the year that The Menger Hotel ushered in a new era of sophistication to the Texas Frontier. More than 150 years of refinements have created a masterpiece of traditional elegance and atmosphere. Now a modern 350-room hotel, the Menger remains faithful to the integrity behind its authentically restored 19th-century section.

W. A. Menger opened the hotel with this advertisement: “He flatters himself that his establishment will be found by the traveling public generally as fully equal to the want of all. He spares no pains to have his Table and all the accommodation of his hours, at least equal to any hotel in the West.” The Menger remains true to its origins.

Even the newest lodging at The Menger recalls an era when accommodations were tangible evidence of tasteful opulence in space and appointments. Selected views include the Alamo, Alamo Plaza, and the tropical patio or pool. Although much has changed at The Menger, much remains the same as it was in the 1800s.

There are areas of The Menger that are like wonderful time capsules of Victorian era splendor. Marvel at the priceless antiques and paintings gracing the public areas, many of which were the personal selections of Mr. Menger, who purchased them during New York and European trips in the 1870s.

A hotel like The Menger is truly unique, and it is yours to experience nowhere else but in San Antonio.

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 in achieving the foundation's vision. Contact Kim Nimon (Kim.Nimon@unt.edu) for further information or to make contributions.

Front Cover

Photos courtesy of Visit San Antonio

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 the Florida State University. He subsequently accepted 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, 6 of the last 7 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 has 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 also serves as SERA Deputy 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 is Distinguished Professor and College Distinguished Research Fellow of Educational Psychology, and 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 9 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 as regards greater emphasis on effect size reporting and interpretation, and promoting improved understanding of score reliability.

Awards

SERA BRUCE THOMPSON OUTSTANDING PAPER WINNERS

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 Bagget
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

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 EXTENDED SERVICE AWARD

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
2018-2019
Executive Council**

President
Forrest Lane

President-Elect & Program Chair
Jana M Willis

Immediate Past President
LaVonne Williams-Fedynich

Treasurer
Kim Nimon

Secretary
Lesley Leach

Deputy Treasurer
Grant Morgan

Graduate Student Advisors
Sandra Acosta
Lesley Leach
Celia Wilson

Graduate Student Representative
Jay Raadt

Executive Director Emeritus/Historian
Bruce Thompson

Deputy Historian
Victor Willson

Newsletter Editor
Tracey S. Hodges
Wendi K. Zimmer

Director of Information Technology
Susan Troncoso Skidmore

Council Members-At-Large
Mordecai Brownlee
Suzanne Lindt
Celia Wilson

Sandra Acosta
Scott Bailey
Ditka Gupta

Sandra Nite
Sonya Sherrod
Marsha Sowell

Executive Director
Linda Zientek

Presidential Appointments

Audio-Visual
Shirley Matteson

***New Faculty Mentor Program and Early
Career Research Grants***
Michelle Peters
George Moore

Program Division Chairs – 2019

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:

Division I: Educational Administration, Policy, Leadership, & Program Evaluation

Antonio Corrales

University of Houston-Clear Lake

Robert Nicks

Lamar University

Division II: Instruction, Learning, & Cognition

Scott Bailey

Stephen F. Austin University

Laura Isbell

Texas A&M University-Commerce

Division III: Methodology, Measurement, & Evaluation

Tommy De Vaney

Southeastern Louisiana

Renee Lastrapes

University of Houston-Clear Lake

Division IV: Teachers & Teacher Education

Bob Elliott

Eastern New Mexico University

Julie Yoo

Lamar University

Division V: Special Populations & Counseling

Nara Martirosyan

Sam Houston State University

Monica Wong-Ratcliff

Texas A&M University-Kingsville

Division VI: Graduate Student Work-in-Progress

Ken Young

Lamar University

Aaron Zimmerman

Texas Tech University

SERA Past Presidents

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

Foreword

As President of the Southwest Educational Research Association (SERA), I would like to warmly welcome you to the 42nd Annual Conference. We have over 375 members, and there will be 248 research presentations, workshops, symposia, and innovative sessions at the 2019 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 SERA Annual Conference offers an excellent forum for attendees to share their research findings with SERA members from across the Southwest and beyond, to network with colleagues, and to form collaborations with researchers in their field. The association takes pride in its intimate and nurturing environment that supports both researchers and practitioners, novice and experienced. 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. Robert Pianta, Dean of the Curry School of Education and Novartis US Foundation Professor of Education at the University of Virginia, is the Presidential Invited Speaker on Thursday. Two ticketed workshops are being offered. 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 *Mordecai Borwnlee* for doing an incredible job as local arrangements chair. Tremendous appreciation is also extended to our President-Elect/Program Chair *Jana Willis* for organizing and compiling this year’s conference program; to *Tracey Hodges and Wendi Zimmer* who serve as our *SERA Newsletter* editors; 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 an historical perspective; to SERA “Trinket and Program Poster Maven” *Mary Margaret Capraro*; and to all board SERA members. Graduate student participation in SERA continues to increase and many thanks are extended to the graduate student representative, *Jay Raadt*. 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 2019 SERA Annual Conference. We are glad you are here and look forward to sharing this experience with you. Enjoy!

Forrest Lane
SERA President

The Program

There were 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 together in selected program sessions. The session schedule format is provided on the next page followed by the program highlights on pages 3-4. The first session on Wednesday begins at 1:00 p.m. On Thursday and Friday mornings the sessions begin at 8:30 and are 1-hour in length. In the afternoon, the sessions are 1 hour and 15 minutes in length. 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 in the first time slot on Wednesday. If a presenter identified him or herself as a graduate student, special efforts were made to schedule that session so that it does not correspond with the fireside chat and the graduate student meeting. Our **Presidential Invited Speaker** is Professor Robert Pianta and his presentation will be immediately following the luncheon at 1:35 PM in the **Minuet Room**. The **Fireside Chat** on Thursday afternoon in the **Minuet Room** is for **graduate students only** and is an excellent opportunity to visit with Professor Pianta in an informal setting; students are welcome to bring up any profession- or education-related questions or topics of interest to them.

The **graduate student meeting** on Thursday begins at 5:30 p.m. in **Ballroom C** and provides graduate students with the opportunity to meet with people from various institutions of higher education and to 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, 2 excellent ticketed research training sessions will be offered on Wednesday afternoon. Descriptions of these sessions are provided on pages 8-9. Don't 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!

Jana M Willis

SERA President-Elect & Program Chair

The Program Chair acknowledges the invaluable assistance of the program consultants Forrest Lane, Shirley Matteson, Sonya Sherrod, Sandra Nite, and Linda Zientek without which the program would not have been finalized.

Program Session Schedule

Wednesday

- 11:00–5:00 Registration
- 11:00–1:00 Training Session: P.O.W.E.R.ful Hour Full (Ticket Required, Ballroom A/B)
- 1:15–3:15 Training Session: Close Encounters of the Third Paradigm: Mixed Methods Researchers - We're Not Alone (Ticket Required, Ballroom A/B)
- 1:00–2:15 Sessions (W1)
- 2:20–3:35 Sessions (W2)
- 3:40–4:55 Sessions (W3)

Thursday

- 8:00–5:00 Registration (Closed During Business Luncheon)
- 8:00–9:00 Continental Breakfast
- 8:30–9:30 Navigating Through & Getting the Most from SERA
- 8:30–9:30 Sessions (T1)
- 9:35–10:35 Sessions (T2)
- 9:35–10:35 SERA Junior Faculty Mentoring Initiative (T2.1)
- 10:40–11:50 Sessions (T3)
- 12:00–1:25 Luncheon** (Ticket Required, T4)
- 1:35–2:45 Presidential Speaker – Professor Robert Pianta (T5)**
- 2:45–4:00 **Fireside Chat with Robert Pianta – Graduate Students Only (T6.1)**
- 2:45–4:00 Sessions (T6)
- 4:05–5:20 Sessions (T7)
- 5:25–6:30 Graduate Student Meeting & Election of Representatives (T8.1)
Graduate Student Social Immediately Following Graduate Student Meeting (T8.2)

Friday

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

Program Highlights

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

The Annual Luncheon and Business Meeting (T4.0 Thursday 12:00-1:25 – Ballroom A/B). The luncheon includes announcement of the winners of the graduate student travel awards and the Outstanding Student Paper competition.

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

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

Fireside Chat Professor Robert Pianta (T6.1 Thursday 2:45-4:00 – Minuet Room)
Graduate Students Only.

Graduate Student Meeting (T7.1 Thursday, 5:25–6:30 – Ballroom C)
An opportunity to discuss student concerns and elect the 2019–2020 graduate student representative to the SERA Executive Council and university-level representatives who together comprise the Graduate Leadership Council.

Graduate Student Evening at the Pat O’ Brien’s (Immediately following the Graduate Student Meeting). Meet in the lobby to go to the **Pat O’ Brien’s** for an evening of fun and relaxation.

Graduate Student Leadership Meeting (F0.3 Friday, 8–8:45 – Sam Houston Board Room)

Graduate Student Division VI Paper Sessions
There are 81 graduate student Division VI paper sessions included in this year’s program. Each Division VI paper features presentations of **works 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>The Advantages of Creating A Crosswalk in Reviewing Literature</i>	<i>T3.4</i>
<i>Finding and Negotiating Your First Academic Job</i>	<i>W3.6</i>
<i>Navigating and Getting the Most from SERA</i>	<i>T1.1</i>
<i>Managing the Literature Review with Mendeley</i>	<i>F1.1</i>

SERA Junior Faculty Mentoring Initiative

Thursday, 9:35-10:35 (Session T2.1)
Poolside 1

Michelle Peters

The new SERA Junior Faculty Mentoring Initiative will be discussed during this 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.

An important initiative of the SERA is the mentoring of 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 12:00-1:25 – Ballroom A/B). The luncheon includes announcement of the winners of the graduate student travel awards and the Outstanding Student Paper competition.

Presidential Invited Address (T5.0 Thursday 1:35–2:45 – Minuet Room) 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>Identifying and Utilizing Large Scale Data Sets for Dissertation Research and Beyond</i>	W2.1
<i>Finding and Negotiating Your First Academic Job</i>	W3.6
<i>Are You Ready to Use R</i>	T1.8
<i>SERA Junior Faculty Mentoring Initiative</i>	T2.1
<i>Regression as the Univariate General Linear Model - Take 2</i>	T2.8
<i>An Introduction to Exploratory Factor Analysis: Assessing Construct Validity</i>	T7.2
<i>Mixture Models: Introduction & Applications</i>	F1.8
<i>Qualitative Data Analysis: Lessons Learned</i>	F3.6

Session Chairs

PLEASE NOTE: Session chairs are indicated by an asterisk 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 to the end of the session.

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

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

Division VI Discussants

Name	Institution
Sandra Acosta	Texas A&M University
Emma Bullock	Sam Houston State University
Faye Bruun	Texas A&M University Corpus Christi
Mary Margaret Capraro	Texas A&M University
Jongpil Cheon	Texas Tech University
Victor Cifarelli	University of North Carolina at Charlotte
Antonio Corrales	University of Houston – Clear Lake
Robert Elliott	Linyi University
Tracey Hodges	University of Alabama
Bill Jasper	Sam Houston State University
Renée E Lastrapes	University of Houston – Clear Lake
Sharon Matthews	Texas A&M University
George Moore	Sam Houston State University
Sandra Nite	Texas A&M University
Michelle Peters	University of Houston – Clear Lake
Sonya Sherrod	Texas Tech University
Susan Skidmore	Sam Houston State University
Julie Smit	Texas Tech University
Marsha Sowell	Texas A&M Kingsville
James Telese	University of Texas Rio Grande Valley
Fernando Valle	Texas Tech University

Thank You

A special “thank you” to all of the division chairs and proposal reviewers for dedicating their time and expertise in the reviewer process, the SERA Board for reviewing the program and helping run the conference, to Linda Zientek for running the proposal submission system and her guidance throughout the program development stages, to Susan Skidmore for coordinating the Conference Registration system, to Mordecai Borwnlee for serving as Local Arrangements Chair, and to Mary Margaret Capraro for yet once again serving as SERA “Trinket Maven” (i.e., arranger of SERA mementos distributed at the conference registration desk).

SERA 2019 Presidential Invited Address –Robert Pianta

Dean of the Curry School of Education
University of Virginia

On Thursday of the SERA Annual Meeting, Robert Pianta will present the 2019 SERA Presidential Invited Address, titled "Observation and Improvement of Teacher-Student Interactions: Translating Developmental Science to Educational Policy and Practice." This presentation summarizes research on the measurement and improvement of teacher–student interactions conducted over the course of the past two decades. Starting with the theoretical bases for a focus on teacher–student interactions and relationships it will also describe research on the nature and validity of measurement systems, including descriptive results from over 15,000 PreK-12 classrooms in the United States. Findings to be presented also include investigations on the impact of teacher–student relationships on students’ achievement, self-regulation, and social development. A series of experiments that improve teacher–student interaction and student outcomes will be highlighted for their implications for policy and innovation in the preparation of the teacher workforce.



Biography

Robert Pianta, PhD, is Dean of the Curry School of Education, Novartis US Foundation Professor of Education, Professor of Psychology, and founding director of the Center for Advanced Study of Teaching and Learning at the University of Virginia. Dr. Pianta’s research and policy interests focus on the intersection of education and human development. In particular, his work has been influential in advancing the conceptualization of teacher–student interactions and relationships and documenting their contributions to students’ learning and development. Dr. Pianta has led research and development on measurement and improvement tools that help teachers interact with students more effectively and are used widely in the United States and around the world. Dr. Pianta received a BS and an MA in Special Education from the University of Connecticut and a PhD in Psychology from the University of Minnesota. He began his career as a special education teacher and joined the University of Virginia faculty in 1986. He is past Editor of the *Journal of School Psychology* and Associate Editor for *AERA Open*. An internationally recognized expert in both early childhood education and K-12 teaching and learning, Dr. Pianta regularly consults with federal agencies, foundations, universities, and governments. He was named a Fellow of the American Education Research Association and received the Distinguished Alumni Award from the University of Minnesota in 2016.

2-Hour Training Session

(Ticket Required)

“P.O.W.E.R.ful Hour Full”

Tracey Hodges, Sharron Matthews & Wendi Zimmer

You know your subject matter. But do you know which writing processes are optimal for you to communicate your expertise? The ones that yield productivity, publications, and promotions? The P.O.W.E.R. system will save you years of trial and error. Pat Goodson pioneered the “Promoting Outstanding Writing for Excellence in Research” system at Texas A&M University. 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.

Biography

Tracey Hodges is a passionate, ambitious, and motivated young scholar in education research. She is an Assistant Professor at the University of Alabama, and her goal is to prepare highly qualified literacy teachers who motivate and inspire their students through innovative pedagogical practices and integration of technology. She enjoys research and is knowledgeable about methodologies, research designs, and statistical analyses (both quantitative and qualitative) for exploring a variety of research questions. Her primary research interests are in Grades 4-8 writing interventions and teacher self-beliefs and classroom practices about writing. She also explores text structure instruction in fiction and nonfiction reading and writing. Her secondary interest focuses on children's literature.



Sharon Matthews is a Clinical Assistant Professor in the College of Education and Human Development at Texas A&M University. Sharon utilizes her classroom teaching experiences, supported by ongoing research and translation of evidence-based practices, to guide the preparation of knowledgeable and decisive preservice teachers who integrate literacy across all contexts.

Wendi Kamman Zimmer is a Ph.D. candidate and POWER Writing Consultant at Texas A&M University. She majors in Curriculum and Instruction with an emphasis in Literacy. Her research interests include; digital literacy, perspective-taking, and writing development at both the K-12 and higher education levels. Wendi’s current work assesses classroom transfer of teachers’ digital learning identities with an additional focus on graduate writing development.



2-Hour Training Session

(Ticket Required)

"Close Encounters of the Third Paradigm: Mixed Methods Researchers—We're Not Alone"

Tony Talbert



On the Wednesday afternoon start of the SERA Annual Meeting in San Antonio, Dr. Tony Talbert will conduct a 2-hour training session titled "Close Encounters of the Third Paradigm: Mixed Methods Researchers—We're Not Alone." This interactive symposium will explore how two unique research species (quantitative and qualitative) from two distinctive galaxies (interpretivism and positivism), telling two parallel stories (narrative and numeric), can move beyond conditioned coexistence into complementary conjoining into a third paradigm known as Mixed Methods Research. Three broad topics will serve as the framework for

discussion: 1. Hyphen or no hyphen? The nature and foundations of mixed methods research; 2. "Come to the edge," he said: Choosing and conducting a mixed methods design; and, 3. How do I love thee? Let me count the ways: Interpreting and reporting complementary numbers and narratives. In addition, participants will be asked to share instances and insights from their own close encounter with Mixed Methods Research.

Biography

Tony L. Talbert is the Associate Dean for Strategic Initiatives and Professor of Social/Cultural Studies Education and Qualitative Research in the School of Education at Baylor University. Tony refers to his field of research and teaching as Education. As Democracy, which integrates social/ cultural, diversity, and democracy education into a focused discipline of qualitative and ethnographic inquiry, examining school and community stakeholder empowerment through activist engagement in political, economic, and social issues.



**Join Us at the
Hilton Hotel
Arlington, Texas
SERA 2020, February 12-14**

Wednesday, February 6

W0.1	11:45a – 5:00p	Ballroom C Foyer
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Registration

W0.2	Training Session	11:00a – 1:00p	Ballroom A/B
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P.O.W.E.R.ful Hour Full

Tracey Hodges, Sharron Matthews & Wendi Zimmer
Cost = \$30. You may be able to pay for this session at the registration table.
Special Ticketed Event

W0.3	Training Session	1:15p – 3:15p	Ballroom A/B
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Close Encounters of the Third Paradigm: Mixed Methods Researchers – We’re Not Alone

Tony L. Talbert
Cost = \$50. You may be able to pay for this session at the registration table.
Special Ticketed Event

W1.1	Innovative Session	1:00 – 2:15	Poolside 1
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Solving the Mystery: Enhancing Critical Thinking and Problem Solving Skills Using Innovative Techniques

Tracey M Holley, Karley A Goen, & Jennifer T Edwards – Tarleton State University

This innovative session will demonstrate the use of a packaged “mystery” as a means of instruction. Each episode of the “mystery requires the students to implement problem solving skills and critical thinking in order to solve the crime. Using the Toulmin model of argumentation, students analyze evidence comprised of letters, interviews, artifacts, and forensic evidence in order to support persuasive claims. Attendees of this session will experience a “hands on” demonstration of the utilization of an episode of the mystery package.

W1.2	Paper Session	1:00 – 2:15	Poolside 2
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Critical Thinking

A Multi-Year Examination of Student Critical Thinking Skills Within Undergraduate Critical Thinking Course

Jeff Roberts – Sam Houston State University

The importance of student critical thinking skills is widely recognized; however, improving student critical thinking requires intentional interventions. This study examined the pre-to-post critical thinking skills gains of students enrolled within an undergraduate critical thinking course. Multiple years of data (2012-2017) allowed for comparisons in student gains over time. Parametric, dependent samples *t*-tests revealed that students made statistically significant gains in critical thinking scores each year. Meaningful critical thinking gains were observed for the 2012-2015 academic years; however, gains for the 2016 and 2017 academic years were far lower than the other years within the study and were not meaningful.

Investigating the Teaching of Thinking Skills by Colleges of Education

Shirley M. Matteson & Dimitrio Martinez – Texas Tech University

In this intrinsic case study, undergraduate and graduate courses offered by 33 carefully selected colleges of education were examined to determine how the teaching of thinking skills was

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addressed by each institution. A conceptual framework utilizing the 21st century skills like critical thinking and problem solving was used in examining relevant literature. About one-third of the colleges of education addressed thinking skills in their teacher preparation programs. The thinking courses were further examined for the focus of the course as to either the process and/or the process of thinking. Implications for colleges of education course offerings are presented.

Teachers' Perceptions of Teaching Critical Thinking and Teaching Practice Focusing on Critical Thinking

Lu Guo – Texas Tech University

Teachers are encouraged to help students developing critical thinking while their perception of their role in teaching students critical thinking presumably shapes their teaching practices central to the development of students' critical thinking. This study examines this assumption drawing 2013 OECD Teaching and Learning International Survey (TALIS). This study compared with Japanese and United States' teachers' perspectives about critical thinking and results showed that both the two countries' teachers believed that craft questions will be promote students' critical thinking.

Differences in Student Critical Thinking Skills as a Function of Demographic Characteristics

**Jeff Roberts – Sam Houston State University*

The importance of critical thinking skills is recognized across higher education. However, questions remain whether students are proficient in critical thinking, particularly for at-risk students (e.g., racial/ethnic minority students, first-generation students, and students with financial need). Using social capital theory, this study examined differences in student critical thinking skills by gender, ethnicity/race, socioeconomic status, and first-generation status. A multiple regression revealed these variables were predictive of student performance on a critical thinking test. Furthermore, the critical thinking scores of Black students, Hispanic students, and first-generation students were statistically significantly lower than those of White students and non-first-generation students.

W1.3 Paper Session

1:00 – 2:15

Poolside 3

Culture

A Narrative Inquiry into a Female Vietnamese Graduate Student' Lived Experience of Linguistic and Cultural Challenges in American Higher Education

Ngan T Nguyen – Texas Tech University

The number of Vietnamese graduate students enrolled in American universities has constantly increased for many years. The increase, however, has not revealed multiple challenges that these students have to endure while navigating their American education dream. This proposal presents stories of linguistic and cultural challenges confronting a Vietnamese female while attending a graduate program at a U.S. college in the northwestern part of Texas. From post-colonial perspectives, the proposal desires to extend the understanding of her lived experiences to larger American multicultural educational issues.

Married and Co-Teaching While Abroad: A Case Study

Rachel L Renbarger, Munube Yilmaz, & Tracey N Sulak – Baylor University

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The literature discusses best practices in co-teaching, higher education, and study abroad but does not describe how these frameworks together improve student experiences. This case study was an examination of how students in a higher education program experience and perceive a study abroad course taught by a married couple. The data were examined for themes related to the co-teaching, higher education, and study abroad literature. Results illustrated that married co-teachers were well matched, compatible, and equally involved in teaching the course. The professors used active learning techniques, provided feedback, and maintained contact. In addition, students who participated in the study abroad program encountered U.S. values, interacted with people having different perspectives, and have increased social cohesion.

Approaching Multimodal Literacy Through Star Wars

**Tomas E Espinosa & John W Hill – Texas A&M University-Corpus Christi*

In this session, we share our study of the different ways educators may use popular books to teach reading. This study analyses a number of journal articles that address the Star Wars series as educational tools for the classroom. Educators may use Star Wars to teach children about multimedia technologies. Most often, educators who embrace books, movies, graphic novels, and even videogames set in the Star Wars universe affirm the value of reading for pleasure. This study also encourages reading as a route to the critical literacy goal of social inclusion and reading development of the child.

W1.4 Innovative Session

1:00 – 2:15

Minuet Room

CampusConvivencia: Addressing the Social Justice Issue of Food Insecurity on College Campuses

Kinsey Hansen, Gina Shipley, & Kristen Lyons – Angelo State University

Food insecurity among college students represents a growing and alarming social justice issue across the country. This innovative session will engage and challenge participants to consider causes and effects of, as well as potential solutions to, this critical issue. The concept of convivencia examines how humanity lives together, building supportive inclusive social and cultural relationships. Food insecurity and the lack of basic needs among students in higher education illuminates widening socioeconomic gaps. Session participants will become informed on this critical social justice issue and leave inspired to contribute to solutions, in hopes of creating a climate of convivencia on campuses.

W1.5 Symposium

1:00 – 2:15

Patio Room

Rural Education

Examining Implementation Factors of Professional Learning Communities on Campus Accountability and Improvement in Rural Schools

Matthew Birdwell – Ponder Independent School District

This study addressed the need for an investigation of implementation factors of Professional Learning Communities (PLC) in campus accountability and improvement within a single rural, small elementary school with an “Improvement Required” (IR) rating from the Texas Education Agency (TEA). The researcher employed a qualitative case study design to explore factors to be considered in the implementation of PLCs, strategies to consider, and what best practices to utilize by campus administration when implementing such job-embedded professional development within a rural, small school setting. Findings of the study revealed that factors such as strong leadership and campus structure, function, and processes should be considered with

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implementation. Other themes that emerged included teacher buy-in, educator empowerment, and development of a campus PLC vision and goals.

Examining the Experiences of STEM Minority Students in the Rural Context

Audrey Meador – Texas Tech University

This qualitative case study investigated the experiences of minority science, technology, engineering, and mathematics undergraduate student participants from rural backgrounds. Utilizing Social Cognitive Career Theory as a theoretical framework, the environmental variables of prior learning experiences and background contextual affordances were investigated. Results of interest from this study include the student participants' awareness of the lack of learning experiences in STEM and the desire to use STEM degree knowledge to assist their rural hometown communities. Implications from this research may inform stakeholders of the impact STEM students from rural backgrounds can have on rural populations.

Bring Best Practices for Transition Services to Remote Rural Schools

**Sherri Warren – Texas Tech University*

This action case study investigated special education transition services in a remote rural school, focusing on the effect of applying best practices as described by students, parents, staff, and business people. The practices of career awareness, work experience, and collaboration were applied to the program of five high school special education students. Observations, interviews, document reviews, surveys, and a reflexive journal were used. Students and parents found benefit in the addition of the best practices, and business people enjoyed sharing their trades with the students. Obstacles included the interplay between student esteem and motivation. Recommendations for application of best practice to rural school transition are offered.

W1.6 Workshop

1:00 – 2:15

Cavalier Room

Free Workshop

Designing Online Assessments With Confidence

Audrey B Heron & Ashley Atwood – Angelo State University

With the advancements in technology and growth of the global society, online instruction has rapidly become a highly desired educational setting. Online instruction offers a unique instructional opportunity for online faculty, but they must be able to effectively design courses that offer educational experiences tailored to the needs of online learners while delivering rigorous content that encourages higher level thinking and mastery of course objectives. In this tutorial / training session, attendees will learn the components of clear, authentic online assessment design and will be guided through examples through instruction on how to apply key foundational concepts of online assessment design.

W1.7 Paper Session

1:00 – 2:15

Renaissance Room

Higher Education

Effectiveness of a Student Affairs Scholar-Practitioner Quantitative Research Workshop: A Mixed-Methods Study

Jeff Strietzel & Corina Kaul – Baylor University

In higher education, student affairs literature emphasizes the importance of professionals' quantitative research skills, but empirical research on how to develop these skills is limited. This

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study explored how a weekly, semester-long scholar-practitioner support group influenced the research knowledge, skills, and abilities of nine student affairs professionals. Although external barriers to developing as a scholar-practitioner persist, the participants expressed an increased capacity as researchers after the workshop. The authors provide implications and recommendations for future research and practice.

Doctoral Students' Perceived Academic Research Reading Ability: A Mixed-Methods Study

Ryan Glaman – Tarleton State University

Scholarly research is a valuable resource for guiding educational practice. Therefore, it is imperative that educational leaders be able to read and evaluate academic research papers. The purpose of the present study is to examine educational leadership students' attitudes toward and perceptions of their ability to read and evaluate empirical research articles in a doctoral-level educational research methods course. In this study, pre-course and post-course surveys are used to gather quantitative and qualitative data to assess students' perceptions of their academic reading ability as well as perceptions regarding which course components have the most impact on their academic reading ability.

Exploring Doctoral Students Perceived Challenges Associated With the Development of Their Professional Identity

Narges Hadi, Kara Page, Jessica Spott, Terra Tindle, & Kamau Siwatu – Texas Tech University

Doctoral education has been tied to academic course load and dissertation preparation; however, doctoral student training is not effective in preparing students for an academic career, and students are not feeling prepared for entering the work force. This study highlights major challenges doctoral students experience as they develop their professional identity. Comparing similarities and differences between international and domestic doctoral students' academic, psychosocial, and cognitive challenges provides a holistic perspective for universities. This information can be used when creating solutions to further develop student professional identity and should further prepare international and domestic students to enter their chosen professional field.

Academic Hybridized Identity Transformation: A Postcolonial Reflection From an Asian Male Graduate Student in American Higher Education

**Loi Q Le – Texas Tech University*

International students often experience cultural shocks during their early induction in the American higher education institutions. Using Postcolonialism as theoretical framework and autobiographical narrative as data collection method, I delve into my autobiography to question my former identity as an Asian male graduate from Vietnam and to transform my identity to fit in the American higher education institute. The questioning on the Self and Other in my autobiographical narrative helped redefine my values and shed light on the power relations in American classroom and the aspirations to thrive as a new educator and a search for a pedagogy of hybridity.

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W2.1 Invited Workshop	2:20 – 3:35	Poolside 1
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Free Workshop

Identifying and Utilizing Large Scale Data Sets for Dissertation Research and Beyond *Celia Wilson – Texas Wesleyan University*

In most cases, the doctoral dissertation is intended to embody a superior example of a student's ability to engage in self-directed, rigorous research. Indeed, Jones (2009) outlined the major purpose of dissertation research as a student's demonstration of his or her ability to think and write critically, develop and demonstrate research skills, and to contribute to the knowledge base of a given field. This workshop will introduce and explore existing large scale, publically available data sets for potential dissertation (or other) research. Participants will be guided in the location, selection, and an introduction to the use of these data sets.

W2.2 Paper Session	2:20 – 3:35	Poolside 2
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Higher Education

State-Level Community College Policy in the United States: A Systematic Literature Review *Kelly O Jacobs – Sam Houston State University*

A systematic literature review of existing research on state-level community college policy was conducted in this study. Scholarly journal articles centered on the topic of state-level community college policy published between 2006 and 2017 were selected for a descriptive and classical content analyses. The classical content analysis of the selected research literature resulted in the emergence of multiple themes that were organized into 80 first-cycle codes and were subsequently categorized into four second-cycle codes. Prevalent themes in the research literature articles on state-level community college policy included state appropriations; policy, governance, and regulation; graduation, persistence, and transfer; economics; and performance-based funding.

Identidad Invisible: Hispanic Serving Institutions Operating as Predominantly White Institutions *Jocelyn A Gutierrez, Nikola Grafnetterova, & Rosa Banda – Texas A&M University – Corpus Christi*

The role and shaping of identity for Hispanic-Serving Institutions (HSIs) has been arbitrary in contrast to the espoused missions of other minority-serving institutions. Since 1992, 409 HSIs have surfaced, with 209 emerging HSIs to acquire designation as a result of demographics shifts and geographic proximity to Latin@ populations. Consequently, HSIs have operated in conferred dominate frameworks of Predominately White Institutions (PWIs). This paper will utilize document analysis to focus on the examination and alignment of the espoused and enacted missions of HSIs in relation to a principle identity.

Representations of United States Education on TIME Magazine Covers From 1983-2017: A Multimodal Content Analysis *Stephanie Reid – Arizona State University* *Dani Kachorsky - Texas A&M University-Corpus Christi*

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Magazine covers convey messages through combinations of words, images, and design elements. Drawing upon social semiotics and multimodality, a multimodal content analysis of TIME Magazine (TIME) covers published between 1983 and 2017 was conducted to understand how TIME has communicated ideas about U.S. education to their audience throughout time. Three primary categories were constructed: 1) schools need fixing; 2) learning and schooling have not changed; and 3) uncomplicated stereotypical representations can stand for broad categories of educational stakeholders, practices, and tools. If these conceptualizations of education are left unchallenged, uncritical reader-viewers may take up such conceptualizations as truth and reality.

Women of Color Leading Community Colleges

**Maria Delgado – University of Texas at Arlington*

These qualitative case studies examined the role that bicultural socialization (De Anda, 1984) played among women of color (i.e. African American, Hispanic, Asian American, and Native American) to overcome obstacles and achieve success in obtaining higher-ranking administrative positions at community colleges. Using interviews, campus observations, document analysis, and analytic memos, this study sought to understand the obstacles and strategies that women of color experienced in their path traversing the leadership pipeline at community colleges. The implications and recommendations for practice and future research are included.

W2.3 Paper Session

2:20 – 3:35

Poolside 3

Gender Issues

“I Thought That to Be a Scientist You Had to Be a Boy”: Young Latinas’ Perceptions About STEM

Maria E Diaz – The University of Texas Rio Grande

This qualitative study examines different socio-cultural factors that could influence Latina youth to pursue a STEM career. Participants were 37 young females, ages 15 to 25, and all Latinas. Data sources were interviews and written reflections. Data analysis showed that gender stereotypes and lack of female role models are some of the barriers that could preclude participants’ entry into the STEM field. However, participants commented on the positive impact that their family members had on their career choices. The identification of these factors could help create a plan of intervention to increase Latinas’ interest in STEM since an early age

A Meta-Analysis of Gender Differences in Variance Ratio, Number of High-Achieving Students, and General Achievements in Mathematics

Ehsan Ghasemi, Hansel Burley, & Parviz Safadel – Texas Tech University

There are ongoing concerns and speculations about the reasons women are underrepresented in mathematics-related careers. This study through the meta-analysis of two prestigious international databases, namely Trends in International Mathematics and Science Study 2015, and Global Gender Gap Report, 2017, investigated the gender differences in mathematics achievement. The analyses were done in two conditions: first, assuming the homogeneity of variance and the mean comparison and second, comparing variance ratios. Boys and girls were also compared in terms of the number of students who arrived at the advanced international benchmarks. The Findings mainly supported previous findings in the related literature.

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Females' P“her”ceptions of STEM Disciplines and Careers in Single-Gender and Co-Educational STEM Camps

Katherine N Vela, Cassidy J Caldwell, Erica Lohmann, Sabrina Rodriquez, & Mary Margaret Capraro – Texas A&M University

The underrepresentation of women in STEM prompted researchers to analyze this dilemma. Research suggests although STEM related jobs are increasing, girls' interest decreases as they progress through school. The purpose of this study is to determine the effects of female perceptions toward STEM disciplines and careers. Data from females in two camp options, all-female and co-educational, were analyzed. Results indicated that females in the all-female camp significantly increased their perceptions in science. Furthermore, there was a high correlation between STEM perceptions and career interest. Overall, results from indicate an all-female STEM camp may help improve females' interest in STEM.

Gender Gap in Mathematics Competitions

**Martha Tapia – Berry College*

This study examined difference in the performance of students in mathematics competitions, at three different grade levels, due to gender. Data were analyzed using independent *t*–tests. The *t*-tests results showed that there was no significant difference in the performance of male and females students at the 6th grade level and at the high school level. The *t*-test results for the 7th-8th grade students indicated that there was a significant effect of gender with male students scoring higher than female students.

W2.4 Paper Session

2:20 – 3:35

Minuet Room

Higher Education

Discussant: Michelle Peters

Faculty Sense of Efficacy for Culturally Responsive Literacy Instruction at Hispanic Serving Institutions: An Exploratory Inquiry

Tomas E Espinosa – Texas A&M University-Corpus Christi

In this session, the researcher focuses on the low graduation rate of minority groups at 4-year universities. According to the Pew Research Center, high school dropout rates among U.S. Hispanics has finally decreased after several decades and Hispanic college enrollment has increased, setting a record high in US History. However, Hispanic students are not graduating. This study would analyze different culturally responsive literacy practices and consider a validation support for academic achievement among students from minority groups.

Digital Divides: Challenges and Solutions to Bridge Them to Effectively Conduct Face-to-Face & Online English Programs in a Vietnam College

Thi Bang Tam Nguyen – Texas Tech University

From the perspectives of administrators, teachers and students, the paper discusses the understanding of digital divides; the challenges or difficulties in the effort to narrow digital divides; how the digital divides are narrowed to effectively conduct both face-to-face and online English programs at the college. The research is a documentary and narrative design in which document reviews, observations, informal conversations and the researcher's personal experiences are conducted. Hopefully, the paper will contribute to making educators' and students' aware of their own digital divides and seek effective ways to bridge them for more successful English program and better student learning outcomes.

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Relation Between the Use of Mother Language and Vocabulary Learning in the Process of Second Language Study

**Farrokh Farrokhzad & Norma A Guzman – Texas A&M University-Kingsville*

The significance of code-switching and the utilization of mother language in ESL classes in enhancing vocabulary learning will be explored. In an ESL class of internationally diverse students (Mexicans, Venezuelan, and Middle Easterners) in the age range of 22 to 24, students will re-tell a story of their choice. Translanguaging is predicted to be utilized by the students as well as a subconscious realization of meaning in the process of vocabulary learning.

W2.5 Paper Session

2:20 – 3:35

Cavalier Room

Curriculum

Building Local Partnerships to Provide Career Readiness Opportunities to Students While Benefiting Rural Communities

Brian B Uriegas – Stephen F. Austin State University

College and career readiness is a consistent focus of 21st century instruction throughout the US. Rural school districts often struggle independently with staffing and funding that will provide their students with career preparation. Many rural districts are using local partnerships and practices, such as becoming a district of innovation, to provide students with opportunities to attain career skills while also gaining valuable career related work experience. Incorporating partnership building into leadership preparation programs is integral. This paper will discuss the benefits of creating community educational partnerships for all stakeholders involved.

Using Personality and Cognitive Ability To Predict STEM Success In a Hispanic Serving Institution

Marcus A Fagan & Christal-Joy Turner – University of North Texas

Reginald Gray – Mountain View College

Darrell M Hull – University of North Texas

The current study examined the Big Five and cognitive ability as predictors of success of STEM majors in non-traditional students ($n = 342$) at a Hispanic-serving institution. Cognitive ability, Agreeableness, and Conscientiousness were positive predictors of STEM success. Conversely, Neuroticism, Openness to Experience, and Extraversion were not statistically significant predictors of STEM majors' success. These findings suggest that cognitive ability, Agreeableness, and Conscientiousness can be used to predict success for STEM majors across traditional and non-traditional populations. Consequently, this provides 2-year colleges with a method for identifying potential at-risk students majored in STEM.

Pre-Service Administrators Experiences with Effective Research-Based Learning Strategies for English Language Learners

**Juanita M Reyes & James Gentry – Tarleton State University*

Pre-service administrators completed a pre and post open-ended survey concerning research-based strategies for English Language Learners (ELLs). Instructional items critical for ELL instruction were tallied for both pre and post survey responses. The researchers observed statistically significant growth between pre and post narrative responses as a result of the class experience.

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W2.6 Paper Session

2:20 – 3:35

Renaissance Room

Literacy

Teaching With Comics for the First Time: The Dominance of Traditional Literacy in Science and ELA Content Areas

Dani Kachorsky – Texas A&M University-Corpus Christi

Scholars call for the use of comics in education, yet research in this area is underdeveloped. This study explores what literacy practices teachers and students draw upon when comics are incorporated into classroom instruction. Drawing from the theory of literacy as a social practice, his qualitative case study uses ethnographic tools/methods to examine the literacy events that occur in a Science and an English classroom. Interpretive analysis was used to construct findings: 1) traditional literacy practices dominate classroom instruction; 2) there is a disconnect between teachers' instructional goals and practices; 3) teachers and students take up comics differently.

The Effects of Adolescent Engagement in Popular Media on In-School Literacies: A Systematic Review of the Literature

Kelli M Bippert – Texas A&M University-Corpus Christi

This systematic literature review focuses on what research reveals about adolescent participation in popular media, and its effects on in-school literacies. The analysis provided here is a preliminary analysis based on a random sample of 20 articles focusing on popular media and in-school literacies from top literacy practitioner journals with a focus on secondary literacy instruction. Preliminary analysis indicates that students' experience with popular media supported in-school literacies by providing opportunities to use higher order thinking and literacy skills, application of reading strategies with popular media texts, and integrating technology tools as a means for producing and responding to texts.

An Exploration of Teacher Success in Improving Students' Abilities to Speak Like Scientists

Alana D Newell & Nancy P Moreno – Baylor College of Medicine

Competency in science disciplinary literacy – the field-specific language skills, tools and techniques that scientists use when they interact with text – can help students better make sense of science content, however, there are few materials designed to introduce early elementary students to the ways in which scientists use language. In this study, we investigate the differences in effectiveness for teachers implementing pilot science disciplinary literacy materials, and the ways in which successful teachers made adjustments to the curriculum to help second grade students understand language related to hypotheses and conclusions.

An Analysis of Questioning Strategies Used by Literacy Coaches During Coaching Conversations

**Alida K Hudson – Texas A&M University*

Bethanie C Pletcher – Texas A&M University-Corpus Christi

The qualitative analysis of a multi-case study of literacy coaches by the presenters revealed that consulting strategies, including providing examples and solving problems for teachers, may come more naturally than coaching maneuvers such as the use of questioning to probe reflection. Coaches reported wanting to learn the language of a coaching conversation and discovered the

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use of effective questioning strategies takes time, practice, and thoughtful reflection on one's coaching moves. The findings have implications for the ways in which schools and districts professionally develop their literacy coaches, as well as for how universities prepare teachers to move into coaching roles.

W2.7 Paper Session

2:20 – 3:35

Patio Room

Teacher Education
Discussant: Bill Jasper

A Qualitative Study on Teachers' Perceptions of Their Preparation for Inclusive Classrooms

Ubaldo Cirlos – Texas Tech University

As the number of students receiving special education services continues to grow, a move was set towards the inclusion of children receiving special education services in general education classrooms. After teacher graduate from teacher preparation programs, they are not being prepared to work in inclusive classroom with children who receive special education services. The research sets out to better understand the perception of general education teachers' lack of preparation to educate students who are receiving special education services and to obtain their perspectives on what they feel is needed to be better prepared.

Examining the Role of Social Media as an Instructional Tool Among Pre-Service Teachers

Lecia Eubanks – University of Houston-Clear Lake

As social media becomes more prevalent among teachers, it is vital to understand how they are using it and what effects it has on teaching practices in the classroom. This study will explore the relationship between pre-service teachers' use of social media and their instructional practices by surveying a sample of pre-service teachers in a state university located in southeast Texas. The survey consists of multiple-choice questions. To better analyze survey results, participants will be interviewed to elaborate on both social media use and perceptions of the relationship between their social media use and instructional practices.

Building Pre-Service Teacher Interest in Artificial Intelligence Education: A Python Project for Handwriting Recognition

**Liangyan Wang – Texas A&M University*

While Artificial Intelligence (AI) research has attracted a large amount of investment from academia and industry, little research shows our future teachers are prepared for educating our next generation in an AI setting. This study will examine the pre-service teachers' attitudes toward using AI software in classroom: whether the pre-service teachers are willing to use AI tools as the medium of instruction, and also teach the students to work on and with AI projects; the study will also explore how well the pre-service teachers could complete an entry-level AI task using Python.

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W2.8 Paper Session

2:20 – 3:35

Ballroom C

Higher Education

Discussant: Antonio Corrales

A Convergent Mixed Methods Study in Exploring the Determinants of Doctoral Students' Satisfaction in Online Courses

Loi Q Le – Texas Tech University

This convergent mixed methods study explores the predictive factors that determine doctoral students' online learning satisfaction at a northwestern university in Texas. Social cognitive theory (Bandura, 1986) is used as the theoretical framework to guide the research direction. The quantitative strand uses the online survey on key social cognitive factors of learning satisfaction. The qualitative strand uses the phenomenological method to explore the holistic perspectives of a conveniently selected group of doctoral students. Doctoral students with online course experience are invited to participate. Instructors, school administrators and online doctoral students might benefit from this research.

First-Generation Student Enrollment and Retention in Online Community College Courses

John P Maynard – Sam Houston State University

The purpose of this paper is to examine retention and persistence rates among first-generation students enrolled in online Mathematics courses at a Texas community college. In addition, the proposal aims to determine characteristics of first-generation students that influence success in online, Mathematics courses at a Texas community college. Through the use of an online survey and institutional data retention and persistence rates will be determined for the 201-2018 academic year for online Introductory Algebra and Intermediate Algebra courses. The expectation is that first-generation students will have lower success rates than non-first-generation students.

A Review of Doctoral Student Preparation for Future Faculty Careers

Jamie M Thomas – Texas Tech University

It is common for doctoral students from a four-year, research university to be competent in conducting research, but students may be unprepared in other areas necessary to obtain a faculty position. This paper explores the literature on doctoral student preparation for future faculty careers in an effort to answer the following questions: 1) what practices are in place to prepare doctoral students, 2) what areas do doctoral students identify as lacking preparation in, and 3) what impact does the lack of preparation have? This literature review outlines recommendations for future research and opportunities to improve doctoral student preparation.

Select Administrators' Experiences With Student Employee Supervision: A Case Study

**Meredith L Conrey – Sam Houston State University*

On-campus student employment is an opportunity for students to earn while they learn. Many studies address both the positive and negative outcomes associated with student employment, but new studies are needed to explore the experiences of administrators to learn about the factors and perceptions that contribute to their supervision, mentoring, and development of student employees. This doctoral dissertation research study will utilize a collective case study to explore the perceptions of select higher education administrators from a single institution in the Midwestern United States.

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W3.1 Paper Session

3:40 – 4:55

Poolside 1

Measurement

Segregating Variance Through G Theory

Janice Chretien – The University of Texas at Tyler

Coefficient alpha is the most commonly used estimate of internal reliability yet, many researchers do not know how to proceed with data when the reliability analysis returns an alpha < 0.70. The purpose of this paper is to demonstrate how scholars can segregate variance, diagnose, and correct for low reliability.

Identifying Language-Related DIF in TIMSS 2015 Items

Fatimah Ahmad – Indiana University - Bloomington

The aim of this study was to identify items that performed differently across the USA and Kuwait in TIMSS 2015 mathematics achievement data. The study focused on fourth grade data, specifically items in booklet 7, with respect to the test administration language, either English or Arabic. The results revealed eight items with differential item functioning (DIF) that were flagged by both the Mantel-Haenszel (MH) and logistic regression (LR). The MH and LR results of DIF items were aligned. However, the associated effect size results were conflicting, suggesting a large effect size with MH and a negligible effect size with LR.

Validating a Computer-Delivered Self-Assessment Version of the Student Risk Screening Scale

Renée E Lastrapes & Jana M Willis – University of Houston-Clear Lake

A major challenge in treating mental illness and behavior problems is effective early identification of those who pose risk factors for behaviors that are symptomatic of an underlying disorder. Teachers are mandated by state law to monitor students and detect mental or behavioral disorders. Universal screening for academic issues in reading, writing, and math is being done in schools but less for potential mental or behavioral problems. By creating a format for young students to conduct a preliminary self-assessment, teachers can more effectively monitor and detect potential mental or behavioral problems.

A Validation of Science Teaching Efficacy Belief Instrument by Biology Teachers

**Philomena N Agu – University of Houston*

Studies have used personal efficacy and outcome expectancy subscales in Science Teaching Efficacy Belief Instrument (STEBI) to measure teacher effectiveness. Few scales exist specifically for subject teachers teaching science in high schools. Hence, STEBI was adapted. This study assessed the validity and reliability of modified STEBI using data from 562 in-service biology teachers in Texas public high schools. Principal Component Analysis supported the validity of the instrument, Confirmatory Factor Analysis failed. The reliability was established with Cronbach's alpha. The subscales were reliable; alpha was .81 and .81. STEBI could be adapted to study teaching efficacy beliefs of biology teachers.

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W3.2 Paper Session

3:40 – 4:55

Poolside 2

Higher Education

Taking a Second Look at 21st Century Learning Through the Eyes of Adult Students in the Online Environment

Katrina K Schultz – American College of Education

The purpose of this research study was to explore the lived experiences of adult students in the online learning environment to gain a deeper understanding about higher education in the 21st century. There are many questions about how and why adult students succeed or fail in the 21st century online environment. This follow up study seeks to compare and contrast responses from diverse participants to clarify identified trends among multiple underlying factors, which build upon current literature, as well as expound on the knowledge of how underlying factors influence adult students differently or in common ways. It is essential to gain understanding from the voices of adult students reflective of the diverse population represented in the online environment.

The Face of a Doctoral Orientation Course: Overview of Doctoral Candidates' Identity During Transition

Karen E McIntush, Michele Norton, Askari Nazneen, Karla A Garza, Jeff Keese, Peter Scaramuzzo, & Lynn M Burlbaw – Texas A&M University

As doctoral students enter the academy, a process must take place by which the individual becomes part of the larger community. Because the transition is unique at this level, orientation programs may serve doctoral students in establishing the epistemology needed for successful integration and retention. This descriptive study analyzed the attributes and skill sets with which Ph.D. students identify in a mandatory, full-semester orientation course during their first year of a doctoral program at a Tier 1 university. The use of descriptive statistics from survey data closely mirrored literature regarding student demographics concurrent with orientation needs the first year.

FlipGrid as Communication Tool in Online Courses

Lesley L Casarez, Dara Anderson, Audrey B Heron, & Ashley Atwood – Angelo State University

Online courses can pose challenges to communication between students and instructors, due to lack of voice tone and facial expression in written words. In addition, the self-determination theory of motivation posits that a sense of relatedness can be vital to students' overall motivation for learning activities. Video tools may enhance learners' sense of community in predominantly text-based online courses. Although tools allow instructors to send out videos to students, it is more difficult for students to submit videos to communicate with each other. One department has implemented the use of FlipGrid in order for students to overcome this challenge.

Concealing and Revealing a Godless Identity: A Phenomenological Study of Atheist University Students

**Gerald V Bourdeau – University of Houston*

Atheism is a stigmatized identity in broader American society and at higher education institutions. The literature on the atheist identity development of college students does not address the ways in which these students reveal and/or conceal their stigmatized identity during their collegiate career. This study employs phenomenology to examine how atheist,

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undergraduate students navigate the social information regarding their stigmatized identities in various contexts during their collegiate career as well as the tension which may be elicited once their atheism is revealed.

W3.3 Paper Session

3:40 – 4:55

Poolside 3

Achievement

Discussant: Marsha Sowell

Navigating Liminal Spaces: Student Accountability in an Online Intermediate Writing Course

Stephanie Millett – Texas Tech University

The purpose of this pilot study is to determine if using a modified version of the 2-point system will motivate students to complete optional work in an online first-year composition (FYC) course. The purpose of optional work is to avoid forcing students who have already mastered topics covered in the optional work to unnecessarily view videos and complete corresponding activities. Thus, optional work allows the online instructor to customize student instruction without penalizing students already performing at level and reward students who need additional support.

A Comparison of Student STAAR Success Between STEM, Pre-College, and Traditional High Schools

Stephen M Gruber – University of Houston-Clear Lake

Teachers are pressured from both the School District and the State to ensure that students reach certain levels of achievement on the STAAR exam. This pressure has driven many biology teachers to ignore inquiry-based learning in favor of strategies that emphasize memorization of facts. This project will examine the effectiveness of inquiry-based learning taking place at STEM and Pre-college high schools and compare it to methodologies at traditional high schools. The goal of this research is to determine what methodologies can be taken from the specialized programs and applied across all levels of high school biology.

The Influence of Proctored Testing in Distance Learning Mathematics Courses

Kelly Anderson – University of Houston-Clear Lake

While there are obvious benefits of distance learning for college students, institutions face significant challenges. One such challenge is the perception of rampant academic dishonesty. Proctoring is the ideal way to monitor students' conduct; however, proctoring is inconvenient, counter to the spirit of distance learning, and may increase test anxiety. Research is inconclusive about the influence of proctoring on grades and test anxiety, especially in mathematics. The purpose of this study is to determine whether students who are evaluated entirely online in proctored environments experience examination grades and test anxiety different from students who are evaluated online in unproctored environments.

Increasing Self-Efficacy in Young Females Through STEM Academies

**Betty George – University of Houston-Clear Lake*

Females are underrepresented in STEM careers and typically have a lower self-efficacy in STEM coursework. The purpose of this sequential mixed-methods study is to examine the influence of participating in a STEM Academy on females' self-efficacy. There will be two participant sample groups, females in STEM Academy and females not in STEM Academy,

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who will be given the Student Attitudes toward STEM (S-STEM) Middle and High School survey. Females in STEM Academy will participate in a partner interview. Quantitative data will be analyzed using an Independent samples t-test, while qualitative data will be analyzed using an inductive thematic coding process.

W3.4 Paper Session

3:40 – 4:55

Minuet Room

Statistics

Assessing the Assessing of Factor Analysis' Assumptions in The Journal of Educational Psychology

Jesus Tanguma - Walden University

Every article published in the Journal of Educational Psychology for the years 2012 – 2017 was reviewed as to whether or not exploratory factor analysis (EFA) had been used in a given article. Of the articles that did use EFA in their analyses (preliminary or primary), most reported the variables to be linearly related, and to follow a multivariate distribution. Some of the articles reported not meeting the recommended guidelines for sampling adequacy, and few articles reported on the factorability of the dataset.

Evaluating Methods of Calculating Structure Coefficients: Suggestions for Improving Common Practices

Jay S Raadt – University of North Texas

Structure coefficients allow inferences about magnitudes of effect of independent variables in multiple regression. There are two different methods for calculating structure coefficients: correlating fitted values with observed values (correlation method) and dividing the correlation matrix by the multiple R effect size (effect size method). Using Cohen's d effect sizes, this paper compares computers' speeds of calculating the structure coefficient. Results show that the effect size method is faster than the correlation method. This indicates that educational researchers should use computer software that uses the effect size method and that computer software using the correlation method should be updated.

Investigating Method Effects Associated With Measures of Statistics Attitudes

**Chao Xu – University of Houston-Clear Lake*

Theories of psychological measurement suggest that method effects may be construed as one primary dimension of individual differences. In this study, this dimension was modeled as a common latent factor uncorrelated with the substantive constructs. By employing this modeling strategy along with ordinal data analysis, variances attributable to method effects inherent in the structure of the Survey of Attitudes Toward Statistics-36 (SATS-36) were thoroughly examined at both the item and construct levels. The SATS-36 measured generally well although a few items and constructs were found to exhibit large method variances. Findings also suggest the dynamical nature of statistics attitudes.

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W3.5 Paper Session

3:40 – 4:55

Patio Room

Literacy

The Construction of Identity Through Early Childhood Curriculum: Examining Picturebooks From a Critical Feminist Lens

Kelly Medellin – Midwestern State University

Children in prekindergarten programs are being exposed to a plethora of picturebooks daily, and these books help shape their sense of the world and their identity. Many picturebooks that are available to teachers and students in preschool classrooms are drawn from state-adopted curriculum that the school district has implemented. This study employed a marginalized feminist lens, using critical content analysis to investigate representations of female characters of color in picturebooks from an early childhood curriculum.

MEXT 2020 Reforms: Integrating Programming and English Education in Japanese and Texan Curriculum

Florent Domenach, Naoko Araki, & Mary F Agnello – Akita International University

In response to 2020 educational demands of the Japanese Ministry of Education quickly approaching public schools across the nation, anxiety and anticipation, along with some excitement, are guiding an interdisciplinary computer programming and English education response at Akita International University (AIU) in the rural north countryside of Japan. The English “Eigo de” Programming Project (EPP) focuses on new ideas of integrating programming concepts into English learning for teachers to improve both English education and computer programming for elementary students.

The Effects of Professional Development on Student’s Writing Achievement of One Secondary Teacher

Lien Thi Xuan Nguyen, Narges Hadi, Lu Guo, & Julie Smit – Texas Tech University

In this case study, we measured secondary students’ writing progress every six-weeks to determine the effectiveness of professional development (PD) of secondary school teachers on students’ writing achievement. Writing samples were collected in five separate data collection periods and scored based on a teacher-generated writing rubric in one focal classroom. Our findings showed a small but significant growth in students writing scores suggesting that a cognitive strategies model was beneficial in helping teachers teach writing in a step-by-step process. Our results can inform educators in conducting PD opportunities for secondary teachers in low-performing schools.

Tier Two Reading Intervention: Effects of Preteaching First Grade Classroom Reading Instruction

**Melinda Lucko – Texas Tech University*

This study focused on pre-teaching lessons based on future general classroom lessons during Tier 2 intervention time with at-risk first grade students. Five at-risk first graders participated in pre-teaching lessons implemented by the researcher corroborating, with classroom lessons. Students met in small groups twice a week in thirty-minute sessions. Students took a weekly assessment which addressed pre-taught and classroom taught topics. A one-sample *t*-test was conducted comparing test questions. The examination of the means revealed the differences between participants’ pre-taught instruction and classroom instruction answer scores ($M = 89, SD = 4$) and classroom only instruction question scores ($M = 71, SD = 7$) was

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statistically significant ($t_{(4)} = 47, p < .001$). Results suggest pre-teaching instruction has an effect improving students' scores.

W3.6 Workshop

3:40 – 4:55

Ballroom C

Free Workshop

Finding and Negotiating Your First Academic Job

Bill Jasper – Sam Houston State University

Gilbert Naizer – Texas A&M University-Commerce

Julie Combs – Sam Houston State University

This interactive workshop is especially designed to help aspiring graduates of doctoral programs to explore what faculty positions involve, and to make the transition from student to faculty member a smooth one. Topics to be discussed include preparing your vita, highlighting your areas of expertise, matching your applications to actual job postings (and pitfalls to avoid), and negotiating the job offer. In addition, balancing the requirements for scholarly work, grants, research, service, teaching, and becoming a part of your faculty community will be addressed. The open discussion forum will encourage questions from all participants.

W3.7 Paper Session

3:40 – 4:55

Cavalier

Career

Discussant: Julie Smit

The Role of Ethical Leadership on Black Employee Intergroup Contact, Identity Conflict, and Diversity Climate

Douglas A Franklin – University of St. Thomas

Intergroup contact is often utilized to create diversity policies and initiatives within schools, businesses, and other organizations. However, intergroup contact (1) often understates the effects of institutionalized, historical, and everyday racism has on racial minorities; and (2) sparsely identifies how leaders affect intergroup contact for others. This mixed methods research study embeds intergroup contact into a critical race theory framework and identifies how identity conflict for Black employees in educational and private sector settings affects how they engage in intergroup contact, and the role ethical leaders play in encouraging positive outcomes and attenuating negative Black employee discretionary behaviors.

Taking a Look in the Mirror: How Gender and Ethnicity Demographics in Educational Settings Shape Career Aspirations

Rebecca J McElyea & Rebecca Morris – Stephen F. Austin University

Despite gains in women's educational attainment and readiness for post-secondary education, women remain underrepresented in the professorate in four-year degree granting institutions. The question of this study is: why are women marginally represented in post-secondary institutions within the professorate? A quantitative equity audit will be conducted for comparison of national gender and ethnicity information in K-12 educational settings against full-time faculty in four-year degree granting institutions. This study will utilize a critical feminist lens to explore the effects of gender ideologies on women's career aspirations.

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Improving Culturally and Linguistically Appropriate Healthcare Services

**Lisa D Chaddick Clarkson – Sam Houston State University*

With ever-increasing immigrant populations, issues of ineffective communication can arise, especially in healthcare. This research-in-progress proposal will outline the problem, educational significance of the study, and the method and design for a proposed new Healthcare Interpreter and Translator (HIT) certification minor at a medium sized state university in Texas.

W3.8 Paper Session

3:40 – 4:55

Renaissance

Curriculum

Texas School Administrators' Perceptions of STEM Awareness

Sandy Watson – University of Houston-Clear Lake

Despite effort and dollars expended on STEM initiatives in the United States, the research is bereft of studies on a collective comprehension of STEM. There has been little effort on the part of K-12 educational institutions, higher education, or STEM industry and businesses to educate the community of the critical need for understanding the connections between STEM and U.S. economic prosperity and the preparation of future STEM professionals (Sondergeld, Johnson, & Walten, 2016). The purpose of this study is to assess the beliefs of K-12 Texas school administrators regarding school and community STEM awareness utilizing the STEM Awareness Community Survey (a Rasch measurement) and to elicit their suggestions for promoting STEM awareness among interested K-12 stakeholders.

Creating an Educational Escape Room: Action Research

Marsha D Sowell – Texas A&M University-Kingsville

This qualitative action research project explores the process of creating Educational Escape Rooms for middle school students. A team of teachers and parent volunteers joined together to create mini-Educational Escape Rooms focusing on ELA curriculum. Data collection includes face-to-face interviews, document collection, and participant observation in the process of creating, adapting, improving, and implementing Educational Escape Rooms. The knowledge gained in this study will serve to guide others to create well organized and structured active games that focus on the desired content and skill objectives while being responsive to the needs of participants.

Frequency of Bloom's Taxonomy in Education and Engineering Education: A Leximancer Analysis

Courtney K Wilson & Heather Greenhalgh-Spencer – Texas Tech University

The purpose of this study was to analyze the frequency of Bloom's taxonomy references in engineering and education journals through the use of Leximancer, a large data mining software and concept mapping automated tool. This study utilizes a discourse analysis process and automated tool called Leximancer, a content analysis software specifically for the use identifying thematic and semantic relational data in large data sets. A total of 4552 articles from ten journals ranked high in Scopus and published between 2013-2017 were uploaded for processing through Leximancer for frequency of key terms and concepts.

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The STEM Related Charter Schools Effects: Dove Science Academy

**Serife Turan - Texas Tech University*

Silapberdi Berdiyev – Dove Science Academy

This study identifies elements of high school education that encourage students to major in STEM fields when they get to college. Analyses of survey responses from 162 graduates of the Dove Science Academy in Oklahoma City revealed that in-school and out-of-school STEM activities influenced their decisions concerning whether to major in a STEM field. In addition, these activities were found to have decreased gender and ethnicity gaps in STEM-field majoring among the graduates.

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T0.1	8:00a – 5:00p	Ballroom A/B Foyer
	<i>Registration</i> <i>Closed During Business Luncheon</i>	
T0.2	8:00a – 9:00a	Ballroom A/B
	<i>Continental Breakfast</i>	
T1.1 Workshop	8:30a – 9:30a	Poolside 1
	<i>Free Workshop</i>	

Navigating and Getting the Most from SERA

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

T1.2 Paper Session	8:30 – 9:30	Poolside 2
	<i>Teacher Efficacy</i> <i>Discussant: James Telese</i>	

Exploring the Impact of Instructional Coaching on Middle School Teacher Self-Efficacy

Chau HP Nguyen – Texas Tech University

This study will explore the impact of instructional coaching (IC) on middle school teacher self-efficacy. The participants will be first middle school teachers recruited from a 15-month job-embedded principal preparation program at a large public state university in the Southwestern, United States. Data will be collected via three sources: interviews, documents, and audio-visual materials. Based on the findings, implications for educational practitioners and policy makers will be made at the end of the study.

General Self-Efficacy and Teacher Sense of Self-Efficacy of Generation Z Teacher Candidates: A Sequential Explanatory Mixed Methods Study

Rochelle D Cortino – Texas A&M University-Corpus Christi

A new generation of teacher candidates is beginning to enter the education field, Generation Z. This generation is unique, diverse, and unlike any previous generation. Born in or after 1995, Generation Z has never had to imagine a world without technology. University faculty, school administrators, and hiring committees are faced with tasks related to student and teacher retention. What is offered here is a baseline for understanding the general efficacy and teacher sense of self-efficacy of teacher candidates. Clinical teachers and field base teachers completed two efficacy surveys in an effort to gain knowledge pertaining to this unique and diverse generation.

Exploring Demographics as a Predictor of Writing Self-Efficacy

**Keith Vyvial – University of Houston-Clear Lake*

Writing is a skill that is recognized as necessary in education and in the workforce. Yet, many students doubt their own writing ability. This issue of low self-efficacy can be detrimental to communication success. I wish to explore the idea of demographic factors as a potential predictor of low self-efficacy in writing. If demographic factors are successfully identified, then educators can seek out strategies to face the issue.

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T1.3 Paper Session **8:30 – 9:30** **Poolside 3**
Writing

*****SERA Research Grant Award Winner*****

A Nationwide Survey of Inservice Teachers’ Beliefs about Writing and Writing Instruction

Tracey S Hodges – University of Alabama

Kathryn L Wright, & Sherry Dismuke - Boise State University

Research confirms that teachers’ self-beliefs about writing are often passed on to their students. However, little research has looked nationally at inservice teachers’ self-beliefs about the task of writing and their beliefs about teaching writing. Additionally, studies conducted on this topic tend to be either qualitative or limited to one location. In the present study, inservice teachers from across the country are surveyed on their beliefs about writing and writing instruction. The findings of this study will indicate how inservice teacher beliefs may differ across the United States.

Making Writing Assessment Personal: Teacher Candidates’ Use of an Informal Writing Inventory in a Reading Diagnosis Course

Bethanie C Pletcher, Crystal Elliott, & Jeannette Gomez – Texas A&M University-Corpus Christi

The purpose of this study was to explore the ways in which teacher candidate tutors implemented the use of a revised informal writing inventory in an undergraduate reading diagnosis course. We obtained information on how teacher candidates administered the writing inventory by recording the tutor/tutee conversations prior to and during the assessment and inviting them to complete a written interview about the experience. Findings related to tutors’ perceptions of their tutees’ writing abilities and tutors’ attitudes toward administering the inventory will be presented.

A Grounded Theory Study Exploring Different Types of Feedback Used to Foster the Literacy Needs of Secondary Students

**Brianna L Willis – American College of Education*

With the integration of 1:1 technological platforms and the new Common Core State Standards writing expectations at the secondary level, research regarding the utility of digital and traditional, handwritten feedback used to foster student writing is critical. A study on digital and handwritten feedback seeks to narrow the research gap regarding digital feedback using technological platforms. Using the grounded theory method, the study investigates the utility of digital and handwritten feedback and student and teacher perceptions of both feedback methods. The purpose of the study is to identify which feedback type proves most effective in the context of secondary writing while working towards mastery of CCSS writing standards.

T1.4 Paper Session **8:30 – 9:30** **Minuet Room**
Cognition

Spark: A Case Study on Adolescent Student Perception of the Role of Passion and Creativity in Student Learning

Mary P Winn & James E Gentry – Tarleton State University

This study examined perceptions of 17 fifth and sixth grade students who participated in an academy designed to emphasize creativity and passion for learning. Qualitative data were analyzed using open coding and axial coding. The statements from the Spark students’ pre-Spark interview transcripts (80 statements and 2,469 words) and post-interview transcripts (120 statements and 4,606 words)

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comprised 200 statements and 7,075 words. Researchers coded 131 statements (65.5%) of the students' pre- and post-interview statements. Researchers reported 11 codes that merged into six categories within two themes: Theme 1: negative perception of school experience, and Theme 2: transformative learning.

Christian Educators' Personal Epistemology

Alexandru Spataru & John Spoede – Houston Baptist University

The purpose of the study was to construct a profile of Christian educators ($N = 48$ graduate students). Participants completed the Epistemic Belief Inventory (EBI), the World View (WV) quadrant measure, and a brief questionnaire. Certain knowledge score was slightly low therefore the group tended to consider certain knowledge to be more constantly evolving rather than absolute. This finding requires a deeper analysis of graduate students' epistemology and ontology in general regardless of their religious backgrounds. Quick learning score was low therefore the group viewed learning as a gradual process rather than quick or not -at-all.

Changing Cognitive Perceptions of Second Language Acquisition in Chinese Undergraduate ESL/EFL Students: A Mixed Methods Approach

**Robert W Elliott – Linyi University*

With the continued demand for teachers of English as a Second Language (ESL/EFL) in China, colleges and universities in China continue to struggle with teaching oral English to high volumes of undergraduate students using faculty-centered strategies. This concurrent, mixed methods, single level case study intends to reveal students' cognitive perceptions of their oral English ability. The data analysis revealed three main themes intersected by the findings of the quantitative and qualitative analyses. The findings from this and future studies are intended to guide leaders, administrators, scholars, and students to affect national and provincial policy.

T1.5 Paper Session

8:30 – 9:30

Patio Room

Gender Issues

Discussant: Faye Bruun

Grooming Minoritized Women as CEOs: Role of Retention Programs on Graduation Rates at Minority Serving Institutions

Tammy E Smithers – University of St. Thomas

This study conjectured the role of retention programs on Black and Latina women's college graduation rates. This paper scrutinized the gaping void of Black and Latina women chief executive officers for Fortune 500 corporations. This paper examined the role minority serving institutions play in grooming a pipeline of next-generation, diverse high-potential talent. Preliminary findings for this study are based on empirical research, field observation, and phenomenological experiences of women of color in the classroom and in Corporate America. Additional qualitative and quantitative data collection will corroborate and inform future research.

Obstacles Women of Ethnicity Face While Obtaining Managerial Roles: A Qualitative Descriptive Phenomenological Study

Wanda Goodnough – University of the Rockies

The purpose of this study is to investigate the lived experiences of African American women that are associated with facing any barriers when being promoted. Twenty African American women aged 35-60 years who live and work in the Detroit, MI metropolitan area and who have no experience in

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obtaining higher managerial roles in organizations will be invited to participate in the study to address the principle of saturation. The results of this study will allow for discussing specific promotion experiences of women of color and identifying typical barriers faced by these women on their career paths.

Heteronormativity in the Elementary Classroom

**David L Goss – Texas Tech University*

This in-progress dissertation study focused on teacher perceptions of heteronormativity in the elementary classroom. The study will explore how heteronormative expectations are placed on students and teachers in the context of the elementary school environment, and how those expectations impact thinking, perception, and performances relating to gender, biological sex, and sexuality. Do self-identified gay male teachers experience heteronormativity differently than self-identified lesbian or self-identified heterosexual teachers? If so, how does this impact the learning and climate of the elementary classroom as it relates to heteronormative ideologies and performances? These questions will be considered in this qualitative study.

T1.6 Paper Session

8:30 – 9:30

Cavalier Room

*Curriculum & Instruction
Discussant: Victor Cifarelli*

The First Few Minutes of Math Classroom Practice

Serife Turan – Texas Tech University

Sumeyra Karatas & Veysel Karatas – University of Texas - Rio Grande Valley

Researchers have argued that the first few minutes of class raise students' engagement and curiosity, which affect the nature of their classroom interaction. This qualitative case study examines patterns in how math teachers use their first few minutes and discuss effective practices for engaging students therein. Researcher viewed videos of lessons taught by middle school mathematics teachers that were obtained during the I3 grant project. Researchers found that the teachers had a difficult time in their first few minutes.

Exploring Relationships Between School Climate Dimensions of Academic Rigor, Consistency and Learning, School Environment, School Safety, Family and Community Relations, and Student Achievement

Rosa Cruz – Houston Baptist University

The focus of the study was to explore relationships between the school climate dimensions of Academic Rigor, Consistency and Learning, School Environment, School Safety, and Family and Community Relations and Student Achievement as measured by the State of Texas Assessment of Academic Readiness (STAAR) exam. This study focused on Title I urban middle schools. This study specifically examined if differences exist in the sixth, seventh, and eighth-grade reading and math STAAR and school climate.

Student Use of Metacognitive Reading Strategies and Implications for Retention in Higher Education

**Becca Guler – University of Houston-Clear Lake*

While many higher education programs provide financial, social, and academic content area support for student academic success, there are few university initiatives incorporating metacognitive reading strategies in their efforts to promote student critical thinking. This study will investigate if and how

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students use reading strategies in various courses and if there are quantifiable effects on retention rate. Higher education instructors and administrators can utilize this data to inform curricular and academic support service decisions for improving retention.

T1.7 Paper Session

8:30 – 9:30

Renaissance Room

Higher Education

The Effects of Cohort Member Retention on a First-Year Educational Leadership Doctoral Student

Sara Pariseau – Sam Houston State University

Cohort member retention is seen as an important component of graduate program selection and accountability by interested post-baccalaureate candidates. Educational leadership doctoral programs in the United States that employ the cohort-based model are increasing due to the model's ability to develop leadership skills, advanced research skills, and problem-solving skills for educational leadership positions. Few researchers have addressed the effects of cohort member retention within a cohort on remaining cohort members in a doctoral program. This case study examines the effect of the retention rates within an educational leadership doctoral program on a current member of a cohort-based program.

Mediating Factors Affecting Student Adaptation to College

Alexandra M. Bures – Houston Baptist University

The proposed research is designed to measure the effect that Relational Health, Social Support, and time have on adaptation to college in new college undergraduates. Undergraduate college students attending a Christian University in Texas, will be surveyed. Outcome measures will come from self-reported surveys composed of informed consent, a demographic section, a scale to measure social support, a scale to measure relational health and a scale to measure college adaptation. It is predicted that social support, relational health, and number of terms attended are positively correlated with College Adaptation and that GPA has a linear relationship to positive college adaptation.

Perceptions of Select First-Year Students Enrolled in an Online Student Success Seminar Paired With Development Mathematics: A Case Study

**Max Walling, Dana Van de Walker, Matthew Olmstead, & Kathleen Gilbert – Sam Houston University*

This qualitative study aims to examine the expectations and perceptions of select developmental students enrolled in an online first-year seminar paired with a developmental mathematics course. Results from this study might help inform how first-year seminars can be successfully delivered online and paired with developmental courses to improve pass rates.

T1.8 Workshop

8:30 – 9:30

Ballroom C

Free Workshop

Are You Ready to Use R?

Renee Lastrapes & Chao Xu – University of Houston-Clear Lake

R is a programming language and free software environment for statistical computing and graphics used widely used among researchers and statisticians for data analysis and visualization. Participants in this workshop will be given an introduction to 1) the R data frame, 2) common

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statistical analyses using R, 3) graphing with R and 4) some useful R packages. We could use a few sets of real data for the purpose of illustration.

T2.1 Workshop **9:35 – 10:35** **Poolside 1**

Free Workshop

SERA Junior Faculty Mentoring Initiative

Michelle Peters & Jana Willis – University of Houston-Clear Lake

The SERA Junior Faculty Mentoring Initiative will be discussed during this 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.

T2.2 Paper Session **9:35 – 10:35** **Poolside 2**

Achievement

How STEM Students React To Negative Feedback: The Role of Emotion Regulation

Trang T. Nguyen, Mahati Kopparla, & Elizabeth Piwonka – Texas A&M University

Traditionally, students' high school GPA and placement scores have been considered for admission into higher education. In the current study, we examined the role of a psychological trait, emotion regulation, when a STEM undergraduate receives negative feedback. Preliminary analysis included 36 first-year STEM students. Emotion regulation strategies positively correlated with performance scores immediately after receiving negative feedback. The current study addresses existing gaps within the literature on the importance of emotion regulation in STEM students' success.

Achievement Goal Orientations: Gender Differences Across Middle School, High School, and College Students

Jianmin Guan & William M Land – The University of Texas at San Antonio

Ping Xiang – Texas A&M University

Xiaofen D Keating – The University of Texas at Austin

Achievement goal theory has been an important theoretical framework guiding research on student motivation in physical education (PE) settings. The type of achievement goal an individual adopts have influences on affective, cognitive, and behavioral outcomes. The adoption/pursuit of an individual's achievement goal is associated with gender and age/grade. The purpose of the present study was to extend previous research by examining the differences in achievement goals in relation to gender and education level (middle school, high school, and college students) in PE settings. The findings from the present study expand our understanding of gender and age differences in goal orientations.

The Role of School Leaders in Student Mathematics Achievement: An Argument for Random Forests and Variable Importance Plots

**Emma Bullock – Sam Houston State University*

How does a researcher, in trying to consider the realities of complex life even begin to quantitatively wade through the thousands, if not millions, of variables without becoming overwhelmed by the sheer number of possibilities? Using the example of understanding the role of the school leader in student mathematics achievement through the lens of Complexity Theory, the purpose of this paper is to

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explain how I innovatively used a quantitative data mining technique utilizing decision trees to filter through the complex landscape of influences on school leaders and focus on what was most important.

T2.3 Paper Session

9:35 – 10:35

Poolside 3

Reading

Relationship Between Teachers' Collaboration, Group Use in Reading Teaching, and Student Achievements

Lu Guo – Texas Tech University

How teacher collaborate with each other is assumed to influence how they teach and thus, their student learning. This study specifically examines this assumption to understand the influence of different kinds of teacher collaboration on the kinds of group work in they used in teaching and thus, their student reading achievements. It draws on the data from PIRLS and uses HLM in analysis. It found when interacting with each other more in professional development, teachers were more likely to used mixed-ability group more. When working together on a same topic, they used the same-ability group more in teaching. The more mix-ability group teachers used, the more likely their students would have the better reading achievements.

Aliteracy Among Teachers? Investigating the Reading Habits of Elementary and Early Childhood Educators

Rebecca M Giles – University of South Alabama

The time prekindergarten through sixth grade teachers ($N = 24$) spent reading literature for pleasure was investigated. Participants logged time spent in 13 leisure activities for one week. Reading literature ranged from 0 to 845 minutes. The highest average amount of time was spent watching movies ($M = 552.92$). Reading literature had the eighth highest mean ($M = 123.13$). Pairwise comparisons revealed no significant difference ($t = -.795, p < .435$) between time spent reading literature and time spent in other leisure activities. Lack of motivation, rather than lack of time or technological distractions, may be a factor in participants' decision to read literature for pleasure.

Pre-Service Primary Teachers' Perceptions and Knowledge of Dyslexia and Basic Language Concepts

**Mary Kay Sherman – Houston Baptist University*

Approximately 20% of students in the general education classroom have difficulty learning to read. Students with dyslexia may have trouble in the areas of reading, spelling, writing, and other language processing areas. It is necessary for elementary school teachers to understand what dyslexia is as well as have a working knowledge of concepts in the areas of phonology and phonemic awareness, phonics, fluency, comprehension, and morphology. The purpose of this qualitative research was to examine the perceptions and knowledge of dyslexia and basic language concepts of pre-service primary teachers. Continued adjustments to pre-service teacher education is discussed.

T2.4 Paper Session

9:35 – 10:35

Minuet Room

Technology

The Effects of Instructor Behavior on Learner Participation in Online Discussion Boards

An Nguyen – Tarleton State University

With the prevalence of online learning in higher education, there is a need to enhance teaching strategies in the virtual realm that improve social learning. Due to the impersonal nature of online

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environments, student connectedness is important. While students often try to satisfy minimum course requirements to participate in online discussion boards (ODBs), research is mixed on the effects of instructor behavior on student engagement. There is a need to further explore high leverage instructional practices that increase students' participation in ODBs. The researcher will conduct a quantitative, quasi-experimental study to explore the correlation between instructor behaviors (passive vs. assistive) in online discussion forums and student participation levels in discussion groups.

Using an Online Tool for the Synchronous Collaboration

Danh N Nguyen & Lien T-X Nguyen – Texas Tech University

The purpose of this empirical study was to investigate the use of an online tool for synchronous collaboration by instructors and students in facilitating collaborative learning activities in university online courses. The research explored the benefits of the online technologies to instructional aspects to gain an in-depth understanding of the phenomenon regarding the collaborative learning in the online environment. The research findings and implementation had contributions to supporting instructors to design effective online courses utilizing the online synchronous tools and to aiding students in taking advantages of the tools to enhance and master their learning.

Exploring Instructional Interventions to Increase the Understanding of Computational Thinking Concepts in an Online Learning Environment: A Mixed Methods Study

**Hyunchang Moon – Texas State University*

Jongpil Cheon – Texas Tech University

Although the assessing of computational thinking has received a good deal of attention, a learning intervention to improve computational thinking has been comparatively neglected. This study is to determine what computational thinking (CT) concepts undergraduate students struggle with and how an instructional intervention would assist them in improving effective computational thinking skills. Both qualitative and quantitative data will be collected during the 2018 Fall semester of an undergraduate online course. More findings and implications will be discussed in the presentation.

T2.5 Paper Session

9:35 – 10:35

Patio Room

Higher Education

Discussant: Jesus Tanguma

Vertical Transfer Students' Perceptions of Community College Stigmatization

Melissa L Thompson – The University of Texas at Arlington

Although community college attendance has become increasingly common, university attrition is higher for students who start at a community college than for those who begin their higher education journey at a four-year institution. While many contributors to vertical transfer student attrition have been established, community college stigmatization is one reason for attrition described in prior research that remains relatively unexplored. The purpose of this study is to discover how transfer students feel their university connections (e.g., faculty, staff, and classmates) perceive them and how, if at all, those perceptions shape vertical transfer students' overall university experience.

Socially Responsible Leadership in a Residence Life Program

Kathryne DR Pelton – Sam Houston State University

Residence life programs are multi-faceted in their responsibilities, organizational structure, leadership opportunities, and leadership styles. Residence Life employees may spend years in the field,

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advancing through a housing department's organizational structure. This paper will provide research outcomes about leadership in residence life, leadership in the residence halls, and normative behavior associated with residence life staff. All of these components factor into a socially responsible leadership model, which if implemented, can serve as a foundational component of a housing and residence life department.

Retention of Professional Residence Life Staff: A Perceptual Study From a Southern State

**Elizabeth J Roshell – Stephen F. Austin University*

There is a lack of retention of residence life, full-time professional staff members at 4-year higher education institutions. Retaining good quality entry-level housing staff is becoming an overwhelming challenge (Steven, Ellett, & Nestor, 2008). These professionals are leaving the field for a variety of reasons (e.g., role ambiguity, role conflict, role orientation, role stress, job burnout, work overload, and the lack of professional development and career advancement) (Tull, 2006). This problem contributes to the lack of social development of residence hall communities, missed opportunities for the cultural and emotional development of students, and the dearth of stable and sustainable support mechanisms for academic learning and achievement (Belch & Mueller, 2003).

T2.6 Paper Session

9:35 – 10:35

Cavalier Room

Methodology

Within-Person Variation in Factor Profiles: Exploring the Validity of Between-Persons Decisions

Jay S Raadt & Modesta Juarez-Jacinto – University of North Texas

Administrators in a North Texas school district wish to use a battery of assessments to draw inferences about teachers. An orthogonal two-factor profile of the battery of assessments explained 59% of the variance in the observed correlation matrix. However, this variance explained can be partitioned into between- and within-persons variance. If any off-diagonal elements in the correlation matrix are not equal, there will be some within-persons variation. Partitioning the variance explained showed that both factors overwhelmingly explained within-person variance. Because the factors measure within-persons variance, the between-persons interpretation desired by school district administrators is invalid.

Multilevel Factor Models: Model Specification and Fit Guidance

R. Noah Padgett, Grant B Morgan, Shan Jiang, & Laura Shero – Baylor University

In education and social science, data often arise from nested data structures, meaning that students (level-1) are nested within teachers or schools (level-2). We present a generalized framework for measurement models in organizational structures with multilevel confirmatory factor analysis with the goal of helping readers better understand measurement possibilities. However, little is known about how fit statistics perform in identifying properly specified models or incorrectly specified models. We offer to fill this gap by (1) presenting MCFA and considerations for its use, (2) conducting a simulation study to aid researchers with how/when to use measures of model-data fit.

An Examination of Grounded Theory Methods Used in Top Ranked Education Journals

**Laura M Stough & Sungyoon Lee – Texas A&M University*

The purpose of this study was to examine types of grounded theory methodologies used between the years of 2000 to 2017 in educational research. We identified 16 highly ranked journals in the field of education and completed an in-depth analysis on the 277 articles in them which identified using

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grounded theory an analytical method. Educational researchers appeared to prefer Strauss and Corbin's methodological frame, with its paradigmatic tendency towards symbolic interactionism. However, only a small number of these publications produced, in fact, a "grounded theory" and most did not detail the analytical steps most common to grounded theory methodologies.

T2.7 Paper Session

9:35 – 10:35

Renaissance Room

Teacher Education

Inquiry-Based Lessons: Observing Preservice Teachers Progress and Understanding Perceptions

Jacqueline Riley & Laura J Isbell – Texas A&M University-Commerce

This paper session reports on how faculty examines the use and benefit of an English Language Learner (ELL) website focusing on teaching resources. The resources include, but are not limited to videos, lesson plans, and handouts. Implications about faculty perceptions and effectiveness of the website are discussed.

Flipped Learning and Pre-Service Teachers' Self-Efficacy in Elementary Mathematics Instruction

**Monica Wong-Ratcliff & Olivia P Modesto – Texas A&M University-Kingsville*

The amount of empirical research on applying the flipped learning model to a hybrid university course is limited. To study this problem, an exploratory study was conducted, which compared two hybrid teacher education classes: one using traditional lectures during face-to-face meetings, and the other providing videos and resources on teaching strategies. Measures of pre-service teachers' confidence towards teaching were compared through MTEBI. Results found no significant differences between the traditional model and the flipped model. Qualitative data analysis found that majority of the pre-service teachers responded that the flipped learning model helped them to learn the mathematical concepts better.

Comprehending the Cost: Can Students Read Application Fee Waiver Statements?

Zachary W Taylor – The University of Texas at Austin

This study examined the grade-level readability of application fee waiver statements of the public and private institutions charging the highest undergraduate application fees for the 2015-2016 academic year ($n = 39$). The results suggest that the majority of application waiver fee statements are unreadable by prospective postsecondary students, and no statements were translated into a language other than English. Implications for policy, practice, and future research are addressed.

T2.8 Invited Workshop

9:35 – 10:35

Ballroom C

Free Workshop

Regression as the Univariate General Linear Model - Take 2

Kim Nimon – University of Texas at Tyler

Linda R Zientek – Sam Houston State University

Mandolen Mull – Rockford University

This invited workshop will present a comprehensive evaluation of regression as the univariate general linear model (GLM). Participants will see how multiple linear regression yields the same results as repeated measures ANOVA, ANCOVA, ANOVA and Pearson's r . As well,

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it will be shown that (a) ANOVA subsumes select Pearson's r analyses, (b) Pearson's r subsumes independent samples t test which subsumes the single sample t test and (c) single sample t test subsumes the paired samples t test and it subsumed by repeated measures ANOVA. The demonstration of the univariate GLM will be conducted via an interactive presentation of relevant test statistics, effect sizes, and their relationships.

T3.1 Workshop

10:40 – 11:55

Poolside 1

Free Workshop

Using Game Theory for Educational Research: A Native Mixed Methodology for Researchers and Practitioners

Jay S Raadt – University of North Texas

Game Theory is a mixed methodology that allows qualitative generation of hypotheses and quantitative updating of predictions. A challenge many researchers face when using mixed methods is gaining competency in using the procedures required by both quantitative and qualitative paradigms. Therefore, the purpose of this tutorial is to introduce three competencies and four procedures to researchers who are not familiar with game theory. The competencies are ranking preferences, sequencing events, and conditional probability. The procedures are strategic equilibrium, mixed strategy expected utility, extensive equilibrium, and Bayesian equilibrium. Each procedure has examples of applying it to a research scenario.

T3.2 Paper Session

10:40 – 11:55

Poolside 2

STEM

Language Courses within the IB MYP in Taiwanese and Chinese Schools

Liang Ward – The University of Texas at San Antonio

Aurora Terry – Portland ISD

This study was to explore the reasons that impede the implementation of IB MYP language courses in Taiwanese and Chinese schools. This study was based on a qualitative design, using semi-structured interviews for data collection and the comparative cross-case analytic strategy for data analysis. This study is expected to provide essential information and be a reference for future related research and educational policy-makers of Taiwan and China in considering the implementation of the IB MYP in schools.

A Description of At-Risk 5th Graders Motivation, Teachers Instruction, and Parents Perceptions During a Summer Math Camp Experience

Andrea M Elizondo, Faye Bruun, Bethanie C Pletcher, & Sergio Olivares – Texas A&M University-Corpus Christi

Middle school at-risk students from two urban school districts participated in a two-week summer math camp program for struggling students. Results from the Motivation and Engagement Scale (MES) measured 11 subscales regarding self-efficacy, valuing, mastery orientation, planning, task management, persistence, anxiety, failure avoidance, uncertain control, self-handicapping, and disengagement. Interviews with students, teachers, and parents revealed five main categories including motivation, attitude, teaching strategies, summer math camp activities, and transformation. In addition, the various math stations utilized during the math camp provided a positive learning

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experience for students and allowed instructors to deliver differentiated practice for students with different learning styles.

Effects of LEGO Based Interventions on Students' STEM Achievements

**Amir Fidai, Chad Huckaby, & Ashley Craft – Texas A&M University*

In this paper we present the meta-analysis of research articles on the effects of LEGO based interventions on students' STEM achievements. 11 experimental/quasi experimental studies were included in the meta-analysis providing 17 unique data sets. The effect sizes for students' achievements in mathematics, science, technology and engineering are calculated along with effect sizes on student's attitudes and beliefs towards STEM subjects and careers. The overall positive effect size indicates that LEGO based interventions have an encouraging impact on students' STEM achievements and their perceptions towards STEM careers.

T3.3 Paper Session

10:40 – 11:55

Poolside 3

*Higher Education
Discussant: Sandra Nite*

Hispanic Graduates Perceptions of Academic and Social Support Retention Services at a Baccalaureate Nursing Program

Geny A Moreno – The University of St. Thomas

The United States is currently experiencing a nursing shortage well documented in the literature as being caused primarily by retiring nurses (Cox et al., 2014). The United States is also experiencing a national shortage of culturally and ethnically diverse nurses in the health care industry at a time in our history when the minority population is becoming increasingly diverse (Bond & Cason, 2014; Nadeau, 2014; Stroup & Kuk, 2015). Therefore, this study will explore the lived experience of Hispanic nursing graduates who utilized academic and social support retention services at a nursing program in higher education.

Lived Experiences of Students of Color in a Diverse Honors Setting

Rebekah Chojnacki – The University of Texas at Arlington

Collegiate honors programs have grown in popularity during the last few decades, offering families the opportunity to obtain a high-quality education at a public institution. While many honors programs are disproportionately White, there are a few honors programs with sizable populations of students of color that researchers have not studied. This study fills a gap by exploring the lived experience of students of color in a diverse honors setting and thus may prove useful to honors administrators seeking ways to incorporate more diversity and inclusivity in their programs.

Differences in Postsecondary Credit Completion as a Function of Ethnicity/Race in Texas Schools

Tess Johnson – Sam Houston State University

Examined in this study was the extent to which differences were present in postsecondary credit completion by ethnicity/race for the 2015-2016 and the 2016-2017 school years. Data analyzed were from 1,915 schools in the State of Texas that reported postsecondary credit data for Black, Hispanic, and White students. Statistically significant differences were present in postsecondary credit completion between Black and Hispanic students; Black and White students; and Hispanic and White students. A clear stair-step effect was present in postsecondary credit completion, with White students

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having the most postsecondary credits, followed by Hispanic students, and then by Black students in both for the 2015-2016 and 2016-2017 school years.

Mission Statements of 4-Year Texas Universities

**Gene Roberts – Sam Houston State University*

Much of the research on mission statements suggest that they can be important for understanding the unique undertaking of the university. A crucial external stakeholder for public universities in Texas is the Texas Higher Education Coordinating Board, which promulgated the 60x30TX plan. Has the 60x30TX plan influenced the mission statements of 4-year public universities in Texas? The purpose of this study is to understand better the content of the mission statements of 4-year Texas public universities, to explore what themes emerge, and to determine whether the mission statements align with the goals set out in the 60x30TX plan.

T3.4 Symposium

10:40 – 11:55

Minuet Room

Free Workshop

The Advantages of Creating A Crosswalk in Reviewing Literature

Shirley M Matteson – Texas Tech University

Sheri Warren – Wayland Baptist University

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

T3.5 Symposium

10:40 – 11:55

Patio Room

Statistics

Conducting and Interpreting a Canonical Commonality Analysis Within Personality: A Tutorial and Demonstration

Trey L. DeJong, Marcus A. Fagan, & Darrell M. Hull – University of North Texas

Multicollinearity and suppressor variables create substantial problems in interpretation of canonical correlation analysis (CCA). Typically, researchers utilized both standardized and structure coefficients to interpret CCA; however, these do not provide researchers with full information of the variables within the canonical functions. Canonical commonality analysis offers researchers with a more holistic picture that includes unique and common variance explained for each variable. This allows researchers to better understand the effects of multicollinearity and suppression within their data; consequently, allowing them to make more accurate interpretations that potentially lead to more meaningful implementation. To facilitate a better understanding of canonical commonality analysis, we demonstrate the analysis using substantive data containing the Big Five factors of personality and resiliency within a Jamaican sample.

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Approaches to Modeling Time Varying Covariates in Growth Mixture Modeling

Jayme M. Palka – University of North Texas

Growth mixture modeling (GMM) is a longitudinal method for modeling change over time and disaggregating between- and within-person effects. Of particular interest with such methods is the disaggregation of between- and within-person effects conditional upon a covariate. Although it is common for a covariate of interest to be conditional upon time (i.e., time varying covariates [TVCs]), many choose to include only time invariant covariates (TICs) in their model, or inappropriately model TVCs as TICs, which could lead to misinterpretation. I illustrate the various ways in which TVCs can be modeled in GMM applications using a structural equation modeling framework. Data are simulated using Mplus, and syntax is provided.

An Introduction to Propensity Score Matching: Understanding and Strengthening Research Designs

Marcus A. Fagan & Emily A. Brown – University of North Texas

Randomization of group membership is not always possible or probable, which produces issues for researchers attempting to estimate causal effects. Propensity score matching is a method that allows researchers to account for the lack of randomization by reducing or eliminating the effects of confounding variables in quasi-experimental designs that are frequently used in educational research. Propensity score matching accounts for non-randomized group membership by creating equal groups through matching individuals across both groups on observed covariates. We explain and demonstrate propensity score matching through a simulated example to establish a better understanding and increase the availability of propensity score matching to researchers. Additionally, potential mistakes and misinterpretations that can occur when researchers do not utilize propensity score matching in quasi-experimental designs is highlighted.

Exploration of Structure Coefficients, Partial, and Semi-Partial Within a Moderated Regression.

**Trey L. DeJong & Lindsay Ellis Lee – University of North Texas*

Utilization of structure coefficients in multiple regression analyses haven been widely accepted in the evaluation of predictor variables in the face of multicollinearity. Also, prior research has described how structure coefficients compare to partial and semi-partial correlations to determine where explained variance originates. However, there is scarce research over the difference in methods for interpreting interaction effects within multiple regression analysis. This paper uses a heuristic example with simulated data to illustrate the utility of structure coefficients as well as partial and semi-partial correlations within a moderated regression.

T3.6 Paper Session

10:40 – 11:55

Cavalier Room

Higher Education

Accelerated Developmental Mathematics: Challenges and Recommendations

D. Patrick Saxon & Nara Martirosyan – Sam Houston State University

The purpose of this study was to identify challenges and best practices in implementing accelerated developmental mathematics (ADM) courses. Analyzing survey data received from 77 faculty members who teach ADM in 2- and 4-year colleges, researchers identified the five most frequently occurring challenges in teaching ADM, as well as the top five recommendations for improving student outcomes in ADM. Based on the findings, practical implications were drawn for future practice in ADM instruction.

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Does Completing a Mathematics Course During the First Semester of College Predict College Success?

Linda R Zientek & Forrest C Lane – Sam Houston State University

College success has been measured by continued enrollment and attaining a college degree. Passing mathematics requirements has been a barrier for some students, particularly students who are required to complete a developmental mathematics course. The purpose of this study is to determine the extent to which completing a mathematics course during the first semester of college predicts graduating with a bachelor's degree in 6 years. Longitudinal data from a 4-year regional public institution in Texas was used to examine patterns among 1,275 first-time enrolled undergraduate students from the fall semester of 2012.

Differences in 2-Year Persistence Rates Over Time for Black Students at Texas 4-Year Universities

Kathleen G VanDyke – Sam Houston State University

The extent to which differences in 2-year persistence rates existed for Black students at Texas 4-year universities from 1999-2013 was addressed in this study. This study is one of the first to analyze 2-year persistence rates versus previous studies that only analyzed 1-year persistence rates. Obtaining data from the Texas Higher Education Coordinating Board, showed a statistically significant difference present in the persistence rates for Black students who attended a 4-year university in Texas between the 2005-2006 and the 2012-2013 academic years. Analyzing these differences can help Texas 4-year universities increase the student success among Black students.

Doctoral Graduates' View on Developmental Mathematics in Their Dissertation Research

**Reubenson Wanjohi – Grambling State University*

In the last several years, the field of developmental education has gone through major reforms. These reforms resulted more research in the field especially for developmental mathematics. This study reviewed available doctoral dissertation research in developmental mathematics conducted over the last two decades. This session will offer the major findings of the developmental mathematics dissertations, along with recommendations for future research and practices. Faculty and practitioners involved in redesigning their developmental mathematics courses could also benefit from this session.

T3.7 Paper Session

10:40 – 11:55

Renaissance Room

Higher Education

Understanding the Needs of Freshman in the Professional Programs of Education and Respiratory Therapy

Staci Morgan, Madison Dodd, Suzanne Lindt, & Jennifer Anderson – Midwestern State University

The researchers sought to understand how to increase recruitment and retention efforts in the education and respiratory therapy programs. After identifying freshman majors in these programs, they were recruited to participate in focus groups and one-on-one interviews to discuss their experiences and beliefs. Following the analysis of transcriptions, it was found that recruiting education majors may not be necessary, but keeping them involved in the program is. For respiratory majors, recruitment may be needed because few students entering college are aware of respiratory therapy.

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Young Millennial Adults' Social Attitudes Toward Disability: Perceptions of Employment, Education, Marriage and Dating, and Residence

Patricia R Huskin – Texas A&M University-Kingsville

Key legislative acts sought to change the lives of individuals with disabilities. Despite historic actions, people with disabilities face negative perceptions and attitudinal barriers. Scholars have highlighted the need for studies to forefront roles of social context in shaping perceptions and attitudes toward disability. This study examined disability attitudes across social contexts, including employment, education, and residence. The study surveyed 746 undergraduate students at a south Texas university. The survey consisted of 11 social context and attitude items relating to employment, education, marriage/dating, and residence. Results demonstrated unfavorable attitudes toward individuals with disabilities, as well as some attitudinal improvements and increased inclusion of individuals with disabilities.

Learning to Speak Financial Aid

Zachary W Taylor & Bicak Ibrahim – The University of Texas at Austin

This study surveyed 575 prospective postsecondary students in the U.S. to learn whether they understood financial aid jargon terms at three different institutions of higher education: public, nonprofit private, and for-profit private four-year institutions. Data suggest the most common financial aid jargon terms prospective students do not understand are FAFSA, master promissory note (MPN), counseling, merit-based, and holistic. In addition, only 51% of prospective students could accurately define both subsidized and unsubsidized loans. Implications for research, practice, and policy are addressed.

Numeracy Competency: What are the Characteristics of the Highest Performing Adults?

**Corina R Kaul – Baylor University*

From the US sample ($n = 7,921$) from the first two waves of the PIAAC dataset, this study specifically examined the characteristics of the 10% of US adults who performed at the highest level on numeracy skills. Additionally, structural equation modeling was used to examine the relationship between environmental, personal, educational, occupational characteristics and numeracy skills those performing at the highest level. The results of this study may have implications related to vocational and public school education.

T4.0	12:00p – 1:25p	Ballroom A/B
	Lunch & Business Meeting <i>Special Ticketed Event</i>	
T5.0	1:30p – 2:45p	Minuet Room
	Presidential Invited Address <i>Dr. Robert Pianta, University of Virginia</i>	
T6.1 Fireside Chat	2:45p – 4:00p	Minuet Room
	Fireside Chat <i>Dr. Robert Pianta, University of Maryland</i> <i>This is an informal, casual opportunity for students to interact with Professor Alexander about whatever issues they would like to discuss.</i> (Graduate Students Only)	

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T6.2 Paper Session

2:45 – 4:00

Poolside 1

Teacher Education

The Intrinsic and Extrinsic Motivators That Emerge From Teachers' Positive Perceptions of Their Mentoring Experiences

Whitney Baker-Beach – Texas Tech University

The downturn in university students choosing to enter the teaching profession along with the increase in in-service teacher attrition rates is alarming. Mentoring has long been a buzzword in the field of education; however utilizing mentoring to it's fullest is tougher than it appears on the surface. This study looked at over 150 schools and their teachers and administrators and discovered several ways that intrinsic and extrinsic motivators emerged from teachers' positive experiences with mentoring. Additionally, several factors that could also affect positive mentoring experiences were discovered through this quantitative analysis.

Leveraging Third Space Amid Chinese and Spanish Student Teachers' Teaching Practicum Experiences: A Transformative Learning Perspective

Gang Zhu – Texas A&M University

This paper examines how the Chinese ($n = 11$) and Spanish ($n = 11$) preservice teachers reflect on their learning-to-teach experiences during the teaching practicum period from the lenses of transformative learning theory and third space. Specifically, the authors traced the Chinese and Spanish preservice teachers' transformative teaching practicum experiences evidenced by (1) disorienting dilemma, (2) reflection and exploration of assumptions, (3) gaining confidence in a new role, (4) behavior changes, and (5) integration of new perspectives. This paper contributes to a fine-grained account of the Chinese and Spanish preservice teachers' transformative learning journeys in different socio-cultural contexts. Implications for fostering third space, namely hybridity and boundary-crossing between university and schools, during teaching practicum are discussed in this paper.

Modeling Teacher Self-Efficacy as a Function of Peer Observation, Administrative Feedback, and Job Satisfaction

**Chau H P Nguyen & Aaron S. Zimmerman – Texas Tech University*

This study used a large-scale, international data set, to examine the manner in which feedback from administrators, time spent observing colleagues' classes, and job satisfaction predicted teachers' instructional self-efficacy. It was found that feedback from administrators was not a significant predictor of teachers' instructional self-efficacy, while peer observation and job satisfaction were estimated as being significant predictors. The results of this study have implications for how school leaders cultivate teachers' instructional self-efficacy.

T6.3 Paper Session

2:45 – 4:00

Poolside 2

Learning

Lessons Learned From A Meta-analysis of Productive Failure Learning Designs

Hansel Burley & Ehsan Ghasemi – Texas Tech University

The purpose of our paper is to report lessons learned from a systematic review and meta-analysis of the impact of productive failure learning designs. This learning design places before students complex, ill-structure problems they cannot solve. Productive failure theory suggests that a correctly constructed productive failure classroom will produce deep and long-lasting learning of concepts. Our

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examination of 45 studies produced an effect size of .62. The effect sizes did not significantly vary about the mean; they were homogeneous. This finding provides evidence that the productive failure classroom produced consistently strong, positive learning effects despite a variety of learning conditions.

The Effects of Attentional Focus on a Sport-Specific Skill and Efficacy Beliefs

Dimitrio A Martinez – Texas Tech University

Researchers have consistently found that a learner's attentional focus can influence learning and performance of motor skills and, most recently, cognitive and affective outcomes. Although external focus is often associated with superior performance acquisition, questions are emerging about types of external foci and the conditions under which it might be most effective. This study was an examination of the influence of attentional focus on performance of a complex sport-specific skill and related efficacy beliefs. Findings revealed performance differences favoring external-distal focus treatment, but no difference in self-efficacy. These findings offer support for the constrained action hypothesis and highlight the advantages of adopting a distal external focus for optimal motor skill performance in a complex sport-specific task.

Dual-Process Growth Mixture Model of Math Achievement and Working Memory Using ECLS-K 2011

Tracy N Sulak, David M Rehfeld, Marie Kirkpatrick, Munube Yilmaz, & Crystal Collins – Baylor University

Prior research has established a relationship between working memory and math achievement, but studies examining the relationship longitudinally in a non-clinical sample are absent from the literature. The current study utilized six waves of ECLS-K 2011 data (N=6478) to estimate a dual-process, longitudinal model of working memory and math achievement. Mixture models for one to six classes were estimated and results indicated four distinct classes of the dual-process model. The results support more training in working memory and its impact in the classroom as well as more research on interventions designed to support low working memory, particularly in mathematics instruction.

Combatting Digital Distractions: Relationships Among Accessibility, Anxiety, Frequency of Cell Phone Use, and Cognitive Learning

Jeff Sorrels – East Texas Baptist University

Brett Welch – Lamar University

**Charlotte Carp – Southeastern Louisiana State University*

Kelly Brown – Lamar University

Technology can improve the educational experience of college students but also serves as a distraction. This study applied marginal value theorem to the problem of cell phone use in the classroom. The technology use of 144 college students was observed in a simulated classroom. Variance was measured between those whose cell phones were placed at the front of the room, those who had their phones placed under their desk, and those who had their phones placed face down on their desk. Frequency of use, anxiety, and cognitive learning were measured and analyzed for differences and correlation.

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T6.4 Paper Session

2:45 – 4:00

Poolside 3

Mathematics Education

Assessing High School Students' and College STEM Majors' Interest In Pursuing Secondary Mathematics Teacher Certification in the Lowcountry Region of South Carolina: A Mixed-Methods Study

Volkan Sevim – University of South Carolina Beaufort

This mixed methods study will assess high school students' and college STEM majors' interest in secondary mathematics education and investigate what incentives, if any, might induce them to enter a teacher education program. Increased knowledge of local factors inhibiting entry into STEM majors and entry into STEM teaching will help researchers to design a more effective teacher recruitment plan.

Factors That Influence Deductive Reasoning

Michael S Rugh, Robert M Capraro, & Mary Margaret Capraro – Texas A&M University

A wide variety of literature and research has been produced on the topic of deductive reasoning abilities, but no systematic review of this extant literature exists. The purpose of this study was to analyze research studies that have examined deductive reasoning abilities with respect to presentation of the task and relevant participant characteristics. Through a thorough and systematic inclusion and exclusion process, eight ($n = 8$) articles were identified that could contribute to this study. The effects of training, using fantasy premises, and various disabilities are discussed.

Factors Influence High School Students' Motivational Beliefs About STEM Disciplines

Aziz Koyuncu – Texas Tech University

**Yetkin Yildirim – Rice University*

This study examines how summer STEM research camp influence high school students' motivational beliefs about science, technology, engineering, and mathematics (STEM) disciplines by considering about students' gender, lunch-status, and underrepresented minority (URM)-status. Participants were 20 high school students of a STEM-focused charter school network in Texas. Descriptive analyses of pre and post survey showed that there were no significant difference in students' motivational beliefs about STEM disciplines from pre- to post-survey; however, there were a few items (i.e., self-efficacy, students identity in technology subjects motivational beliefs per lunch status) found practically significant.

T6.5 Paper Session

2:45 – 4:00

Patio Room

Teacher Education

Mentoring Novice Teachers

Erin A Singer – Texas A&M University

Research indicates that mentor teachers are an integral part of a novice teachers' induction into the field of education and essential for retaining teachers. Five novice teacher and mentor participants were interviewed about their experiences with their mentors and mentees and whether or not the novice teachers would remain in the field of teaching after their induction year. This paper explores the lived stories of novice teachers and their mentors.

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A Comparison of Graduate Student Supervision Needs & Expectations

David M Rehfeld, R Noah Padgett, & Crystal Collins – Baylor University

This paper is an investigation of how the needs of graduate students in a pre-service educational program compares with and is different from their expectations of practicum supervisors. Using information gained through administration of paired rating scales developed by Larson (1981), trends in responses are discussed in addition to their implications for supervisory practice in pre-service educational programs. While data were collected on graduate students enrolled in a communication sciences & disorders program, discussion will be focused on the impact of such information on pre-service education across multiple fields.

Using Social Network Analysis as a Predictor of Sustainable Curriculum Change in Teacher Education

**Courtney K Wilson – Texas Tech University*

A review of literature was conducted concerning the evolution of teacher education, from the traditional university-based programming to the more current competency-based movement, along with an intersection with the literature on organizational change leading to power of social networks on sustainable change. Included in the review and organized in three themes were example studies on challenges with traditional teacher education, transitions to competency-based model programming, and impacts of social networks on change efforts.

T6.6 Paper Session

2:45 – 4:00

Cavalier Room

Teaching

Discussant: Emma Bullock

The Investigation of Collective Inquiry and Transformative Inquiry to the Sustainability of PLCs in Reading and Writing Instruction

Thi Bang Tam Nguyen – Texas Tech University

This qualitative case study is designed to investigate teacher participation in PLCs, the influence of English Language Arts/reading and writing PLCs on teaching approaches, the impact of PLCs on student learning, and the sustainability of PLCs among seventh and eighth grade teachers. Sociocultural Learning Theory (Vygotsky, 1978) and Transformative Learning Theory (Mezirow, 1978) are employed. A qualitative single instrumental case study is used with data collection of interviews, observations of PLCs and teachers, and document review. The influence of collective and transformative inquiry to teachers' learning capacities and practices, students' learning outcomes and the sustainability of PLCs will be illustrated.

Professional Learning Communities, Bureaucracy, and Democracy: Perceptual Evidence from Texas Schools

Cleo Wadley & Angela L Mireles – Stephen F. Austin University

While PLCs are promoted as democratic, their actual practice is bureaucratic. This study contributes to limited literature on this issue. The theoretical framework of this study uses Senge's Learning Organizations. This hermeneutical, mixed-methods, cross-section, non-experimental, survey research study seeks to understand the perceptions of teachers, instructional coaches, and school administrators in a purposeful sample of schools that differ by their PLC policy and practice within a convenient sample of Texas school districts. The data will be analyzed using inferential statistics and thematic analysis. Ethics of research will be adhered to (IRB, confidentiality, anonymity, protection from risk and harm).

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Quality English Language Arts and Mathematics Instruction for Diverse Learners

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

Our schools, once vigorous and dynamic centers for learning, have been reduced to mere test prep factories; diverse learners are not excelling due to limitations related to language barriers, and teacher preparedness for such learners. As America tries to target instruction as a one-size-fits-all approach, it is quite evident that there are many issues at hand. As standardized assessments are on the forefront for schools across the nation, we see a trend of English Language Arts and Mathematics being equally tested. This is another legitimate reason why mathematics and the connection to oral vocabulary and comprehension should be analyzed further.

Early Learning and Child Care Programs and the Impacts on Executive Functions in Socioeconomically Disadvantaged Preschool Students

Anil Karim – University of St. Thomas

This research aims to understand the current status of executive functions in Canadian children coming from low socioeconomic families who have been attending child care programs since they were infants or toddlers. We apply theoretical knowledge about executive functioning on practical early childhood care services with the goal of finding out how our children are doing and how their brains are developing; beyond traditional examination i.e. literacy, mathematics, etc. The specialized assessment tool CHEXI (Childhood Executive Functioning Inventory) is being used to assess children's executive functions allowing educational researchers, teachers, and parents a window into the child's brain development. This study shall be paramount in understanding the effects of the different types of available programs that children from poor families attend and how they affect the children's executive functions. Research indicates that children who develop executive functions and self-regulation abilities in early childhood education programs have greater tendency for improved academic achievement, increased prosocial behavior, and decreased disruptive behavior (Diamond et al., 2007).

Response to Intervention in High Schools: Evidence From a Texas Education Region

Gretchen Ponder – Stephen F. Austin State University

Response to Intervention (RTI) is common in elementary, but less so in secondary schools. My research will add to this subject. The distinction is in my sampling of RTI coordinators. My methodology will use post-positivist, mixed methods, non-experimental, and cross-section uses surveys to relay high school RTI coordinators knowledge from a region in Texas selected for convenience. The IRB will ensure my methodology is valid and reliable. The quantitative data will be analyzed using descriptive and inferential statistics (Laerd Statistics, 2018) and the information will use coding and thematic analysis to ensure anonymity and confidentiality of the participants.

T6.7 Paper Session

2:45 – 4:00

Renaissance Room

Higher Education

Retaining Your Future Scholars: A Content Analysis of Coaching and Mentoring in First-Year Doctoral Education Courses

Jeffrey Keese, Karla A Garza, Nazneen Askari, Karen McIntush, Michelle Norton, Peter Scaramuzzo, & Lynn Burlbaw – Texas A&M University

Doctoral student attrition is a well-researched issue in post-secondary education. Two factors contribute to this problem: a lack of readiness to perform the scholarly tasks of education researchers

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and a failure to form mentoring relationships. The Department of TLAC at the research team's university is addressing this problem by requiring all first-year doctoral students to complete a course that coaches them in scholarly tasks and facilitates the development of relationships with senior department faculty. This paper reports the analysis of syllabus materials of this doctoral course and others to determine the level of coaching and mentoring offered to new students.

Perceptions After Completing the Degree: A Qualitative Case Study of Select Higher Education Doctoral Graduates

Meredith L Conrey, Gene Roberts, Melissa R Fadler, Clifford Johnson, Misty Rasmussen, & Matias Garza – Sam Houston State University

What are the perceptions of higher education administrative professionals who complete a doctoral degree in higher education? What experiences and skills, developed in their doctoral program, do administrators perceive contribute to their post-graduate employment? What, if any, perceived changes do they experience in their professional careers related to their attainment of the degree? This case study explored the perceptions of select higher education doctoral graduates from a single institution in the southern United States who serve as higher education administrators.

Helping Underrepresented Students Enroll in Graduate School: A Multilevel Modeling Examination

**Rachel L Renbarger, Grant B Morgan, & Shan Jiang – Baylor University*

Students from low-income, first-generation, and minority households are less likely to enroll in graduate school or attain a graduate degree compared to their peers. One program that helps students from underrepresented groups enroll in graduate school is a federal TRIO program. This study, using public performance data, utilizes multilevel modeling to examine the graduate enrollment rates of participants. Results indicate that students who attain a bachelor's degree are highly likely to enroll in graduate school and programs vary. Limitations and implications are included.

T7.1 Paper Session

4:05 – 5:20

Poolside 1

Mathematics Education

Examining Open-Ended Problem Solving as Iterative Model Cycles

Victor V Cifarelli – University of North Carolina at Charlotte

This paper reports on a study of pre-service middle-grades mathematics teachers (PMMT) that examined how they used informal modeling methods to solve open ended mathematics problems. Participants came from a Mathematics course for PMMTs ($N = 35$) at a four-year university. Data included results of the students' performance on a mathematics placement exam and written records from interviews conducted with a subset ($N = 15$) of the original sample. Protocols were examined to identify: (1) the role that the student's informal modeling strategies play in solving open ended mathematics problems; and (2) the iterative cycles of modeling that characterized the students' solutions.

Posing Potential: The Impact of Problem Posing Instruction on Mathematics Achievement

Julia E Calabrese & Mary Margaret Capraro – Texas A&M University

Problem posing, or having students create mathematics problems, is becoming increasingly popular. The present study synthesizes prior research on the impact of problem posing instruction on mathematics achievement. Articles selected for synthesis were of pretest-posttest format and included quantitative data comparing problem posing and problem solving for students at the elementary and

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middle school levels. Effect sizes (Cohen's d) were calculated for all individual studies as well as for the overall impact of using problem posing strategies with students on their mathematics achievement. All effect sizes were positive, indicating that using problem posing instruction has the potential to increase students' mathematical achievement.

Teacher Engagement & Maker Project: Enhancing Pre- & Inservice Elementary Teachers Mathematics and Science Skills

**Patricia Larke, Gwendolyn Webb-Hasan, Lynn Burlbaw, & Rebecca Schlegel – Texas A&M University*

In meeting the need to strengthen the science and mathematics content of inservice and preservice teachers, our project designed a Teacher Engagement and Maker (TEAM) Professional Development (PD) Workshop. This study paired one inservice teacher and one preservice teacher and one preservice intern to work as a team when participating in the TEAM workshop. As such, this proposal will share the results of a collaborative/ interdisciplinary project that used a PD workshop approach to assist 11 elementary inservice teachers and 14 preservice teachers in building their science and mathematics content using instructional models centered around the MAKER principles.

T7.2 Invited Workshop

4:05 – 5:20

Poolside 2

Free Workshop

An Introduction to Exploratory Factor Analysis: Assessing Construct Validity

Celia Wilson – Texas Wesleyan University

Doctoral students often utilize one or more data collection instruments during the dissertation, or other research, process. In doing so, it is important construct validity be considered and assessed. One method often used to study latent constructs thought to be present in a set of observed variables or items is exploratory factor analysis (EFA). EFA is often conducted as an initial step in providing subsequent empirical evidence, beyond the instrument development process, of the factor structure of a given instrument. Participants will gain knowledge of the purpose, use, and importance of EFA in the assessment of construct validity.

T7.3 Paper Session

4:05 – 5:20

Poolside 3

Higher Education

Discussant: Sandra Acosta

The Effect of the 2017 Trump Administration Travel Ban on International Graduate Applications at Two Texas Public Universities

Dana Van De Walker – Sam Houston State University

In this project, the researcher seeks to explore the relationship between immigration events, namely the Trump Administration ban on individuals from seven Muslim-majority countries (Executive Order 13769), and international student mobility. The researcher aims to analyze the change, or lack thereof, in the international student application rate to graduate programs at two Texas institutions before, shortly after, and more than a year after the ban.

Becoming Academically Literate, the Challenges and Successes of International Students in a Small Community College: A Pilot Study

Crystal D Rose – Texas Tech University

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The following paper outlines a proposal for a semester-long intrinsic case study with 10 international students at Central College (pseudonym). This study will serve as a pilot study for future critical participatory action research. The students are over 18 years of age, in their first semester of college, starting their higher education journey in developmental reading and writing, and from various countries throughout the world. Data collection will include interviews with students, interviews with faculty, classroom observations, and student writing samples. I will specifically examine the experiences of international students during their first semester of college in the United States as they work to achieve academic literacy.

Narratives and Counternarratives of Feminist Student Protests in Chile

Amy E Biedermann– Texas State University

Chile is currently in the midst of wide-spread feminist student protests against sexism in higher education. In 2018, protests occurred at over twenty universities in the country's capital city of Santiago and several of these universities were forced to cease operations for periods of multiple days due to student take-over. This research project seeks to explore the narratives of Chilean college students who participated in this movement, and conversely, to uncover perspectives excluded from the dominant narrative. A poststructural feminist lens will be utilized in the analysis of interview data to highlight expressions and interpretations of incompleteness and complexity.

Latina Community College Students' Perceptions of Barriers to and Supports From On-time Program Completion

**Chris D Trevino – Houston Baptist University*

Texas is facing some critical points that must be addressed in its' social and economic resources to achieve skillful and educated workforce and be competitive nationally and internationally (Murdock, Cline, Zey, Jeanty, & Perez, 2014). Latina students' enroll in post-secondary institutions in large numbers, and their population segment creates the largest community college enrollment growth in the nation (Johnson, 2007). Even though the reviews seem to be positive with enrollments increasing, retention and graduation rates which are decreasing.

T7.4 Paper Session

4:05 – 5:20

Minuet Room

School Environment

School Climate Characteristics and Student Outcomes: A School-Centered Approach

R.Noah Padgett & David M Rehfeld – Baylor University

The 2015-16 School Survey on Crime and Safety (SSOCS) dataset was collected from public school in order to study the relationships among individual school characteristics and crime and safety. We investigated the relationship among school crime and safety characteristics and student outcomes with a regression mixture model. The individual crime indicators had little predictive utility of student outcomes whereas the combination of all of the indicators improve the performance of the model. Once we accounted for unobserved heterogeneity, we found evidence of differences among the schools which was not evident otherwise. Implications of unobserved heterogeneity are discussed in our paper.

A Pilot Study: An Exploratory Investigation on Flexible Furniture in an Elementary School and the Impact on Student Engagement

Jorge Carmona Reyes – Baylor University

Judy York – Education Service Center Region 12

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Leanne Howell, Shanna Attai, & Truell Hyde – Baylor University
Kerri Ranney – Huckabee, Inc.

Flexible furniture is believed to improve student engagement (Snow-Gerono, 2005); however, there is limited research on student engagement at the elementary school level (Appleton, Christenson, & Furlong, 2008). Thus, an exploratory study was design to understand the construct of student engagement and its interaction with flexible furniture at that elementary school level. A phenomenological-case study research design was employed and the experiences of all participants (i.e. students, teachers, parents, school administrators, researcher observers and participating student teacher assistants) were recorded. The experiences lived suggest that there is a relationship between student engagement and flexible furniture and these will be discussed in the presentation.

Teachers' Professional Development Needs and Barriers: A Latent Class Analysis Approach

Rachel Renbarger, Anna M Payne, Crystal Collins, & Tracey N Sulak – Baylor University

Professional development for teachers is often used to improve school environments and positively impact student outcomes. However, little is known regarding how teachers group together in terms of their perceived professional needs for and barriers to professional development. Using a nationally representative sample of United States teachers, a latent class analysis was conducted to understand what groups of teachers exist in regard to their professional development. Results indicated that there are five classes of teachers with varying combinations of needs and barriers and few teachers have no needs or barriers. Implications for schools and research are discussed.

Exploring the Relationship Between Parent Participation and Fifth Grade Student Achievement

**Christine A Irvin – University of Houston-Clear Lake*

The purpose of this study is to examine the relationship between parent participation in education on student achievement. A purposeful sample of fifth grade parents from seven elementary schools in a large school district in southeast Texas was solicited to provide responses to the Parent and School Survey (Ringenberg, Funk, Mullen, Wilford, & Kramer, 2005). The data was analyzed using Pearson product-moment correlation to determine whether a statistically significant relationship exists between parents' perceived participation in education and fifth grade State of Texas Assessments of Academic Readiness scores. The solicited parents were also invited to participate in focus groups.

T7.5 Paper Session

4:05 – 5:20

Patio Room

Pre-Service

Data Driven Practicum and Internships: Putting Theory Into Practice

Tia Agan, Raelye Self, & Heather Schoen – Angelo State University

Practicum courses provide candidates opportunities to obtain supervised experience and integrate theoretical and practical knowledge gained during the graduate program through meaningful field experiences. This is one of the most important aspects of educator preparation as candidates conceptualize and put into practice real-world experiences that transform them into educators who are prepared with skills and confidence to succeed. Because of the importance of the practicum experience for full transformation, university professors must ensure that candidates are receiving the most quality experience. The presenters will review program data in areas of program improvement, documentation, communication, and feedback.

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Trends in Educator Preparation

Tia Agan & Kinsey Hansen – San Angelo State University

Texas Education Agency (TEA) Texas Administrative Code (TAC) Chapter 228 holds educator preparation programs accountable for developing teacher candidates that are prepared, trained, and experienced. Additionally, it includes regulations for field supervisor certifications, including observation training. Because of these TEA requirements, the traditional model of teacher and administrator preparation have evolved into a more strengthened system of support and collaboration. The presenters will share an overview of teacher preparation as it has evolved over the past few years and add some updates on the educational administration program and end with a summary of current trends.

College Professors' Reflections on Working in a School District: A Discourse Analysis

Kimberly S Peters & Julie Smit – Texas Tech University

In many universities, professors associated with colleges of education are embedding themselves into the classrooms of public schools. This paper analyzes the discourse of university professors as they reflect upon their experiences. The data indicated that both professors were willing to significantly support the literacy development and goals of the schools, but both professors felt that their ability to achieve the stated goals was inhibited. As more universities partner with local school districts to maximize the expertise of the college, the voices of professors as they reflect on their experiences provide a needed viewpoint for successful implementation.

NSF Robert Noyce Internship Program: Preparing Future STEM Teachers

**Monica Wong-Ratcliff & Marie-Anne Mundy – Texas A&M University-Kingsville*

A Texas university was awarded \$1.2 million from NSF Robert Noyce Teacher Scholarship Program to alleviate the shortage of certified secondary STEM teachers. One of the grant activities was the Summer Internship Program, which was a 4-week, paid learning experience. With the support of the University Special Programs, the interns were assigned to shadow mentor teachers in STEM classrooms. Two online surveys were administered to investigate the satisfaction rates of the interns. The results showed that the interns were highly satisfied with their learning experiences. Almost half of the interns decided to pursue teaching certificates to become secondary STEM teachers.

T7.6 Paper Session

4:05 – 5:20

Cavalier Room

Teacher Preparation

Impact of Professional Noticing Framework on Pre-Service Teachers Understanding of Struggling Students' Mathematical Thinking

Connie Ginnings, Amanda Latham, Emily Rutherford, & Dittika Gupta – Midwestern State University

Teaching is a complex endeavor requiring teachers to make decisions based on students' thinking. Pre-service teachers, training to be future teachers, need to be equipped with insight to notice, understand and analyze student work especially for struggling students so as to provide them with the support needed to be successful. The paper examines pre-service teachers' skills to recognize, identify and make instructional decisions when provided with explicit instructional guidance by the researchers. Results of the study inform the effectiveness of the research study and insight into pre-service teachers' understanding in analyzing student work and making instructional decisions for struggling students.

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Mentoring Students in a Teaching Role

Janet Hammer, Robin Rackley, & Rachel Turner – Texas A&M University

Mentoring helps students achieve success, and that is the University's core business (University of Washington). In large research universities, this level of commitment, while an enviable goal, is difficult to achieve. Serving as mentor is not included in the job description and does not contribute to funding or research; the benefits to the instructor are intangible (VanMouwerik, 2017). Bellows and Perry (2005) found that graduate students who develop positive mentoring relationships with faculty mentors are more likely to receive financial support in the form of assistantships, scholarships, or fellowships and exhibit greater research productivity. This paper will explore the implementation of a mentoring program for graduate students who are serving in a teaching role at a large research university.

Exploring Writing Processes and Writing Efficacy of Pre-Service Teachers

**Inci Yilmazli Trout – University of the Incarnate Word*

Teaching writing to pre-service teachers (PSTs) is a complex undertaking in teacher preparation. In order to teach writing well, PSTs need to develop their own efficacy as writers and strengthen their writing skills. With the purpose of supporting PSTs, a formative, longitudinal study was designed to implement strategies focusing on revision and reflection on writing. As part of this study, current paper explores the writing processes of PSTs and how revision and reflection influence their self-efficacy in writing. This study is significant as improving PSTs' knowledge of writing and identity as writers would positively influence their practices in teaching writing.

Desire for Change: Results From a Mathematics Teacher Professional Development Program

Sandra B Nite – Texas A&M University

Teachers ($N = 17$) from high need schools in the southwest U.S. attended sustained professional development that included research-based instructional practices. Teachers were asked what they planned to implement in their classrooms. Content analysis of their responses revealed ten themes regarding teachers' planned changes in response to the professional development: 1) real life connections, 2) understanding student thinking, 3) hands on activities, 4) effective questioning, 5) critical thinking, 6) creativity, 7) technology integration, 8) problem solving, 9) communication, and 10) collaboration. These themes align well with inquiry based instructional practices and development of 21st century skills.

T7.7 Paper Session

4:05 – 5:20

Renaissance Room

Technology

Exploring Instructional Interventions Affecting Learning of Computational Thinking in an Online Learning Environment: A Mixed Methods

Hyunchang Moon & Jongpil Cheon – Texas Tech University

Although the assessing of computational thinking has received a good deal of attention, a learning intervention to improve computational thinking has been comparatively neglected. This study explored what computational thinking (CT) concepts undergraduate students struggle with and how an instructional intervention would assist them in improving effective computational thinking skills. Both qualitative and quantitative data will be collected during the 2018 Fall semester of an undergraduate online course. More findings and implications will be discussed in the presentation.

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Problematic Social Media Use, Academic Procrastination, and the Moderating Role of Mindfulness

Bryan Sapon, Laela Ezzeddine, & Danya M Serrano Corkin – University of Houston-Downtown

Excessive social media use is a growing concern among educators. However, little research has examined the effects that problematic social media use has on student's academic procrastination and achievement. Thus, this study explored the effects of social media on students' academic procrastination, achievement, and the degree to which students' mindfulness moderated these effects. Participants were 103 undergraduate students. Hierarchical regression analyses indicated that problematic social media use significantly predicts academic procrastination. Moreover, highly mindful students were found to procrastinate less and mindfulness was found to moderate the effects of problematic social media use on academic procrastination. Data collection is on-going.

Immediate Feedback Using Student Response System

Austin Kureethara Manuel – Midwestern State University

The current research investigated the effects of providing immediate feedback using a student response system (SRS) to 53 students who had statistically significant similar math skills. The students in the experimental group ($n = 25$) received continuous, rigorous, and consistent immediate feedback for their responses through SRS, whereas, the students in the control group ($n = 28$) lacked the same for 18 weeks. An analysis of covariance (ANCOVA) revealed a statistically significant difference in the math achievement of students in the experimental group with a medium effect size ($\eta^2 = .11$), when controlling for giftedness, gender, and economic status.

Middle School Students' Perceptions of Engineers and Engineering in an Engineering-Design Summer Camp

**Emel Cevik, Bugrahan Yalvac, Jennifer Whitfield, & Sara Raven – Texas A&M University*

In this study, which is a part of an NSF-funded engineering research project, we assessed to what extent participation in a one-week long engineering summer camp impacted middle school students' perceptions of engineers, engineering, and technology. During the camp, students engaged in authentic engineering-design activities using 3D printers, computer-aided design tools, and "Internet of Things" technologies. In order to assess the impact of the camp, we administered a pre and post-Draw An Engineer Test (DAET) and conducted semi-structured interviews. Results may inform future research about how extracurricular activities could be used to improve students' perceptions about engineers, engineering and technology.

T7.8 Paper Session

4:05 – 5:20

Ballroom C

Assessment

Reconsidering Research Paradigms: Using Texas End of Course Performance to Evaluate Innovation in EPISD

Liz Bergeron – New Tech Network Schools

The El Paso Independent School District (EPISD) is committed to graduate every student prepared for postsecondary life and beyond. The district serves an ethnically, culturally, socioeconomically, and linguistically diverse population of approximately 60,000 students across 92 campuses, situated on the US- Mexico border. This research examines the impact of implementing Project-based Learning in 4 schools within schools in EPISD. Data from Texas End of Course performance and school culture surveys is used to explore the impact. Chi-Square results suggest that the students in SWS outperform their counterparts on the host campus.

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Profile Analysis of Teachers Based on Results of a Battery of Student Assessments

Modesta Juarez-Jacinto & Jay S Raadt – University of North Texas

Administrators from a North Texas school district make decisions about teachers based on a battery of student assessments. A profile analysis (PA) of factor scores allows inferences about flatness, equality, and parallelism of factor scores. These statistical tests showed that teacher profiles were flat, not equal, and not parallel and that variation in factor profiles accounted for by parallelism was high. Post-hoc tests show that district-mandated assessments are the cause of non-parallelism, which means that inferences about teacher ability would be based mostly on a single assessment, not the battery of assessments.

Reducing The Number of Tests Taken by Students Using Exploratory Factor Analysis

**Modesta Juarez-Jacinto & Jay S Raadt – University of North Texas*

A North Texas school district wishes to reduce the number of assessments they use to make decisions about reading interventions, which is a goal of dimension reduction. Thus, an EFA was conducted on 36 assessments for 255 individuals. A ProMax-rotated four-factor structure explaining 63% of variance in the correlation matrix was the most reasonable solution. One assessment had an unacceptably low factor loading and h-squared coefficient, indicating that it may be redundant, accomplishing this study's main goal. Additionally, teacher-created assessments were good indicators of the underlying construct, showing that teachers can create valid assessments without the aid of educational researchers.

T8.1

5:25p – 6:30p

Ballroom C

Graduate Student Meeting

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

T8.2

7:45p – ????

Lobby

Graduate Student Social

Pat O'Brien's

Scheduled immediately following the graduate student meeting

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F0.1	8:00a – 12:00p	Ballroom C Foyer
	Registration	
F0.2	8:00a – 9:00a	Ballroom A/B
	<i>Continental Breakfast</i>	
F0.3	8:00a – 8:45a	Sam Houston Boardroom
	<i>Graduate Leadership Council</i>	
	Plan for the coming year and set priorities for incoming graduate leadership council members.	
F1.1 Workshop	8:45 – 10:00	Poolside 1
	<i>Free Workshop</i>	

Managing the Literature Review With Mendeley

Julie P Combs, Gene Roberts, & Melissa Fadler – Sam Houston State University

Doctoral students and faculty might encounter roadblocks in the academic writing process that can lead to frustration and delay productivity. One common challenge is managing the literature review process. In this session, an academic writing professor along with doctoral students will demonstrate the free reference manager software, Mendeley. Ideally, participants should bring a device downloaded with a copy of the free software at www.mendeley.com. Participants will take away ideas for organizing materials to complete a project or manage an on-going research topic.

F1.2 Paper Session	8:45 – 10:00	Poolside 2
	<i>Assessment</i>	

A Foot in Two Worlds: Describing the Experiences of High School Dual Credit Teachers

Rachel E Jones – The University of Texas at Arlington

Dual credit is a rapidly-expanding college readiness strategy. Teachers of dual credit courses are often full time high school teachers who are also employed as adjunct college instructors. Although this unique population of teachers are critical to dual credit students' college readiness, little is known about their experiences. This qualitative study examines dual credit teachers' perspectives regarding employment at two educational institutions, the charge of promoting college readiness, and dual credit program elements. Because they are directly involved at the intersection of high school and college, dual credit teachers' understandings could hold important clues regarding elements that promote college readiness.

Immigrant Children of the Diaspora: Narrative Inquiry Into the Identity Paradigm of Filipino American Adolescents Using Literary Texts About Filipino Americans

Charity G Embley – Texas Tech University

The more books there are about/for and written by people of color, and importantly, if a person of color is featured in the narrative, young readers can reflect on the diversity of their lives in books. This inquiry was an exploration of the ways the reading of literary texts about Filipino Americans, help Filipino American adolescents explore their identities. Narrative inquiry and themes of separation, attachment, and self-discovery underscored the need for visibility of Filipino American texts in mainstream K-12 classrooms. Thus, culturally responsive teaching encompasses diversity wherein students acquire more knowledge about the challenges of other ethnic/racial groups.

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Rebounding From Intimate Partner Violence Through Self-Development and Education

**Charity G Embley – Texas Tech University*

This narrative study is about the experiences of three women in an intimate partner violence and their attempts to pursue an education. Research has focused on reasons women stay in abusive relationships, yet little has been learned about their perspectives towards self-development. Rather than stipulate solutions, the purpose of this inquiry is to explore aspects that contributed to (a) the nonprioritization of self-development, and (b) their capacity to pursue education. Themes of surpassing, reversal, responsiveness and self-efficacy, emerged. Thus, one might be immediately drawn to a distinctive plot, which marks a lack of self-empowerment to potentials of self-development.

F1.3 Paper Session

8:45 – 10:00

Poolside 3

Instruction

Discussant: Mary Margaret Capraro

Teacher Personality Traits and Openness to Collaboration in Co-Teaching Partnerships

Brittany S Craig – University of Houston-Clear Lake

To comply with special education law, schools must include special education students in the general education classroom to the maximum extent possible. Co-teaching is a widely used inclusion practice for students with disabilities. The issue is the successful implementation of this practice. There could be many factors that hinder implementation. This study examines the teacher collaboration aspect of co-teaching, by correlating the personality traits of teachers in co-teaching partnerships and the teacher's openness to collaboration. Previous research indicates there are specific personality traits correlated to highly-qualified teachers, but there is limited research in collaboration and personality traits of teachers. The findings from this study will aid principals when hiring teachers for the purpose of co-teaching.

Effects of Concrete-Representational-Abstract (CRA) Instruction on Tier 3 Students' Math Achievement and Attitudes in an RtI Model

Kimberly E Jones – Texas A&M University-Corpus Christi

It is widely known that students must develop both conceptual and procedural knowledge when learning mathematics. The concrete-representational-abstract (CRA) sequence of instruction supports the development of both. Students work with manipulatives and visual representations to develop deep conceptual knowledge before attempting to work with abstract procedural processes alone. Furthermore, it offers opportunities for students to verbalize their thinking, explore mathematical concepts with scaffolded support, and demonstrate their knowledge in a variety of ways. This research seeks to determine if CRA is an effective intervention strategy for teaching long division in Tier 3 of a Response to Intervention (RtI) model.

Differentiated Instruction: Understanding the Perceptions and Practices of Teachers

Serife Turan, Chau Nguyen, Mehmet Cihan, Ozge Cihan, & Selenda Cumby – Texas Tech University

The diversity extends to the academic readiness of the students in the classroom, and teachers should keep their lesson engaging to students with a wide range of interest, learning styles, and prior knowledge. Differentiated instruction is a philosophy that acknowledges students learn at different rates and in many different ways. Differentiated instruction can take many forms. The

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teacher can adapt their lessons, so they can be understood by students with different aptitudes and abilities.

Challenges Beginning Elementary School Teachers Face: Reasons and Solutions

**Chau H P Nguyen – Texas Tech University*

This study will explore challenges beginning elementary school teachers encounter, reasons, and solutions for the challenges. The participants will be five U.S. beginning elementary school teachers who will be selected using the purposive-sampling approach (Merriam, 1998, 2009). Data will be collected via three sources: observations, interviews, and documents. Based on the findings, implications for policy makers and practitioners will be presented at the end of the study.

F1.4 Paper Session

8:45 – 10:00

Minuet Room

*Educational Reform
Discussant: Fernando Valle*

Teacher Leadership Development in the Urban Setting

Robert R Michaels-Johnson – Sam Houston State University

As teacher leaders become increasing ubiquitous, initiatives to identify, develop, and support those leaders are also increasing. Despite this growth in practice, consensus has not been reached on a broadly accepted definition of teacher leadership, and questions remain as to how teacher leaders evaluate their own effectiveness. By way of a systematic literature review, this study will explore the various definitions of teacher leadership and teacher leader practices. Additionally, through an analysis of archival program qualitative data, the experiences of teacher leaders who participated in a district-wide teacher leader initiative will be analyzed.

School Choice and Non-Educational Variables: Student Transfer Evidence From Texas

Julie Olguin-Phillips – Stephen F. Austin University

The literature favoring school choice focuses mainly on the role of educational variables in that choice. This study contributes to a limited literature favoring school choice that is interested in non-educational variables as well educational variables. The theoretical framework of this study draws from the Free Market Theory. This post-positivistic, quantitative, cross-sectional, non-experimental, secondary-date analysis research studies the correlation between student transfer and a variety of educational and non-educational district metrics in a random sample of Texas school districts. The data will be analyzed using descriptive and inferential statistics. Ethics of research will be adhered to (IRB, confidentiality, and anonymity).

Freedom, Community, and Speech: Perceptions of Texas High School Students

Bethany R Gentry – Stephen F. Austin University

Controversial offensive speech is on the rise in today's American society. There is however no agreement on what constitutes such speech exactly. This interview study will contribute to the corresponding literature by eliciting the perspectives of a diverse purposeful sample of high school students from a convenient sample of two school districts in a southern state. This hermeneutical study uses a Bakhtinian theoretical framework and will be qualitative, non-experimental, and cross-sectional. Interview data will be analyzed using coding and thematic analysis. The ethics of research will be adhered (IRB, protection of anonymity and confidentiality and from discomfort, risk, or harm).

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K-12 Leadership Survey for Learning Analytics Adoption

**Justin T Dellinger –University of Texas at Arlington*

Although learning analytics holds great potential as a data-driven way to improve student outcomes in K-12, there are significant barriers to the adoption of these tools. The development of a research-informed framework that can help guide the implementation of learning analytics and improve its overall effectiveness is critical for public school leaders in a period of increasing accountability, as well as federal and state policies that promote the use of large-scale learning data and educational technology. This study will investigate motivations and self-efficacy of administrators relating to learning analytics, as well as contextual factors such as district and leader characteristics.

F1.5 Paper Session

8:45 – 10:00

Patio Room

Teacher Retention

Teacher Attrition and Teacher Burnout: Exploring the Effect of Being a Highly Motivated Teacher

Jay S Raadt – University of North Texas

Teacher burnout and teacher attrition lead to teacher shortages. Moreover, people differ in their ability to see the connection between current behavior and future payoffs, which is called motivation. Using a finitely repeated game theoretic model, this paper shows that highly motivated teachers realize lower long-term payoffs than teachers with a more balanced motivational profile. Thus, this paper shows evidence of the need to control one's motivation; teachers who are motivated to exert great amounts of effort may burn out and may even leave the profession completely. Teacher preparation programs should include units on controlling motivation to maximize long-term payoffs.

Experiences of Early Childhood Interventionists: Stress Levels, Staff, & Enjoyment Levels

Jennifer Camacho – University of North Texas

Exploring factors related to job satisfaction and enjoyment, along with stress levels among early childhood interventionists may provide solutions to the high turnover rates and low employee satisfaction rates often associated with this line of employment (Bridges, Fuller, Huang, & Hamre, 2011; Dillenburger, 2004). Information regarding potential factors that may influence job satisfaction and enjoyment can be examined by reviewing responses to semi-structured interview questionnaires from early childhood interventionists located in Texas. The research study will also review the importance of reflective supervision/consultation (RS/C), as questionnaires will be provided to participants prior to receiving RS/C, and then nine months after receiving such services.

Modeling Teachers' Perceptions of Teacher Evaluations as a Function of Teacher Characteristics

Paula Szymanski & Aaron S. Zimmerman – Texas Tech University

Teacher evaluations can help teachers identify areas for growth. However, evaluations conducted by school administrators do not always have this intended effect. This study used a large-scale, international data set to estimate a linear regression model that predicts whether or not teachers believe that the evaluations that they are experiencing in their school provide them with useful and constructive information. The results of this study estimated that time spent in dialogue with colleagues as well as the perceived comprehensiveness of the evaluation were among the most significant factors that predicted whether or not teachers valued their evaluations.

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Does Extended Professional Development Experiences Correlate With Constructivist Teaching Practices?

**Sheri Caine – Texas Tech University*

While the Next Generation Science Standards promote constructivist teaching practices, teachers need professional development to implement constructivist pedagogy in their classrooms. This statistical analysis seeks to determine the extent that professional development experiences correlate with teachers' constructivist teaching practices. The conceptual framework underpinning this study comes from a variety of past research in effective professional development. The data used in this study comes from the teacher questionnaire of the 2013 TALIS data set. Surprisingly there were no relationships between the variables, showing the amount of time in professional development and constructivist teaching practices were simply unrelated.

F1.6 Paper Session

8:45 – 10:00

Cavalier Room

Literacy

Discussant: Sharon Matthews

Critical Digital Crusaders

Elizabeth D Jones – Texas Tech University

This proposed study is to explore how cosmopolitan critical literacy as a theoretical framework encourages agency. Digital media has created opportunities for adolescents to connect internationally, thus making students aware of global issues that generate social barriers and inequalities. Digital media require students to analyze and evaluate information quickly. This qualitative action research case study will examine how digital media influences agency and academic literacy skills in 6th, 7th, and 8th grade students participating in a literacy intervention program. Implications for this study will provide a further understanding of how to integrate cosmopolitan critical literacy into middle school curricula.

Student and Teacher Perceptions of the Effects of Extrinsic Motivation on Student Achievement in Reading

Nancy H Barajas – University of Houston-Clear Lake

This mixed methods study seeks to determine students' and teachers' perceptions of causal attributes for increased reading comprehension. Intrinsic motivation alone is not sufficient for struggling readers. This study seeks to examine student and teacher perceptions of the effects of extrinsic motivation on the reading achievement of upper elementary students whose comprehension is two or more grade levels below their present grade. This is done through a survey instrument as well as qualitative interviews with students and teachers at an elementary school.

A Survey of Elementary Teachers' Language Ideologies and Their Perceptions of Biliteracy

Rolando A Merchán – Sam Houston State University

Some U.S. educators hold language ideologies that favor English over other languages, while simultaneously equating fluency in other languages as problematic. This ideology potentially affects how teachers instruct in monolingual and bilingual classrooms (De Korne, 2012; Fielding, 2016). This study addresses language ideologies among select teachers in south-central Texas. Examining teacher ideologies might enlighten school and district administrators on how to improve their efforts to offer effective bilingual and multilingual education options in their schools.

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Acculturation, Self-Esteem and Language Proficiency.

**Irma Esparza & Norma A Guzman – Texas A&M University-Kingsville*

One of the problems faced by some students is they do not succeed in the proficiency level of second language. Traditionally, ELLs succeed in most of the subjects of bilingual programs; however, they have difficulties increasing language proficiency. It is primordial for this study to comprehend the relationships that exist in the interaction among acculturation, the contexts in which the second language is used, and their influence on self-esteem. To explain how ELLs feel in the academic contexts in which they expend their academic and non-academic time is elemental as well as to know how students feel when they use the second language in academic and non-academic contexts.

F1.7 Paper Session

8:45 – 10:00

Renaissance Room

Technology

Modeling Student Teachers' ICT Knowledge Integration in Teaching Practicum

Gang Zhu – East China Normal University

Researchers explored the relationships among self-efficacy, attitude toward computer use, and information communication technology (ICT) knowledge integration through structural equation modeling. Based on the questionnaire responses from 206 student teachers who finished the teaching practicum in China, student teachers' self-efficacy had a direct significant effect on their ICT knowledge integration ($\beta = 0.32, p < 0.001$) and attitude toward computer use ($\beta = 0.33, p < 0.001$). Meanwhile, student teachers' attitude toward computer use had a direct significant effect on their ICT knowledge integration ($\beta = 0.47, p < 0.001$). Furthermore, the Sobel test revealed that teachers' attitude toward computer use ($\chi^2 = 3.250, p = 0.001$) significantly mediated the indirect relationship between self-efficacy and ICT knowledge integration.

*****SERA Research Grant Award Winner*****

Effects of Coaching Based Professional Development on Teachers' Digital Learning Development

Wendi K Zimmer – Texas A&M University

While many studies examine strategies for supporting students' use of out-of-school literacies for in-school instruction, a gap exists in developing strategies to assist teachers, often also proficient in using out-of-school literacies to learn, to apply these digital literacy (DL) skills to in-school instruction. As learning identity relates to perception of confidence and ability, a possible link exists between teachers' digital learning identity and the low percentage of teachers successfully using digital literacy for instruction. The purpose of this study is to test the efficacy of a coaching model for increasing teachers' personal DL.

An Analysis of Information and Communication Technology Adoption and its Impact on Reading and Mathematics Assessment Scores for 4th and 8th Grades: A National Study

Bahia Braktia, Ana Marcela Montenegro, & Lory Haas – Sam Houston State University

With the increased emphasis to integrate Information and Communication Technology (ICT) in educational curriculums at all levels, it becomes necessary to explore and determine to what extent this is taking place. The purposes of this study were twofold, first, to explore the implementation

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of policies and practices in relation to ICT as reported by each of the 50 states in the United States. A second purpose of this study was to analyze the relationship between the incorporation of ICT and reading and mathematics assessment scores for 4th-and-8th grade students among states that reported they have integrated ICT in the curriculum.

Investigating the Potential of Multimedia to Expand Teachers' Perceived Effectiveness at Engaging Learners and Enhancing Student Achievement

**Katie Alaniz & Dawn K Wilson – Houston Baptist University*

Multimedia tools and resources play a ubiquitous role in the lives of society's younger generations. They consume, create, and publish multimedia content at an unprecedented rate. This particular study purposes to explore the potential of multimedia integration to expand teachers' perceived effectiveness at engaging learners and enhancing achievement. The method of inquiry is a qualitative case study consisting of in-class and online discussion forums and written reflection papers, each of which offer graduate education students the opportunity to share observations relating to the impact of multimedia integration upon their students' levels of engagement and progress towards identified learning objectives.

F1.8 Invited Workshop

8:45 – 10:00

Ballroom C

Free Workshop

Mixture Models: Introduction & Applications

Grant Morgan & R. Noah Padgett – Baylor University

Mixture modeling is an increasingly popular and powerful set of analytic techniques for social scientists. In this workshop, we introduce the fundamentals of mixture modeling as a family of procedures as well as present a variety of applications of mixture models, including latent class models, factor mixture models, regression mixture models, and growth mixture models. Cautions and modeling considerations will also be provided along with sample Mplus and/or R scripts for each type of model.

F2.1 Workshop

10:05 – 11:20

Poolside 1

Free Workshop

Teaching Research Methods: Innovation in the Pedagogy of Quantitative and Qualitative Courses

Mandolen Mull – Rockford University

Rachel Renbarger – Baylor University

Shirley M Matteson – Texas Tech University

Grant Morgan – Baylor University

Kim F Nimon – The University of Texas at Tyler

Have you ever learned quantitative analyses through music? What about learning how to code qualitative themes using Chex Mix? Has anyone ever described the process of research methods as being an authentic learning opportunity? This 50-minute training session focuses on innovative strategies for teaching quantitative and qualitative methods. Introduced by two doctoral candidates with ambitions of teaching research methods, this session showcases the teaching techniques of three prominent research methods scholars. With over 200 combined published articles, backgrounds in mathematics education, educational psychology, and human resource development, the scholars share strategies for teaching research methods in an engaging manner.

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F2.2 Paper Session

10:05 – 11:20

Poolside 2

Assessment

Discussant: Renée E Lastrapes

Texas STAAR Assessments: Academic Readiness Correlation to College Preparedness

Ashley F Carter – The University of Texas at Austin

This study is designed to investigate the correlation between student performance on the State of Texas Assessments of Academic Readiness (x) exams and college course-taking patterns and class performance. Studies show that many postsecondary students are not prepared for college-level work and must complete developmental classes before enrolling in for-credit coursework. This study will use the Pearson correlation on pre-existing data from a large Texas public research university of first-year college students who took STAAR examinations for high school graduation.

Factor Structure of Perfectionism

Lindsay E Lee & Marcus A Fagan – University of North Texas

Perfectionism is a multidimensional construct that requires closer examination of trusted measurements before relating to other latent factors in educational environments. The current study aims to further unravel the components related to perfectionism through item-level data analysis with long form versions of perfectionism instruments. This study will propose multiple plausible factor structures using 12 subscales obtained from Hewitt and Flett's (1991) Multidimensional Perfectionism Scale (HFMPS), Frost et al.'s (1990) Multidimensional Perfectionism Scale, and Slaney et al.'s (2001) Almost Perfect Scale-Revised (APS-R) Multidimensional Perfectionism Scale. Implications, limitations, and future suggestions for educational research will be provided.

Correlation of Claim, Evidence, and Reasoning (CER) as a Writing Framework and Students Success Rates in High School Science Standardized Tests

**Muhammad Abid – University of Houston-Clear Lake*

This study is the extension of the research that evaluated whether correlations exist between students writing scientific explanations using a literacy writing framework known as Claim, Evidence, and Reasoning (CER) in science classrooms and student achievement on standardized tests, such as Curriculum Based Assessments (CBA). This study will employ mixed methods research to determine the implementation of CER and effect on students CBA scores. Teacher interviews, demographic data and the district curriculum-based assessment (CBA) will be obtained from a purposeful sample of the selected high school science teachers of a large urban school district in Texas.

F2.3 Paper Session

10:05 – 11:20

Poolside 3

At Risk Populations

Discussant: George Moore

Mentoring At-Risk Socio Economically Disadvantaged Students

Vivian R Hernandez – University of Saint Thomas

Mentoring, one effective strategy to prevent high school dropouts. High school youth participating in school-based mentoring programs are more likely than non-mentored peers to have a non-parental adult who “they look up to and talk to about personal problems, who cares about what happens to them and influences the choices they make” (Herrera et al., 2007). The Mentor Partnership (2009) believes, for youth who struggle with home life, having an adult show

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interest in them can make a difference. Tolan et al. (2013) found well-structured mentoring programs, with clear goals and expectations, and continued mentor support had the strongest effects on improved attitudes toward school, fewer unexcused absences, and a higher likelihood of attending college.

The Relationship Between Teacher Perceptions and the Academic Achievement of African American Male Homeless Students

Benjamin Jules – The University of St. Thomas

Homelessness among youth has become a major issue within our current society. According to Ingram, Bridgeland, Reed, and Atwell (2016), the African American population is experiencing high stages of homelessness, which also includes adolescent African American males attending public schools. The lack of meaningful teacher relationships has been recognized as a barrier impeding the academic success of homeless students. As a result, this descriptive case study will seek to identify and describe approaches designed to decrease barriers related to student- teacher relationships, which may impede African American male homeless students in public schools from completing the graduation process.

Discipline Consequences of Economically Disadvantaged Black Girls

**Ketina D Willis – Sam Houston State University*

This study examines the effect of the economic status and number of days of Black girls in Grades 6, 7, and 8, who were assigned to an in-school suspension. Disproportionally Black girls are assigned to an in-school suspension for violations of the local student code of conduct. Often these violations are subjectively determined by the interpretation of the teachers or administrations to complete the referral. In this study, the utilization of archival data from the Public Education Information Management System (2012-2013) school year will be analyzed.

F2.4 Paper Session

10:05 – 11:20

Minuet Room

Technology

Discussant: Robert Elliott

Engaging the Digital Generation: Examining the Use of Science Notebook in a Universal Design for Learning Environment (SNUdle) and Its Influence on Science Learning for All Students

Gelyn R Cornell – University of Houston-Clear Lake

The purpose of this study is to test SNUdle over a broad range of science content and generate evidence to determine its impact on elementary school students' science content knowledge and motivation for science. A purposeful sample of fourth grade teachers and their students from seven elementary schools in a large suburban school district in southwest Texas are invited to participate. The quantitative data will be analyzed using frequencies, percentages, and t-test. Data collection will also include surveys and focus groups.

Mobile Phones for Instructional Purposes: A Perceptual Study from Texas

Jonathan S Hill & Eric E Holton – Stephen F. Austin University

The use of mobile phones for instructional purposes in K-12 settings is ineffective. This study will contribute to this problem's literature. The theoretical framework of this study is FRAME. This post-positivist, mixed methods, non-experimental, and cross-sectional study uses surveys to understand the perceptions of students, teachers, and administrators from a purposeful sample of

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six Texas high schools differing by their mobile phones policies and practices about the nature of the problem and its solutions. The data will be analyzed using inferential statistics and thematic analysis. Ethics of research will be adhered to (IRB, confidentiality, anonymity, protection from risk and harm).

Systematic Review of Effects of Adaptive Scaffolding Approaches in Computer-Based Learning Environments

Seoyeon Park – Texas A&M University

Computer-based learning environments (CBLEs) have a high potential that can provide adaptive scaffolding where students get customized scaffoldings based on their learning progress. However, most CBLEs embedded uniformed instructional model so that they often fail to help diverse students with different learning needs. Many studies developed adaptive scaffolding approaches in CBLEs, but there is little comprehensive review of these studies. This paper is to perform a systematic literature review of adaptive scaffoldings in CBLEs to analyze characteristics of adaptive scaffold designs and how the effectiveness of scaffolds differ depending on a subject domain and learners' characteristics.

Always Here to Help: Creating a Certifying Mentoring Model to Integrate Innovative Technology in the Classroom

**Donald L Becker – Sam Houston State University*

Among the most challenging aspects of any type of technology integration is the element of adequate and sufficient professional development. This is a significant barrier to implementation of innovative technology in the classroom. By utilizing a self-paced online Train the Trainer mentoring model, the teacher would receive quality professional development focused on the technology and as a result be better prepared to successfully implement innovative technology into their curriculum. This mixed-methods study looks to investigate the impact of a newly developed self-paced certifying mentoring model to improve teacher learning and to remove a significant barrier to innovative technology integration.

F2.5 Paper Session

10:05 – 11:20

Patio Room

Culture

Perceptions of Early Childhood Teachers' Cultural Understanding of Latin American Students

Emilie S Robert – University of St. Thomas

The increase of the Latin American immigrant population within the United States has placed significant demand on educational resources. Student success is of concern for educational leaders who are held accountable for learning achievement. Even though one out of every four children in the United States is an immigrant (or the U.S. born child of immigrants), many schools are ill-equipped to meet their needs. This research study examines the perceptions of teachers' cultural knowledge toward Latin American Early Childhood students as a consideration regarding academic achievement within this population.

Experiences of African American Superintendents in Texas

Milton Fields - Judson ISD, Don Jones, & Kathryn Korelich – Texas A&M University-Kingsville

The topic of African American superintendents has been largely neglected in society. Research studies revealed that an under representation of African American superintendents exists. This

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ethnic disparity is a valid concern. This study was based on the premise that additional research studies are needed to understand the climate, culture and leadership experiences of African American superintendents in Texas. This explored the overall experiences and perceptions of six African American superintendents in Texas. The findings revealed there were challenges facing aspiring African American superintendents: (a) lack of networking, (b) lack of mentors, (c) lack of school district pool of potential African American candidates and (d) lack of professional educational and equity associations.

Multicultural Professional Development and Its Relationship to Teacher Self-Efficacy: A Global Perspective

**Kendra N Nwosu – Texas Tech University*

Classrooms around the world are becoming ethnically diverse therefore multicultural education is an emerging focus in education (Sutton, 2015). One way to influence teachers to teach with the growing ethnic population in mind is through professional development. Professional development is meant to equip teachers with strategies that will boost their self-efficacy and in turn be used in the classroom. Using data from the 2013 TALIS survey, the results of this study suggests that there is a significant difference between the self-efficacy of teachers who have attended professional development on multicultural education and those that have not.

F2.6 Paper Session

10:05 – 11:20

Cavalier Room

Curriculum

Discussant: Tracey Hodges

Parallel Convergent Mixed Methods Case Study at a Title I Elementary School

Alecha L Sheppard – Texas Tech University

Parallel Convergent Mixed Methods Case Study at a Title I elementary school evaluates the effectiveness of a recent curriculum change. After three years of implementation, the curriculum change from Basal Readers to the Balanced Literacy framework requires a thorough evaluation of its effectiveness. Focusing the analysis at a high minority, title I school, quantitative and qualitative methods will be utilized to provide stakeholder opinions, student growth, and academic achievement success rates.

Organizational Sensemaking Within the Context of Science, Technology, Engineering, and Mathematics Project-Based Learning Curriculum

Aziz Koyuncu – Texas Tech University

STEM schools and PBL curricula are essential, but reform in the context of STEM schools and PBL has also been found to be challenging. This ongoing study will focus on a unique implementation of a STEM PBL curriculum (which is called the STEM PBL model). I will investigate the unique features of the STEM PBL model and the organizational sensemaking that occurs in this model. There are unique features to the STEM SOS model that warrant investigation. This could have implications for how we understand organizational sensemaking within STEM/PBL schools and curricula.

Underrepresentation of Minority Students in T-STEM Schools: A Comparative Examination of Texas High School Districts

Jeremy D Small – Stephen F. Austin University

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STEM academies have been a topic of consideration within the educational community. Academies were created to address the deficit of workers in the STEM field, as well as to address the underrepresentation of minorities, women, and low socioeconomic status. Texas has created Texas science, technology, engineering, mathematics (T-STEM) academies to address the disproportionate representation within its own state. This study will use secondary data to examine underrepresented groups' demographics in T-STEM academies compared to their public district school counterpart.

Hidden Figures: A Mixed Method Study of Mathematically Gifted African-American Girls

**Crystal D Evans – Texas Tech University*

In 2010 African-American women held only 2% of the more than 3.5 million American jobs in math and computer science (Women, Minorities, and Persons with Disabilities in Science and Engineering, 2013). A potential contributing factor begins in early elementary school gifted programs where African American female students are severely underrepresented. This study proposes to use intersectionality theory to investigate the effects of race, gender, and teacher perception on participation in gifted math programs. Both quantitative and qualitative methods are utilized. Results will inform all parties of the current state and future direction needed for gifted math programs.

F2.7

10:05 – 11:20

Renaissance Room

Special Populations

On the Screen for Child Anxiety Related Emotional Disorders: A Meta-Analysis

Katie Runyon – Texas Tech University

Steven R Chesnut – University of South Dakota

Hansel Burley – Texas Tech University

The current study meta-analyzed the psychometric properties of the Screen for Child Anxiety Related Emotional Disorders (SCARED), including internal and test-retest reliabilities, and parent-child agreement. Child and parent data from the SCARED were recorded from 65 studies and examined using random-effects models. Results from the parent and child versions of the SCARED exhibited excellent internal consistencies overall and for each of the five original subscales. Furthermore, the SCARED demonstrated moderate to large test-retest reliabilities and moderate to large parent-child agreement rates. Overall the SCARED exhibits robust psychometric properties and perform consistently well in community and clinical settings across various countries.

The Effect of STEM-specific Intervention Program on Academic Achievement, STEM – Retention and Graduation Rate of Risk College Students in STEM Majors at a Texas College

Ismatara Reena, James Young, Brett Welch, & Mamta Singh – Lamar University

Historically at-risk students—women, minorities, first-generation—remain underrepresented in STEM majors. Thus, universities have begun developing STEM-specific interventions and programs to facilitate their success in STEM majors. This study was an exploration of the effect of participation in a STEM-specific intervention on various academic outcomes for historically at-risk undergraduate students enrolled in STEM courses at a Southeast Texas university. Using a quantitative, non-experimental secondary data analysis of archival at-risk student data (N=101), independent samples t-test and the Mann-Whitney test were used to investigate the effect of the intervention on student achievement, retention, and matriculation. Findings suggested the

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intervention had a main effect on student achievement, but not on STEM retention or graduation rates.

Differences in Advanced Coursework Completion Over Time in Texas by Student Status

Daniel C Craft – Sam Houston State University

The purpose of this study was to determine a disparity in advanced coursework completion percentages between all students and students who were at-risk in Texas public high schools. At-risk students have fewer opportunities in many cases depending on the factors that label them at-risk. The continued disparity suggests that public schools are complacent or ignorant to the disparity in completion percentages of advanced coursework by student status. The data revealed a statistically significant disparity with moderate to large effect for the differences in percentage of completion between all students and students who were at-risk for the 2014-2015 and 2015-2016 school years.

Teachers Who Make A Difference: What Gifted Students Say

**Anna M Payne– Baylor University*

Most gifted students are being taught by teachers with little to no background in gifted education. This qualitative study looked at 536 high-scoring students who were asked to identify the qualities that make an effective teacher of the gifted. Comments were analyzed looking for themes that emerged. Many comments showed that they cared about a number of qualities and characteristics of their teachers. Implications of this study include further study of gifted students' preferences of their teachers, as well as creating professional development targeted at preservice and in-service educators-both regular classroom educators and those working primarily with gifted populations.

F2.8

10:05 – 11:20

Ballroom C

Factor Analysis

Discussant: Susan T Skidmore

Examining the Relationship between the Quality of Teachers and the Dropout Rates of High School Students in Texas

Phuongdieu J Nguyen – University of Houston-Clear Lake

Dropout rates represent an important indicator to measure failure that can be quantized in financial terms of money lost in the investment in a student without tangible results. This amount is estimated as an average of \$11,800 per student per year nationally, and about \$8,100 per student per year in Texas. Recognizing the negative economic impact of high school dropouts, states and schools began to look for effective intervention that alleviates the dropout rates. Although studies have been conducted to understand the impact of remedial program on academic outcome and dropout rates, there is much less research on the relationship between the qualifications of the teachers who delivered the teaching and motivation to the students and the dropout rates.

The Development and Evaluation of the Aggression Towards Teachers Scale

Crystal D Evans – Texas Tech University

Few studies have evaluated the current rates of student aggression on teachers in the school system, despite an abundance of media coverage and empirical evidence (McMahon et. al., 2013). This study attempts to create a valid and reliable measure of aggression towards teachers by students. Exploratory Factor Analysis and Confirmatory Factor Analysis were completed on survey data and

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revealed three valid and reliable factors on the Aggression Towards Teachers Scale (ATTS). The ATTS hopes to provide researchers a concise way to measure student aggression directed at teachers.

Developmental Assets in Belizean Youth: The Predictive Roles of Personality and Intelligence

**Genea K Stewart & Darryl M Hull – University of North Texas*

Rapidly increasing crime rates and rampant gang activity place a heavy burden on Belize, a young nation with a growing political infrastructure and scant institutional resources. This quasi-experimental study, employs multiple regression to analyze data collected from 5,432 Belizean youth in an attempt to measure the dual influence of personality and cognitive ability on the developmental assets known as the 5 C's of Positive Youth Development: Competence, Confidence, Connection, Character, and Caring. These insights will contribute to an evidence-based field of research aiding public program developers and policy makers who are working to reduce problem behaviors and promote positive youth development.

F3.1

11:25 – 12:40

Poolside 1

Principals

A Narrative Study of Principal Interns Growing Teachers Through a Job-Embedded Principal Preparation Program

Chau Nguyen, Fernando Valle, Irma Almager, Selenda Cumby, & Mehmet Cihan – Texas Tech University

This narrative study explored how principal interns (PIs) grow teachers in high-needs schools. The participants were five PIs from a 15-month job-embedded principal preparation program at a large public state university in the Southwestern United States. Data were collected via three sources: interviews, documents, and audio-visual materials. The findings indicate that PIs used numerous tools to grow teachers, and that during the process of growing teachers, PIs encountered various challenges. The implications for teachers and school leaders are also presented at the end of the study.

The Role of the Principal in Developing Cultural Capital in School

Patricia A Ortiz – The University of Texas at San Antonio

The purpose of this study was to identify practices and attributes that lead to high achievement among Latino students from the perspective of principals, teachers and parents at two inner city schools. Critical Race Theory and Latino Critical Race Theory provide the framework for the analysis of findings. In examining the case studies of two schools, there were four major themes that emerged: High Expectations (Esperanzas), a Culture of Success (Exito), Trust (Confianza) and Empathy for the Latino Culture, (Entendimiento). The principal is key in developing a school culture that values the cultural capital that Latina/o students bring to school.

The Perceived Effects of Texas's Accountability System on Select Elementary School Principals Who Serve a Title I Campus

Katy M Roede, Rhonda Mason, & Tami Schuler – Sam Houston State University

In this multiple case study, we examined how this accountability system influenced the perceived self-efficacy of a select group of principals. The researchers interviewed five principals at Title I campuses regarding their sense of efficacy before, during, and after the state accountability testing

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and reporting time periods. Three types of ethnographic analyses were conducted: domain analysis, taxonomic analysis, and componential analysis. Although all of the principals in this study held a negative perception of state-mandated tests and the state and federal accountability systems, each worked diligently to ensure student achievement progress.

The Latina Movement in High School Leadership

**Kristina Vidaurri – University of Texas at San Antonio*

This study sought to examine the experiences of female high school principals serving comprehensive Texas public high schools to better understand why there continues to be a gender gap in the high school principalship. A qualitative study was used as the research design to examine three Latina principals who were leading 6A high schools through the use of interviews. The analysis of the interviews revealed the following themes: family support, career patterns and the middle school experience, the role models and advocate, being involved as a child, definition of success, service orientation, being Latina and becoming a high school principal.

F3.2 Paper Session

11:25 – 12:40

Poolside 2

*Education Reform
Discussant: Jongpil Cheon*

Examining Education Foundations in Texas: A Mixed Methods Study on Organizational Traits and Revenue Generation

Natalie Clogston – University of Houston-Clear Lake

It is no secret that government support in K-12 schools has seen dramatic decline in numerous states over the last decade, but another trend has also emerged. School leaders, concerned parents, and actively engaged community members have converged to find funding solutions and have increasingly turned to education foundations as a means to “filling the gap.” Recently hitting a national all-time high in both fundraising and fund distribution, these organizations are worthy of critical study. Researchers have examined education foundations in several states; however, no comprehensive study in Texas has been conducted.

A Teacher’s Lens: A Connection with Emotions to Teacher Retention Through Photo-Voice

Melissa A Martinez – Texas Tech University

In this study, photo-voice will provide a different perspective of the views of teacher retention based on the emotional presence of the participants lived experiences within their teaching careers. The stories the teachers divulge using narratives and descriptions of their photographs may create themes that may show relations to specific emotional characteristics. The development of teacher emotions has been addressed by many theories, but in recent years the philosophy of education and the importance of teachers’ lived experiences have been employed to comprehend the whole teaching dynamic.

Effects of Social Constructivist Learning Theory on Latino Students’ Proportionality

**Victor M Vizcaino & James Telese – The University of Texas – Rio Grande*

This study will examine the effects of incorporating social constructivist learning theory on Latino, middle school students’ understanding of proportional reasoning skills (PRS). Youth experience multiple difficulties to develop a meaningful understanding of PRS and there have

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been a continuous low performance in the knowledge and skills related to proportional reasoning in the State Texas Assessments of Academic Readiness. A mathematics reform calls for instructional approaches blending geometric and algebraic concepts and giving greater emphasis to mathematical reasoning. Additionally, the teaching and learning of mathematics should be integrated from a socio-constructivist learning perspective around fundamental ideas.

F3.3 Paper Session

11:25 – 12:40

Poolside 3

Language

A Bilingual Teacher Life's Story Experience: A Narrative Study Approach

Erika Zavala – Texas Tech University

Life story/history narrative research is a way of understanding single lives in detail, and it analyzes people play various roles in society. This paper illustrates a study of one individual, a Bilingual Hispanic Teacher and the story of her 35th years of experience as an elementary teacher. The researcher focuses on telling her story as it undisclosed in time by using data collected in this teacher's own words through an interview. The analysis for this study included the retelling of her life's experiences, developing themes and approaching an interpretation of the meaning of her story and other educators.

Contributions by Principal and Teachers to a Sustained Dual Language Program

Gilberto M Ponce – The University of Texas at San Antonio

The purpose of this qualitative case study was to investigate the characteristics of a sustained dual language campus in a low SES, high EL population on the South Texas border; including contributions made by the building principal. Using a culturally relevant pedagogy framework (Brown-Jeffrey & Cooper, 2011), various interviews were conducted and analyzed. These interviews included in-depth individual and focus groups of teachers at various grade levels as well as the building principal they worked under. Interviews revealed a strong need for cultural and language acquisition understandings as well as a need for advocacy of ELs by the building principal.

South Texas Urban Administrator Perceptions of Best Practices for ELL Literacy

Rosalina Borrego – Texas A&M University-Kingsville

Gerri M Maxwell – Texas A&M-Corpus Christi

The purpose of this qualitative, multi-case study was to explore the perceptions of administrators in an urban border district in deep South Texas. This study gleaned the perceptions of administrators with regard to best practices in early literacy success in underrepresented groups of students, namely English Language Learners (ELLs) in an urban border district in a deep South Texas. The researcher, as a human instrument, focused on a variety of data collection sources from administrators' responses to questions, field notes, audiotaped interview sessions, and observation notes. Four key themes emerged from the data contextualized in an overwhelming sense of urgency on the part of the administrators. The findings from this study have the potential of leveraging educational decisions for educators, policymakers, and the practitioner who may be concerned about improving the literacy achievement gap for ELLs by the end of 3rd grade.

Friday, February 8

An Overview of the Operating Procedures and Practices of Ten University-Based Reading Clinics

**Bethanie C Pletcher & Maureen Sullivan – Texas A&M-Corpus Christi*

The purpose of this study was to explore the operations of university-based reading clinics to inform the creation of our own reading clinic. We conducted Internet searches and contacted university faculty who were knowledgeable in the area of reading clinics to create a list of clinics to research and interviewed ten reading clinic directors about the daily management of their clinics. Each interview was audio-recorded, transcribed, and focus-coded for themes related to our interview questions. Themes were then grouped into the following categories: founding and funding; student demographics; tutorial session logistics; assessment and instructional materials used; and family involvement.

F3.4 Paper Session

11:25 – 12:40

Minuet Room

*Exceptional Education
Discussant: Sonya Sherrod*

Effects of Peer Mediated Intervention on the Social Verbalization Skills of Adolescents With ASD

Brenda V Grafton-McCall – Texas Tech University

Non-verbal children with autism often use augmentative and alternative communication (AAC). A type of AAC device is a speech generating device (SGD). SGD's can now be utilized on an iPad or smartphone. This research discusses how functional communication skills can be influenced by the assistance of peer-mediated interventions, utilizing the aspects of verbal behavior within applied behavior analysis. Using a multiple baseline design, three adolescents with autism were taught, through peer mediated interventions, to mand and use intraverbals, using a 2-step sequence and responding to the questions, "What do you want?" and "What is your name?"

Teacher Perception of the Use of Augmentative and Alternative Communication Devices and Social Interaction for Children With Autism Spectrum Disorders

Nereah Obiero – Texas Tech University

Children with autism spectrum disorder (ASD) experience deficits in communication, social interaction, and inappropriate behaviors. These characteristics affect how teachers involve them in various activities in the classroom and within the school. This study will focus on perception of teachers on the use of Augmentative and alternative communication devices by children with autism for social interaction. A qualitative case study approach will be used. This study is of significance because there is an increase of children with autism spectrum disorder in the classrooms, and the use of technology. An understanding of the teachers' thoughts and experiences is of utmost important.

Using Narrative Inquiry to Understand Educational Experiences of Students with Invisible Disabilities

Stacy JM Fox – Texas Tech University

Students with invisible disabilities are at a disadvantage in the inclusive classroom not only to their non-disabled peers but also to students whose disabilities are obvious and afford societal protection (Cook, 2001). The purpose and goal of the study are to provide a narrative detailing the lived experience of students with invisible disabilities in order to share the lived experiences in inclusive settings and explore how these settings can impact students with invisible disabilities.

Friday, February 8

Advancing Learning Transfer: The Neurodiverse Training Room

**Janice Chretien – The University of Texas at Tyler*

A training room setting can hinder or promote learning transfer and knowledge retention for adults with attention disorders. This quasi-experimental study tested seven modifications to a traditional training room. Results and implications will be discussed.

F3.5 Paper Session

11:25 – 12:40

Patio Room

Writing

Exploring the Impact of a Professional Writing Course on Graduate Student Writing

Anica M Cisneroz, Heather Schoen, & Jim Summerlin – Angelo State University

The convenience of the online forum draws many students to pursue avenues that could further their professional careers. While the professional experiences candidates bring to graduate programs are valuable, many come from disciplines that did not foster strong writing skills or have been out of writing practice for extended lengths of time. The disparity between professional skills and knowledge and the ability to effectively communicate that knowledge through academic writing has created barriers to success for many graduate students. The current study sought to examine the impact of a Professional Writing course in writing improvement at a regional state university.

The Impact of Targeted Writing Intervention: A Case Study of an English Language Learner

Sophia Galvin, Layne Poole, Keith Graham, Stephanie M Moody, Quentin Dixon, & Li-Jen Kuo – Texas A&M University

The purpose of the present study was to examine how a targeted writing intervention impacted the writing development of English language learners (ELLs). A single case study was conducted with one struggling second grade ELL. Data included pre- and post-test writing assessments, which were analyzed to determine the effectiveness of the intervention on word level, sentence level, and discourse level. Results showed improvement in usage of unique words, story elements and idea development. Teachers can use this to study to guide instruction with struggling ELLs.

The Impact of a Technology-Enhanced Writing Intervention on a Student With Learning Disabilities: A Case Study

**Megan Heatherly, Hannah Burns, Samantha Magana, Stephanie M Moody, Keith Graham, Li-Jen Kuo, & Quentin Dixon – Texas A&M University*

The purpose of the present study is to examine how children with learning disabilities (LD) may benefit from the use of technology within writing instruction. Through the use of a single-case study, we investigated how the narrative writing of one struggling second grade writer with an LD was impacted by the use of iPad technology during a targeted writing intervention. Post-intervention writing samples, using both iPads and traditional paper-and-pencil, were collected and analyzed. Results show the iPad significantly impacted the participant's performance. Technology can help teachers better serve the writing needs of their students with LD.

Friday, February 8

F3.6 Workshop	11:25 – 12:40	Cavalier Room
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Free Workshop

Qualitative Data Analysis: Lessons Learned

Weena McKenzie & Julie P Combs – Sam Houston State University

Managing the data collection and analysis stages of a qualitative study can be challenging for students and faculty. In this session, a doctoral candidate and dissertation advisor will share strategies that can be used to manage a qualitative study. Examples and experiences from a recently completed dissertation will be shared.

F3.7 Paper Session	11:25 – 12:40	Renaissance Room
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Teacher Preparation

Which STAAR shines brighter: Science, Math, or Both?

Andrea Foster & Julie Herron – Sam Houston State University

Teacher candidates of today are part of the standardized testing generation. When our teacher candidates were asked to take a released the 2015 fifth grade State of Texas Assessment of Academic Readiness (STAAR) Science test to measure their content knowledge, there were no teacher candidates that received 100% on this test. This raised the question of what is the source of their misconceptions: science concepts, mathematical concepts, or both. This exploratory study used an item analysis techniques to examine teacher candidates' performance on the released 2015 STAAR science test.

Five Challenges Related to the Collective Presentation and Discussion of Data in Teacher Education Departments

Aaron S. Zimmerman & Jessica Gottlieb – Texas Tech University

Accountability for data use in the context of teacher education is now an unavoidable practical reality of the work. During the spring semester of the 2018 academic year, we initiated a self-study of data use within our university's teacher education department. In this presentation, we will share five challenges that surfaced when we observed the members of the department gather to together to share data collected from their various teacher education coursework. We believe that the results of our self-study have implications for how department leaders might productively structure collective data use practices in their teacher education departments.

Project-Based Teaching and Learning: Implications of a Course Redesign

Kelli M Bippert & Tomas Espinosa – Texas A&M University-Corpus Christi

An elementary-level content area reading course was redesigned using a project-based learning (PBL) model in an effort to improve undergraduate pre-service teacher course content instruction. The research question was, what are college students' perceptions of project-based teaching and learning? Qualitative analysis of student end-of-class responses revealed while the majority of students perceived the online content and project to be engaging and beneficial to content learning and application, students responded negatively to the frequency of course assignments and grades.

Friday, February 8

Do Teacher Credentials Impact Student Achievement?

**Christina J McIntyre, Daphney L Curry, & Emily K Reeves – Midwestern State University*

This study investigated the type and level of teacher credentials that impact fourth-grade reading achievement as reported by the NAEP. Data analyses revealed a significant statistical difference existed among fourth-grade reading achievement scores for the following teacher quality variables: NBPTS status ($p < .001$), teacher preparation route ($p < .001$), and degree earned ($p < .05$). No statistical difference existed among reading achievement scores for college major/minor).

F3.8 Paper Session

11:25 – 12:40

Ballroom C

Attitudes

Assessing the Impact of Increasing Teachers' Praise-to-Correction on Student Behavior

Kristen L Padilla-Mainor, Rebeca Tipton, & Suzannah Avery – Baylor University

Problem behaviors in schools is a significant concern among teachers, parents, and policy makers (Sailor, Zuna, Coi, Thomas, McCart, 2006). These behaviors produce many negative outcomes such as decreased instructional opportunities, school dropout, and alternative school placement, (Carr, et al., 2002). Teachers must be equipped to manage difficult classroom behaviors to optimize student success. Research has shown that teachers who deliver high amounts of praise experience fewer disruptive behaviors in the classroom (Espin & Yell, 1994). This study aims to assess the impact of increasing a teacher's praise-to-correction ratio on disruptive behaviors using video self-evaluation and performance feedback.

The Impact of Teacher-Student Relationship on School Engagement: The Investigation of Gender Differences

Donghyun Kang –Texas A&M University

This study examined the associations between teacher-student relationship and school engagement among Korean upper elementary students. It was hypothesized that there were latent variable level mean differences in teacher-student relationship and school engagement between boys and girls and the associations between teacher-student relationship and three dimensions of school engagement were differed by gender. Via multi-group structural equation modeling, this study revealed the mean differences by gender and indicated the locations of specific gender differences. Because boys and girls responded differently to teacher-student relationship and school engagement, differentiated approaches are needed for teachers to enhance school engagement in the classroom.

Perceived Effects of Campus Mentors and Content Specialists on Novice Teacher Support and Growth

Tessia Brixey –University of St. Thomas

Teacher retention and teacher effectiveness continue to be areas of concern in education. Effective teacher induction support systems reduce teacher attrition, increase teacher self-efficacy and instructional ability, and lead to higher student achievement. The goals of this phenomenological study were to describe effective characteristics of an existing mentoring program in an urban school district, and to explain the perceived impact of campus-assigned mentors and content specialists on novice teacher retention, resiliency, and growth. By describing the lived experiences of current novice teachers, the researcher could provide practical and meaningful data on novice teacher support and retention methods.

Friday, February 8

**Exploring Narratives from the Frontlines of War and the Frontlines of the Classroom:
Shifting Mindsets and Developing Options in Complex Situations**

**Michele Norton – Texas A&M University*

Jonathan Silk– Pepperdine University

This paper utilizes a Narrative Inquiry to explore and understand theoretical concepts integrated into a decision-making framework that enables decision-makers to analyze and create options in chaotic and complex environments. The paper explores the practice decision makers take to shift their mindset from “What should I do” to “What could I do” to increase the number of options available to the decision-maker. The framework referenced integrates research on complexity and chaos theories, emotional intelligence, emotional agility, and decision making combined with work on fixed and growth mindset, teaming and exploratory responses, and research on shifting mindsets in decision making.

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