

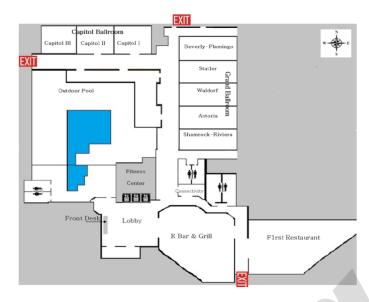
Southwest Educational Research Association
43rd Annual Meeting Conference Program

AE AE

February 12 – 14, 2020 Hilton Arlington Arlington, TX



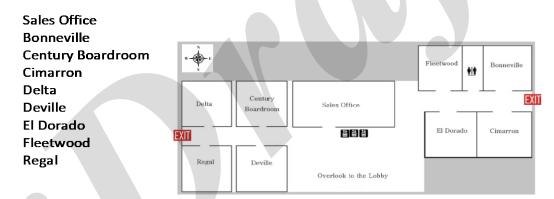
Map of Conference Hotel



First Floor

Connectivity Lounge Grand Ballroom Capitol Ballroom R Bar & Grill F1rst Restaurant Fitness Center Outdoor Pool

Second Floor



Southwest Educational Research Association

www.sera-edresearch.org



2020 Annual Meeting Program and Abstracts

Hilton Arlington, Arlington, TX February 12 – 14, 2020

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SERA Foundation

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

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

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



Front Cover

Photos courtesy of Arlington Convention & Visitors Bureau

A Brief History of SERA

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

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



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

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

Have we met these goals? I would say "Yes" to all 5. Next year, we celebrate well past our third decade of meeting, and we are still going strong. SERA is a terrific place to meet and talk with researchers of all likes. The social events are a great way to network and have fun. Of our 30+ presidents, I believe at least 11 started as graduate students. In fact, 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 continuously attended 35+ SERA conferences. Bruce has served as an At-Large Member of the SERA Board. Prior to the time that SERA combined the Program Chair role with the office of President-Elect, Bruce first served as a Program Chair, and later as SERA President. In the early 1990s, Bruce served as Editor of the SERA book series, which was an edited volume containing selected SERA conference papers chosen through peer review and was published by a commercial publisher. Bruce began service as the inaugural SERA Executive Director when the By-Laws were amended in 2000 and this position was first created. Bruce continues to serve as SERA

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 was a 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

| 2019 | Ehsan Ghasemi, Hansel Burley & Parviz Safadel |
|------|---|
| 2018 | Emma Bullock |
| 2017 | Peter Boedeker |
| 2016 | Katherine L. Wright & Tracey S. Hodges |
| 2015 | Kara M. Styck & Grant Morgan |
| 2014 | Kary A. Johnson |
| 2013 | Grant Morgan & Aaron Baggett |
| 2012 | Forrest C. Lane & Robin K. Henson |
| 2011 | Celia M. Wilson |
| 2011 | Anthony J. Onwuegbuzie, Rebecca K. Frels, Nancy L. Leech, & Kathleen |
| | M. T. Collins |
| 2010 | Terence Fung |
| 2009 | Prathiba Natesan, Patricia F. Roberts-Walter, Gwendolyn Webb-Johnson, |
| | & Norvella P. Carter |
| 2008 | Susan Troncoso Skidmore |
| 2007 | Meixia Ding & Xiaobao Li |
| 2006 | Carmen Fies |
| 2005 | Helenrose Fives & Michelle M. Buehl |
| 2004 | Anthony J. Onwuegbuzie |
| 2003 | Anthony J. Onwuegbuzie & Nancy Leech |
| 2002 | Lilia M. Ruban |
| 2001 | Stephen Caldas & Carl Bankston, III |
| 2000 | Bruce Thompson & Colleen Cook |
| 1998 | Katherine Friedrich |
| 1996 | Shari L. Davis |
| 1995 | Debra A. King |
| 1994 | Bruce Thompson, John Wasserman, James Gyurke, Kathleen Matula, & |
| 1002 | Blaine Carr |
| 1993 | Patricia Synder, Bruce Thompson, & James David Sexton |
| 1992 | Dianne L. Taylor & Ira E. Bogotch |
| 1989 | H.C. Waxman, Y.N. Patron, S.L. Knight, E. W. Owens, & K. Ebner |
| 1988 | Stephanie L. Knight |
| 1987 | P.A. Alexander, M.K. Tallent, V.L. Willson, & C.S. White |
| 1986 | Mary K. Tallent |
| 1985 | Walter C. Parker |
| 1984 | Ralph A. Hanson |
| 1983 | William C. Kyle, Jr., & James A. Shymanasky |

SERA EXTENDED SERVICE AWARD

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

Southwest Educational Research Association 2019-2020 Executive Council

PresidentShirley Matteson

President–Elect & Program Chair Grant Morgan

Immediate Past President
Forrest Lane

Treasurer Kim Nimon

Secretary Lesley Leach

Deputy TreasurerGrant Morgan

Graduate Student Advisors

Sandra Acosta Lesley Leach Michelle Peters Graduate Student Representative
Katherine Vela

Executive Director Emeritus/Historian

Bruce Thompson

Deputy HistorianVictor Willson

*Newsletter Editor*Wendi K. Zimmer

Director of Information TechnologySusan Troncoso Skidmore

Council Members-At-Large

Sandra Acosta Emma Bullock Dittika Gupta Sandra Nite
Marsha Sowell
Aaron Zimmerman

George Moore Michelle Peters Juanita Reyes

Executive Director
Linda Zientek

Presidential Appointments

Audio-Visual
Aaron Zimmerman

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

Chrissy Cross

Program Division Chairs – 2020

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

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

Forrest Lane Grant Morgan
Sam Houston State University Baylor University

fcl004@shsu.edu grant_morgan@baylor.edu

II. Instruction, Learning & Cognition

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

III. Methodology, Measurement & Evaluation

Tommy De Vaney Renee Lastrapes
Southeastern Louisiana University of Houston-Clear Lake

tdevaney@selu.edu latrapes@uhcl.edu

IV. Teachers & Teacher Education

Bob Elliot Julia Yoo

Eastern New Mexico University Lamar University Robert.Elliott@enmu.edu hyoo@lamar.edu

V. Special Populations & Counseling

Nara Martirosyan
Monica Wong-Ratcliff
Sam Houston State University
Texas A&M University – Kingsville
nxm021@SHSU.EDU
Monica.Ratcliff@tamuk.edu

VI. Graduate Student Seminars for Work in Progress

Julie Smit Audrey Meador

Texas Tech University West Texas A&M University julie.smit@ttu.edu ameador@wtamu.edu

Rebecca Delozier Texas Tech University rebecca.delozier@ttu.edu

JOHN J. HEDL, JR. LIFETIME SERVICE AWARD

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



SERA Past Presidents

| 2018-19 | Arturo Olivarez | 1998-99 |
|---------|---|--|
| 2017-18 | Max Martin | 1997-98 |
| 2016-17 | Mark Lewis | 1996-97 |
| 2015-16 | Larry G. Daniel | 1995-96 |
| 2014-15 | Mary K. Tallent-Runnels | 1994-95 |
| 2013-14 | Stephanie L. Knight | 1993-94 |
| 2012-13 | Elaine Jackson | 1992-93 |
| 2011-12 | Victor L. Willson | 1991-92 |
| 2010-11 | Glynn D. Ligon | 1990-91 |
| 2009-10 | Hersholt C. Waxman | 1989-90 |
| 2008-09 | Patricia A. Alexander | 1988-89 |
| 2007-08 | Michael J. Ash | 1987-88 |
| 2006-07 | Deberie L. Gomez-Grobe | 1986-87 |
| 2005-06 | Claire Ellen Weinstein | 1985-86 |
| 2004-05 | Bruce Thompson | 1984-85 |
| 2003-04 | Jon J. Denton | 1983-84 |
| 2002-03 | Douglas M. Brooks | 1982-83 |
| 2001-02 | John J. Hedl Jr. | 1981-82 |
| 2000-01 | Wayne R. Applebaum | 1980-81 |
| 1999-00 | Robert M. Caldwell | 1979-80 |
| | 2017-18 2016-17 2015-16 2014-15 2013-14 2012-13 2011-12 2010-11 2009-10 2008-09 2007-08 2006-07 2005-06 2004-05 2003-04 2002-03 2001-02 2000-01 | 2017-18 Max Martin 2016-17 Mark Lewis 2015-16 Larry G. Daniel 2014-15 Mary K. Tallent-Runnels 2013-14 Stephanie L. Knight 2012-13 Elaine Jackson 2011-12 Victor L. Willson 2010-11 Glynn D. Ligon 2009-10 Hersholt C. Waxman 2008-09 Patricia A. Alexander 2007-08 Michael J. Ash 2006-07 Deberie L. Gomez-Grobe 2005-06 Claire Ellen Weinstein 2004-05 Bruce Thompson 2003-04 Jon J. Denton 2002-03 Douglas M. Brooks 2001-02 John J. Hedl Jr. 2000-01 Wayne R. Applebaum |

Foreword

As President of the Southwest Educational Research Association (SERA), I would like to warmly welcome you to the 43rd Annual Conference. We have over 375 members, and there will be approximately 220 research presentations, workshops, symposia, and innovative sessions at the 2020 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. Michael Feuer, Dean of the Graduate School of Education and Human Development and Professor of Education Policy at The George Washington University, is the Presidential Invited Speaker on Thursday. A ticketed workshop on survey design is being offered by Robin Henson and Sarah Ferguson. 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 Forrest Lane for doing an incredible job as local arrangements chair. I also want to thank The University of Texas at Arlington College of Education for hosting a special reception for our members. Tremendous appreciation is also extended to our President-Elect/Program Chair Grant Morgan for organizing and compiling this year's conference program; to Wendi Zimmer who serve as our SERA Newsletter editor; to Executive Director Linda Reichwein Zientek who keeps us updated throughout the year; to Historian and Executive Director Emeritus Bruce Thompson who provides us with an historical perspective; to SERA "Trinket and Program Poster Maven" Mary Margaret Capraro; and to all SERA board members. Graduate student participation in SERA continues to increase and many thanks are extended to the graduate student representative, Katherine Vela. 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 2020 SERA Annual Conference in Arlington, Texas. We are glad you are here and look forward to sharing this experience with you. Enjoy!

Shirley Matteson 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 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 Michael Feuer and his presentation will immediately follow the luncheon at 1:35 PM in the Shamrock & Riviera Room on Thursday. The Fireside Chat on Thursday afternoon in the Shamrock & Riviera Room is for graduate students only and is an excellent opportunity to visit with Professor Feuer 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 pm in Beverly-Flamingo 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 would also like to note that The University of Texas at Arlington College of Education has graciously agreed to sponsor a reception on Wednesday from 5:30 – 7:00 pm at Boston's Pizza. Food will be provided along with two drink tickets per person. Please join us there!

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, an excellent ticketed research training session will be offered on Wednesday afternoon. A description of this session is provided on page 8. Do not forget to check out and attend the various free workshops, innovative sessions, and symposia scheduled throughout the program.

Thank you for attending and supporting SERA!

Grant Morgan SERA President–Elect & Program Chair

Program Session Schedule

| Wednesday | |
|--------------------------------|--|
| 11:00a – 5:00p | Registration |
| 12:00p - 2:00p | Training Session: |
| | |
| | Survey Design and Instrument Development: How Not to Collect |
| | Meaningless Data (Ticket Required, Astoria & Shamrock Riviera) |
| 1:00p - 2:15p | Sessions (W1) |
| 2:20p - 3:35p | Sessions (W2) |
| 3:40p - 4:55p | Sessions (W3) |
| 5:30p - 7:00p | Sponsored Reception: |
| 2:20p - 3:35p 3:40p - 4:55p | Sessions (W1) Sessions (W2) Sessions (W3) |

The University of Texas at Arlington College of Education

Boston's Pizza Food + 2 Drink Tickets per Person

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

| Friday | |
|-----------------|-----------------------|
| 8:00a – 12:00p | Registration |
| 8:00a - 9:00p | Continental Breakfast |
| 8:45a - 10:00p | Sessions (F1) |
| 10:05a - 11:20p | Sessions (F2) |
| 11:25a – 12:40p | 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 12:00-1:30 – Statler & Waldorf). 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 Thursday business luncheon **only** to students who are **both** (a) officially registered in the hotel and (b) in paid attendance at the luncheon.

Presidential Invited Address (T5.0 Thursday 1:35 - 2:45 - Shamrock Riviera) immediately following the luncheon.

Fireside Chat Professor Michael Feuer (T6.1 Thursday 2:45 – 4:00 – Shamrock Riviera) *Graduate Students Only.*

Graduate Student Meeting (T8.1 Thursday, 5:25 – 6:30 – Beverly-Flamingo)

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 Rock Wood Fired Kitchen of Arlington (Immediately following the Graduate Student Meeting). Meet in the hotel lobby to go to the Rock Wood Fired Kitchen of Arlington for an evening of fun and relaxation.

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

Graduate Student Division VI Paper Sessions

There are 59 graduate student Division VI paper sessions included in this year's program. Each Division VI paper features presentations of **work in progress** by graduate students followed by feedback from an experienced faculty member discussant.

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

| The Multivariate General Linear Model Hierarchy: A Comprehensive Illustration | W1.7 |
|--|-------------|
| Guiding Doctoral Students through the Dissertation Writing Process | W2.5 |
| How to Find and Obtain Your Ideal Job in Academia | <i>T7.7</i> |
| Improve Your Group Comparisons: Matching for Beginners | F2.2 |
| Introduction to Research Models: Using a Research Model to Build Your Proposal | F3.1 |
| What Productive Writers Do | F3 4 |

SERA Junior Faculty Mentoring Initiative Part 1 & 2

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

Part 2: Thursday, 10:40-11:55 (Session T3.1)

Michelle Peters and Jana Willis

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 12:00-1:30 – Shamrock Riviera). 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 – Shamrock Riviera) 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.

| The Multivariate General Linear Model Hierarchy: A Comprehensive Illustration | W1.7 |
|--|------|
| Using R for Confirmatory Factor Analysis: A Tutorial Using the lavaan package | W3.1 |
| Introduction to Research Models: Using a Research Model to Build Your Proposal | F3.1 |
| What Productive Writers Do | F3.4 |

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 |
|------------------|---------------------------------------|
| Emma Bullock | Sam Houston State University |
| Faye Bruun | Texas A&M University Corpus Christi |
| Lynn Burlbaw | Texas A&M University |
| Julie Combs | Sam Houston State University |
| Chrissy Cross | Stephen F. Austin State University |
| James Hardy | University of Texas at Arlington |
| Bill Jasper | Sam Houston State University |
| Audrey Meador | West Texas A&M University |
| Grant Morgan | Baylor University |
| R Noah Padgett | Baylor University |
| Rachel Renbarger | Baylor University |
| Celia Scott | Texas Wesleyan University |
| James Telese | University of Texas Rio Grande Valley |

MORE DISCUSSANTS COMING

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, and to Forrest Lane for serving as Local Arrangements Chair.



SERA 2020 Presidential Invited Address Michael Feuer

Dean of the Graduate School of Education and Human Development The George Washington University



Michael Feuer is Dean of the Graduate School of Education and Human Development and Professor of Education Policy at The George Washington University, and immediate past-president of the National Academy of Education. Before coming to GW in 2010, Michael held positions at the National Research Council of the National Academies: he was the founding director of the Board on Testing and Assessment, founding director of the Center for Education, and executive director of the Division of Behavioral and Social Sciences and Education. Prior to joining the NRC in 1993, Michael was a senior analyst and project director at the US Congress Office of Technology Assessment.

Michael received his BA in English from Queens College (CUNY), an MA in public management from the Wharton School, and a PhD in public policy analysis from the University of Pennsylvania. He was on the faculty at Drexel University from 1981-1986, and has taught courses in education policy and research at Penn and Georgetown.

In addition to many edited volumes and reports, Michael has written two books, both published by Harvard Education Press: The Rising Price of Objectivity: Philanthropy, Government, and the Future of Education Research (2016), and Moderating the Debate: Rationality and the Promise of American Education (2006). His essays, commentaries, and poems have appeared in newspapers, blogs, and magazines in the US and abroad. Michael consults regularly to educational institutions and government in the US, Israel, Europe, and the Middle East.

Michael was elected to the NAEd presidency in 2013. He is also an elected fellow of the American Association for the Advancement of Science and of the American Educational Research Association, cochair of the Consortium for Applied Studies in Jewish Education (CASJE), and was appointed by President Barack Obama in 2014 as a member of the National Board for Education Sciences.

Michael lives in Washington, DC, with his wife, Regine, a physician with board certification in obstetrics-gynecology and addiction medicine. The Feuer's have two grown children.

2-Hour Training Session

(Ticket Required)

Survey Design and Instrument Development: How Not to Collect Meaningless Data Robin Henson & Sarah Ferguson

This workshop will focus on developing survey questionnaires and research instruments for data collection in education research. Particular focus will be given to validity and reliability concerns, providing guidance on developing items and tools to consistently measure what you actually mean to measure (and how to know if you are not doing this). Additionally, the workshop will discuss the process of developing these tools and steps that should be taken to evaluate quality through-out the development stages (a.k.a. planning to not fail!). Participants can bring a survey or instrument they are currently working on, an idea they have for a future project, and/or an open mind and willing heart to learn (with no clear ideas of what they are doing),

Biography

Robin Henson is a professor and department chair in the Department of Educational Psychology at the University of North Texas. He has been at UNT since 2000 and was at the University of Southern Mississippi for one year prior. Robin received his doctorate in educational psy-chology from Texas A&M University, has two masters degrees in general and clinical psychology from the University of Houston – Clear Lake, and a double major bachelor's in biblical studies and applied psychology from Evangel University. He is a past associate editor of Educational and Psychological Measurement, and has served on the editorial boards of multiple journals. He teaches research design and applied statistics and his research interests span across a range of areas, but most commonly center on applied general linear model statistics and self-efficacy theory and application.

Sarah Ferguson is an Assistant Professor of Quantitative Methods at Rowan University in Glassboro, New Jersey. She is an applied methodologist in education research, focusing on the application of advanced research methods and statistics approaches to issues in education. Prior to coming to Rowan University, Sarah was a certified teacher in the state of Texas with certifications in Elementary Education, Middle School Science, and High School Science, and went on to receive her doctorate from the University of North Texas in Educational Research. Her current research focuses on two areas: the education and utilization of quality research methods and analyses, and supporting the career development pathway for individuals from high school to career in STEM fields.

Wednesday, February 12

| W0.1 | 11:00a – 5:00p | Grand Ballroom Foyer |
|------|----------------|----------------------|
| | Registration | |

W0.2 Training Session 12:00p – 2:00p Astoria & Shamrock-Riviera Survey Design and Instrument Development: How Not to Collect Meaningless Data

Robin Henson & Sarah Ferguson

Cost = \$40. You may be able to pay for this session at the registration table.

Special Ticketed Event

W1.1 Paper Session 1:00p – 2:15p Beverly-Flamingo

Literacy

Discussant: Bill Jasper

The Influence of Private Contributions on Public Education

Natalie Clogston – University of Houston - Clear Lake

Government support in K-12 schools has seen dramatic decline in numerous states over the last few decades. Less money for schools has lead to cost cutting, school decline and community distress. Community members with high expectations for their schools often become troubled when academic programs are dropped due to budget cuts and local taxes are unable to improve conditions. In the midst of financial uncertainty and public concern, school leaders, concerned parents, and community members have turned to education foundations as an alternative source of funding. Recently, these organizations have hit an all-time national high, collectively raising nearly \$400 million and distributing \$165 million in programs for K-12 public schools. This growing movement of private funds for public schools begs the question: What influence, if any, do education foundations have on school districts?

Academic Literacy Acculturation Through the Lens of International Students: A Preliminary Research Plan

Crystal D Rose – Texas Tech University

The following paper is a preliminary research plan for a study designed to inform what an inclusive classroom environment might look like that values international students' languages, cultures, and identities while supporting their academic literacy acculturation in the context of an English-only education. This plan includes the story of the research, research questions, conceptual framework, literature review, and methodology.

The Impacts of Global Experiences on Students' Perceptions of STEM

Cassidy Caldwell – Texas A&M University

Educational global experiences, such as, student exchange programs, internships, and study abroad programs are often experienced by university students as an added component of

their degree plan. Through these global experiences, students develop intercultural skills, cultural awareness, and a deeper understanding of the content. Countries are becoming more connected through STEM fields and there is a need to educate students in those areas, as well as, develop intercultural skills. This proposed study investigates the benefits of providing secondary level students an educational global experience while incorporating STEM project-based learning activities.

W1.2 Paper Session 1:00p – 2:15p Capitol I

K-12 Educator Interest in Graduate Studies in Education: Survey Results from a Suburban School District in the South

Eric D Marvin – Union University

In this session, results will be shared from a survey of over 300 elementary and secondary school educators regarding their level of interest in pursuing graduate studies in the field of education. In addition to educator demographics, the results of a researcher-developed instrument will reveal K-12 educator interest in online vs. face-to-face learning, digital badges, and various degree programs and concentration areas. Likewise, educator understandings about district incentives to pursue graduate studies in education will also be shared.

The Impact of a Summer Professional Development Program on High School In-Service Teachers' Designing and Implementing an After-School Curriculum Yujuan Shi, Faith Maina, & Abdul Serwadda – Texas Tech University

This study discusses the impact of a university-based summer professional development program on the design and implementation of high school after-class curriculum on computer and data science. The data collected from classroom activity observation in the summer program, participants' planned unit and lessons, group discussions and presentations, and their implementation of designed lessons in high schools was examined. The participants' knowledge development has been analyzed with the framework of subject matter knowledge (SMK), pedagogical content knowledge (PCK) and technological pedagogical content knowledge (TPACK). The approaches the participated teachers applied to acquire the teaching knowledge have been detected as well.

Association of Mathematics Teachers' Beliefs and Preferences of Teaching Strategies Joseph Junlong Ji, Jian Wang, Shuang Zhang & Lu Guo – Texas Tech University

Teachers' beliefs about mathematics teaching guide their decisions to choose mathematics teaching strategies, which in turn, presumably shape the quality of ethnically diverse students' learning mathematics. This study intends to examine the association between teachers' beliefs of mathematics teaching and mathematics teaching strategies framed with the theories of teacher-centered and student-centered beliefs and procedural and conceptual teaching strategies. It uses a quantitative research design based on the data of the Teaching and Learning International Survey (TALIS) factor analysis to determine whether single items

of mathematics teaching strategies and mathematics teachers' belief-variables were grouped correctly, analysis to reveal the association between teachers' beliefs and their preference of teaching strategies.

No Teachers Left Inside! Preservice Science Teachers' Mental Models of Outdoor Environments

*Andrea S Foster & Lisa Brown – Sam Houston State University

The next generation science and mathematics teachers have spent much of their impressionable years on screens and devices. Limited time and attention have been given to outdoor activities. This longitudinal study explores the impact of an outdoor education experience on preservice teachers' mental models of their natural environment.

W1.3 Paper Session 1:00p – 2:15p Capitol II

Higher Education
Discussant: R Noah Padgett

Ethnic Difference in the Effects of Parental and School Involvement on Readiness for College - Factorial Invariance Test in Multilevel Data

Youngmin Kim – Texas Tech University

In the U.S., the difference of college readiness between students became an important issue for educational policy and research. Parental involvement and school culture has been acknowledged a crucial factor that helps students ready for college. Mwangi et al. (2019) discovered the significant effects of parental involvement and school culture on students' college readiness via multilevel structural equation modeling in their study. As family's ethnic culture is also expected to cause difference of college readiness, present study extends Mwangi et al.'s (2019) research by investigating ethnic difference in the effects of parental involvement and school culture on college readiness.

Truly Free?: Evaluating Free Speech Legal Precedent on US College Campuses Z W Taylor – The University of Texas at Austin

Although college campuses continue to evaluate their commitments to free speech and expression for students and other stakeholder, there exists precedent for outlining how free speech policies can be drafted. As a result, this critical literature review and policy analysis will detail the legal precedent surrounding free speech on campus and how institutions can draft protective, Constitutionally-compliant free speech codes.

The Individual and Combined Effects of Two Types of Feedback in a Higher Education Environment

Hyunjin Shim & Hyunchang Moon – Texas Tech University

A number of researches have examined different types of feedback and their effectiveness on students' achievement, including self-feedback and peer-feedback. However, there has been no to little research examining the individual and combined effects of feedback in a higher

education setting. This proposal will investigate about the individual and combined effects of two types of feedback (i.e., self-feedback and peer-feedback) in online learning environment at higher education on the quality of produced work. The research design used for this study will be a quasi-experimental repeated measures pretest-treatment-posttest design. This study will also contribute to help instructors in a higher education online environment improve the knowledge of effectiveness of self- and peer-feedback and suggest the teaching strategies for the assignments. More implications will be discussed on how we can use the findings of the study.

W1.4 Paper Session 1:00p – 2:15p Bonneville

Measurement Discussant: Emma Bullock

Latent Structure of a Translanguaging Survey Instrument: Perceptions of Bi/Multilingual Graduate Students

Mahjabin Chowdhury, Chenxuan He & Stephanie Moody – Texas A&M University

The purpose of this study is to examine the latent structure underlying a translanguaging survey instrument, and to investigate whether the survey instrument has the same acceptability for bi/multilingual native English speakers and bi/multilingual non-native English speakers. Data included 181 surveys completed by graduate students. Data were analyzed by testing measurement invariance. Results validate a measurement model with 23 items underlying four latent factors for the survey instrument. Measurement invariance further indicates that both groups accept translanguaging as a medium of second language teaching and learning.

Evaluating Post-Test Measures of a Training Intervention

Laura R Shero, R Noah Padgett & Shan Jiang – Baylor University

Failure to measure adult learning sometimes stems from the difficulty of finding an appropriate post-training measurement tool that is feasible, valid, and reliable. Learning and development professionals face challenges in measuring adult learning in a competitive setting where conditions are highly variable. In this study, we evaluate methods for establishing reliability of estimates when data are rater perceptions of adult learning. This study has important implications for how to estimate the reliability of estimates of behavioral change when data can only be feasibly collected from raters' perception. This study will evaluate one post-training measure using generalizability theory and simulation studies.

Factors that Attribute to the Low Enrollment of Black Students in Dual Credit Akilah Ann Martin – University of Houston - Clear Lake

This research seeks to identify the factors that attribute to the low enrollment of Black students in Dual Credit programs. A sequential explanatory mixed method study will be used to guide this research utilizing a student survey instrument to gather data that can be quantified to identify factors. Additionally, interviews of Black students that did not participate in Dual Credit will be used to provide qualitative context.

W1.5 Paper Session 1:00p – 2:15p Cimarron
Gifted Education

Understanding Teachers' Cultural Experiences and Beliefs That Contribute to Successful Urban Gifted Students

Cristina Worley – Texas A&M University Meg Hines – University of Georgia

Sparse research exists in gifted urban education, particularly in the area of teacher beliefs and practices. In this cross-section, the majority of research has been conducted on identification, recruitment, and retention (Harris, J., & Ford, D., 1991; Ford, D., & Moore, J., 2004; Ford, D., Moore, J., & Scott, M., 2011). Unfortunately, few research studies address beliefs and cultural experiences of teachers who do nurture talent of such students. This pilot study will build on current research to understand how culture plays a role in the mindset of Nashville's highly effective urban teachers of the gifted, with hopes to extend research.

Higher Educational Outcomes of Low-Income Gifted Students Who Attended a Summer Enrichment Program

Andrea Toledo Castillo, Ana Lilyan Falcon, Corina Kaul & Jennifer H Robins – Baylor University

Studies have found that low-income gifted students are less likely to attend and complete college than their high-income peers. Project Promise is a summer enrichment program for economically disadvantaged high-ability students. Using descriptive statistics and correlations, this study aims to determine how the postsecondary educational outcomes of Project Promise graduates (N = 259) compare to that of low-income students and low-income gifted students. Findings suggest that graduates from Project Promise have higher college attendance than a national sample of low-income, high-ability peers. Implications for creating interventions to promote postsecondary college attendance in low-income gifted students will be discussed.

Sense of Belonging and Lived Experiences of Honors Students of Color

*Rebekah Chojnacki – The University of Texas at Arlington

One way that students can feel supported is when they have a sense of belonging and connectedness to a group (O'Keefe, 2013) and a way to meet that need for some students is to become active in an honors program (Wawrzynski, Madden, & Jensen, 2012). There are a few honors programs with sizable populations of these Students of Color that have not been well-researched (Klos, 2018). This study fills a gap in the research literature concerning the lived experiences of Students of Color in a racially diverse honors program.

W1.6 Paper Session 1:00p – 2:15p El Dorado

Achievement

Effectiveness of T-STEM Schools on Standardized Mathematics Scores

Michael S Rugh, Aamir Fidai & Luchen Jiang – Texas A&M University

Specialized Texas STEM (T-STEM) high schools have been established for over 10 years with a multi-faceted mission that includes maintaining and improving scores on standardized achievement tests. In this study, we used hierarchical linear modeling and found that attending one year of T-STEM high school has no effect on mathematics achievement, after accounting for student-level variables (prior achievement, socio-economic status, gender, and ethnicity) and school-level variables (percent low-SES). We interpret the results to suggest that T-STEM schools have not lived up to the goal of improving standardized mathematics scores.

Effects of Attendance on Academic Performance

Jeff Quisenberry, Darla McNeely Barnes, Julia Rabe, Tommy Shiflett & Michelle Tolar – Lamar University

The relationship between student attendance and academic performance continues to receive attention from PK-12 educators. As educational communities seek to more deeply understand the correlation between attendance and achievement additional research is required. Specific student demographic variables along with the urbanicity of students' district provide unique opportunities for research. This quantitative study sought to explore the relationship between elementary student attendance and performance levels on state mandated assessments in a suburban school district in Texas.

Threshold Crossings and Data Science/Cybersecurity Education: Learning from the Examination of High School Teachers Cybersecurity Professional Development Joseph Mbogo Wairungu, Faith Maina & Abdul Serwadda – Texas Tech University

This paper explores the experiences of eleven high school teachers learning cybersecurity concepts during a six-week summer Research Experience for Teachers (RET) program. We applied a threshold concept lens to make meaning of the troublesome knowledge that teachers found difficult and how they overcame those difficulties during the cybersecurity and data science training. The threshold concept theory offers a potential lens on teachers learning, focusing on concepts that are troublesome and transformative. The study involved eleven high schools' teachers-six male and five females. We used naturalistic observation to record teachers' behavior during their liminal and transformative stages. We established evidence that after the training the teachers' level of interest, perception, confidence, and motivation improved. This was an indicator of a quality transformation, a key concept in threshold crossing.

The Impact of Gender in Mathematics Achievement in Competitive STEM Camps
*McKennah Edmunds, Julia E Calabrese & Robert M Capraro – Texas A&M University

Over time, a gender gap in mathematics achievement has been identified. International and national testing has shown male students are consistently outperforming female students in the United States. This study aims to determine if there is a mathematical achievement gap between male and female high school students in a competitive-admittance STEM summer camp setting. Posttest scores were analyzed using a linear regression model, t-tests, and effect size. Results showed that gender was not a significant factor in mathematics achievement for students in a competitive-admittance STEM summer camp. However, previous mathematics experience was a significant predictor of performance in this setting.

W1.7 Workshop 1:00p - 2:15p Fleetwood
Free Workshop

The Multivariate General Linear Model Hierarchy: A Comprehensive Illustration - Take 2

Linda Reichwein Zientek – Sam Houston State University Kim Nimon – The University of Texas at Tyler Julia Fulmore – University of Dallas

Support for using the multivariate general linear model as the conceptual framework to unify univariate and multivariate parametric analyses is provided. Attendees will understand the hierarchical relationships and equivalencies of analyses and the notion that the hierarchy is not as flat as some have portrayed it to be. The hierarchy will be proved by R with real data. Test statistic and effect size conversions in this manuscript along with supplementary files containing R syntax, R output, and sample write-ups can help both teachers and emerging researchers develop an in-depth understanding of the hierarchical structure of univariate and multivariate analyses.

W2.1 Paper Session 2:20p – 3:35p Beverly-Flamingo

Measurement

Comparing Estimation Methods for ML-CFA Models with Categorical Data R Noah Padgett – Baylor University

Multilevel measurement models are more frequently applied to help answer questions when data arise from hierarchically structured data. In this project, three estimation methods for multilevel factor models are compared for 1) convergence rates, 2) average relative bias, 3) root mean square error, and 4) Type-I error rates. Presently, few studies have deeply investigated the estimation performance of multilevel factor models when data are ordered categorical. We fill this gap by performing an extensive Monte Carlo simulation study under a variety of conditions. We conclude our study with recommendations on when different estimation methods are likely to learn to diverging conclusions on cautions on relying on only one estimation method.

Examining Technical Properties of Curriculum-based Measurement of Writing for Eighth Graders

John E Romig & Amanda A Olsen – The University of Texas at Arlington

Curriculum-based measurement of writing (CBM-W) is a promising method assessment that can be used to identify struggling learners and determine whether instruction is effective for students. To be used for these purposes, however, CBM-W must have certain technical properties (e.g., reliability, validity, sensitivity to growth). This study examined technical properties of CBM-W slopes. Eighty-nine (N = 89) eighth students participated in this study. Students responded to a weekly writing prompt for eleven weeks. Analysis will consider whether CBM-W data produced stable, reliable slopes and whether the CBM-W measures were sensitive to growth for this population of students.

Developing the Teachers' Addressing Students' Emotional Problems QuestionnaireShan Jiang, R Noah Padgett & Laura Shero – Baylor University

Teachers are important socializers for children's emotional competency development. Teachers' practices and their own characteristics affect children's emotional competency. In this study, a new measurement was developed to capture teachers' behaviors, beliefs, perceived role, and self-efficacy in addressing students' emotional problems. This self-rated assessment is hoped to provide researchers, administrators, and trainers in this field an easy-administration, easy-scoring and time-saving tool to assess relevant information.

Academic Success of Turkish Graduate Students at the United States Universities *Sebahattin Ziyanak – The University of Texas at Permian Basin Jason H Yagci – University of North Texas

This study examines predicting the graduate grade-point-average (GGPA) by using high school GPA, the University Entrance Examination (YGS) and undergraduate GPA. The sample for the study consisted of 128 Turkish graduate students who attending or completed their graduate studies at the United State universities. All of the students included in the study took the University Entrance Examination (YGS) for their admission to Turkish universities for undergraduate study in Turkey. The results of the study show that there is only significant positive correlation between GGPA and UGPA at the 0.05 level.

| W2.2 Paper Session | 2:20p – 3:35p | Capitol I |
|---------------------------|------------------------|-----------|
| | Measurement | |
| | Discussant: Jim Telese | |

Comparing Differential Item Functioning (DIF) across Gender, SES, and At-risk Status in Fifth Grade STAAR Mathematics Test

Seoyeon Park –Texas A&M University

This was a study of differential item functioning (DIF) for fifth-grade mathematics items from STAAR 2017. DIF was conducted across different gender and SES groups. Among test items, we analyzed 277 fifth grade students' item responses of 14 conceptual questions and

16 procedural questions. The result showed that two questions had measurement variance across different SES groups but no question with measurement bias across different gender groups among 16 procedural questions. Among 14 conceptual questions, there was one question with measurement variance across SES groups, and one question across gender groups.

The Development of the College Teaching Self-Efficacy Scale

Yanling Liu, Narges Hadi, Kara M Page, Terra Tindle & Kamau Oginga Siwatu – Texas Tech University

The aim of this investigation was to create a new measure to assess individuals' self-efficacy to successfully enact specific pedagogical practices in a college classroom. We refer to the new measure as the College Teaching Self-Efficacy Scale. In addition to describing the need for a new measure of college teaching self-efficacy and documenting the development of the scale, we explored the psychometric properties of the scale. Implications of the study and directions for future research are discussed.

Initial Development and Validation of the Elementary Student Engagement Survey (ESES)

Jorge A Carmona Reyes, Shanna L Attai – Baylor University John Davis – University of Utah Judy York – Education Service Center Region 12 Kerri Ranney – Huckabee Inc. Truell W Hyde – Baylor University

Student engagement has been researched from multiple perspectives in the literature due to its impact on academic attainment and other variables of interest. However, most of the research has focused on grades above elementary school, leaving a gap on student engagement at the elementary level. This study reports on the psychometrics of a newly developed student engagement instrument for elementary school. The hypothesis assumes that student engagement for elementary school students is a metaconstruct comprised of cognitive, behavioral, and emotional metaconstructs. This instrument named The Elementary Student Engagement Survey (ESES) instrument was piloted employing a sample of 202 minors.

The Development of the Research Self-Efficacy Inventory

Ariel Kirkland, Kara M Page, Terra Tindle, Laryon Witherspoon, Narges Hadi, Yanling Liu & Kamau Siwatu – Texas Tech University

This investigation's purpose was to create an inventory consisting of four scales that could potentially provide a more comprehensive examination of individuals' research self-efficacy beliefs. In addition to describing a need for a new measure of research self-efficacy and documenting the development of the inventory, we explored the psychometric properties of the scales that comprise the Research Self-Efficacy Inventory. Evidence of validity was obtained with two existing measures – Self-Efficacy in Research Measure and Dissertation Self-Efficacy Scale. The results provide an initial report of the psychometric properties of

the four research self-efficacy scales. Implications of the study and directions for future research are discussed.

W2.3 Paper Session 2:20p – 3:35p Capitol II

College Students

Influences on STEM Majors in One University: Formal Education Influences Sandra B Nite – Texas A&M University Devyn C Rice

Many sources indicate that the need for STEM majors to fill STEM jobs continues to rise. Recruitment of STEM majors depends on knowledge about what attracts students to STEM majors. This study was conducted to determine whether, to what degree, and what specific influences in formal education influence student STEM major choice in college. Undergraduate STEM majors (N = 494) responded that their science and mathematics classes had an influence on their choice of major in college. Recognizing what characteristics of these classes increase student interest in STEM majors can inform teaching practices in schools.

The Effects of Math Anxiety on Performance of Undergraduate Business Majors Using Self-Efficacy As a Mediator

Audrey Meador & Leslie Ramos Salazar – West Texas A&M University

This research contributes to the body of knowledge regarding mathematics anxiety, self-efficacy, and performance. Specicially, this study analyzed these constructs as they pertain to undergraduate business students enrolled in entry-level, pre-requisite mathematics courses. Information was collected via surveys utilizing the Mathematics Self-Effiacy and Anxiety Questionnaire (MSEAQ). Results based on regression modeling were consistent with prior research involving the relationship between mathematics anxiety and performance, with self-effiacacy serving as a mediator. Discussion extends to instructional strategies that support self-efficacy and alleviate mathematics anxiety for business students in the infancy of their program, where success in mathematics is paramount.

Technology-based Communication between Developmental Mathematics Faculty and Students

Amy G Nabors – Sam Houston State University

This study investigated the development of student-teacher relationships through extra-class technology-based communication from the viewpoint of developmental mathematics students. Students at a large Texas community college completed a combination of surveys from three previous studies. Results indicated that (a) students initiated conversations was correlated to students' Predicted Outcome Value (POV), (b) instructor immediacy behaviors and students' reasons for communicating were correlated, and (c) students' reasons for communication was the largest predictor for students' POV. Personal, Clarification, Efficiency and immediacy explained 33.9% of the variance in students' POV. The β weight and structure coefficient suggested Personal reasons was a possible suppressor.

The Influence of Proctored Testing in Distance Learning Mathematics Courses *Kelly Anderson – University of Houston - Clear Lake

The purpose of this mixed methods study was to examine the influence of proctored testing on students' test performance and test anxiety in distance learning mathematics courses. The study compared survey and examination results from 263 students in distance learning mathematics courses in a community college in Texas. Quantitative analysis revealed students performed better and experienced less test anxiety in an unproctored test environment. Qualitative analysis revealed contributors to test anxiety related to time, environment, and format. While unproctored testing should be used when possible, institutions should enforce proctored testing on high stakes examinations to ensure academic integrity.

| W2.4 Paper Session | 2:20p – 3:35p | | Bonneville |
|--------------------|-------------------------|--|------------|
| | Multicultural Education | | |

From Excitement to Encouragement: Support Teachers Require to Participate in Global Collaboration Projects

Randi Wold-Brennon, Richard Velasco & Kendra Nwosu – Texas Tech University

Global collaboration is a way to engage students in a meaningful educational experience (Goodwin & Hein, 2017; Scoffham, 2018; Schleicher, 2019). This study describes the experiences of mentoring a small group of classroom educators from Hawaii, Texas, and Guam as they implement global collaboration. The following questions were answered, (1) What are the experiences of mentoring teachers in implementing a global collaboration project? and (2) How do teachers' levels of concern about collaborative learning change after participating in a global collaboration project? They completed pre- and post- surveys detailing concerns in implementing the global collaboration project.

Understanding the Power and Possibilities of Post-Colonial Education: Asian International Students' Narratives of Becoming

Loi Q Le – Texas Tech University

The post-modern era has brought about both confusion and liberation as to how humans experience education in the cross-cultural and multiethnic environment. The drastic globalization and international education demands a new understanding of multinational and multicultural education. This study adopts the postcolonial lens to shed light on the experiences of three Asian international students in American Education. Narrative inquiry is employed to produce a seamless story of language, identity, isolation and allegiances among international students. The findings provide novel insights into the perpetuating colonial effects on Asian students in American higher education context, which urges a reform in multicultural education

Principles of Feminist Pedagogy into Teaching Practices

Erika Zavala – Texas Tech University

Discrimination is a continuing challenge for women of color in the teaching field. Statistics show that Latinas only account for 7% of teachers in the United States compared to White and of European descent (National Center for Education Statistics, 2009). My purpose was to present the experiences of a Latina, Dual language Teacher from North Texas. This study narrates a teacher's life story highlighting advocacy to counter social issues. Additionally, my purpose was to introduce feminist pedagogy as teaching principles to minimize hierarchical relations between teacher and students and to empower teacher and students' voices.

Analyzing Multicultural Picture Books and Culturally Relevant Activities for Content Areas

*Kelly Medellin & Dittika Gupta – Midwestern State University

The purpose of this study was to examine current representations of diversity in children's picture books, and present culturally responsive books and lessons in the content areas for preservice teachers. First, critical content analysis was conducted to explore the representations of culturally and linguistically diverse characters in picture books included in an elementary school curriculum. The second stage consisted of collecting culturally authentic picture books related to science, math, and social studies content areas and create activities and lessons that were presented to preservice teachers. Surveys were used to collect data on the experiences and views of the preservice teachers.

W2.5 Paper Session
2:20p – 3:35p
Culture
Discussant: Chrissy Cross

It's All About Context: The Future of Affirmative Action in Postsecondary US Education

Z W Taylor – The University of Texas at Austin

In no uncertain terms, synthesizing the rulings of Bakke, Gratz, Grutter, and Fisher II, using race as a factor in admissions decisions is constitutional, so long as that the admissions policy survives strict scrutiny: the policy serves a compelling government interest, the policy is narrowly tailored, and the policy engages with the least restrictive means for achieving its goal. From here, I conduct a critical policy and literature review to guide the future of affirmative action in US postsecondary education.

A Mixed Methods Investigation of Teacher Candidate's Culturally Relevant and the Impact on Student Perception

Kara M Page – Texas Tech University

Classrooms across the U.S. are becoming more racially and ethnically diverse. To meet the needs of our students, teachers and teacher preparation programs are learning about and

implementing Culturally Relevant Teaching. The purpose of this study is to compare the relationship between teacher candidate's belief in their ability to meet the needs of culturally and linguistically diverse students with their applied teaching actions, as well as with the students' perceptions of their actions.

The Relationship of Instructional Coaching and T-TESS and Perceptions of Instructional Coaches, Teachers, and Principals

Geronima F Nale – Sam Houston State University

Instructional coaches are tasked with professionally developing teachers but seem to lack an objective tool to evaluate their progress. This research in progress aims to determine the relationship of instructional coaching and the Texas Teacher Evaluation and Support System (T-TESS) growth for teachers. This qualitative study aims to examine the perceptions of the teachers, instructional coaches, and principals.

W2.6 Workshop 2:20p – 3:35p Fleetwood
Free Workshop

Guiding Doctoral Students through the Dissertation Writing Process

Julie Smit, Aaron Zimmerman & Shirley Matteson – Texas Tech University

This workshop will focus on writing the dissertation. It begins with developing goals in time management, content management, and cognitive management for writing. Next the dissertation writing process will be broken down by focusing on strategies to get started writing a chapter, to use texts (e.g. dissertations or research articles) to jumpstart thinking, to develop first initial drafts, and to revise (i.e. addressing the chair/committee's feedback). Expectations for the various components of the dissertation will be discussed. The workshop will conclude with a discussion on how to maintain physical and emotional wellbeing when engaged in dissertation writing.

W3.1 Workshop

3:40p – 4:55p

Free Workshop

Beverly-Flamingo

Using R for Confirmatory Factor Analysis: A Tutorial Using the lavaan Package Shan Jiang, Laura Shero & R Noah Padgett – Baylor University

In this workshop, a demonstration of how one may use the lavaan package in R to construct confirmatory factor analyses. Key features of the workshop will be an introduction into CFA models, the R environment, and lavaan. Using responses to the Rosenberg Self-Esteem Scale, we demonstrate how to specify various plausible factor structures for these data, how to decide among a set of plausible models, and important features of lavaan and R that facilitate latent variable modeling.

W3.2 Paper Session 3:40

3:40p - 4:55p

Capitol I

Principals & Evaluation Discussant: Audrey Meador

An Examination And Application of Design Principles in the Multimedia Design for Mobile Devices in Mobile Learning (mLearning)

Michael O Okumu – Texas Tech University

This paper will undertake the task of examining the application of design principles when designing instructions for mobile devices. It will conduct a comparative study on the design principles applications in multimedia content design for desktop computers and mobile devices. This paper will also propose a framework that can be adopted by mobile devices multimedia content designers and developers as a guide for creating effective and efficient multimedia content for mLearning and at the end will propose some important considerations for future research.

Principal Leadership in Special Education Programming: A Qualitative Case Study to Fostering Inclusive Practices

Ann H Lê – Sam Houston State University

Using Shapiro and Stefkovich's (2001, 2005, 2011, 2016) Ethic of the Profession and Model for Students' Best Interests, and (b) Rawls' (1971) social justice theory, the author proposes to explore elementary principals in Texas' decision-making toward inclusive practices for the educational success of students in special education. The study will bring awareness to the types of support and preparation that are needed to help these educational leaders support shared goals, organize responsibilities, and address challenges that arise with guiding an educational reform positioned around inclusive educational practices.

Principals and School Counselors' Perceptions of the Role of the School Counselor (Research in Progress)

Tania M Merik – Sam Houston State University

Unfortunately, school counselors continue to be assigned duties by principals that are outside the purview of the role of the professional school counselor as endorsed by the American School Counselor Association. The purpose of this research-in-progress is to examine the perceptions of school counselors and their principals in regards to counselor roles.

W3.3 Paper Session

3:40p - 4:55p

Capitol II

Preservice Education

Towards Understanding Service-Learning as a Field Experience in Teacher Education *Kathleen C Tice & Larry P Nelson – The University of Texas at Arlington*

This study examines a service-learning project where preservice teachers worked with youth in neighborhoods characterized by gang recruitment. Mixed methods were used in determining 1) whether preservice teachers would experience gains in teaching efficacy

through the project and 2) factors that play a role when service-learning fosters efficacy beliefs. Quantitative results showed significant gains in teaching efficacy, and findings of the qualitative analysis complemented the quantitative results in understanding the gains in efficacy beliefs. The findings build upon longitudinal research that has synthesized findings towards developing a model that can guide planning community field experiences in teacher preparation.

The Use of a Student Focused Coaching Model in a University Field Based Setting *Robin Rackley, Janet Hammer & Lauren Santarelli – Texas A&M University

The student focused coaching (SFC) model (Hasbrouck, 2017; Hasbrouck & Denton 2005, 2007, 2009) provides coaching support to teachers in real world schools. The SFC model is based on the understanding that "teacher practice is best addressed by using a truly collaborative process in which both the coach and novice teacher focus on a jointly held belief, need or concern, and then work collaboratively to achieve the desired end." This model helps define the roles of the mentor (coach) and the mentee (protegee). This qualitative study follows university field supervisors as they work to implement the student focused coaching model.

Curerre and the Possibility for its Integration in Teacher Education Practicum Ngan Nguyen – Texas Tech University

The aim of the paper is to analyze the currere method as a theoretical perspective that can be integrated in language teacher education practicum to facilitate prospective teachers' reconceptualization of their educational experiences in relation to their teaching career. The method of currere can support the moving from the Tylerian Rationale to a postmodern curriculum that allows teachers to envision a way out of the turmoil of contemporary schooling. Suggestions for further research and implications for integrating the method of currere in the practicum of a language teacher education curriculum are also provided.

Physical Education Preservice Teachers' Perspective on Teaching Health-Related Fitness

*Colin Pennington, Kelsey McEntyre – Tarleton State University Victoria N Ivy – University of West Georgia Jesse Brock – Tarleton State University

This qualitative study examined the relationship between preservice teachers' (PT) acculturation and beliefs connected to teaching health-related fitness (HRF) within the K-12 setting. Inductive analysis was used to determine factors that contributed to participants' (N = 3) perceptions and conceptions of teaching HRF. Three prominent themes emerged: (a) HRF content belongs in physical education, (b) participants lacked pedagogical expertise, and (c) physical education teachers are made at home. PTs learn HRF conceptions from a variety of environments, contexts, and leadership figures. Physical Education Teacher Education (PETE) programs could provide more opportunities for PTs to develop a broader understanding of HRF content.

W3.4 Paper Session 3:40p – 4:55p Bonneville

Policy

Driver Traffic Crash Fatality Causation Factors in the Across Age, Race and Gender *Nina Jo Saint – Texas A&M University*

This research examines data that provides the connections among age, race and gender in traffic crash fatalities' causation factors for younger drivers ages 15 to 24. The effort is to influence federal and state policies and practices to create adequate traffic safety countermeasures to assist in the reduction of traffic crashes across the nation, especially with the rapidly changing race demographics as projected by the United States Census Bureau. The research shows the differences in driver fatal injury crashes by age, race (White, African American and Latinx) and gender for five states: Louisiana, Mississippi, New Mexico, Oklahoma and Texas.

Accelerated Online Programs: The Relationship Between Student Admission Date and Student Start Date on Student Success

Amanda Olsen, Cynthia S Woody & Beth Fleener – The University of Texas at Arlington

As the size and number of online programs continue to grow across the country, it is imperative for institutions to continue identifying and developing best practices to help increase student retention (Simplico, 2019). The proposed study will examine the time difference between a student's admission date into a program and when the student actually begins coursework on student success in the first accelerated online course. It is hypothesized that students who have more days between their admissions acceptance and start dates will be more successful in their first online graduate course.

Clerical Turnover in the K-12 Campus Office

Catherine Robert – The University of Texas at Arlington

Clerical staff in the campus office (i.e., secretaries, attendance clerks, registrars) perform critical functions essential to school operations, yet receive little research attention regarding their contributions. This study determines and describes turnover rates of K-12 campus clerical employees in order to establish base information in the field. Eight years of employment data within a suburban school district in Texas are examined in addition to reasons for turnover and the cost of clerical turnover per year

Texas Perspectives on College and Career Readiness: High School Endorsements *Maria Adamuti-Trache, Yi Leaf Zhang & Staci L Barker – The University of Texas at Arlington

The study is based on quantitative analysis of restricted-use Texas longitudinal administrative and transcripts data for students entering Grade 9 in 2015/16 who can earn endorsements as part of the new Foundation High School Program. This initial examination of student data shows the extent to which students take advantage of endorsement opportunities and whether pathways chosen are associated with student characteristics and

pre-high school achievement. The study is guided by the College and Career Readiness tenets and social equity theories that identify competing goals in Texas educational policies that may produce (or reproduce) persistent socio-economic differences in student educational transitions.

W3.5 Paper Session 3:40p – 4:55p Cimarron

Race Against Time: The Effects of Principal Race and Time Use on Teacher Perceptions of Leadership

Jeffrey Keese – Texas A&M University

To examine the relationships between principal time use, principal and student race, and teacher perceptions of their school and principal, this study analyzes data from the 2015-2016 National Center for Educational Statistics National Teacher and Principal Surveys. Study utilizes a nationally representative sample of 31,950 teachers and 5,710 principals and is analyzed using ordinal logistic regressions while controlling for principal time and the race of the principal and students. Teacher perceptions of their principal and school were significantly related to the race of the principal and students. These same predictors were not consistently or significantly related to principal time use.

Latinx Teacher Recruitment and Retention in Southeast Texas and the Minority Teacher Shortage: A Quantitative Study

Miguel Burgess – Texas A&M University

A school's demographic characteristics (e.g. minority student population and low-SES population) appear to strongly influence White teacher attrition. However, these factors do not appear to play a major role in minority teachers' attrition. Organizational conditions such as classroom autonomy and influence in site-based decision-making play a much stronger role in minority teacher attrition. However, research on organizational conditions influencing minority teacher retention has tended to group all minorities together. Thus, this study will use empirical data from NCES's NTPS to determine which organizational conditions most strongly influence Latinx teacher retention and attrition in Southeast and in what ways.

Mentoring and Novice Teachers: Teachers' Perceptions at a Local High School in Central Texas

Erin A Singer – Texas A&M University

Researchers (Darling-Hammond, 2003, 2010, 2017; Ingersoll, Merrill, & Stuckey, 2014; Izadinia, 2015) have indicated over the last few decades that mentor teachers are essential to the survival of beginning teachers. To that end, the State of Texas requires that every new teacher, with less than two years of experience, must be afforded a mentor in the same subject, and ideally with the same planning periods. Despite the state requiring that beginning teachers have mentors, pairing mentors and mentees can often be difficult. In some cases, the mentor and mentee have differing personalities, or the mentor may have been "assigned" to be a mentor without being asked. Regardless, each mentor/mentee

relationship is unique. This article uses narrative inquiry methods to explore the experiences of eight high school teachers in Central Texas as they relate to being mentored and mentoring others. Specifically, the inquiry will examine the different types of mentors that the teachers had as novice teachers and how their relationship with their mentor influenced their decision to remain in the teaching field. Teacher participant experiences in mentoring others will also be included in this examination.

Untangling the Entangled: Three Educators' Reflections on their Shared International Study Abroad in Costa Rica

*Karla A Garza, Soledad Perez-Hughes & Peter Scaramuzzo – Texas A&M University

We all have a story to tell and share (Riessman, 2008). Noting that, international study abroad programs have been shown to have a dramatic, transformational impact on those who participate in (Williams, 2005), the stories of those who attend such programs yield powerful and robust insights helpful to pre- and in-service educators. In this paper, three graduate student educators with vastly different lived experiences apply Burke's Pentad (1952; Thomas-Brown & Shaffer, 2016) to chart and analyze their accounts in order to discover what, if any, shared insights the study abroad might yield toward developing meaningful implications for educators.

W3.6 Paper Session 3:40p – 4:55p El Dorado
Cultural Issues

Information and Communication Technology and Women Empowerment: Algerian Women in the 2019 Popular Movement

Bahia Braktia – Sam Houston State University

The purpose of this study is to examine women activism in the 2019 Algerian protests. This study pays a specific attention to the enabling effects of Information and Communication Technology (ICT) tools have given women the opportunity to act as agents of change in the fight for women's empowerment and have allowed them to articulate their identities, and take on the roles of civic and political responsibility in such a historical phase of their country. This study will utilize a content analysis methodology, and will collect data through semi-structured interviews, and social media.

Chinese Speaking Parents of Children and Their Perceptions of Their Experiences at IEP Meetings

James Higgs – Texas Tech University

This presentation explores the perception of the experiences of 5 Chinese Parents of children with autism, and 2 with other special education eligibilities and how their experiences relate to each other.

Exploring Supervisory Experiences for Doctoral Students at a Kenyan Public University

Joseph MbogoWairungu – Texas Tech University

This qualitative descriptive study aims at making meaning the supervisory experiences of five doctoral candidates at a public university in Nairobi, Kenya. The study takes a unique methodological approach that will engage the university's doctoral community as coresearchers in discussing their lived experiences. There is limited research in Kenya that has used Community-Based Participatory Research approach to this phenomenon. I will conduct interviews and focus group discussions with the doctoral candidates. The interviews and discussions will be transcribed and analyzed for emerging themes. The themes will be important in understanding the best way to improve the student's motivation to help Kenya realize its national benchmark of 20% PhD graduation rate and three years completion period (Barasa & Omulando, 2018).

Perceptions of Nature: Engaging Community to Increase Equitable Access *Kimberly J Jones – Texas Tech University

Traditional methods of engaging urban residents in data collection are not culturally responsive. This mixed methods research study will be used to develop a greater understanding of the current perceptions and beliefs about activities in nature held by community members in a large urban setting. Identified as an area of low SES with active community participation, this neighborhood has been selected for nature-based improvements at their local community center. By collecting qualitative data through semi-structured interviews, researchers will design a custom quantitative survey tool to be used by the city to include residents in the planning process.

W3.7 Paper Session 3:40p – 4:55p Fleetwood
Improving School Systems

Discussant: TBD

Asian American Women: Their Pathways to Leadership in EducationDivina P Browne – Sam Houston State University

In this study, the researcher aims to explore the different experiences of Asian American women leaders in education to identify and describe the obstacles and barriers they face in their pursuit of administrative positions in public education. Another intent is to also find common themes from the lived experiences of these women in order to define their leadership pathways. Through this study, the researcher hopes to inform aspiring Asian American women leaders the skills and qualities they need to develop and strategies they need to implement to navigate more successfully their way to the top.

Understanding Beliefs About Grading

Michelle L Spoonemore – Texas Tech University

This mixed-methods investigative study was used to elicit perspectives from school stakeholders toward the grading practices at an independent school in Texas. The purpose of the study was to understand how teachers, parents, school leaders, and Board of Trustees' beliefs about grading influence grading practices and reporting. Data were collected through the Teachers' Grading Practices Survey (TGPS), developed by Link & Guskey (2018) and open-ended interviews. The findings of this study in progress could contribute to the understanding of the purpose, composition, and reporting of grades while improving communication of student learning.

The Effect of Discussing the Goals and Expectations of Co-Teaching Prior to Implementation

Nereah Obiero – Texas Tech University

Co-teaching is being practiced in several schools in the country. As a best practice it involves the special education teacher and the general education teacher working together. They can share their expertise as they implement their specialized instruction in the classroom. Many studies examine the practice of co-teaching, however proper preparation of the novice teachers is still lacking. This study will examine the perception of the certified teachers and the novice teachers on their experiences on prior discussion on co-teaching. The data will be collected through semi-structured interviews. Analysis will be done using deductive and inductive thematic approach.

W4.0 Reception

5:30p - 7:00p Reception

Sponsored by The University of Texas at Arlington College of Education

Boston's Pizza Food + 2 Drink Tickets per Person

Thursday, February 13

| T0.1 | 8:00a – 5:00p | Grand Ballroom Foyer |
|------|---------------------------------|-----------------------------|
| | Registration | |
| | Closed During Business Luncheon | |
| T0.2 | 8:00a – 9:00a | Statler & Waldorf |
| | Continental Breakfast | |

T1.0 Workshop

8:30a – 9:30a

Free Workshop

Navigating and Getting the Most from SERA

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

| T1.1 Workshop | 8:30a – 9:30a | VIA | Beverly-Flamingo |
|---------------|---------------|-----|-------------------------|
| | Free Workshop | | |

Using the Logic Model for Effective Assessment

Ramona Dorough – The University of Texas Southwestern Medical Center at Dallas

Logic models are essential to process in the assessment. The model is used by the Center for Disease Control, the National Institute of Health, program assessment academic programs, and more grant applications are requiring effective this assessment tool.

| T1.2 Paper Session | 8:30a – 9:30a | Capitol I |
|--------------------|--------------------------|-----------|
| | Professional Development | |

Secondary Mathematics Teacher Self-Efficacy: Professional Development Pre- and Post-Survey Findings

Sandra B Nite & Jenna Holloway – Texas A&M University

Self-efficacy for teachers is important for controlling stress and limiting attrition in the teaching field. Professional development may have a positive impact on teacher self-efficacy. The purpose of the study was determine how teachers' (N = 41) self-efficacy changed from the pre- to post-survey after they participated in a professional development program. The program focused on mathematics content and research-based teaching strategies. Results showed an increase in teacher confidence that they can maintain composure and continue to teach successfully in the face of disruptions in the classroom. Hedge's g effect size was 0.41 (p = .07).

The Unique Roles that Teacher Pedagogical Content Knowledge, Teacher Collaboraton and Mutual Support Play in Teacher Job Satisfaction

Xiaofang Zeng & Whitney Beach –Texas Tech University

This study examines how teacher pedagogical content knowledge, teacher collaboration and the feeling of mutual support contributed to teacher job satisfaction. This quantitative study

utilized the Teaching and Learning International Survey (TALIS) large data set. It found that each of the independent variables, teacher pedagogical content knowledge, teacher collaboration, and the feeling of mutual support contributed uniquely to teacher job satisfaction. Teachers were more satisfied when they teacher taught jointly, exchanged materials and participated in collaborative learning. However, the feeling of mutual support had the strongest impact on teacher job satisfaction. Implications of the findings were discussed.

A Phenomenological Investigation of Blended Professional Development for K-12 Teachers

Linda M Forrest – American College of Education

A phenomenological study of blended learning for professional development of K-12 teachers was conducted using an online questionnaire and semi-structured interviews. The purpose of the study was to investigate teachers' attitudes, perceptions, and motivations regarding blended professional development. Blended professional development has potential to improve teacher training and provide a motivating and effective alternative to traditional face-to-face workshops. This study may inform teacher educators, school system leaders, and course developers of effective design methods for professional development which train and retain staff.

Transforming Teacher Pedagogy to Maximize 21st Century Skills Through the Learning Environment

*Shanna L Attai, Jorge Carmona Reyes – Baylor University John L Davis – University of Utah Judy York – Education Service Center Region 12 Kerri Ranney – Huckabee Inc. Truell W Hyde – Baylor University

Educators are transforming the classroom, replacing "traditional furniture (TF)" with "flexible furniture (FF)." This study investigated the impact FF has on critical thinking, communication, collaboration, and creativity (the 4Cs) in elementary classrooms (2nd - 4th grade; N = 327). Intervention classrooms received professional development (PD) and FF (n = 4), while control classrooms maintained the TF (n = 10). Classrooms were observed biweekly for eight weeks. We used a between-groups research design, and the results of a series of independent sample t-test demonstrated that students in intervention classrooms had more opportunities to participate and actively engage in the 4Cs.

T1.3 Paper Session 8:30a – 9:30a Capitol II

Special Populations

An Examination of the Relationship Between Dating Violence, Suicide, and School Connectedness in United States Adolescents

Caroline Blach & Julie Ivey – Baylor University

This study examined the relationship between adolescent dating violence and suicidal ideation, using school connectedness as a potential protective factor. The study used secondary data from the National Longitudinal Study of Adolescent to Adult Health (n=3985). A regression analysis was used to examine the relationship between dating violence, suicidal ideation, and school connectedness in adolescents, controlling for race, gender, age, parent's education level, and friends and family suicide attempts within the past year. The relationship between dating violence and suicidal ideation did not yield significant results when protected by school connectedness (p=.506). Implications and future directions are discussed.

Impact of Support Group & One-on-one Mentoring for Undergraduate with Autism Spectrum Disorder: A Case Study

Julie Ivey, Nori Ryland & Stephanie Fritz – Baylor University

As the number of students with Autism Spectrum Disorder (ASD) increases in institutions of higher education, additional supports are warranted. The following case study shares the unique experiences of Toby, an undergraduate student with ASD. The structure and impact of student support groups and one-on-one mentoring is discussed. Additionally, an overview of university-based programs is provided, as guidelines to maximize student success. The short-term and long-term benefits of expanded programming are proposed.

A Chance to Play is a Chance to Learn: Integrating Individuals with Physical Disabilities into Physical Education

Colin G Pennington – Tarleton State University Lacie M Webb – Samford University

Physical educators are likely to come into contact with numerous students who have a variety of physical impairments. These impairments may appear to be significant deterrents to participation in physical education. However, with some modifications, physical education experiences can be an extremely inclusive environment for students with physical disabilities and limitations. This presentation focuses on youth physical disabilities and cognitive impairments, and the manifestations of particular symptoms as they relate to physical activity and movement opportunities in physical education. General backgrounds of the conditions are detailed, as well as recommendations to modifications of physical activity, and general safety/First Aid responses.

Science Identity and STEM Aspirations: Differences between English Language Learners and Native English Speakers

*Rebecca DeLozier – Texas Tech University

This study analyzed data from a national longitudinal study of secondary students in order to investigate differences in science self-efficacy, science identity, and STEM aspirations of English language learners compared to native English speakers. Using a series of ANOVA tests, and parallel logistic regressions, it compared how science identity and science self-efficacy vary across the intersection of ELL status and gender and whether these constructs are significant predictors of STEM career aspirations. Results indicate that higher science identity in ELLs increases the odds of students holding STEM aspirations, while science self-efficacy is not a significant predictor.

T1.4 Paper Session
8:30a – 9:30a
Special Populations
Bonneville

Relationship between Parent Expectation, Student-value and Motivation, and Mathematics Performance at Ninth Grade Level

Joseph Junlong Ji, Jian Wang, Shuang Zhang & Lu Guo – Texas Tech University

Student-value and motivation about mathematics and mathematics learning presumably shape their mathematics performance. The value and motivational factors can be shaped by their parents-expectations for them to learn mathematics. This study examines the relationship between parent expectation, student value and motivations, and their mathematics achievements drawing on the data from 2009 High School Longitudinal Study. It found that parent expectation influences students' value which student-value shape their motivation, all of which strongly connect to students' mathematics-performance.

The Impact of Demographics and Burnout Subscales on Predicting Emotional Exhaustion Levels: Implications for Counselors

Felicia L Mirghassemi & Rebecca A Robles-Pina – Sam Houston State University

While burnout is identified as a problem in most professions, helping professions are at higher risk for burnout (Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, 2012). Shirom (1989) reported that burnout can initially be identified via emotional exhaustion symptoms. Despite differences in occupational stressors, little research has investigated the influence of occupation types or demographics on emotional exhaustion symptoms. Data from three datasets investigated the influence of gender, occupation, depersonalization, and personal achievement symptoms in predicting emotional exhaustion. A Hierarchical Multiple Regression conducted on a total sample of 1,632 participants indicated that all variables were statistically significant predictors of emotional exhaustion.

Differences in College Readiness Rates in Reading, Mathematics, and Both Subjects by High School Type

*Gerald E Warren – Sam Houston State University

In this study, a comparison of college-readiness rates in reading and mathematics was investigated in charter schools versus traditional public schools. An independent parametric t-test was performed to examine statistical differences between charter schools and traditional public schools. The data were from the 2014-2015 and 2015-2016 school years in the state of Texas. The results of this study showed that traditional public-school students performed better than charter school students in reading, mathematics, and both subjects for both school years.

T1.5 Paper Session
8:30a – 9:30a
At-Risk Students

Changes in Academic Achievement as Students Transition From Elementary to Middle Schools: Evidence from Texas Schools

Camille Gipson – Stephen F. Austin State University

The academic achievement of students might suffer as they transition from elementary to middle school. This study will contribute to the corresponding literature documenting such a potential transition gap by using secondary data available through Texas Education Agency. This post-positivistic study uses a transitional theoretical framework and will be quantitative, non-experimental, and longitudinal in nature. An SPSS Quantitative data file will be constructed and data will be analyzed via descriptive and inferential statistics. This research will strictly adhere to research ethics requirements (e.g. IRB and protection of anonymity and confidentiality).

Academic achievement of African American males in Middle schools: Comparative evidence from Texas

Sheenah Hopkins – Stephen F. Austin State University

The academic achievement of African American boys is low compared to other sub-populations. This study will contribute to the corresponding literature documenting such gap by using secondary data available through Texas Education Agency. This post-positivistic study uses a Social Disorganization theoretical framework and will be quantitative, non-experimental, and cross-sectional in nature. An SPSS Quantitative data file will be constructed and data will be analyzed via descriptive and inferential statistics. This research will strictly adhere to research ethics requirements (e.g. IRB and protection of anonymity and confidentiality).

How Positive Behavior Supports Work for African American Students

Johnoson Crutchfield & Jandel M Crutchfield – University of Texas at Arlington

The purpose of this study was to capture teachers' on-going perceptions, understanding, and use of Positive Behavior Interventions and Support (PBIS) program and how they are related

to school and student-level outcomes such as school culture and student motivation. The disproportionate rates of discipline for African-American students creates a need for study on how these students can be motivated and thereby reduce the achievement gap. The researcher conducted a case study of one school using PBIS in Southeast Louisiana to examine to what extent they perceived the program to impact student levels of academic and social motivation. Findings suggest that teachers perceived that students were more motivated to complete assignments and avoid discipline infractions.

Response to Intervention at the High School Level: Perceptions of Texas Educators and Educational Diagnosticians

*Gretchen Ponder – Stephen F. Austin State University

Planning for, implementing, and evaluation Response to Intervention (RTI) at the highs school level is unsystematic and ineffective. This study will contribute to the corresponding literature on the problem by eliciting the perspectives of a convenient sample of Texas high school educators and educational diagnosticians. This post-positivist study uses a qualitative theoretical framework and will be mixed-methods, non-experimental, and cross-sectional in nature. Interviews and surveys will be used. Qualitative data will be analyzed using coding and thematic analysis and quantitative data will be analyzed using descriptive and inferential statistics. This research will strictly adhere to research ethics requirements (IRB, protection of anonymity and confidentiality, and protection from discomfort, risk, or harm).

T1.6 Workshop

8:30a – 9:30a

Free Workshop

Incorporating Trauma-Informed Leadership Practices into Educational Leadership Courses

Pamela Gray –New Mexico State University Detra Johnson – University of Houston Dessynie Edwards – Texas A&M University-Corpus Christi

This interactive workshop will provide educational leadership faculty with current research on trauma-informed practices for today's school leaders. The workshop will share readings and tools that can be integrated into online and face to face principal preparation courses. Topics to be discussed include trauma-informed principles, research on trauma-informed school communities and ways to address student responses to trauma. Sample online and face to face module components will also be provided.

T2.1 Workshop 9:35a – 10:35a Beverly-Flamingo
Free Workshop

SERA Junior Mentoring Initiative – Part I

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

The SERA Junior Faculty Mentoring Initiative will be discussed during the session. Presenters will share the rationale for the initiative, describe the program purpose and goals, and explain

the application process. Interested persons will have an opportunity to ask questions and meet potential mentors/mentees. Part I will address teaching, research, and service expectations for junior faculty.

T2.2 Paper Session 9:35a – 10:35a Capitol I

Early Childhood

Coding with Coder-Pillars: Coding is Possible in Early Grades

Austin Kureethara Manuel & Dittika Gupta – Midwestern State University

In this quasi-experiment, the teachers in a North Texas school, under the guidelines of the researchers, selected 20 students to investigate the effects of using a tangible toy to improve the reasoning and critical thinking skills of second grade students. The participating students, after taking a pre-test, met with the researchers to hear a story and to play with the toy for 45 minutes once a week for one semester. At the end of the study, the students took a posttest. The results of the analyses on the results will be presented in the conference.

Investigating the Patterns of Content-Specific Gain Scores in Math From K through Grade 8

Joohi Lee – The University of Texas at Arlington

This study investigates the domain-specific gains of children's mathematics performance to determine which early math content proficiency has more predictive power in regard to children's later mathematics performance. The analysis of secondary data obtained from the Early Childhood Longitudinal Study-Kindergarten (ECLS-K) Cohort is performed. The participants of this study are 7542 children who were followed from kindergarten year to eighth grade as participants in the ECLS-K cohort of 1998/99. We examined IRT math scores at five points of time across elementary school and into middle school (i.e., kindergarten, first, third, fifth, and eighth).

Unplugged Coding for Young Children: Coding Stories

Joohi Lee – The University of Texas at Arlington

This study investigated the effects of implementing coding to stories (CTS) activities. CTS was implemented as a station in a preschool classroom for two weeks. The participants in this study were 12preschoolers (average age: 4.2 years) composed of seven boys and five girls. Children's discourses and work samples were recorded and analyzed using the computational thinking framework (shown in Computational Science Teachers' Association [CSTA]) involving four skills: decomposition, pattern recognition, abstraction, and algorithms. The results showed that the majority of children's discourses were associated with algorithms. Some were found to reflect abstraction.

Investigating the Impact of Flexible Furniture in the Elementary Classroom

*Shanna L Attai, Jorge C Reyes – Baylor University John L Davis – University of Utah Judy York – Education Service Center Region 12 Kerri Ranney – Huckabee Inc. Truell W Hyde – Baylor University

Educators are redesigning learning environments, replacing "traditional" furniture (TF) with "flexible" furniture (FF), capable of multiple reconfigurations to facilitate learning. This study investigates the impacts FF paired with teacher professional development (PD) has on the elementary classroom. Participants included 3rd and 4th graders (N = 206). A between-groups design and an analysis of covariance (ANCOVA) assessed the effect of the intervention. As predicted, students who experienced FF reported greater satisfaction with the learning environment than did peers with TF. Secondly, a series of independent samples t-test demonstrated classrooms with FF provided more opportunities for student autonomy, ownership, and movement.

T2.3 Paper Session
9:35a – 10:35a
Higher Education

Capitol II

Documenting Graduate Practicum Clock Hours While a Full-Time Employee

Tia Agan, Lesley Casarez & Raelye Self – Angelo State University

Candidates seeking advanced certification in educator preparation programs must fulfill the Texas Education Agency's requirement to complete a practicum for a minimum of 160 clockhours to demonstrate proficiency in each of the educator standards for the certificate class being sought. However, many candidates express concern over the amount of time that the practicum experience requires in addition to the outside responsibilities that are already consuming much of their time. The presenters will explore the challenges of candidates enrolled in practicum courses while working full-time and will provide specific, research-based recommendations to support future candidates enrolling in practicum courses.

Are You in It to Win It?: The Role of Athletics in Fostering Educational Opportunities at Hispanic-Serving Institutions

Nikola Grafnetterova & Jocelyn A Gutierrez – Texas A&M University-Corpus Christi

Hispanic-Serving Institutions (HSIs) enroll the majority of Latin@ students, and constitute the second-largest institutional type in the National Collegiate Athletic Association. Yet, little is known about the role intercollegiate athletics play in fostering educational outcomes for Latin@ students at HSIs. Thus, under the guise of institutional theory, this study addresses the gap in literature and examines the organizational and social structure of institutions operating with HSI designation in relation to NCAA membership and completion outcomes for Latin@ student-athletes. This study utilizes document analysis as the primary method of data collection and analysis.

College Affordability and U.S. News & World Report Rankings: Analyzing National and Regional Differences

Z W Taylor – The University of Texas at Austin

Analyzing all 920 colleges and universities providing U.S. News complete statistics in 2017-2018, results suggest Pell grant graduation rates strongly predicted ranking (p< 0.00), while the percentage of undergraduates receiving state aid predicted ranking only at Regional Midwest and Regional West Universities (p<0.05). Results suggest many college affordability metrics are not predictive of ranking among the best-ranked, elite institutions, possibly misleading prospective students and contributing to the student debt crisis. Implications for theory, practice, and college student choice are addressed.

Student Evaluations of Teaching: A Contentious or Constructive Pursuit?

*Susan Troncoso Skidmore – Sam Houston State University

Student evaluations of teaching have a long history in higher education. More recently, there appears to be increased interest and concern in the use of these evaluations to make high stakes decisions, including promotion, tenure, and merit. The present paper provides a review of (a) reported sources of bias based on professor and/or student characteristics, (b) instrument and measurement concerns, and (c) course characteristics. A discussion of ways to maximize the utility of student evaluations of teaching concludes the paper.

| T2.4 Paper Session | 9:35a – 10:35a | Bonneville |
|--------------------|----------------|------------|
| | Efficacy | |

Discussant: TBD

The Relationship between Grit, Mathematics Self-efficacy, Stem Career Interest, and Academic Achievement for Middle School Students in Algebra I

Amanda Smith – University of Houston - Clear Lake

This doctoral level research focuses on examining the relationship between grit, mathematics self-efficacy, STEM career interest, and achievement for middle school students enrolled in Algebra I. The study is significant for gaining understanding of influencing factors of academic achievement for middle school students in STEM field courses, such as Algebra I. This understanding could help educators incorporate best practices within instructional methods to help facilitate middle school students to be able to persevere when the learning becomes highly challenging in a rigorous mathematics course taken above grade level. This is a graduate research study still in progress.

Survey-based Learning of Interns in Orientation and Mobility Program *The Nguyen – Texas Tech University*

This study will examine how students enrolled in a university orientation and mobility personnel preparation program in the Southwestern of the United States perceived their level of competency. Using a self-evaluation form that included 13 orientation and mobility competency criteria by the Academy for the Certification of Vision Rehabilitation and

Education Professionals, the interns evaluated their capabilities and proficiencies before beginning and after completion of their internship. This is an initial attempt of a multifaceted project to collect data on the perceptions of orientation and mobility students regarding their proficiency levels for further program evaluation.

A New Lens on College Readiness: Collegiate Transition Preparedness and Self-Efficacy Christal-Joy Turner – University of North Texas

This current study investigated the relationship between academic self-efficacy and psychological adjustment amongst college freshmen (n=278). It also aims at exploring the predictive possibility of academic self-efficacy by mentorship, enrollment in advanced courses, academic achievement, campus involvement according to their gender. The findings suggests mentorship, enrollment in advanced courses, academic achievement, and campus involvement predict and have an impact on students' self-efficacy and collegiate transition preparedness while gender did not. Recommendations from findings include establishing mentorships on campus, encouraging campus involvement, and advance coursework enrollment.

T2.5 Paper Session 9:35a – 10:35a Cimarron

Evaulation

Estimating Longitudinal Effects of Computer Science Training

Emily A Brown & Trey DeJong – University of North Texas

This study examines the effects of a Computer Science teacher training program on students' academic careers. In 2015, a large school district on the west coast partnered with Code.org to pilot and implement a new computer science AP course called AP Computer Science: Principles. This study provides evidence of the program's impact and efficacy with respect to students' post-secondary outcomes, such as college enrollment, college persistence, and college major declaration, relative to students not participating in the program from the same schools, controlling for student academic achievement.

First Year Experience Coursework: A Non-Experimental Study Examining its Impact on Early College High School Students

Rory Carothers, Monica Jimenez, Heidi Scanio, Tracie Schneider & Hunter Keeney – Lamar University

Because academic success is a priority for students in Texas, many postsecondary institutions require First Time in College (FTIC) students to take First Year Experience (FYE) coursework. Additionally, many Early College High Schools (ECHS) offer opportunities for students to accumulate up to 60 college hours toward an associate degree before entering the postsecondary environment. While research supports FYE coursework for FTIC students, GPAs and degree attainment for ECHS students do not always justify the requirement to take FYE coursework. This data may be beneficial to educational leaders and state legislators developing college readiness guidelines.

The Impact of a Ph.D. Induction Program: A Qualitative Study on Doctoral Student Perspectives

Karen E McIntush, Nazneed H Askari, KarlaA Garza & Peter Scaramuzzo – Texas A&M University

Induction courses help students succeed in a given established program. This qualitative study analyzes doctoral students' perceptions and the overall impact of a first-year induction course. Through thematic coding of interviews, the present study shows the perceived benefits for participating first-year Ph.D. students include: a sense of community; knowledge of academic tools; and building a sense of confidence and efficacy. The findings of this study support previous research on the benefits of induction courses.

Using Logic Models as a Framework for Educational Program Assessment *Kevin E Kalinowski – Sam Houston State University

All educational programs conduct program assessment to varying degrees and for various purposes. In this session, participants will be introduced to logic models as a formal method to organize and track a program's resources, activities, outputs, and programmatic outcomes. A completed logic model, which was developed for a new college of osteopathic medicine, will be presented, along with how the model was developed, and how it will be utilized to satisfy accreditation requirements.

SERA Research Grant Doctoral Candidate-Early Career Award

Exploring Doctoral Degree Attainment from Ronald E. McNair Scholars Program Alumni: An Embedded Case Study

Rachel L Renbarger – Baylor University

Understanding how students from marginalized groups have created successful pathways during their undergraduate and graduate school careers is crucial to decreasing the gap in doctoral degree attainment. This embedded case study, funded in part by the SERA Early Career Grant, will extend the previous research by examining the pathways of McNair Scholars within one undergraduate program and examine their entire graduate school experience using a specific doctoral student theoretical lens. Participants include McNair alumni who have completed a doctoral degree. Results from this research will help determine overall effectiveness of the program along with important factors for doctoral student success.

T2.7 Paper Session 9:35a – 10:35a Fleetwood

Higher Education
Discussant: Faye Bruun

Effect of Online Research Courses on Doctoral Students' Research Self-Efficacy Narges Hadi – Texas Tech University

The stable growth in online courses has caused that numerous universities attempt to investigate how to offer their curriculum online to maintain attracting students (Kirtman, 2009). With the growth of online doctoral programs and the use of online research courses, little is known about the effectiveness of online research courses in enhancing graduate students' research self-efficacy. The purpose of this study is to inform faculty, instructional designer and administrators about the influence of online research courses in developing doctoral students' research self-efficacy. The cross-sectional non-experimental design will be used to assess factors that influence doctoral students' research self-efficacy.

The Impact of Collaborative Journals on ESL Learners' Writing Self-Efficacy-A Mixed Method Study

Yanling Liu – Texas Tech University

This study intends to investigate whether specific instruction on the English writing process could increase students' writing self-efficacy and thus promote the writing abilities and writing self-efficacy belief in undergraduate students who learn English as a second language (ESL) in China. One hundred and fifty undergraduate students in a key university in China will be assessed using authentic writing assessments before and after instruction of the writing process to help increase students' writing self-efficacy. The mix method with explanatory sequential design approach will be adopted by using a qualitative interview to explain initial quantitative results.

The Implementation of Replication Study

Erkan Sayilir – Florida State University Serife Turan – Texas Tech University

A group of volunteer physiologist, called the Open Science Collaboration (OSC), started a largescale project to systematically replicate selected psychological experiments published recently in leading journals. After Open Science Collaboration calls for replication, there has been an upward trend in publications regarding replication in psychology and other social science field. This paper to make a call to open a discussion of replication and questionable research practices(QRP) in Turkey, including to call attention to the importance of replication study and highlight the issue of questionable research practices to increase research quality and to have attention of the researchers to promote scientific integrity and quality for all of the fields reports statistical test results.

T3.1 Workshop 10:40a – 11:55a Beverly-Flamingo Free Workshop

SERA Junior Mentoring Initiative – Part 2

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

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

T3.2 Paper Session 10:40a – 11:55a Capitol I

Culture and Community

Millenial Generation Attitudes Toward Disability Across Three Social Contexts: Employment, Education, and Relationships

Patricia R Huskin – Texas A&M University - Kingsville

Attitudes toward disabilities are important and focal topics in disabilities studies. This study investigated perceptions of 745 young millennial adults toward 10 disabilities and social contexts. Representing a generation coming of age following the Disability Rights Movement, approaching the 20th anniversary of passage of the ADA, and raised entirely within legal contexts of inclusion. This survey provides insight into inclusion and generational shifts in attitude. Contact experience was statistically significant for six of 10 disabilities. Significant attitudes of intellectual disabilities, mental illness, learning disabilities, health impairments, and autism are presented. Across all disabilities and attitudes investigated, regular contact lowered social distance, with the notable exception of autism.

The Impact of Counseling Deaf/Blind Children and Their Families on Social Interaction in Rural Areas of Southwest Texas

Chinomso JIhenagwam, Phoebe Okungu & Ugochi B Iwuji – Texas Tech University

Counseling has been shown to have a significant positive impact on individuals and groups. The client in a counseling process learns more about herself through greater self-acceptance and self-awareness. Multiculturalism and diversity have become an integral part of contemporary counseling field with special needs populations as a major component. Several studies show that children with DeafBlind have fewer social interactions compared to their peers. This paper explores the DeafBlind special needs population with a view of understanding the impact counseling DeafBlind children and their families have on their social interaction in rural areas of southwest Texas.

Teen-Targeted Movies and How They Differ from Reality

*Ashley L Nitsche & Corina R Kaul – Baylor University

Teen movies have been found to be a valuable model for students going into high school. However, the potential influence on how movies influence teenagers' view of high school experiences as a whole has been underrepresented in literature today. Using a content analysis methodology, this study aimed to explore how a collection of teen movies specifically differ from reality. Data will be collected from some of the top-grossing Disney Channel movies. Preliminary data suggests that movie viewing heavily influences high school behavior. Findings from this study may aid the future generation of students and teachers in differentiating between typical high school movies and reality.

T3.3 Paper Session 10:40a – 11:55a Capitol II

Policy

The Passive Majority: A Qualitative Inquiry of Adjunct Community College Faculty Peter A Zitko

Adjunct college faculty play a vital role in educating students. This presentation includes data and findings from a phenomenological study of adjunct community college faculty in Northern California. The study revealed four primary themes which are identified as motivation, positive attributes, negative attributes, and desired policy changes. Findings indicated adjunct faculty are motivated by a passion for teaching and helping students achieve academic objectives. Motivating factors are circumscribed by a variety of negative attributes which marginalize adjunct faculty. Adjunct faculty are a heterogeneous population by which career objectives play a significant role in their perceptions as contingent employees.

Inequalities in School Funding in the Texas Panhandle Along Racial, Socio-economic, and Language Lines

Adam H Weiss – West Texas A&M University

Significant disparities in school funding have led to several court cases and school funding formulas. The current paper finds that the funding that a district in the High Plains Region of the Texas Panhandle receive is statistically related to the districts' size and student population. Specifically, school districts with larger populations of students of color, socio-economically disadvantaged students, and ELLs receive less funding per student, despite receiving additional state funding for each ELL student participating in a bilingual or ESL program and any additional federal funding a district receives for having schools with a high-percentage of low-income students.

Paying for College: The Impact of Deregulating Tuition on Cost of Higher Education in Texas

*Raymond Brown & Wonsun Ryu – The University of Texas at Austin

Beginning in the 2004 academic year, the Texas Legislature deregulated tuition and gave the power to set tuition rates to the individual institutions. It has been unclear what impact this

law had on the cost of tuition. Using an interrupted time series design with segmented regression, we found there was a significant increase in the average inflation adjusted tuition immediately after deregulation and a significant increase in the rate of annual tuition increases from \$100 a year on average before deregulation to an average of \$141 per year after deregulation.

T3.4 Paper Session 10:40a – 11:55a Bonneville
Higher Education

A Return to Dewey's Vision? Shifting Contexts in Higher Education Kelly O Jacobs – Sam Houston State University

John Dewey presented a vision of education in which individuals receive previously acquired wisdom and are steered to apply it to the collective good of society. Higher education has undergone contextual shifts due to extrinsic factors that have steered its meaning toward various perceived ends in departures from Dewey's conceptualization. Accordingly, three historical contexts of higher education were identified in this study through the application of Dewey's theory of education. This study concludes with the identification of opportunities for higher education to return to Dewey's conceptualization in light of contemporary identity politics and social media influences.

Applying Scale Methodologies to State Higher Education Policy *Mario Martinez & Sara deMartinez – University of Texas at Arlington*

Studies of higher education policy focus on funding and enrollment levels. Legislators across the country ask questions about return on investment. New perspectives on state funding, enrollment and completion offer new insights that address both these concerns. This study applies complex adaptive system methods from research on cities to higher education. State population and higher education funding and funding and enrollment and completion are analyzed using power laws, with a focus on southern states. The findings show scale relationships among all variable sets. The session discusses the implications for research and policy.

State Financial Policy Innovations' Strain on Public Higher Education *Kathleen E Launius – The University of Texas at Arlington*

The Completion Agenda has driven state legislators and governors to develop higher education master plans designed to increase institutional accountability during a period marked by economic recession and decreasing state appropriations. This literature review is informed by a policy diffusion framework and uses matrix analysis to juxtapose three state financial policies (tuition deregulation, performance-based funding, and college promise programs) against outcomes to examine evidence of their impacts. The analysis reveals that these policies have strained public higher education institutions, particularly community colleges and minority serving institutions (MSIs), and resulted in negative outcomes for low-income, Latinx, and African American students.

U.S. News & World Report Best Colleges Rankings: Which Institutional Metrics Contribute to Sustained Stratification?

*Z W Taylor – The University of Texas at Austin

The focus of this study was to examine all institutions reporting complete statistics to U.S. News in 2018 (n=228) and develop experimental algorithms to learn which ranking criteria most contribute to an institution's overall ranking. Of the 28 major ranking metrics, most algorithms demonstrated that predicted graduation rate, six-year graduation rate, and peer assessment best predicted overall U.S. News ranking. However, predicted graduation rate and peer assessment are highly subjective and speculative in nature, possibly contributing to the sustained stratification of U.S. News rankings.

T3.5 Paper Session 10:40a – 11:55a Cimarron
Higher Education

Factors Influencing the Decline in Achievement of Middle School Latino Students Dion A Rivera – Sam Houston State University

The purpose of this qualitative case study is to determine causes of academic decline for middle school Latino students. Six Latino students who were academically successful in elementary school but have had a decline in achievement by Grade 8 will be observed and interviewed in order to learn about their experiences in middle school. The data collection will take place at the conclusion of their eighth-grade year so that the students are able to reflect on middle school. In addition to the observations and interviews, attendance, discipline, grades, and state assessment data will be reviewed.

Un-Making the Grade: The Relationship between District Accountability Scores and Property Values

Staci L Barker - The University of Texas at Arlington

The relationship between socio-economic status (SES) and achievement is well documented. While federal and state accountability systems have attempted to close achievement gaps for economically disadvantaged students, underlying neoliberal assumptions of fair evaluation through ranking lead to a disregard for this context. Within this framework, better measures of SES are needed, including an understanding of how such metrics influence accountability systems. This study explores district property value as a more sophisticated measure than the more common and limited free- and reduced-price lunch (FRL) and the relationship between SES and district accountability scores under the 2018 Texas accountability system.

Attaining Success as a High School Freshman: Phenomenological Study of Academically Successful African American Students

*Kenneth C Fraga – Sam Houston State University

In this phenomenological study, the transition from middle school to high school will be explored from the viewpoint of academically successful African American male students in a suburban school district. The focus will be on the life experiences of the students as told in face-to-face interviews conducted towards the end of their freshman year in high school. Attributes of family dynamics and of the school will be examined as it relates to the success of the students in their first year of high school.

T3.6 Paper Session 10:40a – 11:55a El Dorado
STEM & Critical Thinking

Improving Perceptions of STEM Careers through Informal Learning Environments *Katherine N Vela, Rachelle M Pedersen & Macie N Baucum – Texas A&M University*

This study investigated the impact a STEM camp had on students' perceptions of STEM fields and careers. Secondary students (n=58) participated in STEM projects, lab tours, and panels during the camp. Participants were asked to complete a STEM Semantics survey to assess their dispositions towards STEM fields and careers. Results suggested that although there was no significant change in the disposition towards each individual field, there was a statistically significant improvement in perceptions of STEM careers (p=0.04). This suggests that various components of the informal learning environment positively contributed to students' disposition towards STEM careers.

A Meta-analysis of Factors Impacting Middle Grades Students' Achievement and Attitudes in STEM

Kim B Wright, Jeffrey Keese, Manjari Banerjee & Hersh C Waxman – Texas A&M University

This meta-analysis examined the impact of instructional interventions on middle grades students' STEM-related achievement and attitudes. The study summarized findings across grade levels, content areas, and outcomes, providing a comparison of the impact of STEM instructional interventions across studies. The random effects model showed that STEM interventions in the included studies had a small, positive effect size (Hedge's g=0.424) across all studies for students' STEM achievement and attitude, especially for girls and uppergrades students. The study's findings add to research on the effectiveness of STEM instructional interventions and has important implications for school accountability measures in STEM.

A Comparative Study of High School Students' Math Achievement and Attitudes: Does Math Teacher Qualification Matter?

Marisa Belin Saenz, Vandana Nandakumar & Maria Adamuti-Trache – The University of Texas at Arlington

Using HSLS:2009 data, this quantitative study examined how math teacher qualifications affect U.S. 9th graders' math achievement and attitudes -- important factors to attaining further educational and career success. First, we found that teacher credentials (i.e., level of education & certification) affected student math achievement and identity, but not math self-efficacy and interest in math courses. Second, findings show that teacher's field of study matter. Holding a Math degree affected math achievement and math identity, while holding a degree in Education had no effect on achievement, but a positive effect on math identity and students' interest in math courses.

To What Extent Does Exploring Global and Local Issues Contribute to Students' Awareness of Service to Society

*Salma Ali – Texas A&M University

The current action research is based on an exploration of global and local issues in order to produce awareness in the students about social services. The study was conducted over a period of twelve weeks of teaching grade 7 & 8 students at the public school in Dubai, UAE. The study concludes that a critical reflection on the experience and the role of the teacher are crucial in producing awareness about social services in students where they link the classroom learning with the real world in which they live.

T3.7 Paper Session 10:40a – 11:55a Fleetwood

At-Risk Students
Discussant: Rachel Renbarger

Select First-Generation Female College Students and their Perspectives Regarding a Population Health Pre-Internship Class

Lisa D Chaddick – Sam Houston State University

The purpose of this qualitative study is to assess a select group of female Population Health students and their perspectives of their pre-internship course experiences. Single, one-on-one interviews will be conducted with Black, Hispanic, and White female students to discuss the benefits of their pre-internship course and the effect it had on their internships and professional development. Implications of these findings and recommendations for future research will be discussed.

I Don't Know What To Do: A Mixed Method Study of Mathematic Anxiety as Perceived by Students and Parents

Andrea M Elizondo – Texas A&M University - Corpus Christi

The paper will investigate the perceptions of mathematic anxiety experienced by fourth and fifth grade under-represented students considered low performing in mathematics, parent's

perceptions of mathematics anxiety, the relationship between parent and student mathematic anxiety, and describe how parents and students talk about mathematics. The study is quasi-experimental correlation study conducted with a qualitative component.

Effects of Playing an Instrument on the Brain, Intelligent Quotient, and Multiple Intelligence Scores of IDD Elementary Students

Angela M Girard – Texas Wesleyan University

The purpose of this study is to determine if playing a musical instrument influences the brain, IQ and Multiple Intelligence scores. Five elementary age African Americans identified as IDD were chosen to participate. Data of MRI's of brains, parents filling out the Wechsler Intelligence Scale for Children-Fifth Edition, and teachers filling out multiple intelligence checklist created by Dr. Waveline Starnes will be collected three times, at the beginning, midway, and upon completion of learning to play a musical instrument. Based on the promising findings regarding neuroplasticity, individuals with developmental disabilities might have a chance to change their IQ.

| T4.0 | 12:00p – 1:30p | Statler & Waldorf |
|------|-------------------------------|-------------------|
| | Lunch & Business Meeting | |
| | Special Ticketed Event | |

Dr. Michael Feuer, The George Washington University

Dr. Michael Feuer, The George Washington University
This is an inform casual opportunity for students to interact with Professor Feuer about whatever issues they would like to discuss.

(Graduate Students Only)

A Review of the Effect of Emotional Intelligence on Teacher Job Satisfaction Xiaofang Zeng – Texas Tech University

This review systematically examined research on how emotional intelligence contributes to teacher job satisfaction. A total of 12 studies published in peer-reviewed journals from 2009 to 2019 were reviewed and abstracted using the matrix method. Participants in the studies include elementary school teachers, secondary school teachers and high school teachers. 67% of the studies used some parts of the broad model of emotional intelligence and 33% of the studies

used the narrow ability model of emotional intelligence. All the studies used only the self-report scales for assessing emotional intelligence.

An Exploratory Model of Pre-Professional Identity Development in Bilingual Education Teachers-in-Training

Lina Shu & Sandra Acosta – Texas A&M University

In this paper, we investigated an exploratory model of pre-professional identity development (PPI) in undergraduate bilingual education teachers-in-training. Our sample of 12 undergraduates registered in an undergraduate course for future bilingual education teachers, received four structured reflection prompts over the semester and, at semester's end, created a script for a 5-minute video explaining what bilingual education teachers do. Findings showed all students demonstrated an increased awareness of professional and personal agency in their reflections. Using a personal narrative lens in their scripts, half of the students articulated the roles and responsibilities of bilingual teachers reflected in state and national standards.

Secondary Professional Socialization: Socializing Doctoral Students into the Professoriate

*Colin G Pennington – Tarleton State University

This article outlines a brief review of literature of occupational socialization theory. Specific to physical educators, occupational socialization theory examines the ways in which individuals are recruited into, prepared for, and socialized in the profession. It represents a dialectical perspective on socialization as it acknowledges that educators are shaped by the institutions that seek to socialize them, but that they can resist the influence of this socialization. Also, the key issues that impact physical education teacher education (PETE) doctoral programs, and the means by which PETE doctoral students are socialized into the role of university educators are discussed.

| T6.3 Paper Session | 2:45p – 4:00p | Capitol II |
|---------------------------|---------------|------------|
| | Measurement | |

Establishing Reliability and Validity of an Instrument to Measure Digital Literacy Practices and Perceptions in Higher Education

Bahia Braktia & Ana Marcela Montenegro – Sam Houston State University

The purpose of this study was to develop a reliable and valid instrument to explore the perceptions and practices of university professors and instructors with regards to digital literacy practices in the field of education. The EFA revealed four factors with eigenvalues greater than one. The 20-item instrument explained 65.08% of the variance in relationship patterns among items, 36.49 (F1-digital literacies help me teach), 11.02 (F2-I have digital literacy competency and resources) (F3-digital literacies support student learning), .8.99, and 8.58 (F4-students are competent with digital literacy). The instrument was deemed as reliable in determining faculty perceptions and practices.

The Validation of the North American Indigenous College Students Inventory (NAICSI) Craig A Marroquin – The University of Texas at Arlington

The North American Indigenous College Students Inventory (NAICSI) was designed to measure cultural integrity (preservation of cultural traditions) through six support factors (family, tribe, peers, staff, faculty, and institution) and their effect on cultural reciprocity, and cultural resiliency for Native American college students. Statistical analyses revealed the NAICSI yielded high levels of internal consistency, content validity, and construct validity. Additionally, the confirmatory factor analyses supported the hypothesized factor structure. The NAICSI was validated on 1,567 Native American college students from 75 institutions and representing over 300 tribes.

Frustration in Regards to Online Courses

Sebahattin Ziyanak – The University of Texas at Permian Basin Jason H Yagci – University of North Texas

The four areas investigated were the amount of frustration attributed to the characteristics and instructions of the class, the skill and competence of the instructor, the course format as related to computer technology, and the general experience of participating in an online course. The survey was distributed to students enrolled in computer-based (online) distance education courses. The survey instrument was evaluated for reliability and construct validity. The results for reliability were encouraging ($\alpha = .9226$). Yet, the factor analysis results of a rotated three-factor solution to assess construct validity were inconclusive. This may have been the result of the small sample size (n = 55).

Measuring Self-Efficacy for Mathematical Creativity: Developing a Tool to Identify Mathematical Talent

*Anna M Payne – Baylor University

The SEMaC scale was created to identify individuals with high self-efficacy for mathematical creativity. This is to give teachers a way to identify self-efficacy of mathematical creativity. The participants in the pilot group included college students and teachers, with a high percentage of the participants being female. The scale was scored on a 4-point Likert scale, and evaluated using item response theory. The items were reviewed for reliability and validity. The scale has a Cronbach's α of .94 for reliability. Suggestions for further research include increasing the question pool to include questions such as in the MCPSAT and validity testing.

Effects of Varying Frequencies of Positive Expectation Violations In Visual Displays For Higher Education

Carl J Alfert & Suzanne Lindt – Midwestern State University

Educators are in the search for simple tools they can use to increase the academic performance of their students. Positive Expectation Violations (PEVs) are stimuli that may cause a positive

emotional response, while heightening arousal. The purpose of the current study was to determine the frequency of engagement techniques needed to maintain the optimal arousal level during slideshow lectures in higher education. Do students exposed to PEVs during a course lecture retain more information than those in a standard lecture classroom? Research in developing and testing engagement techniques may assist university faculty in the transfer of information to students.

Becoming a Reading Teacher through an Online Teacher Certification Program: A Qualitative Study on Teacher Self-Efficacy

Melinda Lucko, Ubaldo Cirlos, Amberly Walker & Crystal Rose – Texas Tech University

The purpose of this qualitative study was to evaluate the perception of teacher candidates' self-efficacy in their role as a biliterate/bilingual reading teacher after participating in an online ELAR/SLAR course for an Alternative Certification EC-6 with Bilingual Certification program. The single-intrinsic case study included five preservice teacher candidates enrolled in the online Alternative Certification program. Data derived from the teacher candidates' reflective journal response included personal thoughts and perspectives in answering end-of-the course questions. The reflective journal responses were analyzed and evaluated through constant comparison analysis. Two themes emerged after coding the journals: "Navigating through the Course" and "Becoming the Teacher."

The Effects of Technology in STEM Education: A Systematic Review of Technology-integrated STEM Research Articles

Yu Xiao – Texas A&M University Ke Wang – Nicholls State University

The application and popularization of technology provide solid teaching and learning support for the reform and development in the field of STEM education. For purpose of providing researchers with a clear understanding of published research about technology-integrated STEM education, this study investigated the basic information of selected papers by analyzing 57 STEM education articles including technology as a research subject from 18 educational journals. The findings show that American researchers published the majority of the articles; researchers mostly used technology as a single subject to focus on evaluating technology-based educational projects.

Student Perceptions of Use of Flipgrid in Online Classes: Advancements of Technology in Education

*Dittika Gupta, Timothy Hinchman & Carrie Taylor – Midwestern State University

The use of technology is becoming increasingly prominent in education. These technologies provide new ways for people to collaborate, interact, communicate, and share ideas and knowledge. In this presentation, the presenters will discuss the use of Flipgrid technology for enriching learning experiences of students in online courses by providing an interactive video discussion platform for educators and students. The researchers aim to show that Flipgrid can serve as the quintessential "Snapchat" of education appealing to today's digital learners and hence support teaching in an online setting.

T6.5 Paper Session 2:45p – 4:00p Cimarron
Evaluation

Teaching Block-based Programming to Novices: A Systematic Review

Hyunchang Moon & Jongpil Cheon – Texas Tech University

While numerous studies suggest approaches that provide effective means of teaching programming in introductory courses, to date, no study has attempted to systematically examine the literature on teaching approaches applied to block-based programming. This study was to synthesize the results of a systematic review on articles describing teaching approaches of block-based programming, and provide an analysis of the effect that various interventions. Search terms identified 23 papers reporting empirical evidence about the impacts and outcomes of block-based programming intervention with respect to learning and engagement. We are still in the progress of analyzing data. More findings and implications will be discussed in the presentation.

College Student Satisfaction with Online Learning: A Systematic Review

Xiaofang Zeng – Texas Tech University Xiaoguang Zeng – Quanzhou Teacher College

This study reviewed literature on college student satisfaction with online learning. Thirty-five articles were included in this study. Findings showed that more research with experimental/quasi-experimental design is needed to examine whether certain instructor behaviors or course design elements are useful for promoting student satisfaction with online learning. Further survey research may add more questions in the surveys to reveal student learning behaviors, needs and attitudes in online learning context. Further research for improving student satisfaction with online learning was discussed.

Differences in Perceptions of a Culture of Assessment Between Faculty at 2-Year and 4-Year Institutions

Misty R Rasmussen & Matthew B Fuller – Sam Houston State University

The purpose of this study was to determine the degree to which 2-year and 4-year faculty at higher education institutions in the United States differed about their perceptions of a Culture of Assessment through analyzing select questions on a national survey, Faculty Survey of Assessment Culture (Fuller, 2018). Inferential statistical procedures, used on nationwide archival data, revealed statistically significant differences between 2-year and 4-year faculty members at postsecondary institutions in the United States differed in their perceptions of a Culture of Assessment. Implications of these findings are discussed.

A Complete SMOCkery: College Performance was not Boosted nor were Achievement Gaps Reduced for Online vs. Face-to-face courses

*Daniel H Robinson – The University of Texas at Arlington

Pennebaker, Gosling, and Ferrell (2013) reported that an innovative Synchronous Massive Online Course (SMOC) resulted in better student performance in other courses and a reduction in achievement gaps between lower and upper middle-class students. In this paper, I present a closer look at the data used in this article. In both cases of false claims, threats to internal validity were not adequately addressed. Student performance increases can be explained by selection bias, whereas achievement gap reductions can be explained by differential attrition. It is hoped that the findings reported in this paper will inform future decisions regarding SMOC courses.

T6.6 Paper Session 2:45p – 4:00p El Dorado
Principals

Challenges Rural Schools Face With Instructional Leadership: Perceptions of Texas Rural Schools' Principals

Kimberly Parker – Stephen F. Austin State University

Rural school principals face unique, difficult to resolve challenges that negatively affect their instructional leadership capacity. This study will contribute to the corresponding literature on the problem by eliciting the perspectives of a convenient sample of Texas rural school principals. This structuralist study uses a Motivation-Hygiene theoretical framework and will be qualitative, non-experimental, and cross-sectional in nature. Interviews will be conducted and interview data will be analyzed using open coding and thematic analysis. This research will adhere strictly to research ethics requirements (IRB, protection of anonymity and confidentiality, and protection from discomfort, risk, or harm).

Enactment of the Tyler Rationale: A Case Study of Principal Interns' Instructional Coaching Practices

Chau H P Nguyen, Aaron S Zimmerman, Fernando Valle, Irma L Almager, Mehmet A Cihan, Selenda Cumby & Ozge Cihan – Texas Tech University

The Tyler Rationale has exerted a profound impact on the curriculum and instruction arena since its first publication in 1949. That Tyler's model has gained its momentum since it came into being and remains in vogue thus far proves that it has the substance of a classic. This paper offers insights and examples of how the Tyler Rationale is enacted through principal interns' instructional coaching practices and examines their effectiveness in improving teacher instruction. The results of this study have important implications for practice and future research.

God and Country Revisited: How the Courts Have Ruled on Pledge Recitation and Silent Meditation in Public Schools since 9/11

Carrie Y. Barron Ausbrooks – The University of Texas at Arlington

A resurgence of patriotism followed in the wake of the events that transpired on September 11, 2001 (9/11). As a result, more than 35 U.S. states, including Texas, passed legislation requiring public school students to recite the Pledge of Allegiance each day. This presentation builds on the author's previous legal analysis of the Texas pledge/silent meditation law passed in 2003 and explores litigation challenging the constitutionality of U.S. pledge and silent meditation statutes since 9/11, including the legislation passed during the most recent 86th legislative session.

Principal Interns' Lived Experience of Coaching Teachers: A Phenomenological Inquiry *Chau H P Nguyen, Aaron S Zimmerman, Fernando Valle & Irma L Almager – Texas Tech University

Grounded on the phenomenological philosophy and methodology, in this study, we explore principal interns' (PIs') lived experience of coaching teachers. Our inquiry is guided by the following research question: What might it be like for principal interns to live through the experience of coaching teachers? The participants are six PIs from a job-embedded principal preparation program. This inquiry demonstrates that PIs hail doubt, persistence, and pride/satisfaction as the substance or – as Husserl (1983) calls it – essence of their lived experience of coaching teachers. These phenomenological findings have implications for practice and future research.

T6.7 Paper Session
2:45p - 4:00p
Preservice Education

The Impact of a Preparation Program on ELL Writing: A Case Study of One Preservice Teacher

Stephanie M Moody, Meredith Dunn, Macey Todd, Paola Loera, Lizette Rodriguez & Keith M Graham – Texas A&M University

The present study evaluates the longitudinal impact of a teacher preparation program titled Becoming Teachers of ELL Writing (BTEW) on the self-efficacy and pedagogical moves of one preservice teacher (PST). Data includes journals, reflections, interviews, video recordings, and a self-efficacy survey gathered over the course of three semesters. Results showed that participation in BTEW increased the PSTs' content and pedagogical efficacy, which directly impacted her ELL writing instruction after BTEW. This study provides evidence of the necessity of authentic teacher preparation programs for ELL writing.

Pre-Service Teacher Experiences of Instructional Model: Meta-synthesis of Qualitative Studies

Serife Turan – Texas Tech University

This review was conducted to identify the factors that influence how pre-service science/math teachers implement the 5E instructional model and the challenges and barriers they face in doing so. Eighteen studies were identified in various electronic databases and a metaethnography method was used to review the qualitative studies. The findings illustrated that the experiences of the pre-service teacher varied. Time, resource, method course, training, field experience, belief, content knowledge, and classroom size identified as codes which influenced practice of pre-service teachers. To sum up, this review provides a better understanding of pre-service teacher experiences in implementing the 5E instructional model.

Using Certify Teacher and Course-Taking Location to Predict Student Success on the TEXES Content Exam

Lynn M Burlbaw, Kristen Schumbera, Ashley Jolly & Kaelyn Parks – Texas A&M University

This study examined the scores students obtained on their initial taking of the Certifty Teacher content exam, where students completed their social science and science content courses and their success in passing the Texas TExES exam to determine if there was a relation between these three items. The intention was to assist students, based on their content domain scores on the Certify Teacher exam in being more successful at passing the Texas TExES exam, a task students must complete before enrolling in their clinical/student teaching semester to become a certified teacher.

School Psychologists as Change Agents: An Application of Ecological Systems Theory in Practice

*Rebecca Tipton & Julie Ivey – Baylor University

This presentation will provide an overview of: (a) implementation of Bronfenbrenner's ecological systems model; (b) roles of school psychologists in making dynamic changes; (c) challenges of educational transformation; and (d) a case study to demonstrate how to synthesize this perspective to innovatively meet student needs.

T7.1 Workshop

4:05p - 5:20p

Free Workshop

Beverly-Flamingo

Using R for Rasch Modeling: A Tutorial using the Extended Rasch Modeling (eRm) Package

R Noah Padgett & Grant B Morgan – Baylor University

In this workshop, a demonstration of how one may use the eRm package in R to document person and item analysis through a Rasch framework. An introduction into the unique aspects of Rasch models will be discussed along with a didactic example of how to apply two different Rasch models. Key features include the use of person and item fit statistics, item maps, and

latent construct coverage. These features will be highlighted through the use of data from the Rosenberg Self-Esteem Scale.

| T7.2 Paper Session | 4:05p - 5:20p | Capitol I |
|--------------------|---------------------|--------------|
| | Special Populations | - |
| | Discussant: TRD | |

Perception of Teacher Preparation to Work with English Learners: A Phenomenological Study

Ubaldo Cirlos, Allison Higdon, Melinda Lucko, Mary G Perez & Amberly Walker – Texas Tech University

The enrollment of students who are in minority groups and who are English learners (ELs) has increased in the United States. Often, teachers enter a classroom unaware of what to do or how to face a class of students who come from different backgrounds and cultures. This proposed phenomenological study will focus on the perception of teachers' lack of preparation to teach ELs and to gain their perspectives on what they feel is needed to be better prepared. Culturally responsive teacher/pedagogy (CRT) will be used to guide the study.

Blended Learning in an Elementary Bilingual Science Classroom – a Community Engaged Scholarship Project

Matthew J Crutcher – Texas Tech University

This community engaged scholarship project focused on educating bilingual science teachers about blended learning. A survey to gauge teachers' prior knowledge was conducted before designing and implementing a training program. A learning management system (LMS) was used as the platform for training as well as face-to-face interviews to monitor the development process. Teachers ultimately designed blended science lessons with the researcher, to engage their students and obtain higher student achievement.

Differences in 1-Year Persistence Rates of Black Students at Texas 2-Year Career Colleges Over Time

Clifford V Johnson, Jr. – Sam Houston State University

The purpose of this research study will be to determine the extent to which the 1-year persistence rates of Black students at Texas 2-year career colleges differs across the 2006-2007, 2009-2010, and the 2012-2013 academic years. Through obtaining statewide data from the Texas Higher Education Coordinating Board Interactive Accountability System database, inferential statistical procedures will be utilized to determine the statistically significant differences in 1-year persistence rates of Black students who had been enrolled at 2-year career colleges between the 2006-2007 and 2009-2010 academic years; between the 2009-2010 and 2012-2013 academic years; and between the 2006-2007 and 2012-2013 academic years.

T7.3 Paper Session 4:05p – 5:20p Capitol II

STEM PBL from Harmony Public Schools Teachers' Perspective

Karlygash Ospan & Akerke Andagul – Harmony School of Innovation, Yetkin Yildirim – Rice University, Emel Cevik – Texas A&M University

The scarcity of graduates in Science, Technology, Engineering and Mathematics (STEM) as led to numerous efforts to foster STEM learning in the classroom. While prior work emphasizes that STEM Project Based Learning (PBL) is an effective method to encourage STEM learning, Professional Learning Communities (PLCs) have not adequately focused on STEM PBL and the traditional structure of the curriculum is not STEM PBL supportive. In this paper, we will illustrate the efforts and challenges to include STEM PBL curriculum into Harmony Public Schools from a teacher's perspective and present an example teacher-developed STEM PBL curriculum for the 6th grade math classrooms.

How National Citizenship and Global Citizenship Issues Are Viewed and Implemented from Perspectives of Students and Educators in Vietnam?

Thi Bang Tam Nguyen – Texas Tech University

The issues of national citizenship and global citizenship are discussed with reference to the conceptions, understanding and implementation of these two issues Vietnam. The paper examines how they are viewed and implemented from perspectives of students and educators in Vietnam and how these issues are addressed in school education. The paper aims to make the issues of national citizenship and global citizenship known to administers, teachers and students particularly and many other people generally and to focus the importance of these two kinds of citizenships. Finally, the researcher examines whether global citizenship should be included in the school curriculum.

Mathematics and Distance Running: A Theoretical Formulation for Phase-Based Mathematics Education

Joseph S Webster, Macie Baucum, & Mary M Capraro – Texas A&M University

Distance running and mathematics have more in common than it may seem. We analyzed two of the most prominent distance running training methods (DRTMs) and extrapolated these approaches to the development of a theoretical framework for the teaching and learning of mathematics. We offer in this paper a theoretical framework with the goal of providing a phase-based course structure aligned to a cohesive goal and potential quantitative measures to be used for a growth-based assessment of student success in mathematics.

A Comparison of Teacher Perceptions of Science Lesson Effectiveness with and without Disciplinary Literacy Instruction

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

Instruction in science disciplinary literacy – the unique ways scientists create and interpret text – is uncommon in early elementary education due to a dearth of appropriate materials and concern that increased text focus could deemphasize inquiry, thus reducing instructional quality. This study explores 2nd grade teacher feedback from a matched comparison group field test of a science disciplinary literacy unit. Initial findings suggest teachers who implemented the unit were slightly less positive regarding the effectiveness of the science activities than comparison group peers who implemented science activities alone. Implications for the inclusion of disciplinary literacy in elementary science classrooms are discussed.

T7.4 Paper Session
4:05p – 5:20p
Attitudes & Motivation
Bonneville

Interest and Attitudes of High School Students in STEM Summer Programs

Mayra A Alvarado Ramirez – Texas A&M University - Corpus Christi

Many initiatives exist at the local, state, and national level that aim to increase knowledge and interest in STEM fields. This study set out to determine if high school students' interest and attitudes towards engineering increased after participation in a one-week engineering summer program. Interest and attitudes indicators were recorded using the "Interest and Attitudes Survey" from the Engineering is Elementary program. Participants arrived and left the summer programs with positive interest and attitudes towards engineering. Summer programs such as the ones in this study may help strengthen students' motivation to pursue careers in engineering.

Understanding the Motivation of Current Educators Who Pursue and Complete a Doctoral Degree in Education

Heather Schoen, Anica Cisneroz & Kristen Lyons – Angelo State University

The purpose of this qualitative study is to explore the perceived reasons and motivations that prompt individuals to pursue and complete a doctorate degree in the field of education. This study will take place using a phenomenological approach, with the pursuit of a doctorate in education as the shared, lived experience. The study will utilize both semi-structured interviews and a focus group as data collection methods. Data sources will include a sample of current educators enrolled in doctoral programs in the field of education and current educators who have completed their doctoral program in education within the past five years.

Perceptions of Stakeholders on Declining Enrollment in American International Education

Rishi Raj & Gerri Maxwell – Texas A&M University-Corpus Christi

The year 2018 saw a significant decline in international education enrollment numbers in the United States of America, contrasting the narrative of America being the number one higher

education destination for international students. To study how this decline is being perceived and how it could impact other systems in place, a phenomenological qualitative study was conducted including the three roles that are the pillars of higher education: students, faculty, and staff. One member from each of the above populations were interviewed, and individual and common themes were generated which aligned with immigration, career advancement, macroeconomics, diversity and inclusion.

Relationship among Teaching Strategies, School Management, and Student Achievements: Case of US Ninth-Grade Mathematics

*Joseph Junlong Ji, Jian Wang, Shuang Zhang & Lu Guo – Texas Tech University

Teaching strategies influence students' math-performance. In schools, administrators give management suggestions or directly plan school events, which not only shape schools' culture and testing schedule but alter math teachers' teaching practices and students' math-performance. This study explores associations between US ninth—graders mathematics performance and math teaching strategies under the influences of different school administrative management using the data from 2009 High School Longitudinal Study. Applying HLM, we found that some strategies influence students' math-performance and administrative management approaches provide additional supports.

T7.5 Paper Session 4:05p – 5:20p Cimarron

At-Risk Students Discussant: Lynn Burlbaw

Positive Youth Development and Academic Performance in Belizean AdolescentsFranklin B Lemons, Lee Bedford, Darrell M Hull & Emmal Naslund-Hadley – University of North Texas

Previously, PYD has been shown to be positively related to academic performance (math and reading achievement; Phipps, 2010). Personality traits have been shown to be related to academic performance as well (Kaufman, Agars, & Lopez-Wagner, 2007), and personality traits and PYD have been shown to be related to each other (Phelps et al., 2009). The purpose of this study was to explore whether PYD interventions are beneficial to academic performance (math and treading achievement scores) in Belizean youth. We hypothesized that PYD would predict academic performance (math and reading achievement) even when controlling for personality traits.

Project-Based Summer Enrichment Programs to Increase Language Acquisition and Achievement in Secondary ELLs

Rebecca W DeLozier – Texas Tech University

The U.S. public schools are seeing increased enrollments of English language learners (ELLs). However, despite extensive research into instructional practices that best support ELLs, the academic achievement of non-native speakers still lags behind that of native speakers. This study presents a research study that will evaluate the effect of a project-based summer

enrichment program on the language acquisition, content knowledge, attendance, and graduation rates of secondary ELLs.

How Students Who Struggle With Literacy Develop Agency

Elizabeth D Jones – Texas Tech University

Digital media affords opportunities for adolescent students to connect internationally with other students. These digital interactions enable teens to develop a global perspective through critical digital literacy. My qualitative action research case study will examine how using cosmopolitan critical literacy as a theoretical framework for instruction influences agency and academic literacy skills in 6th and 7th-grade students participating in literacy intervention. Findings from will study will provide further understanding of how students who struggle with literacy develop a global perspective and critical literacy skills.

T7.6 Paper Session 4:05p – 5:20p El Dorado

International Education

Discussant: TBD

Tri Means Three

Kristina Weeks – Houston Baptist University

The purpose of the study is to compare data points of school systems that are using the trilingual process (charter school) to the Dual language progress (public school) for low social economic third grade Hispanic students in the areas of Reading and Math within Texas schools. The data points (Beginning of Year, Middle of the Year, and End of the Year) will include subjects Math (conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and productive disposition) and Reading (Phonemic Awareness, Phonics, Vocabulary development, Reading Fluency, and Reading comprehension strategies). Sources will include Istation (2018), Think through Math (2018), Staar, Curriculum Based Assessments, Instructional Focus Pre/Post Assessments, and classroom assessments. This study will be a mixed method of data collection using observations of the classrooms, surveys of teachers and administrators, and interviews of administrators.

Comparing the Experiences of Black-African International Students in HBCUs and in PWIs in the United States: A Narrative Inquiry

Diana C Awuor – Sam Houston State University

This study will explore and compare the experiences of Black-African international college students (BAIS) who are alumni of HBCUs and PWIs in United States. The purpose of this study is to understand how BAIS's racial identity may affect their experience in two racially different institutions. Henri Tajfel's Social Identity Theory will be used as the framework. This study will be guided by research questions on how Black-African international students who are alumni of HBCUs and alumni of PWIs describe their experiences as students at HBCUs and PWIs in relation to their racial identity?

THURSDAY, FEBRUARY 13

Translation as Charitable Currency: Internationalization Through International Alumni Giving

Z W Taylor – The University of Texas at Austin

The bulk of research on the international student experience has overwhelmingly focused on why international students choose to leave home (Beech 2015), how international students choose institutions of higher education (Mazzarol and Soutar 2002), and international students' experiences within institutions of higher education (Mamiseishvili 2012). However, philanthropy is incredibly important in higher education, as is international education. Therefore, I propose to research English-language learning international alumni from US higher education institutions and inquire about how and what they are asked for as charitable alumni from their institution.

T7.7 Workshop 4:05p – 5:20p Fleetwood
Free Workshop

How To Find and Obtain Your Ideal Job in Academia

Bill Jasper – Sam Houston State University Gil 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.

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

Friday, February 14

| F0.1 | 8:00a – 5:00p | Grand Ballroom Foyer |
|------|-----------------------|----------------------|
| | Registration | |
| | | |
| F0.2 | 8:00a – 9:00a | Statler & Waldorf |
| | Continental Breakfast | |

F0.3 8:00a – 8:45a Century Boardroom

Graduate Leadership Council

Plan for the coming year and set priorities for incoming Graduate Leadership Council members.

| F1.1 Workshop | 8:45a – 10:00a | Beverly-Flamingo |
|---------------|----------------|-------------------------|
| | Free Workshop | |

The Challenges and Benefits in Undertaking Community Engaged Scholarship Research Projects

Shirley M Matteson, Aaron S Zimmerman, Kendra N Nwosu, Rebecca DeLozier, Kimberly J Jones & Paula Szymanski – Texas Tech University,

This workshop provides insights as to the challenges and benefits of community engaged scholarship (CES) research projects. The workshop first presents a brief review of the literature that addresses the history of community engaged research and the benefits of undertaking such projects for faculty and graduate students. In the second part of the workshop, four doctoral students will present an overview of their respective CES projects and discuss some of the challenges they have faced, such as developing partnerships, navigating multiple IRB boards, collecting data, and reporting results in a meaningful manner to partners.

| F1.2 Paper Session | 8:45a – 10:00a | Capitol I |
|--------------------|----------------|--------------|
| | Methodology | - |

A New Educational Methodological Research Framework: Levels of Digital Professional Connectedness (LoDProC) Model

Darci J Harland – Walden University

In this methodology research paper, I propose the need for a new framework that will aide researchers in exploring connections educators make online for professional purposes. This tool could provide educational researchers operational language around this phenomenon and would therefore provide consistency in the literature for a swiftly moving research field. The model could be used to develop both qualitative and quantitative tools to improve the exploration of educators connecting online. Therefore, I propose the Levels of Digital Professional Connectedness (LoDProC) model.

When Participatory Action Research Lacks Participation and Action, It's Just Research: A Critical Analysis of Photovoice PAR

Crystal D Rose – Texas Tech University

This critical analysis utilizes Harzing's (2007) open-source tool, Publish or Perish, to perform a Google Scholar search of articles that contained the keywords participatory action research and literacy and photovoice in order to examine the participatory and action aspects of Participatory Action Research Photovoice projects that are among the top cited in the last five years. There is a lack of regard for the nature of Participatory Action Research, including the basic components of the methodology. The top-cited PAR studies included in this critique have interesting findings, rigorous data analyses, and add to knowledge in their respective fields of study; however, many do not follow under the guidelines of Participatory Action Research. There is a gap in the literature concerning guidance on data analysis in Photovoice Participatory Action Research projects. Perhaps this paper will help ease this expansive gap, encouraging scholars to involve participants in all phases of research.

What Do Users Think about the Content of a Web-Based Instruction Using to Enhance Instructors' Expertise for Online Teaching?

Danh Ngoc Nguyen & Lien Xuan Thi Nguyen – Texas Tech University

The purpose of this research was to investigate the effectiveness of developing a web-based instruction (WBI) to aid instructors in enhancing their expertise for online teaching. This research evaluated and measured users' perception and reflection on the content of the WBI designing to enhance instructors' expertise in using Blackboard function for their teaching. The findings indicated that the WBI was informative and effective regarding providing instructors with online training on using Turnitin on Blackboard to check students' work. The research implications contributed to supporting instructors to take advantages of available functions of Blackboard to enhance their online teaching.

The Effects of Technology in STEM Education: A Systematic Review of Technology-integrated STEM Research Articles

*Yu Xiao – Texas A&M University

The application and popularization of technology provide solid teaching and learning support for the reform and development in the field of STEM education. For purpose of providing researchers with a clear understanding of published research about technology-integrated STEM education, this study investigated the basic information of selected papers by analyzing 57 STEM education articles including technology as a research subject from 18 educational journals. The findings show that American researchers published the majority of the articles; researchers mostly used technology as a single subject to focus on evaluating technology-based educational projects.

F1.3 Paper Session 8:45a – 10:00a Capitol II

Higher Education

"A Gift"... "a Death"... "an Open Door"... "Like Being Pushed Off a Cliff": How Administrators Experience Unexpected Job Loss

Jeff Strietzel – Baylor University

Every year, campus administrators are forced to transition out of their roles. Often subject to nondisclosure agreements and silenced by shame, few of these leaders share their stories. In this exploratory study, I interviewed 40 administrators about their forced job transitions within higher education. Study participants' lived experiences are discussed, and their reflections provide a rich tapestry of adversity and growth. Although participants did not wish their experiences on others, they were pleased to share what they learned as lessons for all.

TxARM Model Implementation: Assessing the Scholarly Learning CommunityRachel K Turner, Zhihong Xu, Rasheedah Richardson, Isah Juranek, Theresa P Murphrey & Karen Butler-Purry – Texas A&M University

The Texas A&M System Research Model alliance is working to develop, implement and study a model of STEM doctoral degree completion and the transition to successful postdoctoral fellowships and faculty careers for historically underrepresented minorities. Through a needs assessment interview, graduate and postdoctoral cohort members shared their needs and challenges influencing their program completion. The TxARM leadership team utilized the findings to adjust the online scholarly learning community curriculum. Changes include an inperson aspect, cohort involvement in leading sessions, addressing all cohort suggested topics and a more individualized approach to the TxARM model.

Holistic Development of a Common Writing Rubric

Lesley F Leach, Credence Baker, Ryan Glaman, Jesse Brock & Phillis Bunch – Tarleton State University

Academic writing is a fundamental skill in doctoral training with which students often struggle. After noting students' writing challenges and program deficiencies in facilitating students' writing development, a group of Ed.D. in Educational Leadership program faculty have begun holistic development of a writing rubric for longitudinal use with students across the curriculum. The holistic development process involves collaboration and stakeholder feedback from students, faculty, and faculty external to the program. The current study presents details regarding the development of the writing rubric and feedback regarding its initial use with students.

Select Student Veterans' Perceptions of Study Abroad Opportunities and Experiences: A Case Study

*Dana Van De Walker, Malin Hilmersson & Justin Ball – Sam Houston State University

The aim of this qualitative study is to examine the perceptions of select student veterans on study abroad opportunities and experiences. How have student veterans navigated the path to

study abroad and made meaning of their study abroad experiences? Results from this case study may help inform study abroad professionals and higher education administrators on how to best work with student veterans interested in study abroad.

F1.4 Paper Session 8:45a – 10:00a Bonneville

Instruction

Texas Hippy: Parent Involvement a Predictor of School Readiness

Cecelia Samuels, Darrell M Hull, Wendy Middlemiss & Suzie Verdin – University of North Texas

Children who live in poverty and/or are ethnic minorities are at higher risk of being unprepared for Kindergarten. A growing method to increasing school readiness, particularly for at risk families, are home visiting program. These programs are guided by the premise that the parent is the first teacher and thus strive to improve their skills and resources. Using pretest data from Texas HIPPY we hypothesized that greater family involvement in learning activities would support increased developmental skill acquisition measured by BSRA-3. The findings support this hypothesis. Recommend that further efforts be made to support the development and implementation of home visiting programs which aims to equip at-risk families who may not possess the skills and support needed to prepare children for school.

Teaching Developmental Education Online: Challenges and Instructional PracticesNara Martirosyan, D Patrick Saxon & Susan Troncoso Skidmore — Sam Houston State
University

The purpose of this study was to identify challenges and best practices in teaching developmental education (DE) courses online. Analyzing survey data received from 37 faculty members who teach DE courses online in 2- and 4-year colleges, researchers identified the five most frequently occurring challenges in teaching DE online, as well as the top five instructional strategies that work well when teaching DE courses online. Based on the findings, practical implications were drawn for future practice in online DE instruction.

The Writing Engagement Framework: Developing Students' Writing Efficacy through Targeted Writing Instruction

Wendi K Zimmer – Texas A&M University

The importance of writing is increasingly associated with educational and industry success. Linked to efficacy research, this study sought to pilot a writing framework for undergraduate writing instruction. Survey and interview data were used in a mixed-methods design to assess growth in undergraduate students 'writing self-efficacy. Results demonstrated an increase in writing self-efficacy when participants received direct instruction in writing as delivered through the developed writing framework. As writing instruction does not receive ample attention in higher education classrooms, a model of writing instruction specifically geared toward student success could increase writing instruction frequency at the higher education level.

Using Multiple Theoretical Lens to Read Children's Digital Comics

*Johnathan W Hill – Texas A&M University-Corpus Christi

This paper analyzes children's digital comics through multiple theoretical lenses including social semiotics, film study, and game studies. As the influence of comics on popular culture and scope of comics has grown, so too has interest in their use for educational and literacy activities. This analysis and reading of the digital comics were conducted through the use of three tools each developed to fit with the tenants of their respective theoretical perspectives. These frameworks, when used to analyze digital comics, can create new meaning for multilevel audiences in academia and shine new light on their uses in the classroom.

F1.5 Paper Session 8:45a – 10:00a Mathematics Education Discussant: Celia Scott

Reformations to Developmental Mathematics Education: A Mixed-Methods Analysis of Programmatic Changes

Gabrielle Castro – West Texas A&M University

A mixed methods study will be conducted to determine the effectiveness of a newly implemented developmental mathematics education program at an institution of higher education. Regression analysis will be utilized to find differences in retention of students who have taken either of the mathematics pathways provided at the institution. The experiment will also look for qualitative differences in student and faculty experiences in these courses. Implications from this research extend to determine factors that could hinder student success, generate program improvement, and provide additional literature on reforms in developmental mathematics education.

Relationship between Students' Math Anxiety and Achievement in High School Sumeyra Karatas & Veysel Karatas – The University of Texas Rio Grande Valley

This research study will be conducted to determine the relationship between math anxiety and students' achievement. High school students will be surveyed about their level of anxiety, and their state test scores and district assessment scores will serve to identify any correlation between math anxiety and students' academic achievement. Math anxiety affects the number of math courses which students desire to take. Students who have math anxiety avoid taking more math courses even though it is a prerequisite to the field they would like to study. Math anxiety and academic achievement have a negative correlation.

Keywords: Math anxiety, academic achievement

Mathematics Teachers' Incorporation of the Written Word: Survey Development Kimberly Ann Currens – Texas A&M University

The study goal, developing a valid and reliable instrument for measuring how teachers integrate reading mathematics texts into high school mathematics courses, will use a systematic approach for scale development. The instrument consists of 21 non-demographic

items: six directly from NSSM survey, fourteen modified NSSM items; and one new item. Fourteen items use a six-point Likert type scale and seven use time interval scales. A factor analysis with varimax rotation will identify distinct factors. Alpha reliability for the total scale and subscales will be determined. Confirmatory factor analysis will determine key fit indices demonstrate highly accepted values.

F1.6 Paper Session 8:45a – 10:00a El Dorado
Policy & Performance

Folicy & Ferjormance

Decolonial Art as Collective Reincarnation Resistance during Participatory Action Research in Post-Ethnic Studies Tucson

Kyla A Kemp – University of Arizona

Although Tucson Unified School District violated the First and Fourteenth Amendment of the U.S. constitution by banning ethnic studies, less attention has been paid to the femme educators, activists, and artists who were/are silenced by the movement. The present dissertation explored the dynamism of college student-researchers' collective agency after an approved youth-led participatory action research project was rescinded by a Tucson school district for gendered control over young people's praxis. Analyses of research meeting observations, decolonial art, and an interview after a community-based conference highlighted that college students combated sexualized racialization structuring the youth-led movement through reincarnation resistance.

Public Schools and Title IX: In the Wake of the Bathroom Controversy

Carrie Y Barron Ausbrooks – The University of Texas at Arlington

In 2016 and 2017, two of the most publicized and contested issues were the bathroom legislation and the guidance from the federal government concerning Title IX and its application, particularly to transgender students in public schools. This session is designed to continue that line of research, the focus of which was on the controversial legislation in 2016 called the Bathroom Bill. The focus of proposed session is on what public schools and districts are doing to ensure compliance with Title IX with respect to transgender students after the bathroom controversy.

Teacher Preparation and School Partners: Pre-service Teachers' Impact on Students Identified with Reading Challenges

James E Gentry & Chris Sloan – Tarleton State University

School partnerships are essential to teacher preparation programs. Within respective school settings, pre-service teachers have opportunities to experience authentic, problem-based learning (PBL) situations with students who are identified with reading challenges (SIwRC). Educators providing SIwRC research-based reading interventions selected from data-based decision making (DBDM) processes are crucial to teacher preparation curriculum. This partnership involved 123 tutors (i.e., pre-service teacher) applying research-based reading interventions from DBDM reflective processes. Tutees' respective independent reading grade levels and reading comprehension measures significantly increased. The results support the

need for providing pre-service teachers opportunities to practice DBDM processes when applying research-based reading interventions with SIwRC.

Role of Reading Engagement in Mediating Effects of Reflective Instruction on Reading Performance

*Lu Guo, Jian Wang & Joseph Ji – Texas Tech University

Reflective activities are used by teachers to measure students' learning outcomes and also to help themselves reflecting their own teaching instructions. The purposes of the present study were two-fold: first, to test the different effects of four types of reflective strategies on English language learners (ELL) and native-speaking students' level of engagement, and whether by improving students' engagement, their reading outcomes can be positively affected. The results indicated that reading engagement cannot be acted as mediating between reflective instruction and students' reading performance. Among the four types of reflective strategies, only classroom-quiz can improve native-speaking students' engagement.

F2.1 Workshop 10:05a – 11:20a Beverly-Flamingo Free Workshop

Improve Your Group Comparisons: Matching for Beginners

Forrest C Lane – Sam Houston State University

Educational researchers are often interested in making group comparisons, but these comparisons can be biased when using intact groups. The purpose of this workshop is to introduce propensity score matching (PSM) as a statistical approach for improving the quality of group comparisons when random assignment is not possible. Participants will learn the theory behind the method, how it differs from other analyses of statistical control, and view a demonstration of PSM using common statistical packages (SPSS & R). Both syntax and heuristic data to conduct the analysis will available to participants.

F2.2 Workshop 10:05a – 11:20a Capitol I
Free Workshop

Reading the Rubrics: A Systematic Approach for Supporting Pre-service when Creating an EdTPA Portfolio

Laura Isbell – Texas A&M University - Commerce April Sanders – Spring Hill College

This interactive session will describe, model, and guide participants to use specific resources to guide preservice teachers with the creation of edTPA© portfolios. Specifically, the presenters will describe and demonstrate the system Reading Rubrics that shows preservice teachers how to understand the edTPA© portfolio rubrics. A conferencing guide connected to Reading the Rubrics will also be provided as a way to support preservice teachers in the reflection process related to the portfolio.

F2.3 Paper Session 10:05a – 11:20a Capitol II

Student Performance Discussant: TBD

Reading Comprehension Skills with Semantic Mapping and Interactive Teaching in Chinese EFL Context

Yanhong Guo – Texas Tech University

Inefficiency with reading comprehension has been discussed a lot. Students who performed unsatisfactorily in reading strategies can be instructed with effective reading strategies to improve reading comprehension. This study was to investigate the effects of semantic mapping and interactive teaching strategies on reading comprehension and their effects on cognitive processing in Chinese EFL context. Two questions were asked to explore the effects on intrinsic loads in the cognitive processing. Two hypotheses were to testify whether there were significant differences in reading comprehension between the experimental group and the control group with the application of semantic mapping and interactive teaching strategies.

Elementary, Middle, and High Schools in the Improvement Required Category: A Texas, Multiyear Analysis

Letty H Roman – Sam Houston State University

In this multiyear, statewide study, the numbers of elementary, middle, and high schools that had the campus accountability rating of Improvement Required will be addressed. Archival data from The Texas Academic Performance Reports for the 2015-2016, 2016-2017, and 2017-2018 school years will be analyzed. Implications of these findings and recommendations for future research will be discussed.

The effect of Socio-Economic Factors and Intervention of Self-Regulation on Students' Physical-fit

Ye Sil Kim – Texas Tech University

Physical inactivity has been responsible for six percent of the global. The behaviors related with health during the early teenage years between 11 and 16 years are crucial because the patterns of the health-related habits in their adulthoods emerge at this time. However, there are few studies investigated the effects of physical activity program including human and environmental factors. The current study considers the influence of physical activity program and SES on physical-fit moderated by self-regulation. This study will contribute to the practical decision making related to health promotive programs in schools.

F2.4 Paper Session 10:05a – 11:20a Bonneville

English Education

The Cross-Linguistic Influence of an L2 English Writing Intervention on Spelling in L1 Spanish Writing

Mariana Melo, Victor Villasana, Keith M Graham & Stephanie M Moody – Texas A&M University

This study investigates the effects of an L2 English writing intervention on the spelling performance in L1 Spanish writing. Seventy-nine bilingual second grade students from three schools in the southern U.S. were assigned to one of three intervention groups: control, traditional (paper-and-pencil) intervention, and technology (writing with iPads) intervention. Participants were administered a pretest and posttest before and after the 10-week English writing intervention. The results of a robust OLS regression model suggest that there were no significant differences in spelling performance between groups. This study further emphasizes the need for bilingual education.

Analysis of English Spelling Errors of Taiwanese Learners

Macy Land, Omar Manzur, Keith M Graham & StephanieM. Moody – Texas A&M University

This study investigates the effects of a bilingual program on the English spelling performance of L1 Mandarin Chinese primary school learners. Fifty-six Taiwanese sixth grade students completed a standardized spelling test. Errors were coded using the following classifications: omission, substitution, insertion, transposition, or their combinations. Besides unclassifiable errors, results found combinations to be the most prevalent error, followed by the substitution, omission, transposition, and insertion, respectively. This study suggests a possible need to expand the way spelling is classified with younger learners beyond singular classifications and has pedagogical implications for spelling instruction.

The Relationship between Second Language Proficiency and Identity Reconstruction among International Students in the US

Shakiba Razmeh – Texas A&M University

This study investigates how two international students at American university reconstruct their identities because of their lack of oral English proficiency. Through semi-structured interviews, the results of his study revealed that international students use writing as a compensatory strategy for their oral proficiency problems. More specifically, they prefer to write papers and submit poster proposals to avoid being in situations where they need to discuss orally. Therefore, various aspects of identity reconstruction in relation to second language proficiency is disused in this paper. In addition, this study argues the importance of proficiency improvement programs for international student in American universities

The Effect of the Zhuyin Phonetic System on Non-Chinese-Speaking Students' Pinyin Pronunciation Learning

*Liang Ward – The University of Texas at San Antonio

This study is to look into the effect of the Zhuyin phonetic system on non-Chinese-speaking students' Pinyin pronunciation learning. This study will be based on a quantitative design, using surveys for data collection and generalizing numerical data for data analysis. This study is expected to be a reference for Chinese language teachers while teaching Mandarin Pinyin phonetic system to non-native speakers of Chinese. Additionally, the results from this research could provide in-depth analysis for future related research.

College Students
Discussant: Grant Morgan

Graduate Student's Persistence Toward Graduation: Factors Affecting Their Ability to Complete a Program of Study

Chenda Moore - University of Houston - Clear Lake

The persistence level of graduate students is of great concern for institutions of higher education (IHE) due to different factors that could help or hinder a student's ability to persist in the program leading to graduation (Dwyer, 2017). Some of the issues that graduate students face include financial hardships, lack of family support, lack of peer support and relationships (Gutowski, White, Liang, Diamonti, & Berado, 2018), lack of faculty support and connection (Dwyer, 2017), and general college support in the form of student activities that encourage involvement and commitment to the program (Okahana, Augustine, & Zhou, 2018). Terrazas-Carrillo, Hong, McWhirter, Robbins, and Pace (2017) found that "graduate student attrition has been referred to as the hidden crisis in higher education" (p. 61). Implications for IHE is great in determining the most effective supports to help graduate students follow-through with their goals of achieving a graduate degree. Ashraf, Godbey, Shrikhande, and Widman (2018) found that dedication, perseverance, and commitment are indicators of academic success. Dwyer (2017) noted a positive correlation between interactions with faculty and students and academic success. The level of student-faculty interactions influences the persistence level of students in higher education (Dwyer, 2017).

Constructing a Radical Community: Disrupting the Dichotomy of the Alone Together Paradox in Online Doctoral Students

Ambyr Rios, Keith M Graham & Radhika Viruru – Texas A&M University

Online learning is often associated with the together alone paradox which suggests that online students are constantly connected digitally yet feel more alone due to a lack of 'real' connection. In this paper we explore the findings from a case study of one online doctoral program in educational leadership. Twenty-five students participated in the study, which included in-depth interviews and photo-elicitations discussing diagrams of online ecologies. The study revealed that students were more likely to view themselves as "apart, but together"

rather than "together and alone"; students also challenged the idea that authentic interactions could only be had face-to-face.

Barriers to College Completion: Dual Credit as a Predictor of Postsecondary Success for Underrepresented Students

Courtney D Pugh – University of Houston - Clear Lake

The time to bachelor's degree completion along with student perceptions of success are key components in determining the useful addition of the dual credit pathways for underrepresented students. The purpose of this study is to examine the relationship between the number of college credit hours completed in a dual credit program, postsecondary student experiences, and bachelor's degree completion rate of underrepresented students to determine the benefits of completing college credit hours while in high school. This mixed methods study will combine university database information, student survey responses, and student focus group participation at a university in southeast Texas.

F2.6 Paper Session 10:05a – 11:20a El Dorado
Higher Education

Effects of Timely Enrollment in College-Level Mathematics on Degree Completion Forrest C Lane & Linda R Zientek – Sam Houston State University

Research indicates that degree attainment is positively related to math completion, but few studies have examined how the timing of when a student completes math affects this relationship. Using longitudinal data from 1,275 first-time enrolled undergraduate students, this study examined the extent to which completing a math course during the first semester of college predicted graduating with a bachelor's degree in 6 years. Results and their implications for research and practice are discussed.

Divide and Conquer: How NCAA Division Membership Predicts Online Advertising and Spending by NCAA Programs

Joshua Childs, Z W Taylor & Jase Kugiya – The University of Texas at Austin

A wealth of research has analyzed how institutions of higher education with NCAA programs market and advertise for their athletic offerings. Although research into NCAA football programs have dominated the literature, this study examined an under-researched element of NCAA marketing and advertising: advertising through paid online search techniques. This paper examined a random sample of 250 NCAA programs from all three divisions (I, II, III) and learned Division I programs are more likely to purchase online advertising (p<0.00), while public Division I programs are more likely to purchase greater volumes of online advertising than private peers.

Innovating Teaching Practice Through Professional Learning Communities

Andrew M Clark, Monica Zhan, Justin T Dellinger & Peggy Semingson – The University of Texas at Arlington

Professional Learning Communities (PLCs) have been used at the University of Texas at Arlington to support faculty innovation in their teaching practices. While the program has high satisfaction and university support, no systematic investigation has taken place to determine the quality of the model for capacity building. This mixed-method study investigated perceived benefits and weaknesses of the program and the diffusion of knowledge, skills, and artifacts at the institution. The findings indicate that participants do share information widely, value the interdisciplinarity and support from their communities, and have improved student outcomes in their courses.

Dominating Between the Lines and Online: How High Revenue NCAA Programs Advertise on the Internet

*Z W Taylor, Jase Kugiya & Joshua Childs – The University of Texas at Austin

A wealth of research has analyzed how institutions of higher education with NCAA programs market and advertise for their athletic offerings. Although research into NCAA football programs have dominated the literature, this study examined an under-researched element of NCAA marketing and advertising: advertising through paid online search techniques. Analyzing all Power 5 and Group of 5 conferences and institutions (n=107), results suggest NCAA programs who drive higher revenues are more likely to advertise online (p<0.05) and purchase higher numbers of adwords (p<0.05). Implications for research and practice are addressed.

F3.1 Workshop

11:25a – 12:40p

Free Workshop

Beverly-Flamingo

Introduction to Research Models: Using a Research Model to Build Your Research Proposal

Celia Scott – Texas Wesleyan University

A research model is typically a method to visually represent the connections between the purpose of your study, research question(s), theoretical or conceptual framework, components of that framework, outcomes to be investigated, and even the data you will collect and methods to collect it. While components of a research model can vary, research models often include the purpose of your study, research question(s), theoretical framework, and any framework components, outcomes, and some way to visually represent the connections between/among the research model components. This workshop will provide attendees an introduction to research models. Specifically, information will be provided regarding creation of a research model, and how to use a research model to guide construction of a research proposal (introduction, literature review, methodology).

F3.2 Paper Session 11:25a – 12:40p Capitol I

Curriculum
Discussant: Julie Combs

Teacher Perceptions and Implementation of Inquiry Based Learning in STAAR EOC Biology Classrooms

Stephen M Gruber – University of Houston - Clear Lake

Inquiry-based learning (IBL), or student-based instruction involving problem solving and independent research, has been shown to improve student learning. Students who engage in inquiry not only better understand the subject material; they also gain valuable skills that can be applied in STEM college programs and careers. Teachers often overlook IBL in favor of teacher-based instruction due to pressures from STAAR testing. This study will determine if there is a statistical difference in the amount of IBL being used in STEM high school versus traditional schools and record the perceptions of teachers regarding inquiry in STAAR EOC tested biology classrooms.

A Rhizomatic Analysis of International High School Student Well-being

The Nguyen – Texas Tech University

This paper will demonstrate recent literature review on international students' well-being when they are studying in the U.S. A model of student well-being, abbreviated as PACES is defined and explained that consists of five distinct and interactive domains: physical, affective, cognitive, economic, and social. In order to understand the complexity, unpredictability, and non-stoppable changing process that international students confront when adapting and adjusting to the new academic system, Deleuzian ontology of "becoming" and assemblage is utilized.

"It's in the Syllabus": Examining Syllabi for Preservice Writing Teacher Education Courses

Aaron J Penton – Texas A&M University

Teachers consistently report that they feel inadequately prepared to teach writing. This current exploratory study focuses on the required coursework for preservice writing teachers in university-based educator preparation programs (EPPs) in Texas. Based on ILA's 2017 Standards for the Preparation of Literacy Professionals, the author created a rubric to critically examine 322 course syllabi from 68 EPPs for preservice teachers seeking certification in English Language Arts and Reading (Grades EC-12). Findings add insight into the content of coursework at educator preparation programs across Texas and highlight the deficits to be revised and refined by teacher educators and program directors.

F3.3 Paper Session 11:25a – 12:40p Capitol II

Early Childhood Discussant: TBD

Impact of Early-Childhood Teachers' Perceptions, Attitudes and Technology Proficiency on Educational Technology Use

Angela P Plut – University of Houston - Clear Lake

Early-childhood is a critical time to form the foundations required for success in education and life. Additionally, the 21st century has catapulted the world into an age of technology. It is imperative to find balance between the use of traditional teaching methods and ways to implement developmentally appropriate technology in early-childhood classrooms. The purpose of this study is to investigate how early-childhood teachers perceive educational technology use in classrooms. A sequential mixed-methods design will be employed, and examination of quantitative survey results and qualitative interviews will provide insight into teachers' perceptions, attitudes, and proficiency of technology use in early-childhood classrooms.

Underrepresentation of Children in Early Childhood Intervention Services *Erika Aziegbe – University of Houston - Clear Lake*

Children with exceptionalities account for 13% of the nation's student population. Black children make up 17% being labeled higher with learning and emotional disabilities. Enrollment shows that black children in special education are more likely to be identified later than their white counterparts. A gap exists between the years prior to k-12 in identifying minority children with special needs. In preschool special education black children makeup 9.8%. On the contrary, there is underrepresentation of black children in early intervention programs that could help with their developmental concerns. A call to action is needed to explore why marginalized families are missing out on early intervention services. The aim of this study is to explore the perceived parental barriers that prevents them from accessing those resources.

Using Interactive Read-Alouds to Foster the Acquisition of Mathematics Concepts for Fourth Grade Students

Michele Cantera – Texas A&M University-Corpus Christi

According to the final 2012 Adequate Yearly Progress (AYP) results summary published by the Texas Education Agency (TEA) (2014), 47.5% of campuses failed to meet AYP, with 13.9% of those campuses missing AYP based on the campuses' mathematics performance. Further, students' mathematics achievement is identified as an issue at the national level. It is by these standards that the education field could benefit from change. Perhaps one way of addressing this issue of mathematics performance is through the use of interactive read-alouds and complex writing, as such methods could offer a more in-depth and authentic instructional experience.

F3.4 Workshop 11:25a – 12:40p Bonneville
Free Workshop

What Productive Writers Do

Julie Peterson Combs – Sam Houston State University

Some academic writers are challenged not by the lack of ideas but by the lack of time. Do you want to complete a dissertation or other major project? Do you sometimes notice how weeks pass with limited progress? Examining the practices of prolific writers can help us make the most of our writing time. In this strategy-based, workshop, we will share productivity tips to help develop a consistent writing practice.

F3.5 Paper Session 11:25a – 12:40p Cimarron
Technology

Affording Conceptual Understanding of Definite Integrals: A Phenomenological Study of Undergraduate Student's Experiences with a GeoGebra Application

Joseph S Webster – Texas A&M University Emma P Bullock – Sam Houston State University

In this study, 14 semi-structured interviews of undergraduate, pre-service, middle-grades, mathematics teachers (MGMTs) were analyzed under the lens of Affordance Theory. The interviews were aimed at determining the helpful features that MGMTs identify in using the mathematics education computer software GeoGebra. Further, we aimed to determine how these features were perceived to help student progress in the learning of definite integrals by analyzing statements MGMTs made in the interviews. Our analysis identified 4 helpful features and ways that these features are helpful. This study contributes to the growing basis of research on the impact of technology on math education.

Constructing a Radical Community: Disrupting the Dichotomy of the Alone Together Paradox in Online Doctoral Students

Ambyr Rios, Keith M Graham & Radhika Viruru – Texas A&M University

Online learning is often associated with the together alone paradox which suggests that online students are constantly connected digitally yet feel more alone due to a lack of 'real' connection. In this paper we explore the findings from a case study of one online doctoral program in educational leadership. Twenty-five students participated in the study, which included in-depth interviews and photo-elicitations discussing diagrams of online ecologies. The study revealed that students were more likely to view themselves as "apart, but together" rather than "together and alone"; students also challenged the idea that authentic interactions could only be had face-to-face.

The Effect of Robot Assisted Language Learning on Second Language Learners' Motivations and Engagements: A Mixed-Methods Study

Amin Davoodi – Texas A&M University

This study investigates how tele-presence robots can affect motivation and engagement of second language learners. Using a telepresence robot, 5 English language learners from Asia participated in this study for a period of 4 weeks and had real-life interactions with native speakers of English. Through statistical analysis of participants' responses to motivation surveys as well as semi-structured interviews, the results of this study revealed that telepresence robots drastically increase second language learners' motivation and sense of engagement by providing opportunities for them to feel the 'sense of presence' in real-life contexts despite being far away from the US.

Is Flipping Effective? A Meta-Analysis of the Effect of Flipped Instruction on K-12 Students' Academic Achievement

*Gang Zhu – East China Normal University

Currently, the overall effect of flipped instruction on K-12 students' academic achievement is largely unknown, still less the effect across subject areas and grade levels. To close this research gap, we conducted a meta-analysis based on four synthesized aspects of flipped instruction research. Using robust variance estimation, based on 53 effects from 27 empirical studies, a weighted average effect of d*=0.54(SE=0.10),p<.001 indicated that flipped instruction had a moderate advantage in promoting students' academic achievement compared to traditional classroom instruction. However, a publication bias was revealed in results from the funnel plot, the Trim-and-Fill, and Egger's regression test. Given the large unconditional heterogeneity (I^2=81.2%), we conducted mixed-effects analyses using study characteristics (publication type, grade level, subject area, duration of intervention, and publication year) as moderators. The mixed statistical significance of the moderator results as well as implications for enhancing flipped instruction in K-12 schools are discussed.

F3.6 Paper Session 11:25a – 12:40p El Dorado

Cognition

Children's Changing Responses with Age When Distinguishing between Valid and Invalid Arguments

Jodi Tommerdahl – The University of Texas at Arlington

Arguments can be placed into the categories of valid and invalid. This study examines how children respond when asked to distinguish between the two types of arguments at various stages of development. A behavioral test of three-line syllogisms, with a mix of valid and invalid arguments, was given to 70 children aged 4-16. Children were asked to provide a truth value for each potential conclusion. A pattern emerged in which younger children tended to answer both valid and invalid arguments as if they were valid while older children showed a marked change, tending to respond to both types of problems as if they were invalid, indicating age-related tendencies or biases in reasoning. Scores and error types are analysed in the context of different theoretical frameworks.

Fifth Graders' Comprehension of Expository Texts: Performance Differences between Adequate and Struggling Readers

Serkan Ozel – Bogazici University Zeynep Gonca Akdemir – Purdue University Nalan Babur – Bogazici University

The present study investigated and compared Turkish expository text comprehension performances of adequate and struggling readers. The participants were 79 Turkish-speaking fifth-grade students and tested through various literacy measures: naming speed, speed of processing, verbal memory, reading fluency, depth of vocabulary knowledge, morphological awareness, and four types of expository texts – description, compare-contrast, problem-solution, and cause-effect texts. Classical path analysis results revealed that reading fluency significantly affected expository text comprehension of adequate readers, whereas naming speed was the most effective variable explaining the lower performance of struggling readers. Taken together, findings feature different factors influencing reading comprehension and its multidimensional nature.

Can Middle School Teachers Use Educational Escape Experiences to Engage Students in Content?

Marsha Sowell – Texas A&M University - Kingsville

This study explored the appropriateness of escape experiences as a classroom practice for engaging middle school students in learning content. Using Ajzen's Theory of Planned Behavior and supported by Tyler's model of curriculum development, two educators developed multiple educational escape room experiences for middle school students over the course of eight months. It is concluded that although it is possible to effectively incorporate curriculum content into education escape experiences that encourage students to interact with the content, it is more difficult than anticipated. Effective inclusion of content requires a focus on the content objective combined with a high level of content knowledge and pedagogy. Furthermore, game design and logistics can hinder deep engagement with content and student learning.

Re-conceptualizing Reading Engagement to Account for Dispositions of Reciprocity within a Community of Eighth-Grade Readers

*Julie Smit – Texas Tech University

This study focuses on tracing the development of a reciprocity disposition within the talk of a reading community of eighth-grade readers as they use their experiences with narrative fiction to work through complex moral and social dilemmas. Claxton and Carr's (2004) dimensions of richness, robustness, and breadth was used as a theoretical framework to identify and illuminate the changing nature of the reciprocity disposition respect for others. Results have implications for re-conceptualizing theoretical models of reading engagement to include dialogical practices that motivate K-12 students to become deep and critical readers.

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