SOAR
Symposium on Arts & Research
2017

A showcase spotlighting faculty research, scholarship, and artistry.
SCHEDULE OF EVENTS

Poster Session
9 a.m.–noon
Grand Ballroom
Featuring more than 60 posters & exhibits.

Authors & Artists Reception
11 a.m.–noon
Grand Ballroom
Honoring faculty who published scholarly work or held creative exhibitions and/or performances in 2016.

LinkedIn & Social Media Booth
9 a.m.–noon
Grand Ballroom
Faculty, staff, and students can receive a free professional headshot along with social media and networking tips and tools.

Awards Presentation
Noon
Honoring the symposium’s Spotlight Presenters and ORSP’s grant award recipients.

ORSP Grants Panel
1:30–3 p.m.
Regents Suite A
Join SFA faculty and staff who have conquered the grant mountain and learn their secrets.
When discussing making course material relevant to students today, the predominant theme that emerges revolves around incorporating technology into the class. Students’ dependence on mobile phones and social media in their daily lives means that technology comes naturally to them and they expect to use it in the classroom and workplace. However, sound pedagogy must remain paramount. Technology does not replace instruction; instead, it should enhance it. SACS has established as one of its accreditation principles that a school’s use of technology enhance student learning (Southern Association of Colleges and Schools Commission on Colleges, 2012). Educators must keep this in mind when developing lessons. Interestingly, Reading (n.d.) commented that “Technology no longer has the buzz that it used to have. Several years ago if you sat a student in front of a computer you would get instant engagement. This is no longer the case.” Technology should instead be viewed as just one tool that educators have at their disposal.

Purpose: This study was designed to investigate how students perceive technology use inside and outside the classroom for both learning and collaboration.

Method: A convenience sample of students enrolled in select university business courses was used to gather data for this research study. Those who opted to participate completed an online survey designed by the researchers to assess student perceptions and experiences with technology for educational purposes. The survey instrument was piloted in Fall 2015 and data collection occurred in the Spring and Fall 2016 semesters. At the end of the data collection period, 279 useable surveys were received. Descriptive statistics are used to report the findings.

Results: While 9 out of 10 students (91%) like using some form of technology for educational purposes, many believe that it is not always used correctly. The tool being used greatly impacts students’ views on its effectiveness. When asked if using technological tools to collaborate in class provided an increased sense of engagement, 71% of respondents said yes; however, almost 27% said that it depended on the tool.

The variety of technological tools did not appear to intimidate students. This may be explained by the fact that some tools are used in a variety of classes, which results in students becoming accustomed to these “old” tools. At the college level, survey participants reported collaborating using email (90.7%), text messaging (84.2%), GoogleDocs (68.1%), and GroupMe (67.7%) as the most common tools. However, at the high school level, participants noted that email (78.9%) and texting (74.2%) were used most often. Over half of the respondents (52%) reported learning about new technologies on their own, yet when asked about preferred technologies, they often responded with the same “tried-and-true” tools like PowerPoint and the university’s learning management system. Implications for educators include being purposeful in the inclusion of technology and being aware of overwhelming students with numerous technology programs that are only used sporadically.
Co-Teaching: Idea to Implementation

The idea of co-teaching dates back to the 1960’s and 1970’s and was thought by many to be an example of progressive education. Today, co-teaching is viewed as a model of planning and instruction to reach all learners. Approaches to co-teaching can vary. Cook & Friend (1995; 2014) have identified six different approaches to collaborative teaching (a) station teaching, (b) parallel teaching, (c) alternative teaching, (d) teaming, (e) one-teach, one-assist, and (f) one teach, one observe. While each of the six approaches may look slightly different, at the core is a model of collaboration amongst educators.

Traditionally, if teacher preparation programs choose to incorporate co-teaching into its curriculum, a final internship experience is selected as the means of facilitating a co-teaching experience. In these circumstances, teaching partners include a Pre-service Teacher Candidate (PSTC) and their mentor teacher. An area of research that has largely been untapped involves providing a co-teaching experience to PSTC’s in which they are paired with another PSTC, rather than relying on mentor teacher to serve as a co-teacher. By providing co-teaching experiences with peers, under the supervision of trained and knowledgeable faculty, teacher preparation programs may be able to off-set the unknowns that accompany finding appropriate placements for PSTC’s in field experience settings. Noticing this gap in the research, two field experience supervisors set out to explore how co-teaching could be facilitated through a university field experience.

This proposed presentation will share the process we, as field experience supervisors, embarked on in creating a co-teaching experience for our PSTC’s. To create a co-teaching experience for field experience students, we began by collaborating ways to embed the components of co-teaching into our current field experience course. After diligent planning, through collaboration, we implemented co-teaching into our coursework. We taught about co-teaching by acting as co-teachers. In doing so, our goal was to model for students how co-teachers move from planning content to implementation.

As part of our field experience requirements, PSTCs are required to teach lessons related to mathematics and science. Participants are currently paired with a peer to collaboratively plan, practice, observe, provide feedback and teach using the various models of co-teaching. We represent two of four field experience sections. The other two field experience sections are not utilizing co-teaching. We are currently collecting data related to perceptions in collaborating with others. Our goal is to analyze the data related to collaboration to compare the perceptions of those in the co-teaching placements versus those in a traditional field experience setting, where co-teaching is not used. Depending on the results of our study, co-teaching could be integrated in other areas of our department’s field experience and coursework.
The focus of this study is on students’ engagement in three types of dissent when they are emotionally exhaustion at the end of semester. Since its inception, scholars have examined instructor behaviors and student characteristics that contribute to three types of instructional dissent, or class-related complaints. According to Goodboy (2011), students engage in expressive dissent when they complain to friends, family, and peers, whereas vengeful dissent occurs when students spread negative messages about instructors to sabotage their reputations. Rhetorical dissent occurs when students voice their complaints directly to their instructor. Research has yet to examine the role of emotional exhaustion as a contributor to dissent. The model tested also includes student anger, emotion work, and emotional support as contributors to expressive, vengeful, and rhetorical dissent.

Participants were 196 (n = 81 males, n = 114 females, n = 1 unidentified) undergraduate students who reported on their general levels of emotional exhaustion before completing measures of anger, emotion work, emotional support, and instructional dissent in a specific class. Results of a SEM with maximum likelihood estimation yielded a good model fit, χ² (179) = 296.03, p < .001, RMSEA = .06 [90% CI = .05: .07], SRMR = .06, and CFI = .95, that accounted for a moderate amount of variance in each outcome (.20 to .46). Ultimately, emotional exhaustion was a significant (p < .05) positive predictor of anger (β = .26), whereas emotional support was a significant negative predictor (β = -.36). In turn, anger was a significant positive predictor of emotion work (β = .46), and expressive dissent (β = .28), but a negative predictor of rhetorical dissent (β = -.27). Emotion work was a significant (p < .05) positive predictor (β = .34) and emotional support was a significant negative predictor (β = -.18) of expressive dissent. Expressive dissent was a significant positive predictor of vengeful (β = .63) and rhetorical dissent (β = .36). Finally, vengeful dissent was a significant positive predictor of rhetorical dissent (β = .47).

Interpretation from a conservation of resources theoretical perspective, this study’s results suggest student anger is a protective reaction to losing additional emotional resources or attempting to restore resources. Thus, emotionally exhausted students are not likely to invest additional resources by dissenting unless they are provoked. When they are angry, the results imply students are more likely to vent their emotions to family, friends, and/or classmates (expressive) to develop their support networks. However, emotional exhaustion, anger, and emotion work alone do not prompt students to approach the professor directly (rhetorical) or to seek revenge (vengeful). Additionally, emotional exhaustion and anger did not directly contribute to vengeful dissent. Rather, emotional exhaustion and anger predicted expressive dissent, which in turn predicted vengeful dissent. This begs the question of whether students strategically rally together before seeking revenge or approaching the teacher for fear of retribution (Bolkan & Goodboy, 2013). These findings are important for future research and yield meaningful implications for students, instructors, and administrators.
**Design of a Robust Undergraduate Biochemistry Laboratory Course Based on a Modified and Expanded Bovine Serum Albumin Purification Scheme.**

The ASBMB curriculum for an undergraduate degree recommends a set of skills that can be acquired only through laboratory courses and research experience. Based on a modified and expanded purification scheme for BSA, we designed a robust, reproducible, budget-friendly, safe and enquiry-based undergraduate biochemistry laboratory course that encompasses a lot of the skill-sets recommended in the ASBMB curriculum. The purification scheme employed in this work has been reported in a research paper. This work not only modifies certain steps in the scheme, it includes additional steps to enhance student learning and skill acquisition. Salt precipitation, ion exchange and size exclusion chromatography were employed by students to purify BSA from cow plasma. Presence of major contaminants of BSA purification, IgGs and nucleases, were tested in the purified sample by western blotting and DNase I assay respectively. The DNase assay step provides an opportunity for students to learn basic molecular biology techniques such as plasmid isolation and enzyme-catalyzed digestion. One major addition to the purification process is the bromocresol green-BSA complex assay to precisely quantitate BSA at each step and generate a purification table. Comparison of sequences and other parameters of albumin proteins from common animals provides a bioinformatics twist to student experience. Abundance of albumin from the plasmas of common animals, cow, pig and chicken, allows for variation in the design of the course, and students can work in groups or individually. The course could be designed as a half-semester or full-semester biochemistry laboratory module.
EXHIBITS

Using Technology for Evaluations in the Culinary Cafe
Runnels, C., Strahl, J., Hererra, E., Barrios, T.

PSTs’ Collaborative Experiences Implementing Physical Activity Breaks in Elementary Classrooms
Sinclair, Christina, Thornton, L., Xu, T.

REPRESENTING THE COLLEGE OF FINE ARTS

Costume Design for Lady Bracknell in Act III of THE IMPORTANCE OF BEING EARNEST
Bacarisse, A.

Building a Mentoring Network from Alumni Input
Conn, C.

Super String Theory: Perpetual Motion, a Locked Room Mystery
Hicks, C.

Tackling Medea
Houston, T.

Leading the Field of Music through Three Premieres at SFA
Meyer, B.

Virtual Reality Uses in the Fine Arts
Midgley, H.

Adonis
Mitchell, E.

Plastic
Nieberding, W.

The State of the Union: Combining Creative Research with Professional Practices
Selden, L.

EXHIBITS

Getting the Greatest Benefit from LED Lighting Systems in Commercial Broiler Production
Bray, J., Glassock, J.

Accuracy Assessment on Drone Measured Heights at Different Height Levels
Hung, I.

SFA Gardens Visualization Using a UAS DJI Phantom 3
Kulhavy, D.

Service-Learning By SFASU Agricultural Engineering Technology Students
Morton, C.

Integrating Research into a Hands-On Forestry Undergraduate Spatial Science Course
Unger, D., Kulhavy, D., Busch-Peterson, K., Hung I.

Incorporating Applied Undergraduate Research in a Senior Level Forestry Remote Sensing Course
Unger, D., Henley, R., Kulhavy, D. Hung, I.

DRASTIC Analysis for Groundwater Vulnerability to Contamination
Unger, D., Brown, M., Creech, D., Kenneth, F.
EXHIBITS
REPRESENTING THE COLLEGE OF LIBERAL AND APPLIED ARTS

The Escalation of Trump: Stormfront and the 2016 Election
Dentice, D.

Values Reflected in Environmental Activism by Email
Forbes, W.

An Investigation of Low-Stakes Versus High-Stakes Testing Using Immediate Feedback
Hutchens, S., Jenkins, D.

Preliminary Analysis of Asymmetry in Caddo Ceramics: A Case Study from the Washington Square Mound Site
Selden, R.

Conflict Framing to Image Restoration to Renewal: A Case Study of Mars Hill Church and its Leadership
Spradley, E., Spradley, R.

STEM, STEAM, and German Language Acquisition
Stoehr, L.

Towns Grief Model
Towns, J.

Flipping the Classroom With Screencasts
Wagnon, A.

EXHIBITS
REPRESENTING THE RALPH W. STEEN LIBRARY

New Outcomes from the Texas Runaway Slave Project
Ainsworth, K.

VR: Another Option in Educational Presentation
Iglesias, E.

The BIO 437 Herpetology LibGuide: A Creative Use of the LibGuides Platform
Lopez, E., Mullin, S.

Considerations Before Implementing SirsiDynix’ MobileCirc for a Deselection Project
Pappas, J.

Research
is to see what everybody else has seen,
& to think what nobody else has thought.

- Albert Szent-Gyorgyi
AWARD RECIPIENTS

Office of Research and Sponsored Programs

Faculty Research – Senior Faculty: Dr. Kevin Stafford, Geology

Staff Research: Dr. Shiyou Li, National Center for Pharmaceutical Crops

University Impact:

Cyndra Krogen-Morton, Health Science Program, Department of Kinesiology and Health
Kenneth Morton, Campus Recreation
Jessica Waguespack, Campus Recreation

Million Dollar Club
For Faculty/staff receiving as combined total of $1,000,000 in competitive funding since 2013.

Dr. Lesa Beverly, Mathematics & Statistics

Silver Level ($500,000 to $999,999):

Dr. Sara Bishop, School of Nursing
Dr. Christopher Comer, Forestry
Dr. Keith Hubbard, Mathematics & Statistics
Dr. Emmerentie Oliphant, School of Social Work
Dr. Kevin Stafford, Geology

Bronze Level ($250,000 to $499,999):

Dr. David Creech, SFASU Gardens
Dr. Jeremy Stovall, Forestry

Honorable Mention

First Applications over $100,000

Dr. Erin Bailey, School of Nursing
Dr. Hyunsook Kang, School of Human Sciences
Dr. Courtney Wooten, English
Dr. Jenny Gumm, Biology

First Awards

Dr. Christopher Aul, Physics & Astronomy
Dr. Daniel Bennett, Biology

EXHIBITS

REPRESENTING THE COLLEGE OF SCIENCES & MATHEMATICS

Inhibition of Eurygaster Integriceps Puton Prolyl Endoprotease (spPEP) and Human Prolyl Endopeptidase (hPEP) using aS1 - Casein Peptide Inhibitors
Clack, B., Kadakova, P., Lovett, J., Anderson, M.

The Effect of Compound L19 on Human Colorectal Cells (DLD-1)
Clack, B., Mohammadhoseinpour S., Mallet, E.

SMASHing it at SFASU
Frantzen, A.

The Evolution of Color Signals in Stomatopod Crustaceans
Gumm, J., Chan, A., Steck, M., Porter, M.

It is Cool to Be Kind: Promoting a Culture of Civility in BSN Students
Harris, T., Jones, A.

The Visual Ecology of a New World Cichlid
Imhoff, V., Gumm, J., Clotfelter, E., Anderson, C.

Polycyclic Aromatic Hydrocarbons in Soil Samples from Diboll, East Texas (USA)
Onchoke, K., Janusa, M.

A Time Course Study of the Effects of Arachidin 1 and 3 on the Host Ultrastructure and Viral Populations of Rotavirus-infected Cells
Parr, R.

Microbial Aspects of the Moody Garden Project
Wagner, S.
The following faculty are being recognized at the Authors & Artists Reception for the publication of scholarly works or held creative exhibitions/performances in 2016:

Edward Iglesias, Library
Edward Michaels, Physics & Astronomy
Elizabeth Tasker Davis, English & Creative Writing
Elton Scifres, Management, Marketing, & International Business
Emily Payne, Agriculture
Emerentie Oliphant, Social Work
Eric Jones, Kinesiology & Health Science
Ericka Hoagland, English & Creative Writing
Erin Brown, Agriculture
Esther Bunn, Accounting
Frank Brister, Human Services
Frank Mullins, Human Services
Freddie Avant, Social Work
Gabriela Miranda-Recinos, Languages, Cultures, and Communication
Garland Simmons, Economics & Finance
George Willey, Secondary Education & Educational Leadership
Gina Harden, Management, Marketing, & International Business
Gina Fe Causin, Human Sciences
Ginger Kelso, Human Services
Gloria Gresham, Elementary Education
Gordon Smolen, Mathematics & Statistics
Harry Downing, Physics & Astronomy
Heather Olson Beal, Secondary Education & Educational Leadership
Henry Dunn, Business Communication & Legal Studies
Herbert Midgley, Music
Hyunsook Kang, Human Sciences
I-Kuai Hung, Forestry
J.B. Watson, Anthropology, Geography, & Sociology
J.D. Salas, Music
Jacqueline Cowan, English & Creative Writing
James Rowe, Kinesiology & Health Science
James Towns, Languages, Cultures, and Communication
James VanKley, Biology
Jane Long, Mathematics and Statistics
Janet Tareilo, Secondary Education & Educational Leadership
Jared Barnes, Agriculture
Jason Reese, Management, Marketing, & International Business
Jay Thornton, Kinesiology & Health Science
Jeffery Roth, Anthropology, Geography, & Sociology
Jennifer Newquist, Human Sciences
Jeremy Becnel, Mathematics & Statistics
Jerry Williams, Anthropology, Geography, & Sociology
Jessica Sams, English & Creative Writing
Jill Carrington, Art
Jim Ewing, Elementary Education
Joe Ballenger, Management, Marketing, & International Business
Joey Bray, Agriculture
John Hendricks, Mass Communication
John McDermott, English & Creative Writing
John Moore, Chemistry
Joyce Johnston, Languages, Cultures, and Communication
Judith Biss, Business Communication & Legal Studies
Judy Abbott, Elementary Education
Justin Blount, Business Communication & Legal Studies
Karen Jenlink, Secondary Education & Educational Leadership
Kathy Sheriff, Human Services
Kefa Onchoke, Chemistry
Keith Hubbard, Mathematics & Statistics
AUTHORS & ARTISTS HONOREES

Kelly Noe, Accounting
Kelly Salsbery, Multidisciplinary Programs
Kenneth Austin, Secondary Education & Educational Leadership
Kenneth Collier, Government
Kenneth Farrish, Environmental Science
Kenneth Untiedt, English & Creative Writing
Kent Riggs, Mathematics & Statistics
Kevin langford, Biology
Kevin Stafford, Geology
Kyle Ainsworth, Library
LaReil Nielson, Geology
Leah Kahn, Elementary Education
Le'Ann Solomonson, Human Services
Lee Payne, Government
Lesa Beverly, Mathematics & Statistics
Leslie Cecil, Anthropology, Geography, & Sociology
Linda Black, Secondary Education & Educational Leadership
Linda Levitt, Languages, Cultures, and Communication
Lindsey Kennon, Human Services
Louise Stoehr, Languages, Cultures, and Communication
Luis Aguerrereve, Human Services
Lynda Martin, Human Sciences
Malcolm Whitehead, Kinesiology & Health Science
Marc Guidry, English & Creative Writing
Marcus Webb, Mathematics & Statistics
Marie Kelly, Accounting
Mario Ajero, Music
Mark Faries, Kinesiology & Health Science
Mark Ludorf, Psychology
Mark Sanders, English & Creative Writing
Mark Schaub, Economics & Finance
Marsha Bayless, Business Communication & Legal Studies
Mary Catherine Breen, Secondary Education & Educational Leadership
Matibur Zamadar, Chemistry
Matthew Beauregard, Mathematics & Statistics
Matthew Kwiatkowski, Biology
Matthew Lindsey, Management, Marketing, & International Business
Matthew McBroom, Forestry
Megan Condis, English & Creative Writing
Michael Maurer, Agriculture
Michael Munro, Human Services
Michael Sheehan, English & Creative Writing
Michele Harris, Chemistry
Michelle Williams, Elementary Education
Milton Hill, Government
Mitch Crocker, Management, Marketing, & International Business
Nathan Fleschner, Music
Neill Armstrong Jr., Secondary Education & Educational Leadership
Nikki Shoemaker, Accounting
Nina Ellis-Hervey, Human Services
Odutayo Odunuga, Chemistry
Owen Smith, Multidisciplinary Programs
Paige Mask, Human Services
Parker Ballinger, Economics & Finance
Pat Stephens Williams, Forestry
Patrick Jenlink, Secondary Education & Educational Leadership
Paul Blackwell, Columbia Center
Paul Sandul, History
Paula Hopeck, Languages, Cultures, and Communication

AUTHORS & ARTISTS HONOREES

Pauline Sampson, Secondary Education & Educational Leadership
Paulo Dutra, Languages, Cultures, and Communication
Perry Moon, Languages, Cultures, and Communication
Phil Stetz, Management, Marketing, & International Business
Phillip Catton, History
Richard & Herzog, Government
Richard Langley, Chemistry
Robbie Steward, Human Services
Robert Friedfeld, Physics & Astronomy
Robert Henderson, Mathematics & Statistics
Robert Szaf, Anthropology, Geography, & Sociology
Robert Wiggers, Biology
Ronald Havner, Biology
Roy Harris, Mathematics & Statistics
Sam Copeland, Social Work
Sarah Stovall, Mathematics & Statistics
Scott Bailey, Secondary Education & Educational Leadership
Scott Sosebee, History
Sharon Eaves, Psychology
Shelby Laird, Forestry
Shirley Dickerson, Library
Spencer Acadia, Library
Stacy Hendricks, Secondary Education & Educational Leadership
Stephen Cooper, Multidisciplinary Programs
Stephen Kosovich, Economics & Finance
Stephen Lias, Music
Stephen Mullin, Biology
Stephen Wagner, Biology
Steven Marsden, English & Creative Writing
Sudeshna Roy, Languages, Cultures, and Communication
Sue Whatley, English & Creative Writing
Susan Casey, Elementary Education
Susan Jennings, Business Communication & Legal Studies
Susan Reilly, Elementary Education
Tammy Angiley, Music
Tara Houston, Theatre
Thomas Judson, Mathematics & Statistics
Timothy Clippson, Business Communication & Legal Studies
Tingting Xu, Elementary Education
Todd Brown, Economics & Finance
Tracy Hasbun, Elementary Education
Treba Marsh, Accounting
Tyler Spradley, Languages, Cultures, and Communication
Vicki Thomas, Elementary Education
Vijetha Koppa, Economics & Finance
Wendy Killam, Human Services
William Bruton, Physics & Astronomy
William Forbes, Anthropology, Geography, & Sociology
William Nieberding, Art
William Servier, Human Services
Wilma Cordova, Social Work
Yanli Zhang, Forestry
Yuhui Weng, Forestry
Yuleinis Castillo, Human Services
SOAR Symposium on Arts & Research 2017
A showcase spotlighting faculty research, scholarship, and artistry.
STEPHEN F. AUSTIN STATE UNIVERSITY