MFA Arts Administration Showcase

The purpose of this project is to showcase the people, contributions, and accomplishments of SUU's Arts Administration MFA program. The program has attracted individuals from a variety of different backgrounds and helps them transform into effective arts leaders across the country. To fulfill the goals of the project, we will be utilizing printed materials and digital projections to demonstrate the contributions from MFA students to various areas of the university and community. A partial list of contributions includes the College of Performing & Visual Arts, the Braithwaite Fine Arts Gallery, the Utah Shakespeare Festival, and Cedar City Music Arts. Materials included will feature creative, academic, and administrative projects, as well as testimonials regarding the impact of the program here, and a "Who's Who" featuring how alumni from the program are impacting the field in other areas of the country.

Creative Video Projects- Multiple Disciplines

A wide variety of video creations will be presented as part of creative work produced for the COMM 47670 class.

The Sky is an Open Vault: An Exhibit of Student Poetry

In the fall semester of 2012, Dr. Danielle Dubrasky's Intermediate Poetry Writing class took an excursion to Cedar Breaks, courtesy of the Outdoor Engagement Center Brigit Estep, director of the Center, led students on a brief walk to the Cedar Breaks star pad from which they observed the constellations. They were then assigned to write a poem incorporating myth and science about the constellations. The poems that best represented this assignment were selected to be in the exhibit. These poems were put on exhibit at the SUU Library on February 26.

10:15-11:15 From Combat to the Classroom: Working with Student Veterans 101; Session Repeat at 1:30-3:30

This presentation will provide information about the veteran population, military culture, and difficulties experienced during deployment. It will overview difficulties facing student veterans including readjustment after deployment, post traumatic stress disorder, traumatic brain injury, depression, and difficulties adjusting to the academic environment. The presentation will review community and VA resources available to veterans and will provide tips for college and university faculty and staff for working effectively with student veterans. A training manual will be presented to all participants.
Bones, Muscles, & The Figure

An intentionally visual (non-written and non-verbal) communication of this semester’s study of the human body by the class, ART 3110 Life Drawing & Anatomy, which is dedicated to such study. The presentation will include; (1) a selection of anatomical drawings of the bones and transparent overlays of muscles that most affect the appearance of the human body, (2) drawings of the skeletal system as fitted into a human figure in various positions, and (3) this anatomical information as applied to understanding the human figure through drawing. Drawings are subject to a second level of evaluation based upon their sensitivity to the materials from which they are made and the masterful control of those materials. On a third level, drawings are evaluated on their use of abstract elements of art, such as, line and value (light and dark) and their organization in the space in which they exist.

Ceramic Art Discipline Exhibit

Small exhibition of finished ceramic vessels from ceramics studio art majors and myself, as faculty, with examples of work completed during the 2012-2013 school year. The works will show a variety of surface treatments including wood and soda atmospheric firings and will represent each individual's expressive research and clay handling techniques.

5 Edge Centers' Display

A showcase of the five Engagement Centers (Community, Creative, Global, Leadership, and Outdoor) displaying student work, faculty involvement, and information about getting involved. Festival participants are invited to stop by and ask questions and share ideas to advance the work of the centers.
Senior BFA Portfolio Show

You are invited to experience the culmination of work in artistic excellence by the Bachelor of Fine Art graduates from Southern Utah University. Each spring the creative visions and achievements of these seniors from the University’s Department of Art and Design are showcased at this finale event, the Senior BFA Portfolio Exhibition. This event offers a chance to experience the collection of work created by these exceptional students, and this year showcases the honed talents of fifteen seniors in a variety of mediums including painting, drawing, printmaking, illustration, and graphic design.

Cedar City Heritage Project

An Exhibit of 22 different projects done by the Education Student Capstone

Jean-Baptiste Lully: Phaëton

The Department of Music's String Ensemble (under the direction of Dr. Xun Sun), Piano Ensemble (Dr. Christian Bohnenstengel) and Woodwind Ensemble (Dr. Virginia Stitt) collaborate with dancers (choreographed by Dean Shauna Mendini) and Associate Dean Dr. Eric Freden (harpsichord) on a performance of excerpts from Jean-Baptiste Lully's tragédie en musique Phaëton. The concert will be in Thorley Recital Hall (Music Building) at 7:30PM.
Contributing Factors to a Successful Course Development Process

This qualitative case study examined the experiences of instructional designers and professors during the online course development process. The purpose of this study was to determine if their experiences had an effect on the process itself.

Data analysis revealed five emergent themes: communication, commitment to quality online courses, commitment to building robust working relationships, mutual respect for one another’s time and talents, and satisfaction in working with online course development. Communication was the most prevalent factor identified as having a positive effect on the development process. Lack of time was most prevalent as an impediment to the process. In conclusion, a workplace culture that fostered good experiences and the opportunity to interact in a supportive environment was beneficial to the online course development process. Managers and others involved in the process should be mindful of the workplace culture and consider dedicating effort and resources to preserve its integrity.

From School to Pool

This study was designed to help prevent chronic rotator cuff injuries in competitive swimmers. The researcher focused on this problem because she incurred such an injury while swimming in high school and continues to be restricted in ability three years later. Many studies have been done to try to identify the cause of the infamous "swimmer's shoulder" yet none have come up with a definite origin. This study proposes that the cause deals with a muscle imbalance and can be prevented by targeting rotator cuff muscles and synergists with weight training and resistance tube training. High school swimmers will be split into the two different training groups (weight training and resistance tube training) and will cross-train with their designated equipment throughout their four years of competitive high school swimming. Both groups will perform the same exercises with the same amount of sets, repetition, and rest to make their equipment the independent variable. The athletes will be tested three times during the season to track when the rotator cuff injuries occurs, and will continue to be tested throughout the remainder of the study to check for improvements. It is hypothesized that both groups will lower the expectation of at least fifty percent of the swimmers getting injured, and that the weight training group will be more efficient than the resistance tube training.
The Last Backpack Generation

Technology is assisting teachers to expand beyond linear, text-based learning and to engage students who learn best in other ways. Its role in schools has evolved from a contained computer class into a versatile learning tool that changes how we demonstrate concepts, assign projects and assess progress. Why should we include technology in the education of our children? Here are some reasons:

1. Information technology allows learning anywhere, anytime; not just in one particular classroom for a limited period of time.
2. Interactive simulations and illustrations can produce a much greater depth of understanding of a concept.
3. Technology allows the tables to be turned. Instead of teaching (push), students can be given projects that require them to learn (pull) the necessary material themselves.
4. Technology provides new media for self-expression. Previously, when students wrote a paper it was for the teacher; today they can record/edit spoken word, do digital photography, make a video, run a web-based school, compose digital music, make a website, create a blog...
5. The ability to work collaboratively on projects with others who may not be physically close.
6. The worldview of the student can be expanded because of the zero cost of communicating with other people around the globe.
7. Technologies permit students to break step with the class and go at a pace and order that suits them without disrupting the class instruction.
8. Three textbooks and three binders easily weigh over 25lb. A 40Gb drive can hold 2 million pages with illustrations; the web is unfathomably large.
9. Students need productivity tools for the same reasons you do.
10. Material created by the educational community itself can be shared freely. Through the use of open, free educational tools on the web, the dependence on static learning can be reduced.

The Utah Shakespeare Festival: An Evolving Arts Leadership Partnership

In May of 2010 the Utah Shakespeare Festival (USF) announced it would be bringing two of its high profile actor/directors on board as co-artistic directors to work with its executive director. While not widely publicized, the Festival actually began a leadership transition between 2002 and 2005. The retirement of several long-serving members of a management team – a team that helped direct the Festival toward its Tony Award for Best Regional Theatre in 2000 – and the founder’s transition to a fundraising leadership position, put in motion several scenarios that led to the 2010 announcement of a leadership team. This presentation will examine the challenges of implementing a shared executive leadership structure at the Utah Shakespeare Festival. The elements of decision-making, interpersonal communication, trust, power, and accountability will be assessed from the perspective of mission fulfillment and impact and organizational effectiveness. Special attention will be paid to concept and practice of a co-artistic directorship and the working dynamic with an executive director and various governing boards in a complex organizational setting. The potential and pitfalls of shared leadership models will be discussed and the development of criteria for the successful implementation of unique management structures at multiple levels in arts organization will be outlined.
The Fulbright Experience in Swaziland: A Small Country with Big Smiles

Swaziland is a small country surrounded by South Africa and Mozambique in south eastern Africa. The country has mountains and flat savannah, hosting a wide variety of animals in multiple game reserves, allowing for great video documentary opportunities. The Smiths will describe the experience they had of teaching courses at the University of Swaziland and also producing documentaries about the people, the land and the animals. They documented amazing stories including "The Father of Conservation in Swaziland," the country’s first "Community Ecotourism Camp" and the first black to summit Mount Everest among other stories of people, their communities and the land.

National Parks as Campus, Classroom and Laboratory

Partners in the Parks (PITP) organizes week-long experiential learning projects for collegiate honors students in national parks across the country. Projects provide educational seminars lead by university faculty and NPS rangers focusing on education, recreation and stewardship. The program creates and fosters new relationships between universities and neighboring NPS sites promoting an ethic of understanding and conservation. We encourage student/faculty participants and university/park partners to continue to enjoy and develop important program outcomes well beyond the initial individual projects.

The Real 2012 in Maya Guatemala: Coping with Multiple Forms of Governance in a Violent Neoliberal World

Maya Guatemala has seen a shift from the political violence of the civil-war era (1960-1996) to a post-war period characterized by even more dangerous and unpredictable social violence, making it one of the most dangerously violent place in the world. Western Highland communities struggle to cope with a withdrawn, diminutive, and ineffective neoliberal state through their own, often quite provisional, local systems of law and governance. These communities are caught between multiple competing forms of governance (e.g., street gangs, paramilitaries, state security forces, cartels). How the Maya confront this endemic anarchy will be explored through three interlinked issues: collapsing traditional authority, the escalation of lynching, and the emergence of gangs. This will be done through a series of ethnographic vignettes that will frame how the Maya attempt to maintain balance in a world that is radically out of balance. While those attempts may not be terribly effective, they may play into neoliberal forms of violent governance.
A Comparison of Student Performance: Traditional versus Online in a Skills Based Computer Applications Course

With the increasing popularity of online courses, much controversy has arisen as to the effectiveness of this type of course in relation to traditional courses. Several studies have indicated that online courses have no effect on student learning, while other studies indicate that students in online courses do worse than their traditional counterparts. In this paper, student performance is analyzed and compared between traditional and online students in a skills-based lower division introductory computer applications course. This paper contributes by comparing the differences among class rank of traditional and online students to determine if their performance differs as they progress in their university studies. Finally this paper evaluates student performance based on gender to determine if gender makes a difference in performance between traditional and online students.

To Live, to Die, or to Go Zombie: Teenage Anxiety in The Forest of Hands and Teeth

Survivalism has been a popular subject for authors of children’s and young adult literature since the days of Robinson Crusoe, and those tropes only escalated with novels such as Lord of the Flies. Since the international trauma of September 11, 2001, even more extreme tales of survival are now in vogue, and with the ongoing success of Suzanne Collins’ The Hunger Games trilogy, post-apocalyptic literature has firmly established its place in the young adult market. A number of these kinds of books are enjoying similar success, including The City of Ember by Jeanne DuPrau, Life as We Knew It by Susan Beth Pfeffer, and The Forest of Hands and Teeth by Carrie Ryan, indicating a generation of readers who have death and global destruction on the brain. The Forest of Hands and Teeth provides young adult readers with a confluent narrative that is part City of Ember, part The Passage (an adult vampire novel by Justin Cronin), and part zombie invasion narrative. These influences have produced a novel that manifests this generation’s fear of isolation, false security, unreliable authority figures, potential invasion/infestation, and inevitable mortality. With a surprising lack of scholarship focused on post-apocalyptic YA fiction, I will use Elizabeth Rosen’s foundational Apocalyptic Transformation: Apocalypse and the Postmodern Imagination as a guide to understanding Ryan’s claim that post-9/11 teenagers are struggling to choose between taking charge of their own uncertain future and giving themselves over to passive acceptance.
New Bedford’s Civil War

New Bedford’s Civil War contributes to the growing body of Civil War studies that analyze the “war at home” by focusing on the bustling center of the world’s whaling industry in the nineteenth century. Using a broad chronological framework of the 1840s through the 1890s, this book contextualizes the rise and fall of New Bedford’s whaling enterprise and details the war’s multifaceted impacts between 1861 and 1865. Known before the war for its wealth and antislavery fervor, New Bedford offered a congenial home for a sizeable black community that experienced a “different Civil War” than did native-born whites. Drawing upon military pension files and welfare records, this book pays particular attention to soldiers and families connected with the Fifty-fourth Massachusetts Volunteer Infantry, the “brave black regiment” that helped to shape national debates over black military enlistment, equal pay, and notions of citizenship. New Bedford’s enlightened white leaders, many of them wealthy whaling merchants with Quaker roots, actively promoted military enlistment that pulled 2,000 local citizen-soldiers (about ten percent of the city’s total population) into the Union ranks. Still, the war provoked anxieties about inadequate coastal defense, ongoing Confederate assaults against whaling, and rising costs and tensions on the homefront. As the Whaling City gave way to a postbellum landscape marked by textile manufacturing and heavy foreign immigration, the black community fought to keep alive the meaning and history of the Civil War. Joining their one-time neighbor, Frederick Douglass, New Bedford’s black veterans used the memory of the war and their participation to push for full equality, a losing battle by the turn of the twentieth century.

Quantitatively Assessing Academic Rigor in Experiential Education: A Pilot Study in the Green River Area

Academic rigor in experiential education has been poorly defined in the science education literature. As Southern Utah University implements the Edge Program, a tool must be in place to quantitatively assess the academic rigor of experiential education opportunities. SUU’s Harry Reid Outdoor Engagement Center currently is developing a rubric to accomplish such assessment. In March 2013, an early version of the rubric was piloted on an experience involving twelve SUU students who spent their spring break learning about geology and rafting skills in the Green River area in southeastern Utah. The trip highlighted a growing partnership between the Geology Program and the Outdoor Recreation in Parks and Tourism Program. Participants included ten geology majors, two ORPT majors, one emeritus professor, and one geology professor. The two ORPT majors handled myriad logistics such as safety, river gear, food preparation, and scheduling, and the ten geology majors completed academic exercises and participated in place-based discussions. Geology topics included Triassic and Jurassic sedimentation, ~50-million-year-old Laramide mountain-building, geomorphology of the Green River, oil production in the nearby Aneth Oil Field, and environmental effects of human actions in the region. The adventure fell directly in line with SUU’s mission to engage “students in a personalized and rigorous experiential education” in southern Utah’s unique natural surroundings.
Mathematical Models to Compare Factors Influencing Mammography Rates

The purpose of this work is to examine the mammography rates of women over forty in five states with the lowest rates in the nation: Utah, Idaho, Wyoming, Nevada, and Montana. A survey was conducted by the Center for Disease Control and Prevention in which each respondent was asked to identify a number of different personal traits. Binary logistic regression mathematical models were constructed from selected variables having individual statistical significance to mammography rates. These models identify which factors are most influential to mammography rates and may determine correlations between the states with lowest rates. We hope to use this data to improve breast health education and increase mammography rates.

Pacesetters Mini Adventures

Research shows that spending time in nature in an outside environment increases mental, physical, and social health. As recently as one generation ago it was typical for children, young adults, and even those who had grown and raised children of their own to spend their free time outside. We can clearly see that this is not the case today (Juster, et. al., 2004). Many studies and theories on the topic support a term coined in 2005 by Richard Louv: “Nature Deficit Disorder” describes the idea that a decrease in time spent interacting with nature is actually having negative effects on growing brains in the rising generation. Programs in all levels of education are being developed to address this decrease of time outdoors, even here at Southern Utah University. As a sub-category of the outdoor leadership club “Pacesetters”, a project called Mini Adventures is designed to provide more opportunities to get outside that are available to all students. Major considerations have included lack of time, money, gear, and experience in the general student population. In a culture that is opening its eyes to the importance of spending time outdoors, we as the transitional generation have an important responsibility to gain and maintain a knowledge and passion concerning the natural world around us.

Engine Flow Research

Swirling flow fields in combustion chambers can be determined based on swirl ratio and a velocity profile specified along some path to the vortex center. A method is presented whereby flow fields can be constructed by applying the continuity equation in a streamline coordinate system and imposing irrotationality about the symmetry axis of the vortex ring. The swirl ratio may be specified at the vortex core, along with a velocity profile along any semi-axis of the vortex cross section. Fluid density is constant on each streamline, but density stratification between streamlines may also be specified.
Physical Activity Awareness: Do you really know how physically active you are?

Physical activity (PA) in the general public, or the lack thereof, has garnered vast amounts of attention in epidemiological studies in search for more antidotes and awareness. Self-report and monitor-based measurements are the most common types of measurements in PA, yet these measurements have produced little to no correlation when compared against one another. Are the present measurement discrepancies credited to the lack of precision by the instruments used, or are they credited to unreliable self-reports of PA? In this study we focused on the self-report of different groups, and then we compared their self-report PA data versus actual PA data gathered by Bodybugg devices. We statistically compared the levels of reported activity and actual activity to test our hypotheses.

Power Searching with Google

As in institute of higher learning one may be called upon to research a multitude of topics. The Google search engine looks for the word(s) you inputted into the search box; however it also looks for alternative word(s) and/or related terms. The presentation will showcase some of the tools one might need to return better search results. Presenter recently earned a certificate from Google - "Advanced Power Searching"* Will need computer (Google Chrome pre-loaded on machine) and internet access.

Central/Southern Utah Visitor Profile

The majority of visitors to the central/southern Utah area were: 1) over 45 years old; 2) have a household income greater than $80,000; 3) spend $100 per day in lodging and $50 per day in food and beverage; 4) are married with no children under 17 years old in their household; 5) have at least a college education; and 6) visit national parks frequently. The picture that emerges was that no matter where people come from, once in central/southern Utah, they tended to visit similar places, select similar activities, and spend similar amounts of money. There were distinct patterns in visitors' origins, destinations, activities and expenditures by season. Central/southern Utah visitors stated the internet (82.6%), past experience (79%), and friends and relatives (63.5%) were either very influential or somewhat influential information sources.
SUU students Chris Hoffman and Mark Tervort, working with twenty architecture students from the University of Colorado, Denver designed, simulated and built a 1200 sq. ft. passive solar home for Lorraine Toney, a Navajo mother of five children. The home was constructed twenty five miles southeast of Bluff, Utah on the reservation. Creating the contemporary concrete and glass home, sited in the open desert with views of the adjacent mountains, involved teamwork involved crafting an inexpensive home suitable for the hot and cold extremes of the region, plus capable of enduring the fierce sandstorms common to the region. Dr. John Murray of SUU’s Integrated Engineering Program mentored Chris and Mark. This presentation, and the associated illustrations, tells their collective story.

I have noticed that in group work situations when there is more than one dominant leader, the group can’t seem to be organized due to the pulling and pushing of different leaders in varying directions. All of the leaders may have excellent and efficient plans but together they ultimately create frustrating chaos. It is my goal to display this chaos while maintaining the undertones of desired order had by all the participants.

I present my research of the mathematics behind a child's math puzzle. In the puzzle, the sum of each column is a specific target number. There are several different rearrangements that are possible for this puzzle. I explored questions such as: what different target numbers can be found, why does it work, and if there are different ways to set up this puzzle to get the same results. I will use excel and Java coding to explore different cases. The Java coding is the direction for future research on my presentation.

My piece of dance choreography is about being drawn away from something. The thing the dancers are being drawn away from and to is up to the dancer and the audience to decide for themselves. It could be an addiction pulling them away. Or a want. Or a fear.
Learning Statistical Patterns of Student Responses

Monitoring student progress is a challenge for teachers who find themselves outnumbered and overwhelmed with the task of determining what student may or may not know. This project will build statistical models of student knowledge in an introductory programming course with the aim of providing automatic feedback to future students with similar needs. We compare string based models with regular expression based models and compare model simplicity and efficacy. This research has the potential to create more effective online courses where students learn at their own pace.

Judicial Corruption and Drug Trafficking in Mexico

This research examines the Mexican federal judiciary and the problem of corruption in this institution, particularly related to cases of drug trafficking. Given the clandestine nature of corruption and the complexities of this investigation, ethnographic methods were used to collect data. I interviewed 45 individuals who work in the federal courts in six different Mexican cities. I also studied case files associated with an important criminal trial of suspected narco-traffickers known in Mexico as ‘El Michoacanazo.’ My study reveals the complicated nature of judicial corruption and how it can occur under certain circumstances. While corruption does occur in these courts, it is not a systemic-wide problem nor does it take a single form (e.g. bribery). Local context and setting are relevant, so are structural factors, including Mexico’s system for staffing the courts and political influence from the executive and legislative branches. I conclude that the Mexican federal judiciary has become a more professional, efficient, and trustworthy institution over the past fifteen years, though institutionalized practices such as nepotism, cronyism, personal abuse of power, and gender inequalities still exist, tending to thwart the full professionalization of these courts and facilitating instances of misconduct and corruption.

Rubber Rabbitbrush Control with Various Herbicides and Two Different Application Techniques

Rabbitbrush (Chrysothamnus spp.) is a genus of native shrubs that are common in many plant communities throughout the western United States. The genus Chrysothamnus contains 16 species and 41 subspecies. All species of rabbitbrush are very prolific seed producers and can be extremely invasive, particularly in disturbed areas such as abandoned homesteads or in rangeland seedings. Management of rabbitbrush is difficult because it is deep rooted and sprouts vigorously after a disturbance such as fire or mechanical treatments. Many treatments and combinations of treatments have been tried with little success or with highly variable results. Effective practical treatments have so far eluded range managers or landowners. Multiple treatments combining fire, mechanical removal and herbicides in various combinations, have shown promise for control. Since 2005, the authors have used a multiple treatment mower that after mowing, windrows the woody debris, then wipes herbicide on the cut stubble to treat Rubber Rabbitbrush (Chrysothamnus nauseosa). Treatments applied in the fall have provided excellent results with Tordon (picloram) and Vanquish (dicamba) at rates as low as one quart per acre. Separate plots with foliar applied herbicides, indicate a new herbicide, Streamline (MAT 28 + metsulfuron), initially appears to show promise in control of Rubber Rabbitbrush.
Instructor Responses to Academically Struggling Students

Teaching in Higher Education likely involves working with academically struggling students. Research suggests that effective instructor responses to struggling students can potentially positively influence subsequent performance of those students. A study was conducted with instructors at a comprehensive public university to explore their responses to failing students. Instructors participating in the study completed a survey that measured their sense of teaching efficacy and asked them to indicate how they would respond to failing students in two different case scenarios. The analysis of the data focused on exploring potential differences in instructor responses to failing students based on instructors’ sense of teaching efficacy, gender, rank, and college. The presentation will focus on highlighting and discussing the findings from the study.

Viracocha and the Volcano: The Archaeology of the Southern Vilcanota River Valley, Peru

Drawing upon original archaeological survey and excavation data, as well as historic and ethnographic resources, this talk examines prehistoric settlement and land-use patterns in southern highland Peru. An Inca legend links the mythic journey of the pan-Andean creator god, Viracocha, with the eruption of the volcano Kinsach’ata in the southern Vilcanota River Valley. The Incas commemorated the spot where god and volcano met with one of the largest temples in their Empire. Archaeological investigations of the temple itself and of the surrounding area suggest that the region’s pre-Inca, “Late Intermediate Period” populations also regarded the volcano as a sacred place. This presentation addresses how the people of the Late Intermediate Period incorporated important places such as Kinsach’ata and local mountain peaks into their lives. Archaeological data obtained from over 250 sites paints a picture of ritual and daily life in this region just before the emergence of the Inca empire. The presentation concludes by exploring motivations for the time period’s high altitude settlement patterns, and by highlighting the close relationship that existed between the communities of the living and the dead.

"Ruin and Light": A Poetry Reading

I completed this collection of poems while on sabbatical during spring semester, 2012. I spent a brief portion of this semester as a fellow at the Virginia Center for the Creative Arts. My time at the VCCA was influential in how I developed the sequence. This collection of poems was part of a manuscript that was recognized as a semifinalist in the Elixer Press Poetry Award. This national competition selected 14% of approximately 500 submissions as a semifinalist. I also read these poems at the Rocky Mountain Modern Language 2012 Convention.
I have created a piece that examines the struggles of nine dancers through modern/contemporary movement. The idea for this piece came to me after my grandpa lost his fight to esophageal cancer. The dance is presented behind a nine foot tall barbed wire fence that represents the dancers lives and struggles. The dancers will chose whether to confront their fears or to let them take control of their lives.

Session
Donna Lister
Campus Location
CN Room 227
Presentation Method
Concurrent

The purpose of the study was to explore perspectives of practicing nurses about learning experiences in nursing school that best prepared them for practice. The conceptual framework drew on meaning-making perspectives from constructive-developmental theorists, including Kegan, Baxter-Magolda, and King and Kitchner. In addition, conditions for learning were examined drawing largely on Gagné’s work. The participants were registered nurses from a western state who had been licensed between 6 months and 3 years. The research methodology was basic interpretive qualitative, consisting of focus group and individual interviews. Focus group discussions (20 participants) and individual interviews (6 participants) were conducted to explore nurses’ perspectives concerning educational experiences that prepared them for nursing practice. Data were analyzed to identify themes that were combined into like categories. The major findings of the study were that interactions with others, mainly faculty members, and the learning environments have significant impact on learning experiences for nursing students. The potential for positive social change is designing and implementing nursing education programs that are more effective and best meet the needs of nursing students. Increased effectiveness in teaching and learning will better prepare nurses to meet the demands of practice, thereby improving the quality of nursing care they provide.

Shauna Mendini
Dr Keith Bradshaw
Kay Andersen

Southern Utah University initiated in 2009 an academic roadmap and identified the enhancement of international partnerships as one of its strategic initiatives. In ways both unpredicted and often surprising, this initiative led to a cross-cultural collaboration with artists from Wuhan, China to create a full-length, original dance/drama based on the life of Helen Foster Snow, a native of Cedar City, Utah. Helen and husband Edgar Snow are highly regarded in China for their humanitarian efforts and work as writers during the critical decade of the 1930s. At the center of the Dream of Helen is the story of an American woman who devoted her life to building bridges of understanding and friendship between two nations. To date, this global project has led to 13 artists from China visiting our campus to engage in research and cultural interchange with students, faculty, and staff; six faculty serving such roles as co-director, composer, co-choreographer, co-designer, music director/conductor, and principal percussionist working through the creative process with Chinese counterparts; and 23 undergraduate students immersed in a foreign country adapting to the challenges of a rehearsal and performance process on an international stage. The production debuted July 23, 2011 at Wuhan’s Qintai Grand Theatre. We have continued to refine the production, and as recently as October 2012 the Hubei International Arts Festival featured the Dream of Helen as the Festival’s closing performance. The presenters will share the journey of the creative process: difficulties, challenges and joys associated with an unprecedented undertaking between a university and a renowned performing arts organization in the People’s Republic of China; the transformative educational results; and the innovative outcome when people share in the creation of art that goes beyond one person, one culture, and one place.
Characterizing the Water Chemistry of Lake Quichipa

The Central Iron County Water Conservancy District would like to see if water from Lake Quichipa can be used to recharge the Aquifer lying below. Tests have been performed to determine the total dissolved solids (TDS) and other ions that are in the water. The results of this work will be presented.

Right Hand Canyon and Canyon Park

Previous research has shown that chloride and sulfate values increased in concentration between Right Hand Canyon and Canyon Park. We would like to expand upon that project by analyzing chloride and sulfate levels at five sites along Coal Creek between Right Hand Canyon and Canyon Park over the course of three weeks using ion chromatography. We will also analyze sodium, potassium, magnesium, and calcium levels at these sites using atomic absorption spectroscopy.

Essential Oils

Essential oils are made up of plants natural secondary metabolites, which are often used as antimicrobial agents to protect the plant. These products have been found to be beneficial in medicinal use for humans since ancient times. One such product is coumarin, which is used medicinally and commercially today that can be found in some species of sweet grass. The purpose of this study is to look at the secondary metabolites produced by a native sweet grass (Anthoxanthum hirtu) and a closely related grass (Anthoxanthum odoratum), which is available commercially as both a diploid and polyploid. This study used Gas Chromatography to first separate the metabolites out into the gas phase and then ran through a mass spectrometer to identify their molecular weights. Using a database possible identities for the metabolites were found.
Reliability of a Short-Term Memory Test for Men and Women

It has been a long belief that women have better multi-tasking skills than men. Multi-tasking involves doing several tasks at once, which would involve the use of short term memory. Our project assesses short term memory with gender comparison. A scientific experiment is needed to confirm or reject these beliefs. To test the short-term memory of the subjects, we created an experiment in which the participants would be asked to recall a list of items and then compare gender difference within short term memory.

Session 1A
Dillon Monroe

Prey Preference in Wandering Garter Snakes (Thamnophis elegans vagrans)

When an area is developed no part of that habitat is left unaffected. Urbanization creates many problems for animals by creating physical barriers, fragmenting habitat, introducing completely new habitat, and introducing species. Exotic species are often better competitors for resources and often competitively exclude native species, resulting in population declines and ecosystem disruption. Despite the negative effects of urbanization some species are able to adapt and survive in urban ecosystems. One such species is the wandering garter snake (Thamnophis elegans vagrans). This species is described as a generalist in habitat selection and is often seen in urban communities basking on sidewalks and pavement, living in gardens, and feeding on rodents, insects, and other species. One unique characteristic of this genus is that prey preference has been observed as being a genetic trait and possesses variation, and as such can be modified via natural selection. For my research project I looked at whether prey preference of T. elegans vagrans differs between snakes from three different locations with varying levels of human development. From these three locations in Utah, Tropic reservoir, Monroe (Sevier River), and Utah Lake, we obtained a total of 14 snakes and found that in this group of snakes there is no correlation of prey preference in snakes to level of development of the habitat.
Evaluating the Construct of Cultural Distance in Bicultural Mexican Americans

Frame switching theory has demonstrated that bicultural individuals (i.e., individuals who identify with two different cultures) vary in the extent to which their two cultural identities overlap versus remain separated in the self. This construct, known as bicultural distance, is commonly assessed using the Bicultural Identity Integration Scale (BIIS: Benet-Martínez & Haritatos, 2005). However, bicultural distance items on the BIIS tend to be low in reliability, suggesting that either the construct needs theoretical refining or the scale needs redevelopment. The current set of two studies evaluated the underlying structure of bicultural distance, as measured on the BIIS. Self-identified Mexican American participants (N = 238) completed the BIIS, a separate American and Mexican identity scale, and various acculturation measures. Factor analysis revealed that cultural distance tends to break into more than one factor, and correlational analysis suggests that these items may be related to one’s individual identification with each of his or her two separate cultures. Acculturation measures were also analyzed and discussed in relation to distance and individual cultural identification.

Hydration, Body Composition, Nutritional Intake and Grip Strength of High School Wrestlers

High school wrestling is a very popular sport, with 3,125 students participating in Utah. Each wrestler competes in a designated weight class, and must become certified to compete by state testing, which consists of a body fat percentage of at least 7% for males and at least 12% for females, and a urine specific gravity of less than or equal to 1.025. These markers of body composition and hydration status are evaluated by the wrestling governing board only one time at the beginning of the wrestling season. Thereafter, many high school wrestlers engage in unsafe weight loss practices to maintain wrestling weight, which may impact body composition, hydration status and grip strength. These unsafe practices may include refraining from drinking and eating for 12-48 hours before a match and engaging in extreme workout techniques. These techniques can lead to dehydration, malnutrition, and decreased body fat percentage. This study is designed to test body composition, grip strength, hydration status, and nutritional intake of high school wrestlers. Varsity wrestlers at a local high school will have their body composition, grip strength and hydration status tested weekly, before official weigh-ins, before match, and after competition at selected matches. A 24-hour dietary recall will also be administered to wrestlers during and after the wrestling season. Understanding trends in dehydration and nutrition practices among high school wrestlers may allow coaches to better monitor wrestlers, thus providing a safer environment where dehydration and unsafe weight loss practices are reduced.
Reaching Struggling Readers with the ACCEPT Intervention

A reading intervention for struggling readers should include a framework that addresses diverse literacy needs within the five research-based elements for reading achievement: phonemic awareness, phonics, vocabulary, fluency, and comprehension skills. One way to provide this intervention is by adapting the core curriculum to enable a practical Tier 2 (ACCEPT) intervention. ACCEPT is a comprehensive literacy intervention that adapts to the school wide core reading curriculum and suggests bridging Tier 1 Tier 2 in a multi-tiered system of support (MTSS). The intent of ACCEPT is to provide a contribution to student achievement while easing the burden for teachers to execute an effective Tier 2 intervention in the classroom. With this model of intervention, students with difficulty in reading should receive classroom instruction in literacy with their peers (Tier 1) and the same content and materials at their reading level when receiving extra support (Tier 2). ACCEPT uses a simple check-off lesson plan that addresses the five research-based elements for reading achievement and research-validated activities. A succinct manual is also provided to assist teachers with implementation and assessment. With the ACCEPT intervention, students struggling in reading should be able to improve their reading fluency and comprehension by using familiar content and materials when receiving this supplement support.

A New, More Accurate Climate Map for Utah

Utilizing a greatly expanded data base, the authors have prepared a new climate map for the State of Utah using the Köppen-Geiger classification. This new map was constructed using data from the same 183 regular weather stations that were utilized for the climate map in the 1981 Atlas of Utah, plus data from the 111 SNOTEL stations that were installed beginning in the early 1980's. The 111 SNOTEL stations are located mostly in mountainous regions that formerly lacked data. They have increased the density of data statewide and allowed for a much more accurate map. For example, Köppen created a category “H” (Undifferentiated Highlands) to cover mountainous regions where a paucity of data existed. The new, larger data base used for this map has eliminated the need for this category in Utah. With the addition of SNOTEL data, enhanced with satellite imagery, the areas that were formerly classified as “H” (Undifferentiated Highland) climates are now classified as “D” (Cold Temperate) and “E” (Polar) climates. Also, “BW” (Mid-latitude Arid or true desert) climates, in the Köppen classification, are more widespread in Utah, and “BS” (Mid-latitude Steppe or semi-arid) climates are less extensive than is shown on the 1981 climate map. This recently completed map offers a more realistic picture of Utah’s climates.
Go Outside

The concept behind the Go Outside campaign was to place something organic and reminiscent of the outdoors somewhere indoors on campus. It needed to be seen, but also observed reverently by a wide variety of students. I cut sod into the logotype of the campaign, and they were placed on the floor of the campus library for an entire day. This one day installation was then developed into an ongoing campaign for the Pacesetters Club called the Go Outside Challenge.

Feeding Strategies and Prey Preferences in Predacious Leeches

Glossiphoniids are jawless leeches that feed using a proboscis, which they use to impale prey so that they can feed on their prey’s blood and tissues. This study focuses on two different species, Glossiphonia complanata and Helobdella stagnalis. Helobdella stagnalis feed on a variety of prey, including bloodworms and freshwater snails, often feeding together in large groups. When a prey item is placed in the container, H. stagnalis immediately begin smelling the water and moving toward the prey. After the first H. stagnalis makes contact and secures prey, other individuals within the group will move to that area, often passing prey along the way, to attach to the same prey item. Once a number of individuals have started feeding, the prey is often broken into smaller pieces and individuals can then begin feeding on various sized pieces. This is in contrast to members of the species Glossiphonia complanata, who appear to be selective with their prey, and have been observed going up to 4 weeks without feeding, even in the presence of their non-preferred prey (bloodworms). When preferred prey (freshwater snails) were placed in the container, unfed G. complanata did not immediately begin smelling the water or initiate hunting. Unlike H. stagnalis which feed in groups, G. complanata appear to prefer feeding alone, and have even exhibited competitive behaviors.

Attitudes, Opinions, and Food Waste among 4th and 5th Grade Students on the New and Old School Lunch System

Since 1946 the U.S. National School Lunch Program has served millions of children. Although school lunch (SL) has served many children it has received criticism. The Healthy Hunger-Free Kids Act of 2010 recently revised SL. Since the changes have been implemented, many schools have anecdotally reported a noticable increase in food waste, yet few studies have examined these reported differences. Also, few studies have looked at children’s attitudes toward the change in SL. The purpose of this study was to examine the differences of children’s perception of SL taste and amount/frequency of food waste. One hundred eighty-four, 4th and 5th grades, 93 boys and 91 girls participated. At the end of the 2011-12 school year 94 children were surveyed regarding the old lunch program and at the beginning of the 2012-13 school year, 90 children were surveyed about the revised SL program. There was no siginificant difference between the old and new school lunch systems with the following self reported variables: children's tate perception of school lunch and the amount/frequency of food waste. Although no significant difference was found with regard to the taste of the SL, the data suggested that the new SL was more satisfactory. T-test approached significance (p=.055), indicating that children had a more favorable view on the taste of the new school lunch. Although sample size was adequate to determine significance, future studies with more schools and larger sample sizes would be beneficial to verify findings.
Prosocial and Antisocial Behaviors Toward Middle Easterners as Propagated by Mortality Salience

One principle postulate of Terror Management Theory (TMT) is that people’s behaviors are influenced by the anxiety associated with knowledge of one’s mortality. Generally, when awareness of death is made salient, individuals engage in behaviors to buffer against the anxiety of death related thoughts. For example, people often seek to enhance and strengthen their worldview beliefs and try to increase their self-importance. Empirical research has demonstrated that when reminded of death, individuals react more antisocially toward individuals portrayed in a manner inconsistent with their stereotyped beliefs. However, there has been no research to date examining how Terror Management affects behaviors of greed and fairness in relation to in-group and out-group stereotypes, especially toward individuals portrayed in a manner inconsistent with their stereotype. To explore these questions of greed and fairness, participants were placed in situations where they could behave in a greedy or fair manner after being reminded of their mortality. Results are discussed from TMT and Social Constructivists perspectives.

The Effect of Casein Hydrolysate on Cancer Growth in Caenorhabditis Elegans After Being Exposed to Aflatoxin B1 In Vivo

Research has shown that there is a possible link between casein consumption and cancerous lesion growth in rats [1]. Casein, a protein found in cow milk, has historically been thought of as a healthy component in the human diet but could in fact be a driver of cancer. Our SUU-UGRASP funded research sought to test this hypothesis on the model organism Caenorhabditis elegans by exposing the nematodes to a carcinogenic, DNA adduct forming molecule called Aflatoxin B1. AFB1 is a mycotoxin found in the fungus species Aspergillus, and has been known to have a genotoxic effect on C. elegans [3]. We grew the worms on an LB broth plate and transferred them into wells that contained S-Medium, AFB1 and Escherichia coli. Three out of the four groups were given specific amounts of casein in addition to their normal E. coli diet, while the last group was not given any additional casein. After allowing the groups to grow for up to 9 days, while being swayed back and forth on a rocker at room temperature, we saw virtually no growth in the groups that were given casein. The group that had not been given casein showed growth of up to 50+ worms after two days of growth. The initial worm count in each well was approximately 5 worms. These results show that casein does make an impact in the nematode growth when exposed to AFB1. However, further research must be done in order to determine what the molecular effects of the casein are in C. elegans.
Evaluating Outgroup Membership and Moral Foundations Theory to Increase Awareness of Mexican Cartel Violence in Liberals and Conservatives

Since 2007, the number of murders associated with drug trafficking from Mexico into the U.S. have increased dramatically. In spite of this extremely high worldwide murder rate, relatively little attention has been paid to this social issue. Our study uses research on outgroup membership (i.e., the violence occurs in Mexico to Mexican citizens) as a means of explaining why limited concern exists in this U.S. for the violence. To test this idea, participants reported the dollar amount that they think would be appropriate for either the American or Mexican government to spend on saving either a Mexican or an American life that “would otherwise be lost in the conflict.” In addition, using Moral Foundations Theory, a theory that explains which moral domains are more important to liberals versus conservatives, a variety of awareness statements/strategies were crafted based off of these five moral domains. In order to assess how the cartel violence issue could be framed in a manner that draws the attention of both liberals and conservatives, participants rated how influential they believe that these statements/strategies would be at increasing awareness of the issue along with their political leanings. Results of the study are discussed in relation to both theoretical and practical issues.

Spear Phishing, Yesterday, Today, and Tomorrow

One of the many ways that these scammers make their move is on the form of phishing attacks. These can be so potent because it can often lower the defenses of some users be making their scam come in the form of something familiar. Fake sites, shiny and well-made advertisement forms. Who doesn’t want a free iPad? What is also scary is these are rarely things that your antivirus or firewalls have any way of predicting and preventing. But all of these attacks still have tell-tale signs that make aware users that much more safe. We aim at making a more aware campus, and bring about an era that is not dominated by such scams. Recently phishing attacks that have become increasingly more effective, the only way to prevent phishing attacks is to inform the possible targets of these attacks. One of the biggest target groups for these attacks is college students. College students have a lot of information that will be very valuable to them in the future. Targeted attacks are among the top security risks for 2013. Who will be targeted? Students at higher education campuses worldwide are very tempting targets. These leaders of tomorrow will have high paying jobs and broad access to information. Students should be aware of the potential threats to their credit ratings and personal information. We as a group are acting as leaders in information security and assurance, to inform the university students. Colton Steele, Chris Kelly, Morgan Coutts, Jonathan Arter
Hackers Leading to Make Us Safe

For the vast majority of individuals when someone uses the term “hacker” positive thoughts aren’t the first to come to mind. While it is true that hackers are known for the negative impacts they’ve had on society, little recognition is given to hackers that have a positive impact. We aren’t here to discuss the political reasons behind why the public has never heard of these so called “good” hackers, we would like to simply inform our audiences of the things these individuals have accomplished and let their actions speak for themselves.

Phosphatidylserine-Cu2+ Interactions Modeled Using Supported Lipid Bilayers

Lipids are essential building blocks for cell membranes. Phosphatidylserine (PS) is a type of lipid that is regulated more strictly than most other lipids and resides on the inner leaflet of cell membranes. Previous experiments have suggested but not demonstrated that when Cu2+ binds PS lipids the complex can “flip” between leaflets of a bilayer. We are testing this hypothesis using supported lipid bilayer techniques, specifically in combination with electrophoresis and by stripping Cu2+ ions from the PS lipids with EDTA through microfluidics. Our data, while not yet conclusive, supports the flipping hypothesis.

Using Online Video Demonstrations in a Culinary Arts Class

The objective of this study was to examine the impact of online video demonstrations on course grade in a basic culinary arts course at a regional university. Students enrolled in a basic culinary arts course (n=56) were assigned to watch online videos (n=25) prior to class. Online quizzes (n=25) were created and made accessible through an online learning management system. After watching the videos students took a pre-lecture quiz on each assigned video. Online viewing behaviors and quiz scores were automatically recorded. Data was analyzed using frequencies, descriptive statistics, Pearson correlation, and regression analysis. Forty-six percent of students viewed all assigned videos, the average student watched 21 videos, two students did not watch any of the videos, and one student watched 70 videos. Regression analysis showed that over one-half of the variation in students’ final grades in the course could be explained by the model (R^2 = 0.701). Number of quizzes completed was positively correlated with grade in the course (p<0.001). Pearson correlation revealed that number of videos watched (p<0.001) and grade on quizzes (p<=0.001) significantly impacted grade in course. Average time to watch videos (p=0.048), year in school (p=0.020), and number of quizzes completed (p<0.001) were positively correlated with score on quizzes. Four advantages of using online videos to demonstrate culinary techniques include financial savings, increased lab time available for student preparation of products, a better view of the intricacies of demonstrations, and improved grades in the course.
Progress Towards The Synthesis of Novel 1; 8-Napthalimide Heterocycles

1,8-naphthalimides; 4-[N-methyl(2-methylamino)ethylamino]-N-(3-propanol)-1,8-naphalamide and 4-[2-aminoethylamino]-1,8-naphalamide have been previously synthesized, and their fluorescence behavior in the presence of several metal ions investigated and presented. Based on this research, other novel 1,8-nathalamide heterocyclic derivatives are being synthesized to study their overall host guest properties as well as possible sensing capabilities towards metal ions and small molecules. The progress towards the synthesis of these compounds will be presented.

Synthesis of Novel Organic Molecules

Several novel organic molecules that may have medicinal qualities will be synthesized and analyzed to determine if they are active against certain key enzymes in required metabolic pathways of pathogenic organisms. The progress toward the complete synthesize of these small organic compounds will be presented.

Google Power

This presentation was part of a 4 day study group in which presenters shared technology tools (iPads, smart phones, laptops and a host of specific applications) with study group members in formal presentations followed by discussions of how best to use each tool and its accompanying applications, as well as new applications and tools which may be available and unknown to all members of the group (approx. 30-50 members). The information was compiled for sharing. The specific tools examined in Dr. Lund's presentation, were online collaboration tools--Google Drive, Dropbox, etc. This presentation concentrates on one of them; namely Google Drive, and how innovative use of the tool will prepare teacher educators and students to be leaders in their chosen field of endeavor.
International Students' Perceptions of Online Learning: Benefits and Challenges

Transition to American universities is challenging for international students and many feel homesick and experience emotional stresses. Students with less confidence in their English speaking skills tend not to participate in class discussion and have feelings of isolation. Especially, in online learning environments, students are often confused and misunderstand instructions, due to cultural differences. The present study investigates international students’ perceptions about online courses at an undergraduate level, and examines their online learning experiences, including benefits and challenges. Data were collected through a survey and one-on-one semi-structured interviews. The author presents the results of the study and provides suggestions for how faculty can best accommodate international students in online learning environments.

Session 2

Bradley Cook

Pre-Mortality and Islam

Islam has generally relegated the doctrine of the pre-mortal soul to the dustbin of unorthodoxy if not heresy. However, the notion of the human soul, with its genesis in the heavens, can be found in varying but identifiable strands within Sunnism, Shi’ism, Sufism, and in the medieval and classical Islamic folklore narratives of the Qiṣṣa al-Anbiyā (Tales of the Prophets, or Qiṣṣa in abbreviation). This presentation explores this concept and why it has held sway at various times and places in Islamic history despite orthodox injunctions against it.

Karen Houser

Full "STEAM" Ahead: An Early Childhood Experience with STEM (Plus Art)

This presentation will address the benefits and challenges of providing a STEAM (Science, Technology, Engineering, Art, Mathematics) curriculum in an early childhood setting. Presenter will discuss the integration of content areas with developmentally appropriate classroom instructional strategies, as well as providing for the natural curiosity of young children. Preparing an environment conducive to exploration will be shared.

Robert Durborow

A Question of Question

The paper examines the state of literary criticism today and the importance of forming an informed question. It also examines the future of literary criticism and how we might successfully proceed from the theory mess which currently exists.
Defining Quality in K-20 Instruction and Programs

The following processes and approaches will be addressed...Quality of digital curriculum to improve student achievement. Developing standards to meet this achievement. Appropriate tools and procedures address the state and national standards. Establishing faculty development training to tie standards and achievement.

The Power of Professional Development: Why University Students should Utilize Career Resources Prior to Graduation

The average college student inadvertently bypasses the need for professional development while trying to make their way closer towards graduation. Unfortunately, with countless opportunities competing for the attention of the student, career and professional development is too priceless to miss. Why then do so many SUU students disregard using professional development skills only to find out they missed out on a great opportunity after completion of graduation? If you are one of these students, you will not want to miss this opportunity to learn the countless ways in which the Career and Professional Development Center at SUU can help you succeed in your college education and beyond.

Connecting Brain Research to the Classroom

Brain research has created new information for affective teaching practices. In addition to new practices, traditional teaching practices have been validated. As research identifies the function of the different parts of the brain, educational practices can be adapted to use this information to rethink educational practices. There are several practices that have been connected to brain activity. For example, addressing multiple intelligences provides the student with learning strategies that embraces his/her learning style. Another technique that has been validated is the use of chunking and the establishment of patterns when learning new material.

Decompositions of Lambda K_n using Stanton-Type Graphs

A Stanton graph is a multigraph on k vertices where, for each i = 1, 2, ..., k choose 2, there is exactly one edge of multiplicity i. A Stanton-type graph is a connected multigraph on k + 1 vertices where, for each i = 1, 2, ..., k choose 2, there is exactly one edge of multiplicity i (and no others). In this talk, we show how to decompose lambda copies of the complete graph K_n (for the minimal value of lambda) into Stanton-type graphs on four vertices.
Protected Concerted Activity under the National Labor Relations Act and Employee use of Social Media: Policy and Practice Issues for Employers

National Labor Relations Board (NLRB) Chairman Mark Gaston Pearce thinks that “the right to engage in protected concerted activity is one of the best kept secrets of the National Labor Relations Act”, and “that a right only has value when people know it exists” (NLRB, 2012). The launch of a webpage by the NLRB to make the public aware of the rights of employees to act together for their mutual aid and protection, even if they are not in a union, highlights the agency’s recent efforts to reign in employer efforts to control employee use of social media with respect to employee engagement in protected concerted activity. NLRB efforts are being praised by organized labor and its supporters and roundly criticized by opponents. The purpose of this paper is to examine employee use of social media regarding protected concerted activity, the efforts by the NLRB to facilitate employees’ ability to engage in protected activity via social media, and what should employers be doing to facilitate compliance with the NLRB’s recent efforts to reign in employers’ efforts to control employee use of social media.

Institute of Policy Analysis Undergraduate Policy Research Panel

This is a Undergraduate Policy Research Panel. 5 Students will present current policy research completed in the IPA.

From Pink to Red Hot: Valuing the Scale of 21st Century Art Education

Education reform has it exactly wrong: Without the arts, and specifically visual art, at the core of learning, students cannot thrive. They are progressing through a K-16 system that does not acknowledge or intentionally cultivate the whole child. Children lose their ability to wonder, to be curious, to question, and to explore because there is no room for playful investigation under the pressures of standardized testing. As Neil Postman famously said, “Children enter school as question marks and come out as periods.” Along came Daniel Pink’s “A Whole New Mind: Why Right-Brainers Will Rule the Future.” Taking his six “high-concept, high-touch senses,” I will build a case for how we art educators can create curricula and classroom environments that sizzle, radiating energy that becomes so contagious, it can permeate walls and transcend geography.
Determinants of Service Quality in Higher Education

We examine the differences and similarities in students and faculty perception of service quality in higher education. A principal component analysis is also conducted to determine any possible underlying structure.

Lincoln and Bismarck: Nation-building in the Nineteenth Century

Many Americans share a “parochial vision” of Civil War history, one perhaps best expressed and disseminated by Ken Burn’s documentary The Civil War. In that familiar narrative, American brothers fought a terrible war over “the peculiar issues of sectionalism and slavery” and in the process forged a unique American national identity. American historians now are more inclined to view the Civil War in a global context. The historian David Potter protested against the old master narrative: “We write about liberty without much reference to the French revolution, about Jacksonian Democracy without reference to the democratic ferment in Europe in the 1830’s and 1840’s, about American reform without reference to the epic struggles in Britain to halt the slave trade [...] and to improve the lot of the industrial worker.” [We also] describe Confederate secession without mentioning the attempt of the Irish and the Hungarians to secede, respectively, from the United Kingdom and the Austrian Empire in 1848.” In short the Civil War looms large in the American experience but the fundamental issues at stake in that conflict were not unique to the United States. The American Civil War and the wars of German and Italian unification were all symptoms of a trans-national nineteenth-century crisis that we might describe as the birth trauma of the modern nation-state. In short, modern central government in both Europe and the United States was a response to the inescapable necessity of stronger armies and navies and for “for [defining] rights of citizenship.” In similar fashion, Americans are rightly proud of the “Great Emancipator” Abraham Lincoln but once again, the Emancipation Proclamation was the most renowned document of a trans-national age of emancipation. At the same time that African-Americans were liberated from slavery in the United States, nearly forty million serfs were emancipated in the Habsburg and Russian Empires. We should also note that Jewish citizens of the newly unified German Empire received full civil and political rights in 1871. Our sixteenth president

Differences in Data Collection and Destination: The Southern Utah Visitor Study

This study demonstrates the importance of carefully defining the scope of the research, and the potential variability of results due to methods, timing, and other factors. In 2006 The Utah Office of Tourism purchased a 2005 Visitor Profile study from D. K. Shifflet & Associates, which received 475 responses from their representative panel participants. SUU hospitality and marketing professors conducted a visitor profile survey in 2007 and 2008, which obtained 814 responses in Southern Utah gateway cities to National Parks. There were significant differences between the two studies for a wide range of variables. Hence, the study indicates the importance of carefully designing empirical studies to match the needs of decision makers, and to be careful about projecting results to subgroups.
The STEAM Effort

This presentation reflects the paper accepted for an international conference in June 2013. The paper focuses the importance of rethinking Computer Science (CS) education to include “exciting and creative” activities that will consequently, enhance computer science skills of students. This is an important perspective to take into account when recruiting students in this field, particularly girls. Literature indicates that there is a critical need for more computer professionals because the computing field is one of the fastest growing sectors of the economy in the United States and world-wide. Hence, this problem needs to be tackled at school and university level. Further, it has been argued that innovation still seems tightly coupled with Science, Technology, Engineering, and Math (STEM). Having said that, art and design are poised to transform our economy in the 21st century like science and technology did in the last century. Therefore, it is significant to integrate art and design into Science, Technology, Engineering and Mathematics (STEM). In addition to reflecting to the current literature studies, this paper provides a current on-going pilot project and contributes towards an effort for STEM to become STEAM. This pilot project will not only promote awareness, motivation, and participation of under-representative and minority groups, but it will also address other barriers that researchers attribute towards the shrinking of the pipeline in CS.

Imperial Restoration? Barack Obama and American Foreign Policy

Clearly, the empire struck back at Usama ibn Laden and al Qa’ida, but how did the United States, as the lone superpower, fare more generally under President Barack Obama in foreign affairs? Foreign policy may not have been a central issue in the 2012 presidential election but that should not suggest that it is any less vital to the future of the United States than it was on the morning of 9/11, 2001. Generally, election promises of 2008 were met, and perhaps exceeded, but what of new challenges in the shifting landscapes of the Middle East and North Africa, unsettling prospects in Europe, and potential economic tensions in China? Has the empire of liberty sustained its precarious claim to international power and leadership or have economic challenges dampened global prospects for leadership and security, and what of the coming four years? Did Barack Obama restore the status and power of the United States or does the shadow of the paradigm of imperial decline still loom over what may be the last superpower? Success or failure in foreign policy is most often judged immediately by most recent events, and here September’s attacks on American embassies, and consulates throughout the Middle East and North Africa, and how the United States reacts to these acts will, accurately or not, go far in assessing Obama’s foreign policy record.
Translatio Imperii, das Annolied and German Mythic History

The Annolied, one of the first works to be written in Middle High German in the late eleventh century, chronicles the life of the Archbishop of Cologne. It was probably written to promote his candidacy for sainthood in the early twelfth century. The work is a "mythic history" of Anno and of the Germanic people organized around the Daniel 7:2-7 in the Old Testament and the vision of the four beasts found there and a secular history which precedes the section taken from Daniel. The anonymous author identifies the four beasts with various cultures in the Old Testament and claims that the last deals with Rome and the various cultures of the Germanic people. The secular history is an abbreviated account of human civilization from Adam to Anno. The questions this paper seeks to address are: why must there be two histories and not just one in this work? why is this history so important? and why is any history important? It seeks to answer these questions by referring to the work of Mircea Eliade who points out that in primitive societies all histories are attempts to "reactualize the primordial event." While this theory may not seem earth shaking when one first encounters it, it turns out that it is the key element which separates modern and ancient views of history, how it should be told and why it is important. Ancient and primitive histories are circular, modern histories are linear. This one realization explains much concerning the difference between modern culture and ancient and medieval culture.

Harpsichords and the Baroque

The harpsichord was the most commonly used keyboard instrument of the Baroque period and its countless differences in design and sound reflect the exuberance and grandeur typical of Baroque music. This presentation discusses the mechanics of the instrument and demonstrates its tonal characteristics through performances. A majority of early keyboard music that is commonly played on the modern piano was originally composed for the harpsichord. The individuality of each instrument and the different way of sound production (i.e. plucking the string rather than striking) are lost on today's pianos. It is an invaluable resource for any performer of early keyboard music to know about harpsichords as much as possible in order to best interpret Baroque keyboard music with its often exaggerated interpretation of the Doctrine of Affects.

A Psychosocial Model of Violent Behavior among Sports Spectators

Researchers from various academic disciplines have attempted to explain the causes of violent behavior among sports spectators. This research has yet to be synthesized, however. This is a significant gap in the literature. Indeed, the complex nature of spectator violence warrants an integrated conceptual framework to guide research. This paper presents a model of violent behavior among sports spectators that includes seven sets of risk factors: (1) cultural; (2) venue; (3) event; (4) police; (5) crowd; (6) psychological; and (7) cognitive.
Representations of the 2-S-Rings of D8 and Q8

The 2-S-rings of D8 and Q8 are isomorphic, but they have distinct 2-characters. We find a module for D8 which has character equal to the 2-character of Q8, and also a module for Q8 which has character equal to the 2-character of D8.

The Metonymical Function of Women in Shakespeare’s Titus Andronicus

Complexities of portrayals of women within Shakespeare's Titus Andronicus are due to the fact that Shakespeare uses female characters as the vehicle in the conceptual process of metonymy in order to give new complexity to the target, the target being the whole to which the woman belongs. Shakespeare’s women often break gender roles in order that they may serve to give greater meaning to a larger entity. For example, within the play Titus Andronicus, Lavinia functions as a vehicle to the target an innocent and falling Rome. Tamora, as Lavinia’s foil, represents the corruption of virginal Rome. Shakespeare, in using female characters as vehicles in the metonymical process, allows women to speak not as a definition of what it means to be female, but rather a definition of the entity to which the women belong.

Preparation for Spring

I created this piece in my dance composition class and have further developed and expanded the idea through my principals of choreography class. The piece depicts flowers preparing to bloom for spring, and the overall energy of growth and rebirth.
A Walk on the Wild Side in Shakespeare’s Titus Andronicus

Animals and their behaviors compose a central portion of human society, which is evident within William Shakespeare’s Titus Andronicus. Shakespeare compares the main female characters of Tamora and Lavinia to creatures of nature in order to portray their animalistic nature. Tamora is equated with a tiger or lion which fuels her need for dominance; whereas, Lavinia is depicted as a delicate doe. As Tamora becomes more beastly, she causes Lavinia to become the damaged doe through her mutilation. The hunger that Tamora feels for revenge upon Lavinia is comparable to the desires of a predator before a hunt. If Tamora is the predator, then Lavinia is the prey, falling in line with the hierarchy of the lion attacking the doe. The family opposition of Tamora and her sons versus the Andronici shows the loyalty, devotion, and hierarchy of a family unit which is comparable to an animalistic pack. Titus and Tamora act as the leader in their family packs exposing their own behaviors similar to the mannerisms of an alpha wolf. Shakespeare’s illustration of the true animalistic nature of his characters within Titus Andronicus is validated through the tiger/doe metaphor, the animal hierarchy, and the idea of human hunting. (On panel with Valerie Ownes and Violet Wager)

American Fathers: A Cultural Perspective

This presentation outlines current trends and sources of diversity in fathering (behavior), fathers (role), and fatherhood (ideology) in the United States. Recent research data support the general notion of an overall trend toward “paternal essentiality” (recognition of essential influence of fathers on child development). However, the growing influence of multiple sources of diversity also makes it increasingly difficult to typify American fathering. These sources of influences (region, religion, ethnicity, immigration, social class, family structure, employment status, and work conditions, along with characteristics of children and their mothers) can be also be observed as intra-cultural influences in other Western and non-Western societies. Because the United States is a nation of immigrants, almost every pattern of fathering observable worldwide can be observed in America. This diversity calls into question the notion that “active” American-style fathering will spread worldwide through globalization; rather, worldwide aspects of fathering may increasingly spread to the U.S. The author’s research data, and a summary of recent American findings reported in the author’s recent edited volume (“Fathers in Cultural Context,” Routledge, 2013) are included to provide additional historical, cultural, and economic background for conclusions about American fathering.

The Logo Program, Inspi, and Fractals

Using the programming language Logo, and the devised program called Inspi, there are many mathematical shapes, similar to rodin coils, farris wheels, rhombicosidodecahedrons, and snub dodecahedrons, that can be created. I explain why Inspi makes these mathematical shapes, and show why the different inputs cause the program to make different shapes. I will also demonstrate related programs I’ve written which draw other well known mathematical shapes, such as fractals.
The following piece consists of the emotions and events that transpired between a boy and a girl. While one felt differently than the other, the pursuits and advances still occurred simply creating tension. Much to her disliking and against her wishes, eventually the girl surrendered herself as well as her heart. While she had given everything, it only resulted in her being treated as a key; a key with the sole purpose of opening a closed door to reveal its contents and nothing more.

Depictions of Battering: Abuse and Abusers in Shakespeare’s Othello and Hamlet

Othello and Hamlet, two tragedies by William Shakespeare, accurately and vividly depict the psychological mindset of batterers in abusive relationships. While this abuse is more evident in Othello, a look at the emotional, physical, and sexual abuse described by Lenore E. A. Walker’s theories on battering and the cycle of violence theory can deepen our understanding of Othello’s abuse, and the less explicit battering displayed by Hamlet. Othello and Hamlet, as well as other male characters that surround them, exhibit patterns of misogyny and abuse that correspond with Walker’s theory on the cycle of violence and victimize the women in these men’s lives. While Othello follows a more typical pattern of violent behavior, Hamlet shows variations in this pattern that rely on more subtle abuses. Othello verbally attacks his wife, hits and eventually kills her, then returns to a stage of love and remorse. Hamlet manipulates both his mother and his lover, and though his tension is released on a man, it is clear he has reached the stage of an acute battering incident. Finally, Hamlet reaches an atypical form of the loving-contrition stage at Ophelia’s grave, revealing himself as an intractable abuser. In both plays, the women are attacked and degraded by a variety of different abuses. While the two plays differ in specific areas of the cycle of violence, Othello and Hamlet both exhibit forms of misogyny and abuse that betray the trust, bodies, and minds of the women they are supposed to love.

Fire Retardants as an Environmental Risk Factor Contributing to Parkinson’s Disease

Parkinson’s disease is caused by a decrease in dopaminergic neurons in the substantia nigra, which results in a loss of motor control. Although the exact causes of Parkinson’s disease are unclear, studies have shown that exposure to environmental contaminants causes death of cells in the substantia nigra (McCormack et al., 2002). The purpose of our study is to investigate the potential role of flame retardant as a risk factor for Parkinson’s disease. We subcutaneously injected 8 mice with retardant solution (1 ml/60 g body weight). Seven control mice were injected with saline solution (1 ml/60 g body weight). Each mouse was given 8 injections over four weeks, after which the mice were sacrificed and brains were harvested. Frozen sections (40 μm thick) were mounted on slides and are being processed using anti-tyrosine hydroxylase, which will be visualized using a peroxidase reaction. Number of cells in the substantia nigra will be counted and compared between control and treated groups. Our hypothesis is that exposure to fire retardants is a risk factor for Parkinson’s disease. If this hypothesis is supported, this would be the first study to show a link between flame retardants and Parkinson’s disease. This would have important implications for current forest fire fighting techniques.
Moneyball and The NBA

Research for decades has shown that scoring totals dominates player evaluation in the NBA. In recent years (and as we note, after the publication of The Wages of Wins), the NBA free agent market has changed. Prior to 2007, shooting efficiency from the field did not appear to impact a player’s wages. From 2007 to 2011, though, shooting efficiency is now one of the dominant factors in player evaluation. Consequently, it appears that player evaluation in basketball has responded to one of the lessons taught by advanced statistical analysis of basketball.

Stripping Supported Lipid Bilayers to Form Vesicles

Membranes are crucial for life on earth, and membrane proteins in particular perform many essential functions. Techniques under development at other universities offer, in many ways for the first time, the opportunity to purify membrane proteins in their native conformations. However, in order to fully take advantage of these purified membrane proteins, the membrane proteins would ideally be in vesicles. There are currently no techniques that can convert supported lipid bilayers to vesicles in the literature. We have developed a technique using high flow in a microfluidic device that can strip supported lipid bilayers. We will discuss our progress towards creating a device capable of selectively stripping portions of supported lipid bilayers and repackaging them into vesicles.

A Day in the Life of a Criminal Scene Investigator

Crime Scene Investigators have a grim job when it comes to identifying what happened to a recently deceased person and the condition of their body when found.
SUU's IIC EDGE

Since 2007 the IIC has supported thousands of students in regional youth conservation camps, introductory experiences, seasonal internships, career-path internships. We do this through our mission by providing “a unique organizational structure to network and communicate, access and share resources, and efficiently create and administer shared programs.” Our structure has given our agency and tribal partners important benefits: good value, flexibility and assistance with managing funds across fiscal years through cooperative agreements, simplified hiring process by having the university facilitate human resources, and year-round relationships with students. For students, we provide opportunities to engage and network with potential employers early in their educational pursuits, obtain valuable real-word experiences, support their academic progression, and develop a greater sense of stewardship for the region’s Public Land Resources.

Street Lights (by Cory Collard)

Tonight they decided to leave the street lights on, and I'm here at the park taking full advantage. I'm alone with the smooth curve of the ramps and the set of stairs that the rail follows down.

Sex vs Love

Love: The Coding of Violence in Native Son and Their Eyes Were Watching God In Richard Wright’s Native Son, the main character Bigger is grappling with life. He subconsciously develops a code, a code that allows Bigger to relate to things, particularly violent things, as representations of sex. In one instance he demands his friend Gus lick the blade of his knife as an act of supreme dominance. Through this example it is made apparent that Bigger codes violence as sex, sex which is not limited to heterosexuality.

In stark contrast to this is Zora Neale Hurston’s coding of violence in terms of love in Their Eyes Were Watching God. Just as Janie is starting her sexual awakening her grandmother rushes her into an arranged marriage. Furthermore, in her relationship with Jody she is actively kept out of the community and he forces her to suppress her femininity. The most memorable act of violence is Tea Cake’s “whipping” of Janie on the muck. Yet each instance of violence is coded as an act of love.

To demonstrate these I will apply the proairetic code, or voice of empirics, developed by Roland Barthes, who played a significant role in developing the coding of texts. Using the proairetic code provides understanding of textual characters, and will prove that Bigger was destined to rape and kill Bessie, and Janie was destined to shoot Tea Cake because of the way they coded the worlds in which they lived.
Their Eyes Were Watching God: An Introduction to Multicultural Studies

Multicultural Studies is a unit the common core specifically requires of English middle school and high school teachers. Students are supposed to learn how to analyze works from outside the United States to gain a broader scope of reading. In addition to this, students should be required to study the many cultures within the United States. These cultures are likely part of lives of American youth, and, unfortunately, many students are consciously or subconsciously ignorant of the different cultures.

Zora Neal Hurston’s Their Eyes Were Watching God is the novel Utah high school educators (9th-12th grade) should use when beginning a Multicultural Studies unit. It focuses on three social problems that students need to understand within their own culture, and are also prevalent in almost every other cultural: race, class, and gender. Brenda M. Green developed a study—based on Their Eyes Were Watching God—that raises, and tries to answer, the question, “How do I help my students connect this text with their lives?” I plan to use Green’s study, as well as comparing the themes of Hurston’s novel with the following common pedagogical theories: Rhetorical, Feminist and Cooperative Learning, to prove that Their Eyes Were Watching God is the best work to aid students in connecting with cultural works within and outside their own.

Black and White on the Map

Spatial Racial Relations in Native Son and Heart of Darkness Racial interactions are directly affected by the spaces that the races occupy and the boundaries between these spaces. Both Native Son and Heart of Darkness deal with those who transgress the boundaries between these racial spaces and the consequences of these transgressions. Although Bigger and Kurtz transgress these different racial barriers—seeking the “white spaces” on the map—with different motives in mind, the consequences of their transgressions are startlingly similar: they both lose their lives. My paper will evaluate the effects of transgressing boundaries on both white and black characters—and probe into the question of why transgressing these boundaries are so detrimental to the individuals who do so.
“Kill that Black Ape”: Atavism in Native Son

In African American literature, atavism is one of the prevailing themes that readers can interpret in a variety of ways. In Native Son, the reader watches as Bigger sinks deeper and deeper into the workings of a white society due to an accidental murder committed out of fear. Bigger is vehemently rejected based on the color of his skin, and is looked upon as a wild animal running rampant through civilized society.

This rejection based on race is made more interesting due to the “mixture of blackness” that the protagonist has. Though the exact African blood that Bigger has is not stated in Native Son, the reader knows that Bigger is very dark skinned. In direct contrast, Janie, in Their Eyes Were Watching God, is a quadroon, and Hurston reemphasizes Janie’s fair skin throughout the novel, arguably showing how Janie is treated fairly on account of her fairer skin. Bigger, however, is subjected to white-inflicted stereotypes of an animalistic nature, and a corrupt mockery of a trial. Therefore, it can be concluded through Native Son that atavism and the white fear of interbreeding with a darker-skinned African American has allowed racial slander, slurs, and stereotypes to also run rampant through our past and present societies.

History of the Harpsichord

Short Presentation about the history of the harpsichord, followed by a performance.

Determination Of Chlorophyll in the Surface Water of Southern Utah

It has been shown that the amount of chlorophyll in surface water is directly proportionate to the amount of dissolved Oxygen in that body of water. This experiment relates the amount of dissolved Oxygen in the surface water of Coal Creek reservoir and surrounding bodies of water to the relative health of the aquatic life they contain by chlorophyll concentration analysis. The emphasis of this presentation is on the experimental method used to determine the concentration of chlorophyll in surface waters, including: preparation of standards, background/explanation of the instrumentation used, quantitative analysis of the obtained results, and discussion concerning the accuracy of the calculated concentrations of chlorophyll.
Ascorbic Acid Concentration of Beverages Using HPLC

We have used HPLC to determine the amount of Vitamin C in beverages. We used ascorbic acid to find the linear range and detection limit of our method using High Performance Liquid Chromatography, HPLC. After we determined the linear range and detection limit of our method, we were able to determine the concentration of Ascorbic Acid in select beverages. To verify reproducibility we measured our standards on different days. Our presentation will include our findings and considerations for future experimentation.

Determination of metals in the Surface Water of Coal Creek

We have taken water samples from Duck Creek, Coal Creek, Beaver River, Virgin River, Santa Clara River, and Lake Quitchipa. The purpose of our experiment will be to determine the metals present in our samples. This will be done using ICP-MS. Some of the metals we will be analyzing are sodium, potassium, iron, and any trace metals in the water. In this analytical process we will determine the detection limit of our ICP-MS as well as determine the linear range of our method. We will basically be screening the water for any possible metal concentrations.

Determination of Heavy Metal Concentrations in Cedar City

The importance in understanding where pollution comes from helps in the prevention and aggregation of pollutants. There are two sources from which pollution can arise, Point and Nonpoint. Point source pollution is pollution that has a discernible location, whereas nonpoint source pollution is not. Some examples of nonpoint source pollutants include: heavy metals, persistent organics, and nutritional elements. In this research we focused on analyzing the heavy metals in various parts of Cedar City, Utah. Six students in an environmental chemistry class collected various water samples from different places (examples are gutters and coal creek). 14.0 ml of each sample was prepared with approximately 1.4% nitric acid. Once all the samples were prepared, an inductively coupled plasma mass spectrometer was used to determine the concentrations of each heavy metal. The results of each sample will be presented at the festival of excellence.
Examining Perceived Attitudes of Counseling between LDS Religious Leaders and Mental Health Therapists

Perceptions between counselors and LDS religious leaders regarding the value, function, and efficacy of mental health therapy were examined. Data consisting of 109 participants (i.e., attitudes of LDS religious leaders, counselors, and general population; still collecting) were analyzed. Results showed less than favorable attitudes towards mental health therapists and the work they do with clients by LDS religious leaders. Conversely, mental health therapists viewed LDS religious leaders more favorably as well as the work they do with their congregation members. Implications are discussed related to these findings.

Good Speaking Tips

A poster with speaking tips

Examining Aspects of Religiosity and Personality Traits Among LDS Individuals

Although there have been documented studies on religiosity and psychological well-being (Allen & Heppner, 2011; Yeh, Arora & Wu, 2006), little is known about LDS individuals regarding their religiosity and personality traits, specifically agreeableness and openness to experience. This study strives to understand the relationship between the level of religiosity of an individual and these specific personality traits. Ciciolla et al (2007) described agreeableness as a need to please others and defined openness to experience as a desire for new experiences. Studies show highly religious people tend to exhibit lower scores on anxiety (Allen & Heppner, 2011). Hovey and colleagues (2010) found college students’ levels of anxiety and depression decreased the more they attended religious services. Some research also point to a negative correlation between anger and religiosity (LeCheminant, Merrill, & Read, 2009). In order to test these factors, participants were surveyed using four psychological scales which were the Big Five Inventory (BFI), the Religious Commitment Inventory-10 (RCI-10), the Clinical Anger Scale (CAS), and the Social Interaction Anxiety Scale (SIAS).

In 2004, a National Breastfeeding Awareness campaign was launched with the goal of promoting breastfeeding among first-time parents. To communicate breastfeeding messages, a variety of public service announcements for television, radio, newspaper, and Internet were used. While surveys found TV to be most effective in raising awareness, the purpose of this study was to more closely examine the effectiveness of breastfeeding messages viewed in a college age population. One hundred twenty-nine students, 86 women and 43 men, mean age (20.8 ± 3.6), at Southern Utah University participated in the experiment. YouTube was used to find videos with different approaches for breastfeeding advocacy: Video one, “Reflections of Breastfeeding”, used an emotional approach. Video two, “Whip ‘Em Out”, used an “in your face” approach. Video three, “Breastfeed with Confidence” made by the Delaware WIC program, used a factual approach. Students viewed one of three videos and then completed a questionnaire. One-way ANOVAs were run to determine significance between groups. It is worth noting that “Whip ‘Em Out” was the most controversial video (at least in the opinion of the research team), yet was well received by the subjects. The mean values of all groups in all conditions suggest a sample that is highly supportive of breastfeeding in general. Still, the differences among groups demonstrate that presentational techniques do have considerable impact, especially when attempting to educate students about a sensitive topic such as breastfeeding.

Developing Recipes That Reduce Overall Fat Content In Baked Desserts With Common Foods as Fat Substitutes

High intake of fat in the average American diet is an ongoing concern to the nutritional community. The successful development of low-fat recipes that can be produced by the general population may be valuable in the fight against CVD and obesity by reducing overall dietary fat intake. Researchers experimented with various common ingredients (applesauce, yogurt, pureed legumes, etc.) used as fat substitutes to produce four low-fat dessert products from popular recipes. Fat content was reduced by 56-73% from the original recipes. Fifty-six volunteer participants, age range 18-31 years, 37 female and 19 male, sampled each dessert and completed a short evaluation of the products. On a 7-point scale (1 extremely disliked to 7 extremely liked) products were rated with a mean acceptance score of 4.83 (brownie), 5.20 (oatmeal cookie), 5.45 (spice cupcake) and 5.49 (chocolate chip cookie). After being told the products were lower in fat, the percent of participants still deeming the products acceptable was: Chocolate Chip Cookie (96%), Oatmeal Cookie (93%), spice cupcake (75%), and brownie (64%). When queried as to common ingredients that could be substituted for fat in baking, participants' knowledge was lacking. They correctly identified applesauce and yogurt as possibilities, but incorrectly suggested usage of sugar substitutes, milk, margarine, whole wheat flour, and brown sugar. Although this population was accepting of the lower fat food products tested, they may benefit from education of suitable fat substitutes and how to utilize them in recipes as one strategy to lower dietary fat intake.
Use of Complementary and Alternative Medicine

Complementary and Alternative Medicine (CAM) has been defined as any ingestible herb, supplement, or other substance used to increase one's health or well-being. National studies have examined the usage of CAM, however little information is available, regarding CAM use and knowledge in rural, college-age population. The purpose of this study is to examine the knowledge in rural, college-age population. The purpose of this study is to examine the knowledge Southern Utah University (SUU) students have of CAM, usage by this population, and the reasons for using these products. It is hypothesized that >50% of CAM users do no discuss their alternative therapies with a health care physician. Additionally, it is hypothesized that students diagnosed, or having a family member diagnosed, with cancer are more knowledgeable/more likely to have a used CAM therapies. Four hundred seventy-six students were surveyed in a convenience sample of 14 general education classes. Results show 94.7% reported they has used CAM, however, when multivitamins are exclusd that number drops to 87.6%. Most frequently used items: fish oil, herbal/green teas, essential oils, and melatonin. Reasons for use: overall health, performance enhancement, and mental health. Of those diagnosed with cancer, 25% used CAM as an alternative treatment. Of those surveyed, 33.7% reported their doctor does not know about their CAM usage. Over 73% said they wanted to know more about CAM, indicating a general interest in the subject. Health professionals need to be educated about CAM as they will likely encounter future patient usage.

Study of A1c and Body Fat Among SUU Students, Staff and Faculty

The goal of this project is to measure glycated hemoglobin A1C levels, an emerging diagnostic marker for Type 2 diabetes, and percent body fat of 500 students, faculty and staff on the campus of Southern Utah University and to determine if there is a relationship between these two tests and other health-related variables. The A1C test is simple but it is inaccessible to many people because of the cost. This project will not only raise awareness of the importance of A1C levels, but will also provide the SUU population an opportunity to learn their A1C level. The average American may not have ready access to equipment to measure body fat, so they use less reliable indicators such as weight, to determine their health status. Awareness of percent body fat can potentially motivate individuals to make appropriate lifestyle changes to enhance health.
Nematocyst Production in Well-Fed vs. Non-Well-Fed Anemones

Resource availability can fluctuate in both space and time. This patchy distribution of resources can act as an environmental stressor, resulting in acclimation within organisms. Like other resources, food availability can be variable over time and space, and the lack of food availability can be stressful for organisms. Symbiotic organisms such as some cnidarians receive nutrients both from their symbiotic dinoflagellates and through prey capture using specialized cells called nematocysts. Symbiotic cnidarians can supplement heterotrophic feeding with photosynthate from their dinoflagellate symbionts. Thus, some cnidarians can persist in relatively low food environments with extremely variable prey availability. We tested the effects of feeding frequency on nematocyst production in Aiptasia pallida, a sea anemone. We hypothesized that A. pallida would up-regulate production of nematocysts when starved as a secondary mechanism for surviving low food availability. Five tanks of A. pallida were fed twice a week (well-fed) and another five were fed once a month (starved). We quantified nematocyst production by crushing A. pallida tentacles and counting the number of nematocysts in a known volume of solution. Our results indicate a significant increase in nematocyst production in the starved anemones. We suggest that the starved A. pallida produce more nematocysts in order to capitalize on prey when available. Our study helps clarify how some organisms may cope with fluctuating resources, such as food availability.

Effect of Alcohol on Stress Level in Tadpoles

Glucocorticoids are a family of hormones that are released after vertebrates go through stress for a prolonged period of time. High and prolonged levels of glucocorticoids in the blood may have negative effects on vertebrates such as hyperglycemia, hypertension, lowered immunity response, and higher levels of LDL cholesterol. Unfortunately, most research has taken place in humans. The hypothalamus of tadpoles signals the release of glucocorticoids, just like in humans. I propose using a controlled experiment that will allow me to measure the effect of a stressor before amphibians have gone through metamorphosis. I will use 20 tanks per treatment. One treatment will be the control group with de-chlorinated water. The second treatment will contain alcohol in de-chlorinated water. At the conclusion of the study, I will be using analysis of variance (ANOVA) to compare growth, white blood cell ratios, and stage of development.
The Effects of Diet on Macronutrient Preference in Crayfish

Obesity is an increasing epidemic in humans. This widespread disease not only affects the physical health of an individual, but also the behavioral preference for food intake. Research has shown that animals choose their food based on their body composition. Furthermore, food choice has been found to be related to previous diets. This study will demonstrate the role of previous diets on food choice and consumption within invertebrates. Crayfish will be used to assess this preference in two experiments. The first experiment will test the amount of food consumed, while the second experiment will focus on food choice. Both experiments will be based on a steady, preliminary diet of either proteins or lipids. For Experiment 1, we hypothesize that crayfish will eat more of the opposite diet than what they had been previously fed. For Experiment 2, we hypothesize that crayfish will choose to eat the opposite diet from preceding food intake. This research will bring a deeper understanding concerning food choice behaviors within invertebrates. Ultimately, recognizing these behaviors may help us more clearly define the obesity epidemic. With better comprehension of food preference in the animal kingdom, we will help humans understand the reasons this disease is so encompassing and what steps can be taken to combat it.

Innocent Freed From Prison

A Meta-analysis of articles about people who have been freed from prison after a decade or more of being wrongly imprisoned. Covers issues such as lack of family support, unable to get jobs, and lack of resources given once they are out in the world. Also a small look at the attitudes of exonerees.

Bone Density of Athletes Versus Non-Athletes

Osteoporosis is a common disease that reveals itself as fractures occurring at multiple skeletal sites, most often occurring at the spine, hip, or wrist, and causes significant injury and mortality. Prevalence of osteoporosis in the United States is estimated to increase from ~10 million to >14 million people in 2020 (based on 2000 census data). The risk of developing osteoporosis decreases with how dense a person's bones are. The null hypothesis of this research is that there is no difference in bone density of college students based on participation in athletics.
In this essay, the craft and art of creative writing from a “quasi-mystical” perspective is analyzed, using the definition of magick proposed by Donald Michael Kraig, altered somewhat by myself: “Magick is the process of effecting a change in the author’s self, consciousness, or in the world around us, using means not currently understood by Western science.” This definition is central to the argument I espouse, that writing is magickal in its own right, but that the magickal element involved can only be properly assessed through the reaction of the individual reader. A simple premise backs this concept: A well-written creative work can directly, deliberately affect the reader as the writer intended (i.e. garnering the intended response is not an accident or a fluke). A skilled writer can make the reader laugh, cry, feel anger, arousal, or any other emotion. The alchemical reaction we understand as reading and enjoying fiction occurs when a skilled author puts the inert building blocks of letters and words into a particular order. This reaction occurs because the author transmutes the inert material (the “lead” of the words) into something far greater than the sum of its parts (the “gold” of a well-written story). This magick doesn’t happen for every reader with every story or novel. However, I advance the hypothesis that any reader may find any poem, story, or novel to contain something worth obtaining if read at the correct time under the correct circumstances. This is the mystery, and the magick, of writing.

Adam Lambert

Parkour and A Prayer for Higashi Nihon: Two Newly Published Works Presented by the SUU Wind Symphony

(Total performance time with both pieces 11:30) Dr. Adam Lambert, of the SUU music department, recently attended the Midwest International Band Clinic in Chicago where he, among other directors, was presented newly published works for wind band. Among them were two pieces of which were chosen for this semester’s repertoire for the SUU Wind Symphony. The first piece, A Prayer for Higashi Nihon, by James Barnes, was published just this month, (January 2013) and is a stirring reference to the horrible earthquake and tsunami in Japan in 2011. The piece is not a representation of these events, but a prayer for those who suffered and are still suffering from the tragedy. The piece begins very solemn and contemplative, but later, and very gradual, it begins to portray hope and optimism until the final, victorious finish. Parkour, by Samual Hazo is an aggressive and exciting piece, employing unique rhythms and harmonies along with a complete jazz section. In the composers own words: Parkour is the “art” of overcoming physical obstacles with the greatest amount of grace and perceived ease, although nothing about Parkour is easy. The “artists” who do Parkour are called Traceurs and their “tricking” maneuvers are tremendous feats of strength and appear to defy gravity. These moves have names that describe them literally: King Kong Vault, Cat to Cat, Wall Runs Palm Spin etc. (Hazo, Samuel. Parkour. 2012. Milwaukee, WI: Music Works, 2011. Score.) The SUU Wind Symphony is comprised of both Music Majors and non-majors and is an auditioned group. Membership is 45.
Valuable Tips for Helping Students with Emotional and Behavioral Disorders Succeed in the Classroom

Meeting the needs of students with emotional and behavioral disorders (E/BD) in a general or special education K-12 classroom can be challenging, yet rewarding. Teachers have reported that the positive influence their efforts have on students with emotional and behavioral disorders lives is tremendous and the memories will stay with them forever. Teachers who take the time to understand and implement the types of support necessary to meet students with E/BDs’ unique individual needs will have a true impact on these student lives. Teachers can successfully include students with E/BD in a general or special education classroom when they 1) build relationships with students, 2) investigate the students’ unique individual behavioral and academic needs, 3) choose effective reinforcers, and 4) provide opportunities to succeed. This presentation will provide attendees detailed examples and materials necessary to implement these four tips when working with students with E/BD in a general and special education classroom. For example, activities that facilitate building relationships will be presented, how to write and implement a behavioral support plan will be discussed, how to choose effective reinforcers will be described, and how to create opportunities to succeed will be demonstrated.

Emotional Intelligence: A Means to Improve Your Coaching

Unmanaged emotions can derail individuals, but this must not be misconstrued to mean that emotions should be ignored or suppressed. Emotions happen to coaches, players, and fans. It is human to have emotions; they play a critical role in influencing how people think and behave. When emotionally upset, people cannot remember, attend, learn, or make decisions clearly. On the other hand, coaches who understand the nature of emotions and how they influence coach and player behavior, have a marked advantage in terms of influencing others to reach individual and organizational goals. Being attuned to feelings, being able to read the emotions of others, understanding what causes emotions and how they may be utilized, and allowing emotions to motivate, inspire, and drive decisions are key competencies coaches should strive to develop.

Making STEM Steamy and The Fire Circle

Part 1: Presentation will illustrate benefits of a successful partnership between a University Teacher education program and area school districts, through engaging in STEAM (Science, Technology, Engineering, Arts and Math) inservice and preservice professional development. Presenters will discuss how the partnership brings Higher Education Content experts together with Elementary Education Students and Inservice teachers to enhance knowledge of Key steam curriculum concepts. Part II A presentation of over two of taking preservice teachers on overnight field trips in project WILD. Following participation in integrated outdoor education activities students are provided with an opportunity to discuss environmental standards around a fire circle, and reflect on the the importance of inquiry based learning.
Bread, A Common Cultural Thread for All Ages

Bread, A Common Cultural Thread for All Ages Workshop Description: Found on most dinner tables across the globe, bread is often the staff of life. Participants will examine the cultural significance of bread in family traditions and celebrations. Recipes from households around the world will be shared in the context of family customs. Curriculum materials, lesson plans, and recipes included. Objectives: - identify typical breads from a variety of cultures - recognize the holistic significance and utilization of bread in multiple cultures - integrate cultural customs involving bread into P-12 classrooms Participants will increase their ability to integrate curriculum components, expand their repertoire of cultural food experiences, and develop a greater appreciation for diverse cultural perspectives. Current research emphasizes the need for educators to provide hands on experiences with cultural diversity. This workshop aims to increase attendees' knowledge of the many uses of bread across cultures. Everyone eats; most everyone eats some form of bread! Participants will learn about the history of bread, the nutritional value of bread, and view a variety of cultural memories of the significance of bread. Teaching activities will be integrated including video interviews, online resources, and children's literature.

Treagedy Without Tears? Confronting the Contradictions in C.P. Snow's Gospel of Science

In his landmark 'Two Cultures," physicist-novelist C.P. Snow captured a global audience for his assertion that the progress possible made it possible to transcend the individual tragedy of mortality by advancing the progress of the species as a whole. Those who see in science a cornucopia of technological, medical, and industrial marvels will likely share Snow's view. However, this is a shallow and theoretically vapid understanding of modern science. Sober reflections on science--especially scientific cosmology--reveals that the ultimate message of science is not one of boundless progress for mankind but one of eventual extinction. Far from delivering a message of reassuring hope, science compels us to confront the futility of human existence, at least within scientific understanding, and to look for ultimate meaning beyond what immunologist and Nobel laureate Peter Medawar has called "the limits of science."

Preservice School Teachers as Learners in a 3-D Virtual Space: Second Life

What effect does video game play have on pre-service school teachers entering a 3-D virtual world as students? This experience will share dissertation research which investigates possible answers to this question, and gives a visual experience with 3-D virtual world of Second Life. Keys topics include how transactional distance gap (psychological gap that occurs when instructor and learners are geographically separated) may be mitigated using a 3-D synchronous environment for teaching and learning. Also, learn how video game experience may influence online learners who use virtual shared spaces for teaching and learning. Finally, understand the significance of Coleridge's "suspension of disbelief" in order to make online learning technologies transparent so learners may focus on learning, instead of technology.
Six ArtsBridge Scholars spent this school year learning how to teach science concepts through their specific art form. Each SUU student worked with a teacher at North Elementary, our local STEAM (science, math engineering, ARTS, and math) school, to understand science lessons the children needed to learn. The challenge for the ArtsBridge Scholar was to create lessons to teach those concepts through the art form they have studied in depth in the College of Performing and Visual Arts. ArtsBridge emphasizes hands-on participatory instruction and involvement. The goal is to engage children in active acquisition of knowledge and skills, and the creation of art and discovery across disciplines. The SUU students learn how to motivate children and keep them on task. For example, a fourth grade class is creating a series of short plays that is based on facts relating to fossils and dinosaurs with theatre arts major Madison Hayes. Melanie Skankey, who is the theatre arts specialist at North, directed this project. She is a former ArtsBridge scholar during the 2008 school year. All children involved in the ArtsBridge program will be performing and/or displaying their newfound knowledge and their creative projects at “The Big Event” at the Randall Jones Theatre on April 12.

Watchmen

Watchmen, is an original choreographed dance work by Rebecca Boizelle, was inspired while she studied Dance abroad at the National Taiwan University of Arts in Taiwan in the Spring of 2012. Upon returning from the study abroad, the ideas and concepts as well as the influence of Asian dancing were constructed into the piece Watchmen. It was first presented in Boundless Journeys, the Fall Student and Faculty Dance Concert at Southern Utah University. Watchmen has been selected for adjudication in the Spring 2013 American College Dance Festival hosted at Southern Utah University. The piece integrates cultural, religious and historical points in a spectrum broad enough to be accessible to a general audience, creating a vivid and exotic performance that will both entertain and provoke inner questioning.
"Seeds Blowin' Up the Highway: Archetypes and Relevance in the Lyrics of Bruce Springsteen

Springsteen’s “broad” and “vague” lyrics reflect a poetic consciousness, one that is not rooted in specific events, but is applicable to a wide range of emotions and circumstances. This is the work of a poet for the ages, rather than that of a commentator on current events. In recent years, the release of a new Springsteen album has been assumed to coincide with specific socio-political circumstances: "The Rising" for September 11, 2001; "Devils & Dust" for the U.S. invasion of Iraq; "Wrecking Ball" for the struggling post-Bush economy. Though Springsteen’s publicity machine has done little to discourage this, it is more accurate to compare Springsteen’s work with that of other singers and poets whose work has fit the circumstances of later times: W.H. Auden, Woody Guthrie, and even Shakespeare. My paper will argue that Springsteen’s lyrics need to be considered from this poetic perspective rather than from the more immediately gratifying, but temporary, perspective of current events. I will discuss the above examples of Springsteen’s work to demonstrate how these songs have and will continue to remain relevant long after the specific circumstances of their composition have faded or are forgotten.

Factors That Affect Teachers’ Attitudes Toward Using Technology Through a Comparison of U.S. and Japanese Practices

The use of technology within schools is of great importance and it is imperative to identify what factors may be keeping some educators from implementing technology in their classrooms. Recent studies have shown when educators utilize technology in their classrooms they have higher levels of confidence, engage in greater collaboration efforts with colleagues, and participate more frequently in professional development activities. While numerous studies have examined various factors that affect teachers’ technology attitudes and use of technology, there is very little research conducting an international comparison on this issue. In the present study, the student researchers, along with faculty mentors, have conducted a cross-cultural analysis between the United States and Japan, which compares the attitudes of elementary school teachers towards technology use. Although both Japan and the U.S. are technologically advanced nations, the study examines how extensively technology is used in educational environments with differing teaching customs.

Explaining Why NBA Franchises Move

Professional sports fans regard franchises as belonging to a city, but franchises are private firms. We explore factors that make franchises move, such as national economy, size of the metropolitan area (size of the TV market), relative size of the metropolitan area, team record, death of an owner, and age of the facility. We investigate using the statistical models of least-square regression (which is inefficient/inferior) and probit/logit.
Medieval Swordsmanship: The German Tradition

Warfare had a constant presence in Medieval history, but there is little evidence that allows a modern scholar to accurately reproduce the practice of arms as it existed in the Middle Ages. The most enlightening source available is the German fighting manuals produced from the thirteenth century through the seventeenth. This study attempts to review the major works scholars have at our disposal and to analyze the commonalities between them. German manuals were produced far earlier than their counterparts in other parts of Europe. They included a far wider variety of weapons and hand-to-hand combat techniques. In addition, the actual methods of practice are nearly identical, based around the principles of the longsword set down in the verses of Johannes Liechtenauer. Though sword masters were notoriously secretive about their methods, examining many manuals allows the modern historian to understand the principles that governed the art of fighting in the Middle Ages.

What's In A Name?

A powerpoint presentation on different aspects of first names. This includes the Kabalarian Philosophy of names, the baby naming industry, and the transformation of modern African American names. (**will need a projector and internet access**)

Study a Competition Model in Math Biology

We study a Lotka-Volterra competition model. By using the nondimensional method, we study the stability of the steady state solutions for this system. Also a stable numerical scheme is proposed to verify theoretical results of the system.

Applications of Lagrange's Method in Economics

We study the relationship between the investment and labor cost of a firm to determine the effects that a government constraint can have on a firm. This is an optimization problem. Using the Lagrange multiplier method and numerical analysis, we were able to determine the direct effects that the government constraint can have on a firm's ability to make a profit.
Nepali Female Migrants in US Informal Economic Sectors: From Women’s Agency to Transnational Community-Building

This study explores the work and community lives of Nepali female migrants/immigrants who work in informal economic sectors in Boston and New York. The study focuses on the multifaceted lives of Nepali women and their simultaneous engagement in socio-cultural, economic, and political transnationalism. The study illustrates the power of women’s agency and leadership in building local and transnational communities.

Using the Lagrange’s Method to Study the Shape of a Can

We study how to minimize the cost of the metal to make a can. When the volume of a can is given, by using the Lagrange’s method, we can determine the height and radius that minimize the cost of the metal to make the can.

Faith Based Cultural Force at a Regional Public Institution: Faculty Socialization In A Shifting Community Context

Using ethnographic case study research methods, this constructivist study explores the influence of a faith based community culture on faculty socialization at a regional public institution of higher education. As demographics in the geographic region shift, research participants described a community in transition, where divisions between community members influenced the everyday socialization experiences of faculty members. Stories emerged relating to a strong, homogeneous religious force, which played a significant role in shaping community and campus culture. Findings shed light on a dichotomy of perspectives related to a variety of issues, including faculty roles and expectations, diversity in the community, community interests, open mindedness, appreciation of the community’s history, the influence of the faith based culture on campus, and political processes in the community.
Engagement-Friendly Rank and Tenure Models

Since its inception, American higher education’s purpose was to meet the needs of communities and to build national competencies and infrastructure. Through the years, those in academic positions have become more invested in disciplinary specific endeavors and less inclined to contribute to community initiatives and programs in beneficial ways. Requirements for rank and tenure, which are central for the success of faculty members, have traditionally valued peer-reviewed publications over other types of faculty contributions. Given the choice, junior faculty are sometimes forced to choose between working on scholarly endeavors with a goal of being published and advancing the discipline, and those programs that tend to be inherently valuable to students and communities that may not readily lend themselves to that level of publication. However, in recent years many universities have shifted to a more engagement-friendly approach to evaluating faculty contributions. In this presentation I plan to discuss several models being adopted by high quality universities across the country. I will discuss options for SUU and welcome dialogue about pro’s and con’s of each.

TEDx Summit in Doha, Qatar

In this presentation, Nickerson and Petersen will present a brief history of TEDxSUU, including the involvement of the SUU Honors Program and the Creativity Center. They will share information on organizing the events, participating in a global idea dissemination platform, and how being part of this global network has enlarged their sense of how local efforts contribute to global-level change.

Negotiation Wilderness: Striking a Balance Between Economic Growth and Conservation in Southern Utah

Over the last decade, Washington County, Utah has been one of the fastest growing counties in the nation. It is not surprising then, that land management issues are of top priority in the county. Rapid growth has created critical land management needs, placing significant pressure on county, state and federal officials to effectively manage expansion issues. In 2006, former Senator Robert Bennett, (R-Utah) and Congressman Jim Matheson, (D-Utah) took the lead on the issue and developed legislation that would re-designate many portions of the county to allow for growth and also designate portions for preservation. This study examines the process which led to the construction and ultimate passage of the second, re-introduced version of the 2006 bill which became law in 2009—the Washington County Growth and Conservation Act of 2008. The legislation was a unique product of collective action, inspired by similar bills in neighboring Nevada counties, which sought to resolve issues of economic expansion in areas where land access is severely limited. Employing stakeholders at various levels, the Utah delegation compiled a bill that offered incentives for all and as such, the legislation enjoyed a broad base of support. By fostering negotiation among them, the political actors were able to resolve expansion issues while also advancing the respective interests of the stakeholder parties in a singular piece of legislation. The unconventional manner by which the bill was crafted, the circumstances that gave the effort momentum and the trade-offs that made passage possible produce a chronicle worthy of examination.
Outdoor Scholarship

Americans are increasingly disconnected from the natural world and as a society we are beginning to see the consequences of this disconnect in our health and well-being (AGO, 2011). In 2011 President Obama launched the America's Great Outdoor campaign to gather input from across the country to create a conservation vision for the 21st Century. Youth engagement became an important area of focus. Public land agencies, universities, and other educators have been charged with re-connecting youth to the outdoors. The Harry Reid Outdoor Engagement Center is uniquely positioned to contribute to this effort. The center’s mission ends with the charge to “progressively engage (the SUU community) in outdoor learning, service, and leadership that actively improves the outdoor experience for everyone (HROEC, 2012),” The purpose of this presentation is to first review the literature on outdoor engagement in terms of learning, serving, and leading in the outdoors. Next it will highlight outdoor engagement projects on campus to show how we are already contributing in very real ways to the president’s call. To end, the presentation will challenge SUU students, faculty, and staff to pursue outdoor scholarship, contributing to our understanding of how we can be a healthier society by being engaged in the outdoors.

Wrath, Wrath, Wrath - Somebody Stop Me: A Reading

Two poems; although, I call them deadlines. Neither slam nor spoken word - just read out loud.

Assess This! The What and How of Assessing Psychology Department Goals and Student Learning Outcomes

With new accreditation standards and an era of increasing accountability, higher education is faced with the somewhat daunting task of defining and assessing what they do. Government agencies, employers, parents and other special interest groups are demanding evidence of “value added”. However, from a faculty and department head’s perspective, this can be a very elusive and moving target. Frustrations echo through department hallways, leaving us to wonder whether it’s too late – we have lost our minds! This presentation is intended to share ideas of what constitutes reasonable goals and outcomes and best practices for assessing them. Although this topic may appeal most to department heads, assessment, and curriculum committee members, it is open to anyone and everyone with a mind toward satisfying external pressures for departmental assessment and an intrinsic desire to provide students with a meaningful, useful degree.
Hippolytus - A Study in Creative Theatre

Modern actors have been trained to satiety to develop instincts toward naturalism and realism. We have lost, to a degree, the power that can be found in the exploration and expression of the full intensity of a moment. The power of a chorus and the uninhibited expression of a mask can provide a wonderful cathartic journey. The closest we come in a current society to such full and committed expression is Grand Opera, or sometimes Hard Rock concerts. I am exploring the forms of ancient theatre that serve as a mask. The irony is that this metaphorical mask actually frees the performer rather than inhibit him. Seneca's version of the Hippolytus/Phaedra story is particularly rhythmic and musical. In an attempt to teach my students the power of stillness, embracing form, and complete commitment to each moment, I have developed a way to tell the Hippolytus story through short intense scenes. With each scene the performers take on different roles, but the storyline remains clear. Hippolytus is the story of King Thesius and his young wife Phaedra. Phaedra begins to experience sexual attraction for her stepson, Hippolytus. Our presentation explores the transitional moments in this tragedy.

Camille Bahoravitch

America, This is You

America is known as a free country, but freedom is not everything...

Shawn Domgaard

The Magic of Film

This project focuses on the impact of film on culture and identity. It strives to interpret what film tells us about ourselves, and what we value. Also the underlying rhetorical value of film as a narrative medium, and what specific source texts say about the magic genre. The movies "The Prestige" and "The Illusionist," act as the sources for studying magic within movies. It will further provide the value society places on magic and a critical analysis of the message(s) it sends.
Video Games in Academia

Video games are mostly studied by programmers who develop them and psychologists who typically are looking for a connection to violence or other negative consequences of game play. While games and gamers have often been labeled as "wasteful" or "childish," games, especially those with complex narratives, have theoretical, critical, social, and political implications as well and in that respect many games are on level with film and literature. Additionally, games have unique immersive elements and the ability for players to affect the story outcomes. Jane McGonigal, author of *Reality is Broken,* is a computer programmer who believes that the phenomenon of gaming can be harnessed to solve world problems. She argues that the average gamer plays 10,000 hours from 5th-12th grades, making them virtuosos at the skills required to play games (based on Malcom Gladwell's *Outliers*). And statistics show that games have become an enormous part of our society as a whole, not just for children or fringe groups. 67% of American households play games, the average gamer is 33, and 26% of gamers are over 50. As a media that influences almost everyone, it should have a bigger place in media and literary studies and eventually should be studied as its own discipline in academia.

The Role of the Bastard in William Shakespeare’s "King John"

In Elizabethan society, the bastard held a precarious position, outside the accepted social order but often near the center of power. Pedro de Mexia, in his compilation A Treasurie of Ancient and Modern Times presented “A Paradox, in defense of bastardie,” which placed the bastard above the legitimate child due to his more amorous conception, while John Donne’s “Why have Bastards best Fortune?” vilified the bastard as the son not of any human mother but of Fortune, whom Donne described as a whore. Into the midst of these two opposed theses William Shakespeare inserted Sir Richard Plantagenet, bastard son of Richard Couer-de-Lion by a country knight’s wife, in his The Life and Death of King John. Shakespeare’s Sir Richard utilizes his status as an outsider to drive much of the play’s action by supporting King John’s rule while at the same time shunning the accepted patriarchal order. Sir Richard walks a line between Donne and de Mexia, acting both as an example of the robust, joyful bastard defended by de Mexia and as a symbol of King John’s illegitimate rule, cursed to failure at the whim of Fortune as espoused by Donne. (to be presented on Shakespeare Studies panel with Abigail Gray Pipes and Jared Komoroski)

Untouchable

This piece is about relationships and the person in your life who you are physically close to but can’t seem to emotionally connect with them. There is a constant pushing away and attempt to reach out.
Utah Library Association Paraprofessional Certificate

Libraries statewide benefit from the work that paraprofessionals do. Librarians with Masters of Library Science degrees teach in an academic environment, but paraprofessionals on all levels do much of the other work in the library by helping to select and process materials, as well as manage their circulation. Paraprofessionals care about and are concerned about the future of libraries and want to contribute to their success for years to come. This poster session will share what kind of requirements are fulfilled in order to receive recognition from the Utah Library Association and receive a "Paraprofessional Certificate."

Numerical Analysis for a Lotka-Volterra System Involving Diffusion Terms

A study of a Lotka-Volterra predator-prey system involving diffusion terms without migration. A nonstandard finite difference scheme is proposed for this system. It is shown that the scheme is uniquely solvable, stable, and that the numerical solution will approach the true solution uniformly on a finite interval. This is a report of research done jointly with Dr. Jianlong Han.

The Art and Life of Jimmie F. Jones

In a powerpoint presentation I will give an overview of Jimmie Jones's life and artwork. This is taken from the book I am currently writing on Jones to be published in the fall of 2014 by Gibbs Smith Books. The presentation will include photos of Jones and of his art work.

The Thunderbard Project: Applying the Liberal Arts at SUU

This presentation was originally presented at the annual meeting of the American Association of Colleges and Universities (AAC&U) in Atlanta last January and details how SUU is applying its liberal arts mission for all incoming freshmen through the wholly unique Thunderbard Project.
The Challenge on Becoming a Converted Christian Woman

In 16th century England, there was a level of tension between Judaism and Christianity, and between what a woman’s role was at home and in society. William Shakespeare’s The Merchant of Venice, and Christopher Marlow’s The Jew of Malta address both of these issues through their female characters Jessica and Abigail. Both are Jewish women who are daughters of rich Jewish men, and each woman chooses to convert to Christianity for different reasons. Although both Abigail and Jessica converted to Christianity, they each would have been accepted differently by a Christian-based society. I plan to use Juan Luis Vives’s The Instruction of a Christian Woman—a text that would have been well known and referred to by Elizabethan society—to show that even though Abigail and Jessica were not originally Christian, they would have been judged by the same standards of a Christian woman, especially after their conversions.
Effect of Therapeutic Touch on PTSD clients

TT (Therapeutic Touch) is a complementary therapy used in a wide variety of patient conditions. The questionnaire was collected by individual therapists, anonymously by signed informed consents. The data was collected on Survey Monkey and consisted of 14 questions, some of which included responses. The purpose of the study was to explore whether the nurse healing modality of Therapeutic Touch has been helpful in treating veterans and others with the serious problem of PTSD and if further research on TT is worth exploration.

An Investigation of Current Social Engineering Issues and Solutions

The intended attacks towards emerging technologies have been increasingly challenging. Social engineering techniques are prevalent to manipulate people into performing actions or divulging confidential information. Nowadays, attackers have started to approach employees in organizations in order to compromise their security systems. Currently, most organizations do not properly educate their employees on the awareness and the negative effects of social engineering, since employees often give out sensitive information about the company and person confidential information, e.g., credit card number, social security numbers, passwords, and many other types of data, to attackers that even have very little knowledge of social engineering techniques. The main objective of this study is to investigate the current awareness of social engineering issues in our local communities, and to provide lessons for enhancing the members’ understanding of the potential security threats caused by social engineering. A qualitative approach is proposed for this investigation. A survey based on the social engineering theories and real world scenarios will be designed and delivered to knowledge workers on campus. Therefore, this proposed study aims to help local communities, including organizations and individuals, to enhance their awareness of social engineering, and learn about social engineering issues and prevention techniques.
Chemical Modification to Identify and Maximize the Anticancer Activity of Theaflavins from Black Tea

Theaflavins are small, organic molecules found in black tea. The polyphenolic compounds of this family have been shown to exhibit anticancer activity. However, very little research has been conducted in which an isolated theaflavin molecule was chemically altered and the anticancer potency of the resulting derivative evaluated. Our research involves the isolation of theaflavin molecules from black tea and their subsequent chemical modification by an SN2 alkylation reaction. The overall goals of this research are (1) to identify the molecular site of biological activity (pharmacophore) of the theaflavin family of molecules and (2) study the in vivo activity of theaflavin derivatives obtained from chemical modification. To achieve these goals, theaflavins are extracted from black tea in refluxing water. Caffeine is then removed from this aqueous extract by liquid-liquid partition with chloroform. The desired theaflavins are then transferred to an organic phase by liquid-liquid partition with ethyl acetate. The crude theaflavins are obtained by evaporation of the solvent under reduced pressure, and then submitted to the SN2 alkylation reaction conditions to produce the desired derivative. Future work will evaluate the biological activity of each new theaflavin derivative synthesized. This work toward the identification of the theaflavin pharmacophore will facilitate the rational design of new theaflavin based molecules with increased anticancer potency, and possibly provide a new line of anticancer drugs for the treatment of people afflicted with cancer.

Teaching Multicultural Education Through Digital Storytelling

Culturally Diverse children should be exposed to different races, nationalities and religions, to be more tolerant and accepting of individual differences. When the learn about custom's, rituals and beliefs of their class mates, they can learn to appreciate another way of thinking. This type of education prepares children to deal more effectively in society after they complete their education. They learn mutual respect and understanding of other cultures and it removes barriers and stereotypes that are preconceived. Diversity is here to stay and we need to teach the future generation the value of understanding and appreciating the differences in our very global communities. A group of pre-service teachers have created short videos to teach children diversity and tolerance. The presenters will discuss how teachers can incorporate digital storytelling in the classroom and promote multicultural education.

Migration of Lipids and Proteins in a Supported Lipid Bilayer

Supported lipid bilayer electrophoresis is poised to become an important technique for the purification of membrane materials, particularly membrane proteins. In supported lipid bilayer electrophoresis experiments, the initial and final positions of membrane materials can be predicted and understood mathematically. However, the position of the components during an experiment is more difficult to understand and predict and may be important if interactions occur in the course of a separation. We have simulated the movement of lipids using a modified finite difference method and are attempting to expand our simulation to proteins. We also compare our simulations to experimental data to evaluate the quality of the simulations and fine tune the constants in our equations.
A Little Service Goes A Long Way

Hello, I realize I'm a little past the deadline but I would still very much like to submit a proposal for the Festival of Excellence. I am planning on completing 2 separate service projects. The first will be an alternative spring break trip with the community engagement center. We will be helping VIA international and learning about the U.S./Mexico Border and the various service projects taking place in San Diego. I plan to create a video presentation highlighting my experience. The second will be a fundraiser project to aid the development in rural Uganda communities. I plan to involve mostly the Black Student Union and the Global Engagement Center but other clubs and individuals will be asked to participate. The funds raised will go to the Inter Ethnic Health Alliance. For this project I would like to create a poster presentation as well as a virtual presentation of some sort.

Virtual Labs: Experiencing Internet-Based 3D Spatial Training

Spatial skills are critical for higher-level thinking, reasoning and creative processes. Thanks to today's Internet technologies, students can access virtual labs for acquiring and improving their spatial skills. In this study, we designed and implemented two different Internet-based spatial training virtual labs including (1) a remotely controlled robotic system and (2) a 3D computer simulation system. Totally 208 college students were recruited to experiment with these systems. Student teams were formed to operate object rotation and movement tasks with shared task representations. Perceived training quality was found similar through both systems, and team familiarity was significant in contributing to both perceived learning and improved spatial skills. Shared task representations supported collaborative learning, but have no direct effects on spatial skills.

Food Security at Southern Utah University

In 2008, the percent of food insecure faculty/staff was 27.1%. In 2012 that number had decreased to 15.2%. In 2008 the percentage of food insecure students was 32.3%. In 2012 that number had decreased to 31.4%.
Hands-on Minds-on Computer Club (A North Elementary Computer Club extension)

Research has indicated that female children, children of ethnic minorities, and those from disadvantaged homes, are less likely to have opportunities to interact with technology (such as computer systems) outside of the school environment. With this in mind, a program was started in cooperation with Cedar North Elementary School and two SUU students (Myself and Ernesto Balderas), under the supervision of CSIS professor Dr. Shalini Kesar. The collaborative STEAM (appendix 1) efforts forged between Southern Utah University and North Elementary reinforced the curriculum devised to address this important issue. As a result, North Elementary Computer Club (NECC) is the first of its kind, because it targets as many students from these minority groups as possible with the hopes of engaging them and exciting them about the world of computer science.

The success of this semester’s NECC (appendix 2) program has led to a committed relationship between the two schools and a county wide interest that has even sparked solicitation from schools as far away as Washington County. Reaching as many minority students as possible and exposing them to the inner workings of a computer system (hardware and software) by creating hands-on/minds-on experiences to motivate exploration in the world of computer science is essential to the future of the field itself. In order to expand this fundamental program and meet the needs of the surrounding community it is essential to set up an umbrella club that will set and maintain standards from school to school. That is where Hands-on Minds-on Computer Club comes in.

The Calm Before the Storm: Mediation Before Due Process

Mediation is nothing new, but in the world of Special Education it is. Mediation is the step to take before going to Due Process. Mediation enables both sides, which normally consists of the school district and parents to talk about issues that have come up. Mediation became a major requirement when IDEA became IDEIA in 2004. It is not mandatory but is highly suggested. Mediation is cheaper and a better environment for all parties involved.

Role of P.E. Teacher in Special Education and IEP's

With the increase in population of students with disabilities and disorders as well as the push for integration when possible, the role of a general education teacher in a special education students life is crucial and physical education is no exception. The following will provide an outline of a physical educators role and responsibility through the referral stage, provide a general definition of Individual Education Plan and what to expect in an IEP meeting. Explanation of what Adapted Physical Education is and include examples to create individualized lesson plans insuring that every special education student can be safe and successful in the physical education class.
Prepare for the Transition Now

We all can admit that growing up is not easy. It is even more complicated for children and young adults with disabilities. Throughout your school career you are always transitioning and things are always changing. Going from a known, comfortable environment to one that is different and unfamiliar can be very stressful. Any student may experience academic, social, and emotional challenges in a negative or stressful transition but the severity and likely hood of the challenge increases in those students that have disabilities. It is important that we learn the tools necessary to help ease the process of transitioning that occur in the Special Education Program so that the students and parents get the best education possible.

Securing the Physical from the Digital

This poster presentation is of an equal contribution of information systems students including, Jared Close, Mikelyn Labrum, Conner Graves, Aaron Day and Brady Ashworth this poster has also be presented at the Leadership Conference; Lead, Share, Build; Together Today and Tomorrow as part of the curriculum for information security class for spring 2013. What is general security? Is it physical or digital? In the world today the line between the two has been blurred and makes it difficult for users to know what they are protecting and how to go about doing that. Not only are the users confused, but the leaders in the industry that create these physical objects are lagging behind on how to protect devices digitally. What we've decided to present is information in regards to the breaches of security on our physical items, and the companies that are working to stay ahead and keep them safe.

Tips for a Great Presentation

Okay this poster will be a poster with 10 do's and don’t's for delivering a great presentation.

Tips for a Great Interview

My research has stemmed from the top interviewing techniques that employers, professionals, and graduate programs look for in applicants. By abiding by these techniques, individuals have a better shot at landing their dream slot.
ability of wolf spider’s (lycosidae) to assess their nutritional needs and deficiencies

as humans, we have the ability to change our diets if we are deficient in any specific nutrient. many animals have the ability to change their diet if they are deficient in nutrients. however, for many carnivores, it is generally thought that a prey item will have the same nutritional composition as the predator body composition. carnivores are limited nutritionally in their diet meaning that they only get nutrients from the prey that they can find to consume. this study is investigating prey choice of invertebrate predators (wolf spiders) when their prey item has been altered to be deficient in one specific nutrient (lipid or protein).

a day in the life of a criminal scene investigator

crime scene investigators have a grim job when it comes to identifying what happened to a recently deceased person and the condition of their body when found. one must always treat a death investigation a homicide until it’s ruled out otherwise, determine if the wounds on the victim match up with the weapon found at the scene, and a myriad of other responsibilities they must do before release the scene to another agency by chain of command. this is a tall order for the CSI agent because not only does the evidence help the victim, but it can collaborate or diminish the suspect’s alibi.

semisynthetic preparation and biological evaluation of theaflavin derivatives from black tea

current research has shown that the molecule theaflavin-3,3’-digallate, a polyphenol found in black tea, has anticancer properties in its isolated form. however, very little research has been conducted in which the isolated theaflavin was chemically altered and the anticancer potency of the resulting derivative evaluated. we propose a research project to study the potency of alkylated theaflavin derivatives prepared by semi-synthesis. cancer will be induced in the model organism Caenorhabditis elegans by exposure to the carcinogen Aflatoxin B1. The anticancer properties of each new derivative prepared will then be evaluated on these diseased organisms. the overall goals of this research are (1) to identify the pharmacophore of the theaflavin family of molecules and (2) study the in vivo activity of theaflavin derivatives obtained from alkylation reactions. After identification of the theaflavin pharmacophore, scientists could then rationally increase the anticancer potency of the theaflavin family of molecules and possibly provide a new line of anticancer drugs for people afflicted with cancer.
A large sample (400-600 specimens) of Mediterranean pycnogonids (Phylum Arthropoda, subphylum Chelicerata) or sea spiders, from the shallow waters of Izmir Bay, Turkey are in the process of being sorted and identified. So far, 10 species, in four different families, have been identified. Initially, we were asked if the samples contained any invasive species, but, with 3/4 of the samples sorted and identified, all specimens examined are native Mediterranean species. The samples also contain a number of reproductive stages including eggs, larvae, and several different juvenile stages. Future research will include documentation of the life cycles (egg-adult) for those species for which we have all life stages.

Session 4

Jeremias Paul

Mikado: Photographs by Jeremias Paul

The theme of my photographic work and subsequent lecture investigates the connectivity between and the production of memories and how we transcend into other people’s experiences through the photographic medium. I am interested in the seemingly factual evidence that photographs supply, how it can be contextualized, and how our experiences of photographs lead us to our own, sometimes misguided and always interpreted, truths and understandings. Through the obsessive collection and dissemination of various details about my life and photographic work, I will bring parallel my seemingly objective understanding of the world around me with the brink of delusion. Topics discussed in my work and lecture will include my ancestry in my birth town of Erlangen, Germany and it’s beer-based celebratory roots leading me to my shared collective memory with German photographer Juergen Teller; my only artistic connection in my family through my uncle Dieter and Erik Kessels’ found photographs of Ria van Dijk, leading to my eventual drowning in Walden pond; my travels to ancient world capitals and rumors about New York City leading me to find the connection between people’s landscaping in southern Utah; and my childhood dreams of survival confronted by a religion and four percent humidity.

Robert Durborow

Lucky Penny

Lucky Penny is a play about relationships, power, greed, and human value. Originally written for 24 Hour Theater, this play was revised and refined based on acting methods and techniques taught by Peter Sham. The focus of this honors contract was to illustrate the connection between the arts of theater and creative writing.
The More the Merrier: Students Choose their Own Textbook

The Information Age is changing the role of the teacher in the classroom. With vast amounts of informational readily available to students the instructor's job is no longer the keeper but rather the facilitator of information. The presentation will report on a recent pedagogical experiment conducted in a Western Civilizations survey course where each student was allowed to select his/her own textbook. Students were given basic guidelines for text selection and were free to choose any book that met the basic requirements. Student feedback was secured through an online survey at the conclusion of the course. The variety of texts increased student buy-in, improved participation, challenged orthodoxy and enlivened class discussion. This paper will also investigate how/if this methodology could be extended to other courses/disciplines.

Making Glass Mosaics in Ravenna, Italy

Carrie’s experience of learning the ancient Byzantine style of creating glass mosaic using traditional materials and tools during the weeklong workshop in Ravenna, Italy is the theme of this presentation. Luciana Notturni’s Mosaic Art School has attracted participants from all over the world. Her fame as an artist, instructor, and conservator has built an international reputation. To study in a city where the ancient early Christian mosaics glitter with history added to the depth of understanding. Using a glass hammer and hardie to create glass into smalti gave an appreciation for the tremendous amount of time needed to complete the work in the 5th and 6th century basilicas of Ravenna. Each participant created a replica of one small section of a local mosaic, learning first hand the intricate process.

Athletics, Victory, and the Right to Rule in Ancient Greece

Victory was a powerful force in ancient Greece and victory in the most prestigious festivals, such as the Olympic Games, brought great honors to successful athletes and elevated them above their countrymen. The regular observance of contests institutionalized victory and its attendant power and glory, allowing the festival’s patron and benefactor to capitalize on the fruits of victory without risking defeat. Victory in athletic competitions played an important role in determining and glorifying an individual’s virtue, or "arete." Naturally born virtue, in the minds of aristocracy, indicated and justified an individual’s right to political and social authority. Indeed, according to Aristotle, an individual’s "arete," or the deeds that sprang from that "arete," provided justification for that person to possess ruling power. At Athens, Cylon and Alcibiades attempted to transform their athletic victories into political and military authority. Kings and tyrants in Greece, Macedon, and Sicily used athletic victories to justify their rule. Despite athletic competition’s ability to single out one individual for great acclaim and glory, athletics also, perhaps paradoxically, offered an avenue for more democratic involvement. This involvement, however, was limited to the competitors, not the sponsors. To a greater extent than the competitors Cylon and Alcibiades, the patrons and sponsors of prominent Games enjoyed the "arete" of athletic victory and its accompanying justification for their rule. Without risking their status against other competitors, those rulers who presided at athletic festivals claimed close associations with victory and used the glory and rewards of victory to their political advantage.
Predestined for Greatness? An Econometrics Model of Personality Type and College GPA.

Are students born with the traits to succeed in college? Do American schools discriminate against certain learning styles? Can we predict student’s GPA’s based on their personality type? I will be discussing these questions and more using an econometrics model and statistics as the tools to obtain insights and answers. I will be going over the results obtained from surveying students at both Snow College and SUU and comparing the two schools.

The Internet’s Counterculture: A Hegemonic Antithesis

The dominant culture has always been one of silence. Jacques Derrida said in an interview, "The first problem of the media is posed by what does not get translated, or even published in the dominant political languages," (Weber, 87). This coherent omission of any radical valance often frays the youth culture towards the fringes of a social apocalypse, as they retreat with their opinions into an abashed refuge - within themselves - as all they know of about their culture is that it doesn’t represent them effectively. Hegemony must rectify a safe perspective, and circulate it. This then becomes a circulation of blatantly alienating coverage, much to the likening of censorship. This suffocation of an underrepresented population - the counterculture - then becomes an eternal circulation of social disavows. If production is what amasses power, which amasses validation in perspective, it is the counterculture which must create - which must create to overthrow - and in doing so, in this coagulation of proficiency whereby creations are exposed - whether this be in hard covered apparitions or through the young channeled internet - the counterculture will supplant the dominant culture, and be themselves, the more dangerous: creating an upheaval of cultures.

Learning and Leading Together: Insight Dubai

In March 2013 I serve as a facilitator for the Insight Dubai Conference, a leadership conference at the Dubai Women’s College. About 150 women attend from over 30 countries, and discuss global issues, leadership, and women's leadership in today’s societies. I facilitate small group discussions and activities, as well as working with the larger conference events. I will present on my experiences and discussion at the conference in terms of global issues, culture, nationality, religion, leadership, and transnational activism.
Numerical Analysis of the Lotka-Volterra Predator-Prey Model

We present a numerical analysis of the logistic Lotka-Volterra predator-prey model. The non-dimensionalization method is applied, allowing for analysis of steady-state solutions. Explicit and semi-implicit methods are used to obtain numerical approximations of the quantity of predators and prey as a function of time denoted $x(t)$, $y(t)$ respectively. The results of these calculations are compared.

Patterning Supported Lipid Bilayers with Magnetic Tweezers

Lipid bilayers have many important purposes in living cells. A lipid bilayer forms a barrier which separates the fluid inside the cell from the fluid surrounding the cell. The arrangement of components within cell membranes can be extremely important, particularly in cell communications. For example, when our immune system attacks certain pathogens, it recognizes them by specific proteins in the inner and outer regions. This forms a shape that resembles a “bull’s-eye”. The ability to generate such patterns in bilayers might see applications in many areas of biology. Our goal is to take an initially unpatterned supported lipid bilayer (model cell membrane) and use magnetic tweezers to generate patterns. We initially calibrated the magnetic tweezers and are currently working on pattern generation.

Audioscape Storytelling

In a traditional fiction reading, the author "reads" work without much concern about the performance value of the presentation. In this age of audio books and desktop media production, it is possible to use digital technologies to design performances that involve lighting, image, dramatic interpretation, and sound design. All of these elements can be controlled with a single, portable device. My proposal is to present two recent, unpublished works of short fiction and to present them as multi-media performance art pieces, utilizing layered soundscapes and pre-recorded performances. The entire presentation will run 25 minutes.
Stripping of Supported Lipid Bilayers into Lipid Vesicles

Transmembrane proteins, which make up the majority of drug receptors, are difficult to analyze because when removed from their native environment their complex three-dimensional structure changes greatly. When purified, this change, or denaturation, often occurs, and as a result the protein loses its functionality. The purpose of this research is to create a method which would allow transmembrane proteins to be separated from each other within a supported lipid bilayer, which is similar enough to the native state to prevent denaturation, then repackaged into lipid vesicles, which would make it possible for the activity and three-dimensional conformation of the proteins to be analyzed in an environment almost identical to the native environment. This presentation will focus on the second part: repackaging the bilayer into vesicles. The bilayer was stripped with a laminar flow of water, and stripping was tested for using a light microscope and fluorescent labels. So far, stripping has successfully occurred on several of the devices, and efforts are being made to increase the amount of lipid that can be stripped.

Rafting the Grand Canyon

Commercial river trips in the Grand Canyon range in price anywhere from $1,500 to $3,500, limiting the amount of people that could potentially have a life-changing experience. By organizing this trip without a commercial company, I was able to offer students this once in a lifetime opportunity at a fraction of the cost. The cost of the trip included permit fees, equipment rental, gas, transportation and food. Besides offering a more affordable trip, the goal of this trip was to introduce students to the world of white water rafting and guiding. Students were assigned to groups and had the task of cooking and making sure the trip went smoothly, under my guidance. Every person in the group was also required to prepare a five minute presentation in order to educate the group on subjects having to do with area. In order to make this trip a success, I devoted over 300 hours to planning and preparation. This isn't an easy trip, and I was able to see people get out of their comfort zones and embrace the beauty and experience of being at the bottom of the Grand Canyon. I have worked as a guide for the past 6 years and this was the most rewarding river trip I have ever been a part of.

Tropical Geometry

The intent of this project is to examine the Euclidean postulates, specifically the SMSG postulates, and theorems that apply to polygons transferred into the tropical setting. We provide an introduction to Tropical Geometry and definitions for Tropical Polygons, as well as tropicalizing the SMSG postulates. Finally, we look at the application of these congruence's as they apply in the Euclidean plane and the Tropical multi-dimensional cases.
Novel Therapeutics

Our experimental work is focused on the isolation, purification and crystallization of a key therapeutic target in the causative agent of an important human pathogen. Our studies are intended to better understand how small organic molecules bind within this target, in order to design compounds which have potential to be used against infections by this organism in humans.

Effectiveness and Efficiency of Housing First Initiative

The State of Utah has taken a very progressive approach in addressing homelessness and especially chronic homelessness. The circumstances leading to homelessness for many individuals and families is not what is often believed in the general population. Changes in understanding of the causes of homelessness and innovative approaches in addressing homelessness are having a positive impact on the number of chronically homeless in Utah.

Preventive Medicine, Nutrigenetics, Type 2 Diabetes, and the Analyses of DPP4 Gene Copy Number Variations Among Native Americans and Non-Hispanic Caucasians in Southern Utah

Diabetes is the seventh leading cause of death among individuals in the United States, it is the leading cause of kidney failure, non-traumatic lower limb amputations, and new cases of blindness among adults. The prevalence of non-Hispanic whites from 2007-2009 to be diagnosed was 7.1%. In contrast the prevalence for American Indians/Alaskan Natives to be diagnosed is doubled at an astonishing 16.1%. Complications from diabetes are major causes of death and severe health problems in most Native American populations, and with a 68% increase of youth aged 15-19 years diagnosed from 1994-2004, type 2 diabetes (T2D) poses a threat of epidemic proportions for the Native American community. Raising awareness to local communities, that they may be at a greater risk for manifestation of T2D, may possibly increase disease prevention methods (Nutrition), and reduce the annual number of individuals diagnosed. In this study, we propose a novel, non invasive method/reference to detect food intolerance of gluten, by looking at copy number variations (CNVs) within the DPP4 gene. We will first provide a questionnaire to participants identifying physical characteristics, medical conditions, diet, and activity. Following the questionnaire, we will obtain saliva samples from each respective participant. DNA will be extracted from saliva samples and real time polymerase chain reaction (qPCR) will be used to evaluated copy number variations in relation to the DPP4 gene.
Constructions of Protestant nationhood in Reformation England frequently are contingent upon the invocation of sexual and religious deviance to contrast “foreign” transgressions with yet another highly suspect myth: that England is a nation of civic and moral integrity. Early Tudor examples of this representational strategy are especially interesting because of their close proximity to recently introduced legislation sanctioning the dissolution of Catholic religious houses in England, which required for its success both the vilification of Catholics and the promotion of a distinctly Protestant alternative. In particular, Henry VIII’s “Act of Supremacy” (1534), as well as his divorce from Catherine of Aragon, invalidated Rome’s political and spiritual power over England and its subjects, necessitating a series of calculated defenses that associate Catholicism with foreignness, criminality, treason, heresy, and sexual deviance. The most provocative examples of the period occur in the Interludes of ex-Carmelite priest John Bales, whose works were commissioned by Henry VIII’s Lord Chancellor, Thomas Cromwell. Bale’s play, A Comedye Concernyng Thre Laws, of Nature, Moses, and Christ, Corrupted by the Sodomytes, Pharysees, and the Papystes, introduces two figures, Sodomismus, a deviant priest, and Idolotria, a witch, to drive the point home that Catholicism breeds corruption and England must embrace a moral, “home-grown” alternative. Bale’s work illustrates the conceptual slippage between different categories of perceived and actual transgression on which anti-Catholic polemic depends, yet ultimately undermines the highly problematic methods of national mythmaking that subjects (and citizens) are continually confronted with, even in contemporary society. (Am happy to present with Don Weingust if he submits work on Shakespeare)

How are student-athletes selling themselves to college coaches? As a student who has three years working in a college athletics office and two years as a recruiting coordinator I find the new methods fascinating. My research will dissect popular "social media" tools for prospective student-athletes and e-mails sent to college coaches. What language do they use? How direct are they? This research will be done through content analysis to build a new theory of how student-athletes sell themselves in order to obtain an athletic scholarship.
The Republican Society of South Carolina and the Success of Transatlantic Republicanism, ca. 1793-95

My paper explores the fusion of local, state, national, and international interests that shaped the South Carolina Democratic-Republican Societies; it highlights the influence of transatlantic republicanism on the Democratic Societies. Those clubs were part of a broader democratic movement that formed in the new American republic. Inspired by events in revolutionary France, they used the transatlantic republican ideology (as articulated by Thomas Paine and others) to oppose the Washington administration’s foreign and domestic policies. This paper’s examination of the publications and activities of the South Carolina clubs illustrates the diversity of the democratic movement in that state and how it diverged from the national movement. While the Republican Society of Charleston formed independently of the leading club in Philadelphia and subsequently cultivated closer connections with representatives and clubs from revolutionary France than Philadelphia, the societies that formed in South Carolina upcountry generally maintained closer connections to their democratic counterparts in Philadelphia. These differences reflected the growing sectional divisions between the lowcountry and upcountry in the state. In moving beyond a Philadelphia-centered approach to early republic politics, this paper stresses the interplay of local, state, regional, national, and international forces that influenced the formation of the Democratic-Republican Societies.

"Original Practices" in Shakespearean Performance

“Original Practices” describe a series of techniques for preparation and performance of Shakespearean and other early modern drama, based upon practitioners’ expectations about the theatrical practices of Shakespeare and his theatrical contemporaries. Some of the practices involve the use of actual or reconstructed early modern spaces; unitary lighting conditions for actors and audiences, in which each can see the other equally well; limited rehearsal conditions (Shakespeare’s players were likely to have had only a single group rehearsal before the first performance of a new play); and making use of such other theatrical elements as early modern staging practices, costuming, music and even pronunciation. While a number of theatrical companies on both sides of the Atlantic engage in original-practices performance, no two employ the same subsets of practices, with most engaging in these practices in different ways. Some original practitioners seek greater fulfillment of what they believe to be playwrights’ original intentions, others wish to create or recreate an immediacy in performance often lost in contemporary theatrical practice. Many use these practices as marketing tools appealing to audience members’ senses of authenticity. Regardless of motivations, original practices have the potential to alter significantly both the theatrical product offered and the experience of audience members, and provide the potential to reveal not only some of the ways in which theatrical performance in Shakespeare’s day was radically different from that undertaken in mainstream theatrical production today, but also to illuminate the plays is ways not discernible through more common theatrical practice today.
Identity

In collaboration with poet Crystal Vernon, through choreography and recitation of poetry, my dance piece exhibits the emotions and feelings of one struggling to find their identity. Just as an actor puts on a visage for a play, we sometimes find ourselves “playing the role” that others want to see. The movement in my piece demonstrates the struggle between being who you truly are and playacting the person people have come to expect. Along with instrumental music, Crystal will be reciting significant parts of her poem which acted as an inspiration for the choreography.

Practice

Though tedious and sometimes grueling, practice is everything. Attaining greatness isn’t a matter of talent, it’s a matter of work.

Camels

This is a dance to explore movement set to a poetic form of expression. It will be exploring the use of both figurative and literal movement to convey a message to the audience.

Implementing Fiscal and Educational Rationale for Implementing and Experiential Learning Model

"Experience and Education" (John Dewey, 1938) serves as a foundation piece of literature when discussing experiential learning. To facilitate a better experience for administrative interns and be fiscally responsible with the precious resources in these hard economic times, this model was developed for two purposes. In John Dewey’s experiential learning theory, everything occurs within a social environment, knowledge is socially constructed and based on experiences. This model provides administrative interns the opportunity to supervise student teachers as part of their required internship. This real-life experience provide a context for the actual responsibilities of a practicing administrator. The quality of the experience is the primary component of the theory, but secondarily is the saving of resources for the college previously used to hire student teaching supervisors.”
Standing Together to Stop Bullying

Bullying can be found everywhere in society today. On the internet, TV, video games, and most importantly, bullying can be found in every school in America. Bullying is not a new problem in America. It is, however, a lot more recognized in society today. Society is starting to recognize the effects of bullying in the long term and is now scrambling to find a solution. Laws are being written and studies are being done. To stop bullying, focus needs to be directed at the 3 main components in every bullying case; the bully, the victim and the bystander. Right now a lot of focus is being directed only at the bully and stopping their actions. Instead we should also think about the victim and helping them cope after being bullied. The bystander also plays a key part. The bystander can stand up and say stop when they witness bullying. Too many kids are turning away and pretending they didn’t see anything. If every student became an advocate, bullying would dramatically decrease. Bullying within special education is especially alarming. This is because students know the kids who are in the other classroom are different. Different is a dangerous word in schools. Kids fear different. There is no perfect solution and every school and case is different but together the bullying problem can be decreased in every school in America and kids will no longer fear for their safety when they walk through the doors into their classroom.
Least Restrictive Environment

Have you ever heard of students being in a least restrictive environment? A lot of people have no idea what LRE even is and it is important to not only educators but also parents because if parents aren’t educated then their children could not be getting the appropriate education at school. Their schools could be violating laws and parents could have no idea.

The least restrictive environment or the LRE mandate is “to the maximum extent that is appropriate that children with disabilities are to be educated with non-disabled students.” LRE (2012) If removal from the classroom is to occur it is intended for the student’s best interest. It is only okay when education in regular classes and the use of supplementary aids and services can’t be achieved satisfactorily. Yell (2006) This will first explain how the process goes, then it will explain how LRE is determined, and finally it will give you examples of LRE so you can understand it more.

Finding the Chinks in Your Student’s Emotional Armor: The Best Tips for Including EBD Students in the Regular Ed. Classroom

Teachers have many challenges when it comes to their classrooms. One may think of a typical classroom as a set of everyday students with very few differences. On the contrary, a typical classroom today consists of several "typical" students as well as at least a handful of students who fall under the special education umbrella. Among the students who fall under the special education umbrella will be some students who fall under the category of emotional behavior disorder. (EBD). This presentation is to help regular education teachers learn strategies and the best tips for including students with EBD in their general education classroom

IEP vs. 504

For this poster presentation I’m going to discuss the difference between IEP’s and Section 504 plans for students and how they affect special educators. Firstly I will be talking about the importance of making sure students with disabilities get the help and accommodations they need, the qualifications for IEP’s, Section 504’s, the accommodations each provide, and the similarities and differences between the two.
Temple Grandin

Temple Grandin is one of the most remarkable women in the world. After sharing her insight and life story in Provo, Utah, this past November, she has provided a few students in the Special Education Department with a lot of quality information to take back and share with the students in the College of Education at Southern Utah University. She has given great tips for how to teach social skills that most autistic children do not have innately. She also gave great insight into sensory stimulation and its application in teaching. With the many methods of using sensory stimulation to help progress learning, she also emphasizes how overstimulation and under-stimulation can hinder an autistic student's learning capability at the moment. She emphasized the importance of early interventions and teaching life skills. Most importantly, Grandin describes autism as a gift to life and a part of who she is. "What would happen if the autism gene was eliminated from the gene pool? You would have a bunch of people standing around in a cave, chatting and socializing and not getting anything done," sincerely spoken by Temple Grandin.

Kaitlyn Steele

Do You Hear What I Hear: How Assistive Technology Fosters Language and Communication Development in Vision and Hearing Impaired Students

Communication is one of the most vital parts of succeeding in society today. With vision and hearing impaired students, development of language in the early years of life is an important factor in determining the nature of their future. The definition of a visual impairment is “An impairment in vision that, even with correction, adversely affects a child’s educational performance. The term includes both partial sight and blindness.” (National Dissemination Center for Children with Disabilities, 2012). The definition for a hearing impairment is “An impairment in hearing, whether permanent or fluctuating, that adversely affects a child’s educational performance but is not included under the definition of “deafness.” Deafness means a hearing impairment so severe that a child is impaired in processing linguistic information through hearing, with or without amplification, that adversely affects a child’s educational performance.” (National Dissemination Center for Children with Disabilities, 2012). With today’s technology, vision and hearing impaired students are able to thrive right along with their non-disabled peers.

Tonya Stratton

RTI or MTSS: Either Way Students Struggling with Mathematics Succeed

Mathematics instruction has seen little change over decades of public education. As a result, the United States is falling behind other countries on math proficiency test scores. Response to Intervention (RTI) and Multi-Tiered System of Support (MTSS) are models developed to better identify children who have learning disabilities (LD) and to improve reading and mathematics education through a process of tiered instruction. Paul Halmos, a famous mathematician, once said, “The only way to learn mathematics is to do mathematics.” It is such a simple statement, yet seems almost like a paradox when considering students who struggle with math. Fortunately, by using research-based interventions it is possible for all children to prosper when solving mathematical problems. The RTI and MTSS models are methods for helping all struggling students succeed at mathematics.
RTI No More: How MTSS is Change the System of Education

Every school district in the United States has been somewhat in turmoil making sure that they are able to meet or exceed the annual yearly progress (AYP) set forth by No Child Left behind (NCLB) as well as others. This has not been a complete disaster as there were some things that have come out of turbulence to benefit to some students like Response to Intervention (RTI). All though RTI has great qualities about it, it does have flaws in its system and that is where the Multi-tiered System of Support (MTSS) has come into replace RTI without the aid of law or Congress. MTSS has taken the idea of RTI and added more to it as to challenge each and every student rather than those that are at risk or failing. MTSS does not truly have a founder but is rather an extension of RTI to a greater level. It does incorporate different aspect that RTI does not cover. MTSS is changing the way subjects are taught and how students get the support that they need in the classroom by moving every student.

Are Students with Aspergers Syndrome a Threat to Society?

This poster session will give attendees an overall understanding of aspergers syndrome. The presenters will outline the characteristics that qualify a person as autistic/aspergers. They will also provide advice on how to help people with aspergers manage their behaviors, as well as provide people without a disability tips on how to embrace the differences in people with aspergers. Presenters want all attendees to understand that people with aspergers are not a threat to society.

Transition: Helping Students Find Their Path to Success

Under the Individuals with Disabilities Act (IDEA), schools are required to provide Special Education Services with to Students with Disabilities from the time they are 3 until they turn 21 years old. What happens to the student after they are no longer provided services under IDEA? There are several resources available to assist the students in their future, but we need to plan for them. This is where Transition planning becomes important.
IEP: What You Need To Know

In my presentation I want to help parents and general education teachers understand an IEP meeting better. It’s scary to go into a meeting with a lot of people and not understand what’s going on, I would like to help with this.

Disruptive Innovations Are Transforming K-20 Education: Report on 2013 HigherEdTECH Summit

The HigherEdTECH Summit is a one-day conference and is a relatively new part of the four-day International Consumer Electronic Show (CES), held at the Las Vegas Convention Center. The Summit focuses on educational technology innovations in K-12 and higher education. Although the audience for the HigherEdTECH Summit is primarily academic, it is not a typical academic conference. There is no call for papers. The event organizers invite keynote speakers, panelists, and other expert presenters who are "visionary thinkers in technology, education, public policy, government, investment, journalism, and business." Dr. Tom Cunningham (SUU Professor of Education and Director of Graduate Studies in Education) is the course steward for EDUC 3180 (Educational Decision Making), which is team-taught by four professors. This required Teacher Education course is the only one that focuses on the use of technologies for learning; thus, it is very important to maintain up-to-date content. Cunningham received a grant from the SUU Faculty Development Support Fund to attend the HigherEdTECH Summit. Keeping up with current and emerging technology is a constant challenge for all teachers in K-12 and higher education but especially for those who teach educational technology to pre-service teachers. Sifting the Internet or attending massive events like CES can be overwhelming. The HigherEdTECH Summit concentrates on educational technology issues to help attendees identify technologies that are most relevant to education and to better grasp significant trends. Dr. Cunningham will share what for him were the key themes and ideas regarding how technological innovations are disrupting and transforming education.

A FAPE For All

Public education is a freedom that hasn't always been available to everyone. In the past, individuals with disabilities were not afforded the same right to attend public school as that of their non-disabled peers. These children were finally allowed to attend public school, because of the Education for all Handicapped Children Act (EHCA) of 1975. To receive a FAPE, a child must be educated to the standards of the state in which the student resides. The appropriateness of each students education is determined by by the child's IEP (Individual Education Plan). A child's IEP states any related services needed to provide a FAPE. Violations of a child's FAPE are subject to proceedings in a court of law.