2016 JUNE 10, 11 & 12

SCIENCE | TECHNOLOGY | ENGINEERING | ARTS | MATH | EDUCATION

KEYNOTE SPEAKER
Stuart H. Coleman
Surfrider Foundation

HAWAII, UNIVERSITY INTERNATIONAL CONFERENCES
**Keynote Speaker – Stuart Holmes Coleman**

“**Education as a Worldwide Voyage.**”

Friday, June 10 – Captain’s Room
7:30 - 7:45 am

Stuart Holmes Coleman is a writer, speaker, surfer and environmental organizer. Coleman is the award-winning author of *Eddie Would Go, Fierce Heart* and more than 60 published articles and poems. His newest book is called *Eddie Aikau: Hawaiian Hero* (Bess Press, 2016). Along with the Eliot Cades Award for Literature, he has won writing fellowships at The Mesa Refuge, The Norman Mailer Center and Vaughan Park in New Zealand. While earning his MFA in Creative Writing at American University, he served as the Writer-in-Residence at St. Albans School. Coleman has taught writing, literature and leadership at Punahou and Iolani Schools, the University of Hawaii and the East-West Center. He currently works as the Hawaii Manager of the Surfrider Foundation. (www.Stuart-Coleman.com)
Welcome Address

Aloha and welcome to the annual STEAM Education Conference held in the Hawaiian Prince Hotel Waikiki in the island of Oahu. We trust that you will gain new experiences and new insights in your field of study while interacting with your peers. This is an exciting opportunity to meet with educators from different universities throughout the nation and throughout the world. They bring with them a wealth of knowledge and experiences in their particular disciplines to share with each and every one.

We hope you enjoy your stay with our host, the Hawaiian Prince Hotel Waikiki, a prime location in the Ala Moana and Waikiki area of Honolulu offering a wide variety of shops and attractions. The famous Waikiki Beach and prime restaurants are close by for your convenience. Be sure to check with the hotel’s activity desk for all the latest adventures and tours to make your trip to these islands a memorable experience.

The Islands of Hawaii offer a very unique experience for all people who visit to gain a better understanding of the Hawaiian culture and its spirit only found in these islands. Enjoy some of the best weather and beaches found anywhere in the world, and take your experiences home with you to return another day.

E’ Komo Mai!

(All are Welcome!)

Please visit our website for more details on the next conference.
www.huichawaii.org
stem@huichawaii.org
artshumanities@huichawaii.org
education@huichawaii.org
Contact Number: 1- 808-537-6500
Conference Schedule

**REGISTRATION HOURS** – **JUNE 9TH LOBBY, JUNE 10TH TO 12TH 3RD LEVEL**

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<tr>
<td>June 9 - Thursday</td>
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<td>June 12 - Sunday</td>
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**KEYNOTE SPEAKER ADDRESS** - **STUART HOLMES COLEMAN**
June 10, Friday 7:30 am – 8:00 am, Captain’s Room

**HAWAIIAN STEEL GUITAR OPENING PRESENTATION**
June 11, Saturday 6:30 am – 8:00 am, Captain’s Room

**CONCURRENT SESSIONS TIME:**
8:15 am – 9:45 am* 10:00 am – 12:00 pm* 12:45 pm - 2:45 pm* 2:30 pm – 4:00 pm* 4:15 – 5:45 pm*

**POSTER EXHIBITS**
11:00 am – 12:30 pm, Captain’s Room

**BREAKFAST/APPRECIATION BRUNCH – CAPTAIN’S ROOM**
(Complimentary)

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<tr>
<td>June 10 - Friday</td>
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**TEA BREAK**
Friday and Saturday - 10:30 am – 12:30 pm/ 2:00 pm – 4:00 pm

**LUNCH BREAK**
11:30 am -12:30 pm (Lunch is not provided)

**INSTRUCTIONS FOR SESSION CHAIRS**

- Introductions of Participants
- Start and complete sessions on time
- Chair leads the discussions and hold question and answer period at end of session
Day 1

Friday - June 10, 2016
Day 1 - June 10 Friday

Room: Haleakala 1  
Time: 8:15 - 9:45  
Session: Paper  
Topic: Algebra/Number Theory/Classical Analysis  
Chair: Dr. Emil Schwab

I. Non-unique Factorization on Non-commutative Settings

The theory of non-unique factorizations has its origin in algebraic number theory. We use several invariants of this theory to study factorizations in a class of non-commutative and non-cancellative monoids.

Author/Presenter: Dr. Emil D. Schwab  
Department of Mathematical Sciences  
The University of Texas at El Paso

Author/Presenter: Prof. Gabriela Schwab  
El Paso Community College

II. Some Fascinating Theorems of the Mulatu Numbers

The Mulatu numbers were introduced in [1]. The numbers are sequences of numbers of the form: 4,1, 5,6,11,17,28,45… The numbers have wonderful and amazing properties and patterns.

Author/Presenter: Dr. Mulatu Lemma  
College of Science & Technology, Department of Mathematics  
Savannah State University

Author/Presenter: Dr. Jonathan Lambright  
College of Science & Technology, Department of Mathematics  
Savannah State University

Continued on Next Page
III. Note On The Abel Matrix Transformations

Author/Presenter:  
**Dr. Mulatu Lemma**  
College of Science & Technology, Department of Mathematics  
Savannah State University

Author:  
**Dr. Jonathan Lambright**  
College of Science & Technology, Department of Mathematics  
Savannah State University

Author:  
**Dr. Latrice Tanksley**  
College of Science & Technology, Department of Mathematics  
Savannah State University
Day 1 - June 10 Friday

Room: Haleakala 2
Time: 8:15 - 9:45
Session: Paper
Topic: Higher Education/Technology/Engineering/Mathematics
Chair: Dr. Laura Sullivan-Green

I. Reinforcing Writing Skills in Civil Engineering at San Jose State University

Writing in the discipline is important to promote strong communication skills directly relevant to a particular body of knowledge. Writing in engineering is often felt to be irrelevant and unnecessary. Challenges facing SJSU engineering students, materials used to promote writing in engineering, and rubrics to encourage consistent grading are presented.

Author/Presenter: Dr. Laura Sullivan-Green
Civil and Environmental Engineering
San Jose State University

II. Assessment of a Writing Workshop Model to Improve Outcome of Engineering Students

This paper will report on a multi-year project to improve the writing skills of engineering freshmen at San Jose State University. For the last ten years, the college has offered an optional class to students who are not proficient in writing. Students can enroll in a one-unit lab class as many semesters as they wish to get practice in writing.

Author/Presenter: Dr. Patricia Backer
Department of Aviation and Technology
San Jose State University
Day 1 - June 10 Friday

Room: Haleakala 1
Time: 10:00 - 12:00
Session: Workshop/Paper
Topic: Art Education/Curriculum R & D/Adult Education/Business
       Education/Educational Psychology/ESL/Edutainment
Chair: Dr. Susan Fernandez

I. Hocus Pocus Enhances Focus: The Magic of STEAM

Workshop participants will delve into the world of neuro-magic while actively participating in the cognitive tricks of STEAM. The greatest magic show on earth is happening in the brain as we study the nuances of attention, awareness, memory and motivation. Sleight of hand, optical illusions, special effects, cognitive artifices, and secret devices will offer mystical glimpses into the neuroscience of magic and reveal the veracity of how our minds execute functions and find meaning.

Author/Presenter: Dr. Susan Fernandez (Workshop)
Department of Teacher Education
Lander University

Author: Dr. Michael Murphy
Department of Teacher Education
Lander University

II. The Happiness Workshop

Typically, in today’s 21st century classroom, we push our students to excel believing that hard work will bring success and ultimately happiness. If they just study that much more diligently, finish another long paper, or homework assignment, they will succeed in school and therefore in life. What if we, along with society, were completely wrong?

Author/Presenter: Prof. Kyla Mitsunaga (Workshop)
College English Department
Yonsei University, South Korea

Continued on Next Page
III. Development of Augmented Reality Materials for Understanding the Roles of Japanese Particles

In our project, we are constructing a tool to support comprehension of Japanese particles. The system will help the learner to understand roles of particles in a sentence by displaying visual objects that indicate the meaning of the sentence in a computer display with the augmented reality technology. In this presentation, I will give details and a demonstration of a language education application that we have been developing to understand the meaning of a Japanese sentence by using AR.

Author/Presenter:  
Dr. Hajime Mochizuki (Paper)  
Institute of Global Studies  
Tokyo University of Foreign Studies, Japan
Day 1 - June 10 Friday

Room: Haleakala 2  
Time: 10:00 - 12:00  
Session: Paper  
Topic: Academic Advising and Counseling/Curriculum R & D/  
Engineering/Higher Education/Technology/Engineering/Mathematics  
Chair: Dr. Leo Stocco

I. Identifying Engineers at the High-School Level

Career guidance matches natural abilities to corresponding careers. An aptitude in science and math is associated with many disciplines that include science, medicine, education and engineering. This paper identifies the skills that specifically indicate potential success in engineering, as defined by the Association for Professional Engineers of British Columbia.

Author/Presenter: Dr. Leo Stocco  
The Department of Electrical & Computer Engineering  
The University of British Columbia, Canada

II. Engineering Management Graduate Program Certification

ASEM’s graduate program certification is intended to recognize Engineering Management and Technology Management programs that excel in offering education at the Master’s level. The rigorous academic standards used by ASEM to certify graduate programs in engineering management are based on the Engineering Management Body of Knowledge (EMBOK). This paper will highlight the certification process and discuss the steps graduate programs in the Engineering Management field can take to get certified.

Author/Presenter: Dr. Hiral Shah  
Engineering Management  
St. Cloud State University

Author: Dr. Ben Baliga  
Engineering Management  
St. Cloud State University

Continued on Next Page
III. Student Engagement in a Summer Bridge Program for Engineering Calculus Success

A summer precalculus bridge program to support entering college freshmen who aspire to become engineers is described. Results of student’s evaluation of the program’s success in strengthening their mathematics skills are discussed.

Author/Presenter: **Dr. Sandra B. Nite**  
Aggie STEM  
Texas A&M University

Author: **Dr. G. Donald Allen**  
Texas A&M University

Author: **Dr. Ali Bicer**  
Aggie STEM  
Texas A&M University

Author: **Dr. Jim Morgan**  
Charles Sturt University
Day 1 - June 10 Friday

Room: Haleakala 1
Time: 12:45 - 2:15
Session: Paper
Topic: Higher Education/Science Education/Mathematics
Education/Business Education/Education Technology/Archeology/History
Chair: Dr. Mary Jo Parker

I. Modeling Intended STEM Success for First and Second Year First Generation STEM Undergraduates

A DOED MSEIP award project design which compares the impact of Scholars Academy program to the non-SA STEM majors success outcomes associated with retention and persistence. Modeled after components of the Scholars Academy program consisting of: 1) Faculty and peer mentoring; 2) Seminar and field trip broadening career experiences connected to advanced degrees and the workforce; 3) Graduate school preparation; 4) PhD-Mentored research (summer and academic year); and 5) Research dissemination.

Author/Presenter: Dr. Mary Jo Parker
Scholars Academy/Natural Sciences
University of Houston-Downtown

Author: Dr. Mitsui Nakamura
Scholars Academy
University of Houston-Downtown

II. A Quantitative Proposal of Personal Electronic Devices and Their Impact on Student Learning in the College Classroom

A quantitative experimental study was used to better understand personal electronic devices and their impact on student learning in the college classroom. The dependent variables in this study were quiz scores and predicted performance. The independent variable was the classroom policy for personal electronic devices.

Author/Presenter: Prof. John Scheffler
Engineering and Technology
University of Wisconsin-Stout

Author: Dr. Dennis Vanden Bloomen
Business Department College of Management
University of Wisconsin-Stout

Continued on Next Page
III. GeoQuest VESUVIUS a Class Role Playing game

This game story is set under the Somma-Vesuvius volcano. The environment that gradually reveals itself to the players is full of significant elements that can be traced back to a volcanic site, inserted in a specific geodynamic situation. It is located in the Mediterranean area, specifically in Campania, close to Pompeii and Erculaneum.

Author/Presenter: Prof. Sabina Maraffi
School of Science and Technology
University of Camerino, Italy

Author: Prof. Francesco M. Sacerdoti
Department of Biology
Temple University, Philadelphia

Author: Prof. Alessandra Scamardella
Galileo Galilei High School, Italy
Day 1 - June 10 Friday

Room: Haleakala 2  
Time: 12:45 - 2:15  
Session: Workshop/Paper  
Topic: Business Education/Social Science/Food Science and Human Nutrition/Entrepreneurship Development/Health Education  
Chair: Dr. Kathleen Liang

I. Regional Food Networks (RFNs) – What, Why, How, and Who Cares?

This workshop offers audience to learn about the most recent local food policy development, new research based information, and share/exchange experiences with respect to local/regional food systems.

Author/Presenter: Dr. Kathleen Liang (Workshop)  
Community Development and Applied Economics  
University of Vermont

II. Food as Medicine- The Current State in Japan

From Ancient time, Food was considered as the important element for health. In Japan, Washoku, traditional dietary cultures of the Japanese, has been approved as the intangible culture heritage of humanity from UNESCO in 2013. By introducing Japanese approach to Food today, I would like to discuss about the importance of Food for keeping health and conquering chronic diseases.

Author/Presenter: Prof. Shinko Ichinohe (Paper)  
Department of Health Administration and Management  
Saitama Gakuen University, Japan
Day 1 - June 10 Friday

Room: Haleakala 1
Time: 2:30 - 4:30
Session: Workshop/Paper
Topic: Teacher Education/Visual Arts/Performing Arts/Music Education/Educational Psychology/Indigenous Education
Chair: Prof. Jayme Klinger Host

I. STEAM Lesson Plans - Teaching Core Curricular Content through the Fine Art of Dance

Dance is an effective means to teach S.T.E.A.M. concepts. Research shows that concepts learned kinesthetically yields longer term retention and increases critical and creative thinking skills. Workshop participants will get out of their chairs to experience sample lessons in a wide range of topics varying from chemical bonds to enviro-literacy through movement. Participants will take away tools to create lesson plans within their own K-12 classrooms.

Author/Presenter: Prof. Jayme Klinger Host (Workshop)
Department of Visual and Performing Arts
Lock Haven University

II. The Impact of a Cognitive Model of Instruction and Learning Influenced by the Kodály Concept on Dictation Skills of Expert Musicians

Teacher professional development for a method of teaching and learning music based on Zoltan Kodály’s philosophy is described. Results of teacher improvement in the ability to perform music dictation and implications for teaching are discussed.

Author/Presenter: Dr. Sandra Bonorden Nite (Paper)
Aggie STEM & Mathematics Department
Texas A&M University

Author: Dr. Michael Houlanahan
Music Department
Millersville University

Author: Dr. Philip Tacka
Music Department
Millersville University

Author: Dr. Patricia Moreno
Fine Arts Department
Austin Independent School District

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III. Collaborative Autoethnography Dealing with Inequality

The purpose of this study is to examine how songs, lyrics, and poetry express emotional reactions to inequity of people with different backgrounds, SES status, race, ethnicity, gender, sexual orientation, power differentials, lack of power, lifestyle choices, and physical/emotional bullying. This study examined how songs, lyrics, and poetry expressed emotion on inequality with three primary data collection sources: (a) Poetry, spoken word, or lyrics (b) Lyric or poetry analysis (c) Interviews.

Author/Presenter:  
**Dr. Jeremy T. Yeats** (Paper)  
Human Performances and Physical Education  
Adams State University

Author:  
**Dr. Robert Demski**  
Psychology  
Adams State University
Day 1 - June 10 Friday

Room: Haleakala 2  
Time: 2:30 - 4:30  
Session: Paper/Panel  
Topic: Science Education/Technology and Development/Energy  
conversion/Physics and Astronomy  
Chair: Dr. Clemente Abrokwaa  

I. Science, Technology and Development: The Contributions of Ghanaian Universities Re-examined  

This paper examines the scientific and technological contributions of Ghanaian Universities to the development of  
the Ghanaian society and its people, since their inception in the 1960s. It argues that the Universities have failed to  
contribute adequately to the scientific and technological development needs of the country due to several  
constricting factors.  

Author/presenter: Dr. Clemente Abrokwaa (Paper)  
College of the Liberal Arts, African Studies  
Penn State University  

II. Supersonic Combustion Simulation  

Supersonic combution holds a great promise to revolutionize future aviation, and this has reinvigorated the interest  
in this area. However, many challenges are foreseen in achieving this goal. This work addresses the development of  
an innovative modeling software that would help the designers to develop supersonic engines more efficiently by  
reducing the need for costly and time-consuming experiments.  

Author/Presenter: Dr. Farzad Mashayek (Panel)  
Department of Mechanical and Industrial Engineering  
University of Illinois at Chicago  

Author: Mr. Zia Ghiasi  
Department of Mechanical and Industrial Engineering  
University of Illinois at Chicago  

Author: Mr. Dongru Li  
Department of Mechanical and Industrial Engineering  
University of Illinois at Chicago  

Author: Mr. Jonathan Komperda  
Department of Mechanical and Industrial Engineering  
University of Illinois at Chicago  

Continued on Next Page
III. Comparison of Mastery Learning and Traditional Lecture-Exam Models in a Large Enrollment Physics Course

We investigate student performance in introductory physics for two pedagogical models: (a) mastery-based, self-paced (MSP) learning course, and (b) traditional lecture and exam (LRE) course. The MSP course followed Bloom’s Learning for Mastery and Keller’s Personalized System of Instruction models. MSP students were required to pass each of 17 module exams with a score > 90%. Both groups took the same final exam. The MSP group mean grade of 67.4% was higher than the LRE group mean of 60.6%.

Author/Presenter: Dr. Arie Bodek (Paper)
Department of Physics and Astronomy
University of Rochester

Author: Dr. Barbara Masi
Arts, Science and Engineering
University of Rochester

Author: Dr. Dan M. Watson
Department of Physics and Astronomy
University of Rochester

Author: Mr. Dev Ashish Khaitan
Department of Physics and Astronomy
University of Rochester

Author: Mr. Erik Garcell
Department of Physics and Astronomy
University of Rochester
Day 2
Saturday - June 11, 2016
Hawaiian Steel Guitar - Performance

Friday, June 11 – Captain’s Room
6:30 am – 8:00 am

HSGA
Hawaiian Steel Guitar Association

Mr. Kamaka Tom
Hawaii, Secretary Treasurer

The Hawaiian Steel Guitar Association is a worldwide organization promoting traditional Hawaiian music and the signature sound of Hawaiian steel guitar.

Our site contains information for HSGA members and for non-members who wish to learn about and listen to the beautiful music of the Hawaiian steel guitar.

We welcome you and encourage you to explore HSGA. If you enjoy your experience here, please let us know. We are always looking for new friends and new members.

HSGA President Paul Kim
Day 2 - June 11 Saturday

Room:  Haleakala 1
Time:  8:15 - 9:45
Session:  Paper
Topic:  Distance Education/Education Technology/Health Science/Statistics/
Higher Education/Discriminant Analysis
Chair:  Dr. Richard Ford

I. Jumbo-Hybrid Model Comparisons for Delivering College Mathematics

In this session we will provide the results of two comparative studies between students who receive instruction in finite mathematics and beginning statistics through a jumbo-hybrid format and those who receive all instruction face-to-face.

Author/Presenter:  Dr. Richard Ford  
Mathematics and Statistics Department  
California State University, Chico

II. Age Perceptions, Knowledge, and Preventive Behaviors Regarding Cervical Cancer: Analysis from the 2005 Health Information National Trends Survey (HINTS)

Cervical cancer is considered to be the third most common type of cancer in women, and the second largest cause of deaths in women. Its toll is greatest in populations that lack screening programs to detect precursor lesions (Roden, 2006). Almost all cervical cancer is caused by HPV (Human Papillomavirus), a common virus that is spread through sexual intercourse. It is widely believed among experts that most women who are diagnosed with cervical cancer today have not had regular pap smears or they have not followed up on abnormal Pap smear results. But the question is how knowledgeable are women regarding this deadly disease which is curable when detected early. We analyzed data from the 2005 Health Information National Trends Survey (HINTS), which in a series of open-ended questions, asked respondents to cite all the strategies for preventing cancer of which they were aware. The results indicate that women ages 50 – 64 were the most opinionated regarding the characteristics of cervical cancer.

Author/Presenter:  Dr. Jonathan Lambright  
College of Science & Technology, Department of Mathematics  
Savannah State University

Author:  Dr. Mulatu Lemma  
College of Science & Technology, Department of Mathematics  
Savannah State University

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III. Factors Affecting the Classification of Recent Graduates Groups Who were Employed and Unemployed, Case Study: The Faculty of Science and Technology, Thammasat University

The research objectives were to study the factors affecting the classification of two recent graduates’ groups who got or did not get a job. The results revealed that six variables namely duration of additional training, achievement motivation, duration of job seeking, the desire to study a masters degree, grade point average, and domicile were able to classify members of two groups who got and did not get a job and were able to correctly predict the members of both groups were 88.9 %.

Author/Presenter:  
**Prof. Samran Muntup**  
Department of Math and Statistics  
Faculty of Science and Technology  
Thammasat University, Thailand

Author:  
**Dr. Penkhae Hickinbottom**  
Department of Math and Statistics  
Faculty of Science and Technology  
Thammasat University, Thailand

Author/Presenter:  
**Prof. Benjamas Tulyanitikul**  
Department of Math and Statistics  
Faculty of Science and Technology  
Thammasat University, Thailand
Day 2 - June 11 Saturday

Room: Haleakala 2
Time: 8:15 - 9:45
Session: Panel/Workshop
Topic: Science Education/Environmental Science/Technology/Engineering/Art Education/ Teacher Education/Information and Computer Sciences/ Mathematics/Education Technology
Chair: Dr. Richard L. Biffle III

I. Introduction to S.T.E.A.M (Science, Technology, Engineering, Arts, and Mathematics) – Course Design and Implementation

This session will provide participants the opportunity to engage in a dialogue related to the planning, organization and delivery of an undergraduate STEAM course designed for first-year students. We will engage in a conversation of the processes that underlie how individuals become lifelong STEAM learners, STEAM practitioners and STEAM researchers as well as the structures and mechanisms that lead to achieving these outcomes.

Author/Presenter: Dr. Richard L. Biffle III (Panel)
Education Program
Thomas College

II. Childhood and Choice for Girls: How Africa is Upgrading Its Game in Science Education

African higher education is retooling its approach to science education for girls through innovative partnerships with government, African Union mandates, universities in the west, and international agencies. What development models in areas of STEM, environmental science, and agriculture are being implemented across the continent to train the next generation of young African scientists through a deeper understanding of the science of learning paired with gender inclusion policies?

Author/Presenter: Dr. Robin M. Chandler (Workshop)
International Studies, College of Social Sciences and Humanities
Northeastern University
Day 2 - June 11 Saturday

Room: Kilauea
Time: 8:15 - 9:45
Session: Paper/Panel
Chair: Dr. Edward S. Shihadeh

I. Best Practices for Predicting College Student Retention

We test two approaches to identifying at-risk college students. One is an off-the-shelf early alert system where students complete a self-report survey. The other method, based on machine learning and predictive analytics, is adapted from recent advances in crime analysis. Results reveal that the latter method accurately predicts at-risk students, whereas the first method does not. We discuss the implications of our findings for best practices and for STEM retention.

Author/Presenter: Dr. Edward S. Shihadeh
Department of Sociology
Louisiana State University

Author: Mr. Anthony Reed
Department of Sociology
Louisiana State University


This research sought to examine correlations between participation in an Emporium model learning environment and levels of math self-efficacy for African American (AA) students, a population that has historically low levels of performance and success in STEM disciplines. Through interviews with AA students who have completed an elementary algebra course via the emporium model, I seek to examine their levels of math self efficacy, which could predict future success in STEM.

Author/Presenter: Mr. Adam Smith (Panel)
Mathematics and Computer Science
Tougaloo College

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In recent years many parents begin to adopt the use of digital media, such as mobile learning software, as a substitute to their parenting tasks. However, as this type of parenting and pre-elementary learning in the digital age becomes more pervasive, it’s necessary to rethink the role of digital media in parents’ and children’s life: how to use digital technology to support parenting to accommodate busy modern life-style and promote parental involvement in pre-elementary education. This research presents an action research of the digital parenting platform for improving work-life balance for parents in parent-child interaction, supporting parents-children activities in pre-elementary education, providing the procedures and supporting requirements of parenting and learning in the digital age.

Author/Presenter: **Ms. Jiani Ma**
Graduate School of Media Design
Keio University, Japan
Day 2 - June 11 Saturday

Room:  Haleakala 1  
Time:   10:00 - 12:00  
Session:  Paper  
Topic:  Higher Education/ Science Education/Secondary Education/Teacher Education/Technology/Engineering/Mathematics/Visual Arts/Art Education /Multi-disciplinary and Student Engagement strategies  
Chair:  Dr. Diane Bender  

I. How a Pre-Internship Seminar Can Positively Impact the Internship

This presentation describes the development and implementation of an internship seminar that occurs prior to the summer internship to engage students in the job search process. The learning objectives, course activities, scheduling rationale, and advantages of the pre-internship seminar will be presented along with seminar topics. A study with students who had completed the seminar and an internship reveal their perceptions of the most and least helpful career planning seminar topics.

Author/Presenter:  Dr. Diane Bender  
The Design School  
Arizona State University  

II. UHD STEM Community Transformation – Taking Mentoring Across a College

The University of Houston-Downtown’s Scholars Academy has generated over 700 alumni STEM graduates of which 91% remain in STEM graduate programs and/or the workforce following completion through its program impacting 160 undergraduates per semester. STEM student successes are supported through a small group mentoring model. How can this successful peer and faculty mentoring structure be expanded to effect positive change and success across an entire college comprised of 1500 STEM majors?

Author/Presenter:  Dr. Mary Jo Parker  
Scholars Academy/Natural Sciences Dept.  
University of Houston-Downtown  

III. Turning Fashion History into Fashion Present

How using a multidisciplinary approach and access to the Seneca Fashion Resource Centre inspires and excites today’s students of fashion history.

Author/Presenter:  Prof. Dale Peers  
Faculty of Communication, Art and Design  
Seneca College, Canada  

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IV. Designing Purposeful Assessment to Support Integrated STEM Learning

Integrated STEM has been viewed as an approach to teaching and learning in a manner such that the curriculum and content of the four individual STEM disciplines seamlessly merge into real-world experiences contextually consistent with authentic problems and applications in STEM careers. Such integration may refer to making meaningful connections between core disciplinary practices of each STEM domain being integrated, with the goal of using this integrated knowledge to solve real-world problems.

Author/Presenter: Dr. Paul Asunda
Department of Technology Leadership and Innovation
Purdue University
Day 2 - June 11 Saturday

Room: Haleakala 2  
Time: 10:00 - 12:00  
Session: Workshop/Paper  
Topic: Education Policy & Leadership/Language Education/Digital Media/Drama/Film/Television and other Media/ Urban & Regional Planning/Sustainability/Inter-disciplinary & other areas  
Chair: Prof. Alan Tollefson

I. Ethnographies of Interdisciplinarity- Promoting a Practice as Research Model

Using metaphor to create conceptual bridges between disciplines collaborations are facilitated to promote life-long learning and community engagement.

Author/Presenter: Prof. Alan Tollefson (Workshop)  
Department of Theatre Arts  
University of La Verne

Author: Dr. Gail Tang  
Department of Mathematics  
University of La Verne

II. Promoting Critical Awareness of Popular Media: A Critical Media Literacy Perspective

This presentation reports on a study that explored the implications of critical media literacy for promoting critical awareness of media texts. Two students' digital videos will be played and analyzed, and ways to promote critical awareness of popular media will be discussed.

Author/Presenter: Dr. Shin-Ying Huang  
Department of Foreign Languages and Literatures  
National Taiwan University, Taiwan

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III. Developing a Framework for a Sustainable Development Plan for the City of Medicine Hat

This presentation will share research conducted to better understand how sustainable development in the City of Medicine Hat, Alberta, can be made more effective by examining sustainable development plans in four cities; Edmonton, Alberta; Montreal, Quebec; Denver Colorado; and Stockholm Sweden. These are considered in a global context through the United Nations Sustainable Development Goals, applying the idiom that “the problems are global, but the solutions are local.”

Author/Presenter: **Mr. Peter Kelly**
Department of Trades & Technologies
Division of Business and Enterprise
Medicine Hat College, Canada
Day 2 - June 11 Saturday

Room: Kilauea
Time: 10:00 - 12:00
Session: Workshop/Paper
Topic: Science Education/Elementary and Secondary Mathematics
       Education/Parent Education/Educational Measurement and
       Evaluation/Education Technology/Secondary Education/Teacher
       Education/STEM Education/Inter-disciplinary and other areas of Education
Chair: Dr. Carolee Koehn Hurtado

I. STEM Learning: Cultivating School-Family Partnerships

Learning does not just happen in school. Parents can be powerful allies in their children’s education. In this session, we explore reasons for engaging families in schools and share research and practice on how we have connected schools and families around students’ mathematical thinking and academic success. Participants will then share and develop ideas for authentic family engagement in supporting STEM-focused learning.

Author/Presenter: Dr. Carolee Koehn Hurtado (Workshop)
UCLA Mathematics Project & UCLA Parent Project
UCLA Graduate School of Education and Information Studies

II. Integrating STEM Education with Entrepreneurship Practices at Middle Schools: Feasibility Study and Preliminary Results

STEM-Inc is a NSF-Funded afterschool program designed to introduce and engage middle school students in STEM related fields. Involving students in exciting real-world projects, STEM-Inc not only helps students develop practical skills in engineering and computer science, but also incorporates business and entrepreneurship practices to reinforce the learning outcomes.

Author: Dr. Jidong Huang
Electrical Engineering Department
California State University, Fullerton

Author: Ms. Amerika Bernal
Electrical Engineering Department
California State University, Fullerton

Continued on Next Page
III. Leveraging EdTech to Accelerate STEM Knowledge from the Classroom into the Real World

Participants will experience new edtech software that is being utilized in K-12 classrooms. Participants will learn about cognitive learning theory, schema theory, and how they can be leveraged to accelerate student understanding. Participants will be introduced to an activity that can help students develop an understanding of how STEM concepts connect. This activity is translatable into an applicable lesson for teachers' respective classrooms in both low-tech and high tech environments.

Author: Mr. Sean Ho’okano-Briel
University of Hawaii Alumnus

Author/Presenter: Mr. Dan Nash
Michigan State University Alumnus
Poster Session

Saturday - June 11, 2016

Day 2
11:00 am – 12:30 pm

Captain’s Room
Saturday - June 11, 2016

POSTERS

Room: Captain’s Room  
Time: 11:00 - 12:30

1. Incorporating Career Development in College Introductory Biology Promotes Clinical Experience in the Health Professions

Early career development results in greater far transfer of learning. A five component careers module was implemented in freshman biology resulting in students completing and using a resume to successfully apply for and obtain clinical experience in the health professions.

Research tracking the successful increase in career experiences, interviews and internships from integrating formative career pathway exercises into a freshman biology course will be summarized.

Topic: Higher Education; Science Education; Biology; Health Science

Author/Presenter: Dr. Anne Bower  
College of Science, Health & the Liberal Arts  
Philadelphia University

2. The Effects of Lack of Sleep and Learning

Topic: Science Education, Biology

Students who obtain the proper amounts of sleep are more likely to retain information better, because lack of sleep impairs spatial learning, such as memory and completing simple tasks. Lack of sleep also impairs cognitive functioning and attention span, and deprives the brain of being able to function properly.

Author/Presenter: Ms. Ashley Taylor  
Department of Biology/Education  
Tougaloo College
3. Aging Increases Reactive Oxygen Species and Interleukin-17 Concentrations in Peroxisome Proliferator Activated Receptor – Alpha Knockout Mice during Angiotensin II Hypertension through a NADPH Oxidase Subunit-2 Mechanism

Aging decreases myocardial peroxisome proliferator activated receptor –alpha (PPAR-α) expression. Activation of PPAR-α reduces hypertension, cellular oxidative damage and inflammatory cytokine production. We hypothesize that the absence of PPAR-α would increase mean arterial pressure. Our results suggest increased myocardial NOX-2 expression, TBARS and increased IL-17 concentrations in 40 week old PPAR-α KO mice are potential mechanisms for the increased Ang II-induced blood pressure responses.

Topic: Physiology; Biophysics; Medicine

Author: 
Dr. Ugo Ananaba  
Physiology and Biophysics  
Howard University College of Medicine

Author: 
Ms. Nia Williams 
Physiology and Biophysics  
Howard University College of Medicine

Author/Presenter: 
Dr. Dexter Lee 
Physiology and Biophysics  
Howard University College of Medicine

Author: 
Dr. Joanne Allard 
Physiology and Biophysics  
Howard University College of Medicine

4. A Better Approach to Developing First Year Students’ Research Ability

We propose a methodology to develop first year students' research ability. We introduce first-year seminar entitled "Critical thinking & Freshman Research" for the development of first year students' research ability.

Topic: Higher Education

Author/Presenter: 
Prof. Eunjeong Kim 
University College 
Yonsei University, Republic of Korea

Author/Presenter: 
Prof. Jeong-Ah Cho 
University College 
Yonsei University, Republic of Korea
5. Parallel Programming Multi-core Computers

With advances in hardware technology, we as educators find ourselves with multi-core computers as servers, desktops, and personal computers in our laboratories while teaching students how to design for sequential environments. We propose to develop pedagogy for teaching undergraduate students how to develop software and design algorithms for multi-core architectures in a laboratory setting. The key success and challenge of this project will be helping students to think in parallel again.

Topic: Higher Education; Information and Computer Sciences; Numerical Analysis

Author/Presenter: Prof. Gita Alaghband
Computer Science and Engineering Department
University of Colorado, Denver

Author: Prof. Hamid Fardi
Electrical Engineering Dept.
University of Colorado Denver

6. Developing Students' Capacity Beyond the Classroom

Educational Goal of Yonsei University is developing students' 5C (Communication, Creativity, Convergence, Cultural Diversity, Christian Leadership) capacity and Yonsei believes Residential College system encourage them.

RC education pursues a synergy effect through the integration of in-class courses, various extra-curricular programs, and living with students of different majors. For this purpose the university provides with a Residential College office, Academic Advisors, and Residential Master.

Topic: Curriculum Research and Development; Higher Education

Author/Presenter: Prof. Hye Kyung Hong
Yonsei University, South Korea
7. Simulation and Experimental Study for Phase-contrast X-ray Imaging (PCXI) Based on a Single Antiscatter Grid and a Polychromatic X-ray Source

Topic: Biomedical Engineering and Technology

Proof-of-concept simulation and experiment for phase-contrast x-ray imaging (PCXI) based on a single antiscatter grid and a polychromatic x-ray source have been performed. Our results indicate that single-grid-based approach seems a useful method for PCXI with great simplicity and minimal requirements on the setup alignment, which can open the way to further widespread use of the PCXI into the related application areas.

Author/Presenter: Mr. Hyunwoo Lim
Department of Radiation Convergence Engineering
Yonsei University, South Korea

Author: Prof. Hyosung Cho
Department of Radiation Convergence Engineering
Yonsei University, South Korea

Author: Ms. Yeonok Park
Department of Radiation Convergence Engineering
Yonsei University, South Korea

Author: Mr. Kyuseok Kim
Department of Radiation Convergence Engineering
Yonsei University, South Korea

Author: Mr. Uikyu Je
Department of Radiation Convergence Engineering
Yonsei University, South Korea

Author: Mr. Chulkyu Park
Department of Radiation Convergence Engineering
Yonsei University, South Korea

Author: Mr. Guna Kim
Department of Radiation Convergence Engineering
Yonsei University, South Korea

Author: Ms. Soyoung Park
Department of Radiation Convergence Engineering
Yonsei University, South Korea
8. The Analysis of Aflatoxin Levels Found in Peanuts

The objective of this study is to test the aflatoxin levels of processed peanuts compared to those obtained directly from small farms in S.C. Furthermore, the farmers of South Carolina will be informed and educated on the seriousness of aflatoxin in their crops.

Topic: Food Science and Human Nutrition

Author/Presenter: Dr. James Stukes
Department of Biological and Physical Sciences
South Carolina State University

Author: Ms. Ebony Dyson
Department of Biological and Physical Sciences
South Carolina State University

Author: Mr. David Karemara
Department of Biological and Physical Sciences
South Carolina State University

Author: Mr. Nazimuddin Mohammed
Department of Biological and Physical Sciences
South Carolina State University

Author: Mr. Isa Musa
Department of Biological and Physical Sciences
South Carolina State University
9. Implementation of e-Portfolio System Based on Developmental Student Advising Approaches

Developmental advising is a process to recognize the importance of interactions between the student and the campus environment. Student engagement is an important feature of higher education and the educational practices occur both inside and outside the classroom. E-portfolio system support students, and students and advisors should share responsibility for the advising relationship.

Topic: Academic Advising and Counseling

Author/Presenter: Prof. Jeong Eun Nah
University College
Yonsei University, South Korea

10. Inquiry-based Learning in High School Science Classrooms

Inquiry based learning is a great tool to promote in-depth learning in science classes. As a preservice teacher, it is essential that effective teaching methods are known.

Topic: Science Education; Secondary Education; Chemistry

Author/Presenter: Ms. Kristy Banyard
Chemistry Education
Tougaloo College
11. Image Improvement in Dental Cone-beam CT (CBCT) by Applying a Compressed-sensing (CS)-based Blind Deconvolution Scheme

We investigated a CS-based blind deconvolution scheme in the dental cone-beam CT (CBCT) for improving the imaging performance. We performed both simulation and experiment and evaluated its image characteristics to demonstrate its viability for image deblurring in CBCT.

Topic: Biomedical Engineering and Technology

Author/Presenter: Mr. Kyuseok Kim
Department of Radiation Convergence Engineering
Yonsei University, South Korea

Author: Prof. Hyosung Cho
Department of Radiation Convergence Engineering
Yonsei University, South Korea

Author: Ms. Yeonok Park
Department of Radiation Convergence Engineering
Yonsei University, South Korea

Author: Mr. Uikyu Je
Department of Radiation Convergence Engineering
Yonsei University, South Korea

Author: Ms. Chulkyu Park
Department of Radiation Convergence Engineering
Yonsei University, South Korea

Author: Mr. Hyunwoo Lim
Department of Radiation Convergence Engineering
Yonsei University, South Korea

Author: Mr. Guna Kim
Department of Radiation Convergence Engineering
Yonsei University, South Korea

Author: Ms. Soyoung Park
Department of Radiation Convergence Engineering
Yonsei University, South Korea
12. Diverse Clinical Field Experiences for Pre-Service STEM Teachers

The goal of our clinical field experience is for STEM secondary pre-service teachers to view the classroom and students from the perspective of a teacher. Our poster session will illustrate how collaborative efforts for providing diverse field experiences and teaching opportunities for pre-service teachers will broaden their understanding and competence to teach science, technology, engineering, and mathematics (STEM) concepts.

Topic: Teacher Education

Author/Presenter: Dr. Pamela Russ
Department of Education
Tougaloo College

13. Reality Capture of Iconic and Historic Facilities -- the Story of the US Air Force Academy Chapel

In the summer of 2014, civil engineers from Peterson Air Force Base and the U.S. Air Force Academy partnered with the Autodesk Corporation to conduct a "reality capture" of one of the most iconic facilities in the Air Force and perhaps, the country, the Air Force Academy cadet chapel.

Topic: Interdisciplinary & other areas

Author/Presenter: Dr. Patrick C. Suermann
Air Force Installation & Mission Support Center
U.S. Air Force Academy

Office of Naval Research (ONR) grant was awarded to Tidewater Community College (TCC), in collaboration with Old Dominion University (ODU), to develop and implement a set of standards and build an educational pathway from an Associate of Applied Science degree (A.A.S.) to a Bachelor of Science degree (B.S.) in General Engineering Technology with emphasis on Mechatronics—with a maritime concentration.

Topic: Industrial Engineering and Management; Technology Engineering

Author/Presenter: **Dr. Petros Katsioloudis**  
Dept. of STEM Education and Professional Studies  
Old Dominion University

Author: **Mr. Jovanovic Vukica**  
Dept. of STEM Education and Professional Studies  
Old Dominion University

Author: **Mr. Tomovic Milleta**  
Dept. of STEM Education and Professional Studies  
Old Dominion University

Author: **Mr. Tom Stout**  
Dept. of STEM Education and Professional Studies  
Old Dominion University

Author: **Ms. Mildred Jones**  
Dept. of STEM Education and Professional Studies  
Old Dominion University
15. Game Based Learning in Higher Education for Indigenous Students

This project is targeted at Aboriginal and Torres Strait Islander students enrolled in the Indigenous Tertiary Enabling Course to do the Introduction to Mathematics unit. It is widely agreed that the Aboriginal society and the non-Aboriginal society have two worldviews, leading to different learning strengths and weaknesses. Although there is no single evident learning style, there are some recurrent learning styles more commonly demonstrated by Aboriginal students.

Topic: Indigenous Education

Author/Presenter: **Dr. Rachna Aggarwal**
Centre for Aboriginal Studies
Curtin University, Perth Australia

Author/Presenter: **Mr. Aaron Matthews**
Curtin University, Perth Australia

Author: **Ms. Siew Ling Lim**
Curtin University, Perth Australia

16. VALUQuest a Role Playing game for Skills Assessment

ValuQuest is a class Role Playing Game for skills assessment. The game meant as a teaching tool is a situations-learning mode that require the student to mobilize its resources to find solutions, in which the problematic nature of proposed tasks require to be connected to their significance. The use of educational game is the custody of a task performance related to different fields of knowledge.

Topic: Curriculum Research and Development; Early Childhood Education

Author/Presenter: **Prof. Sabina Maraffi**
School of Science and Technology
University of Camerino, Italy

Presenter: **Prof. Annalisa Marinelli**
School of Science and Technology
University of Camerino, Italy
17. Weber State University Arts Integration Conference: A Multi-University STEAM Collaboration

Scientists, artists, and educators from across the country have joined forces on an arts-based, experiential science learning initiative—the Weber State University (WSU) Arts Integration Conference. This paper details the collaboration between WSU and the Goldbogen Lab at the Hopkins Marine Station, Stanford University. As a team we are interested in exploring process of structuring a STEAM professional learning experience for K-12 educators.

Topic:   Early Childhood Education; Elementary Education; Visual & Media Arts

Author/Presenter:   Prof. Tamara Goldbogen  
Department of Performing Arts  
Weber State University

Author:   Dr. Nicole Robinson  
University of Utah


Social BPM is a relatively novel approach to improving organizational processes through collaboration of various actors. At the heart of such approach is a combination of Business Process Management Systems and social networking technologies to create an IS-enabled architecture for participation and information exchange. This paper reviews the major opportunities and common challenges in modeling and implementing such systems.

Topic:   Information and Computer Sciences; Management; Education Technology

Author/Presenter:   Dr. Waleed S. Afandi  
Dept. of Management Information System  
King Abdulaziz University, Saudi Arabia
19. Designing the Course for Promoting Creative Presentation Skills of College Students

Communication and Creativity are regarded as critical competences to promote in college years. ‘Utilizing TED and Creative Presentation’ course was designed to develop these competences making the use of digital environment of the classroom.

Topic: Speech; Communication and Translation

Author/Presenter: Prof. Won Kyung Lee
University College
Yonsei University, South Korea

20. Initial Motivational Factors in Foreign Language Learning

This research paper investigates students’ motivational factors to start learning a foreign language. To involve students in learning a foreign language, most non-English speaking countries have made the subject matter compulsory. One or even two foreign language courses are indispensable for academic advancement and career development.

Topic: Language Education; Secondary Education; Psychology

Author/Presenter: Dr. Luisa C. Perez
Department of Modern Languages Education
Emporia State University

Author: Dr. Yuhua Tsui
College of Arts and Sciences
Washburn University
21. Mindfulness in Mothers of Children with Autism

Mindfulness practice reduces stress among vulnerable populations but has only recently been examined among female caregivers of children with Autism. We examine the effects of mindfulness practice on health in female caregivers of children with ASD. 75 participants will be randomly assigned to 3 groups mindfulness practice support group, and controls. Mindfulness and support groups will participate in a 10 week intervention and will complete pre and post test surveys.

Topic: Adult Education; Health Education; Special Education

Author/Presenter: Ms. Roxxette Zepeda
Dept. of Child and Adolescent Behavior
California State University of Northridge

Author/Presenter: Ms. Katie Gonzalez
Dept. of Child and Adolescent Behavior
California State University of Northridge

Author/Presenter: Dr. Nancy Miodrag
Dept. of Child and Adolescent Behavior
California State University of Northridge

Author: Dr. David Boyns
Dept. of Child and Adolescent Behavior
California State University of Northridge

Author: Dr. Ivor Weiner
Dept. of Child and Adolescent Behavior
California State University of Northridge
Day 2 - June 11 Saturday

Room: Haleakala 1
Time: 12:45 - 2:15
Session: Paper
Topic: Education Policy and Leadership/Public Policy
Chair: Dr. Cynthia Sytsma

I. School to Prison Pipeline: Why the Need for Restorative Justice

The School to Prison Pipeline is a nationwide system of local, state and federal education and public safety policies that pushes students out of school and into the criminal justice system. This system disproportionately targets youth of color and with disabilities. Restorative justice seeks to repair the harm done to the victim, the community, while changing the offender’s behavior. This model is attractive because it offers an alternative to popular get tough approaches and legislation.

Author/Presenter: Dr. Cynthia Sytsma
Department of Professional Studies
National University

II. The History and Politics of Affirmative Action Policy: How Brazil is Addressing Past Discrimination in Higher Education

The paper looks at slavery in Brazil and how past institutional discrimination against minorities has affected its educational system especially in universities. It discusses how federal policy is addressing the issue of discrimination in Brazil.

Author/Presenter: Dr. Kwame Badu Antwi-Boasiako
Department of Government
Stephen F. Austin State University

Continued on Next Page
III. The Islamic View of the Crusades and Why It Matters: Historical and Contemporary Perspectives

In July 1096 rumors of an approaching army unsettled the inhabitants of Asia Minor. Spies brought news of a motley horde of knights and foot-soldiers accompanied by thousands of raggedy woman and children all wearing on their backs crosses made from strips of cloth. This paper will address the developing Islamic perception of what became known as “the Crusades” from the beginning through the Third Crusade. Contemporary perspectives and Islamic sensitivity to the term “Crusades” in today’s political climate will also be examined. This paper will suggest that perhaps more than any of the ideological determinants, the Crusaders themselves impacted Islamic consciousness, and as history has shown -- Islamic memory.

Author/Presenter: **Dr. Barbara B. Pemberton**  
Department of Christian Missions  
Ouachita Baptist University
Day 2 - June 11 Saturday

Room:                        Haleakala 2
Time:                        12:45 - 2:15
Session:                     Paper
Topic:                      Women's Studies/Curriculum R&D/Educational Administration/
                            Leadership & Research
Chair:                      Prof. Karen Barahona


Due to certain revolutionary and political events in Central America in the late seventies, women had to redefine their search for equality from a national and a personal perspective. Considering the historical context of revolution, violence and chaos in the region, the purpose of my work is to analyze the relationship between socialist revolution and women’s political emancipation in the Central American context, specifically in Nicaragua.

Author/Presenter:          Prof. Karen Barahona
                            Foreign Languages and Literatures
                            Baldwin Wallace University

II. A Genealogical Consideration of American Self-Help Cultures: Or, How-To Use a Cultural Studies Methodology to Think, Write, and Teach Interdisciplinary

This paper interrogates Cultural Studies as a field of study and method of research. I share my research on American self-help cultures, specifically work on aura healing, to consider what a Cultural Studies method looks like in-practice, and to question the role of interdisciplinary methods at the institutional level.

Author/Presenter:          Ms. Alexandra Fine
                            Cultural Studies Graduate Group
                            University of California, Davis

Continued on Next Page
III. Cultural Markers and Their Influence on Chinese Students in Higher Education Classrooms

This session will describe the results of a qualitative study examining the cultural markers present within US higher education classrooms and their impact on visiting mainland Chinese students. Themes focused on the role of community, respect for instructor, surface/deep learning techniques, and competition/nurturance. Discussion will include analysis and further findings and provide implications for those working in higher education settings. Handouts will be provided.

Author/Presenter: Dr. Jim Berger
Master of Arts in Education - Adult Education Program
Western Kentucky University
I. Life is Rigged: How American Popular Culture Teaches Us to "Win"

American society appears to be an increasingly divisive and bifurcated culture. Cultural artifacts of all kinds indicate this division as well as an assumption of the necessity to approach the modern American life as a zero-sum game. An analysis of various types of cultural artifacts viewed through the lenses of cultural, psychological, and language theory reveals the tools by which divisiveness is created and held in place.

Author/Presenter: Dr. Bryan Fisher
Department of Mass Communication
Francis Marion University

II. Loss of the Mother/Mother Nature: Omissions in Louise Erdrich's The Birchbark House

This paper explores the relationship between Mother Nature and the Anishinabe people as seen through the eyes of Omakayas, the innocent young narrator of Louise Erdrich's The Birchbark House. The conspicuous lack of the word "mother" in the native Ojibwa language reveals a disconnect between the Anishinabe people and the great mother, Mother Nature, one that Erdrich deliberately parallels in the disconnect between mother and daughter.

Author/Presenter: Ms. Sofia Khan
English Department
California State University Northridge
III. The Impact of Media on the Early Sexualization of Children

For more than four decades research has shown that the media play a primary role in the early sexualization of our children. This research will examine TV, advertising, and film on the effects media may have on boys and girls and their perceptions of appropriate sexual behavior.

Author/Presenter:  **Dr. Cheryl Pawlowski**  
School of Communication Studies  
University of Northern Colorado

Author:  **Dr. Diane Matuschka**  
Department of Communication Studies  
University of North Florida
Day 2 - June 11 Saturday

Room: Haleakala 1
Time: 2:30 - 4:30
Chair: Dr. John Paul Dunn
Session: Workshop/Panel
Topic: Business Education/Inter-disciplinary & other areas

I. Entrepreneurship Education among Diverse Populations: Opportunities and Challenges

This workshop will allow experienced and inexperienced entrepreneurship educators to share experiences (both good and bad) so that they can improve or develop programs that will improve their efforts to improve the well-being of their constituents through entrepreneurship education.

Author/Presenter: Dr. John Paul Dunn (Workshop)
College of Business
University of Louisiana at Monroe

II. Increasing Student Engagement through Practical Projects

My challenge as an instructor was to engage students in the act of writing: I developed a project that required students to interact with the business community in Medicine Hat and they got involved in local issues! Student scores went up, student learning increased, and student partnerships also increased.

Author/Presenter: Ms. Miranda Davies (Panel)
Department of Business
Medicine Hat College, Canada

III. Creating Interdisciplinary and Innovative Curriculum for Future Leaders Focusing on Entrepreneurship and Positive Youth Development

This workshop introduces two award winning programs using interdisciplinary strategies, service-learning, and experiential learning concepts to motivate and guide youth (K-12 and 18-25) in engaging in entrepreneurial training and positive youth development.

Author/Presenter: Dr. Kathleen Liang (Workshop)
Community Development and Applied Economics
University of Vermont
Day 2 - June 11 Saturday

Room: Haleakala 2
Time: 2:30 - 4:30
Session: Paper
Topic: Distance Education/Higher Education/Indigenous Education/Science Education/Inter-disciplinary and other areas of Education
Chair: Dr. Patricia Traynor-Nilsen

I. Increasing Student Engagement in an Online Setting

This paper will examine differences in face to face interactions which occur in a brick and mortar setting versus online course engagement. Best practices recommendations for increasing online engagement will also be examined.

Author/Presenter: Dr. Patricia Traynor-Nilsen
Sanford College of Education
National University

II. Does the Journey Ever End? Exploring the Cultural Learning Journey of Students in University First Year Online Courses

This doctoral research project centres on the cultural learning journey of students. It investigates the outcomes when incorporating cultural standards into online teaching practice.

Author/Presenter: Mrs. Gail Tillman
The Wollotuka Institute
The University of Newcastle, Australia

III. Flipping the Classroom Online - Is It Possible

Flipping the classroom is considered to be a positive active student model of delivery of course material - but can this model also work for online courses? The paper will examine ways in which faculty in every discipline can use the Flipped Classroom model for their online courses.

Author/Presenter: Dr. Rebecca H. Rutherfoord
Honors College
Kennesaw State University

Author/Presenter: Dr. James K. Rutherfoord
Software Engineering & Game Design.
Kennesaw State University

Continued on Next Page
IV. Engaging Middle School Students in Computer Science: from Visual Programming on Android to Coding in Arduino

This paper presented the results from a study on students’ interests and confidence towards computer programming where a group of middle school students learned programming through two sequential approaches: one using visual programming tools to develop mobile Apps on Android; and the other using c codes to program Arduino-based robots.

Author/Presenter:    Dr. Jidong Huang
Electrical Engineering Department
California State University, Fullerton

Author:             Mr. Ye Lu
Electrical Engineering Department
California State University, Fullerton

Author:             Mr. Pradeep Nair
Electrical Engineering Department
California State University, Fullerton

Author:             Ms. Amy Cox-Petersen
Electrical Engineering Department
California State University, Fullerton
Day 2 - June 11 Saturday

Room: Kilauea
Time: 2:30 - 4:30
Session: Paper
Topic: Calculus/Geometric Function Theory/
      Computational Mathematics/Probability/Applied Mathematics
Chair: Dr. Mulatu Lemma

I. The Mathematical Beauty of Geometric Power Series

Geometric Power Series is the simplest and most applicable power series. It is commonly used in
differential equations, physics, and engineering. We will see that this power series has surprisingly many
applications.

Author/Presenter: Dr. Mulatu Lemma
College of Science & Technology, Department of Mathematics
Savannah State University

Author: Dr. Jonathan Lambright
College of Science & Technology, Department of Mathematics
Savannah State University

Author: Dr. Samuel Dolo
College of Science & Technology, Department of Mathematics
Savannah State University

II. On the Definitions of Quasi-conformal Mappings in Metric Spaces

We describe the requirements to extend the equivalence of the metric and geometric definitions of quasi-
conformal mappings on Euclidean Spaces of dimension n>1 to Metric Measure Spaces of Hausdorff
dimension.

Author/Presenter: Dr. Abdelkrim Brania
Department of Mathematics
Morehouse College

Continued on Next Page
III. On the Infinite Divisibility of Probability Distributions with Density Function of Normed Product of Cauchy Densities

The speaker will talk about the possible infinite divisibility of probability distributions with density function of normed product of the multi-dimensional Cauchy densities by using the soft "Mathematica".

Author/Presenter:  
Dr. Katsuo Takano  
Dept. Of Mathematics  
Ibaraki University, Japan

IV. Exploring the Gompertz Curve as a Mathematical Model

Many dynamic processes exhibit continuous growth of a quantity which frequently follows a pattern of initial rapid expansion eventually transitioning through an inflection point to an approach toward a limiting value. The Gompertz curve often does an accurate job in mirroring the real world. We introduce the Gompertz curve and investigate how to use it to model a variety of situations including tumor growth, sales of cell phones, U.S. population dynamics and parallel parking.

Author/Presenter:  
Prof. Michael Olinick  
Department of Mathematics  
Middlebury College
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Abrokwaa, Clemente - Penn State University .......................................................... 16, 63
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Weiner, Ivor - California State University of Northridge
Williams, Nia - Howard University College of Medicine

Y

Yeats, Jeremy T. - Adams State University

Z

Zepeda, Roxxette - California State University of Northridge
Acknowledgement

Hawaii University International Conferences would like to thank the following people who have made our 2016 STEAM Education (Science, Technology, Engineering, Arts, Math, and Education) conference a success!

Map courtesy of Hawaii Visitors & Convention Center

Keynote Speaker

We would like to thank Stuart H. Coleman author of ‘Eddie Would Go’ for sharing his unique perspective and experiences.

Hawaiian Steel Guitar Association

We would like to thank Mr. Kamaka Tom for the splendid introduction and music performance at the conference. His dedication to academic endeavors and sharing his knowledge and skills with us is greatly appreciated.

Reviewers

We thank the dedicated professionals who reviewed the papers submitted by our conferees to be included in our programs for the conference proceedings. Your work is of the utmost importance to make sure those accepted meet the highest academic standards for presentation.

Dr. Mulatu Lemma
Dr. Mary Jo Parker
Dr. Sharon Kahn
Dr. Felicia Sawyer
Dr. Ian Hay
Dr. Mary Lou Fritts
Dr. Jane Teng
Dr. Nancy Harding
Dr. Sandra Nite
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Dr. Bryan Fisher

The HUIC Staff would like to cordially invite you to participate in the growth and development of the conference by becoming a peer reviewer for our future conferences. If you are interested in becoming a peer reviewer please complete the form available at the registration desk indicating your topic of interest and specialization.
The Sessions Chair

Thanks to all of the Session Chairs for your guidance of the participants and presenters in each session. Your help in maximizing the experiences of all the session attendees to convey the thoughts and new ideas each brings to our conference is greatly appreciated. All timely presentations are important to expand the overall knowledge offered from many perspectives.

Dr. Emil D. Schwab
Dr. Susan Fernandez
Dr. Mary Jo Parker
Prof. Jayme Klinger Host
Dr. Laura Sullivan-Green
Dr. Leo Stocco
Dr. Kathleen Liang
Dr. Clemente Abrokwaa
Dr. Richard Ford
Dr. Diane Bender

Dr. Cynthia Sytsma
Dr. John Paul Dunn
Dr. Richard L. Biffle III
Prof. Alan Tollefson
Prof. Karen Barahona
Dr. Patricia Traynor-Nilsen
Dr. Edward S. Shihadeh
Dr. Carolee Koeln Hurtado
Dr. Bryan Fisher
Dr. Mulatu Lemma

All Participants

We also want to thank each and every one who attended our conference for their contributions to the knowledge bases presented and the interactions of all attendees who generously shared their knowledge and experiences to enhance everyone’s conference experience. We hope to see all of you back in Hawaii again one day in our continuing effort to bring those together in conferencing here in this magnificent environment as we look to the future of all educational efforts in all parts of the world!

Mahalo!
Hawaiian Prince Hotel Waikiki

100 Holomoana St, Honolulu, HI 96815
ADDENDUM

CHANGES:

Page 24:


Author/Presenter: Ms. Jiani Ma
Graduate School of Media Design
Keio University, Japan

IS MOVED TO:

Page 44: (Poster)


Author/Presenter: Ms. Jiani Ma
Graduate School of Media Design
Keio University, Japan

AMENDMENTS:

Page 34: Ms. Hye Kyung Hong amended to read as Prof. Hye Kyung Hong.

Page 29: Mr. Amerika Bernal amended to read as Ms. Amerika Bernal.

Page 62: Dr. Patricia Traynor-Nelson amended to read as Dr. Patricia Traynor-Nilsen.