

**STUDENT RESEARCH AND
CREATIVITY EXPOSITION
PROGRAM**

APRIL 26, 2012

1:00 P.M. TO 6:00 P.M.

Student Research and Creativity Exposition Committee:

Ziya Arnavut, Computer and Information Sciences
Paul Blanchet, Communication Disorders and Sciences
Maggie Bryan-Peterson, Sponsored Programs
PJ Corron, School of Music
Jack Croxton, Office of Student Creative Activity and Research
Jennifer Dyck, Psychology
Wendy Dunst, Graduate Studies
Tracy Horth, College of Arts and Sciences
David Kinkela, History
Karen Lillie, Language, Learning, and Leadership
Jill Marshall, Curriculum and Instruction
Dixon Reynolds, Theatre and Dance
Whitney Riley, Undergraduate Representative - Psychology
Jonathan Titus, Biology
Peter Tucker, Visual Arts and New Media
Ivani Vassoler-Froelich, Political Science

The following individuals and offices are acknowledged for their many contributions:

Michael Barone and Jonathan Woolson, Public Relations
Patty Herkey and Paula Warren, Publication Services
Kevin Cloos, Mark Delcamp, and Facilities Services
Virginia Horvath, Vice President for Academic Affairs
Michael Lemieux and Lisa Noody, Campus Life
Doug Johnson, Andrea Wasiera, and AIT Staff
Julie Sticek, College of Arts and Sciences
Megan Valentine, Assistant Director of Athletics
Faculty Student Association

Welcome Statements

Dennis Hefner, Ph.D., President 3

Virginia Horvath, Ph.D., Vice President for Academic Affairs 3

Jack Croxton, Ph.D. Director of the Office of Student Creative
Activity and Research3

Christine Givner, Ph.D., Dean College of Education 4

Kevin Kearns, Ph.D., Associate Vice President for Graduate Studies and
Research 4

Russell Boisjoly, D.B.A. Dean School of Business 4

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“Our Vision Statement says SUNY Fredonia should be composed of a ‘community of learners.’ Nowhere is this goal more realized than in the scholarship and creative activities undertaken by our faculty and students. The Student Research and Creativity Exposition shows how students are able to utilize their classroom knowledge to address real life issues, to demonstrate their mastery of complex subjects, and to clearly and effectively articulate their intellectual accomplishments. Additionally, the ever expanding number of joint faculty/student research projects has become a hallmark of our university. I commend everyone involved in making this year’s exposition a major success.”



Sincerely,

Dennis L. Hefner, Ph.D.
President

“Congratulations to the students and mentors whose work is featured in the 2012 Student Research and Creativity Exposition! As you can see from this Expo booklet and from interactions with the many students who are involved in today’s program, SUNY Fredonia offers opportunities for authentic scholarly and creative work across a range of disciplines, and this year we are featuring work that models community engagement as well. Our campus has the most important resources for accomplishing this kind of work: talented, curious students and faculty with the creativity, expertise, and commitment to guide those students in their projects. Regardless of what’s next after graduation—advanced studies or professional work in their fields—Fredonia students have the research, performance, and presentation skills to succeed.”



Sincerely,

Virginia Horvath, Ph.D.
Vice President for Academic Affairs

“The mission of the Office of Student Research and Creative Activity is to promote and support student scholarly activity and creative work across the SUNY Fredonia campus. Such an endeavor is integral to the teaching and learning experience. It provides an opportunity for students to become closely affiliated with a faculty mentor and to develop skills and knowledge that will benefit them significantly in the future. Clearly, both students and faculty gain from such activity, and therefore it is important that the institution make a concerted effort to promote such collaborations.



I am very pleased by the level of participation in this year’s Research and Creative Activity Exposition and I am truly impressed by the quality of our students’ work. They should indeed be proud of their considerable accomplishments. For many of them this is the capstone experience of their academic careers. Furthermore, I would like to commend all of the faculty mentors for the time and energy that they have devoted to supervising these projects. Thanks to everyone who has contributed to this special day of celebration.”

Sincerely,

Jack Croxton, Ph.D.
Director of the Office of Student Creative Activity and Research

“Student research and creative endeavors are a critical component of the intellectual vitality of our university. These activities of critical inquiry are the authentic application of what is learned from textbooks, reference materials, and the classroom. These application projects also provide a rich opportunity for faculty and students to collaborate as active partners in applied scholarship. The Student Research and Creativity Exposition provides our campus learning community with an event to showcase and celebrate the quality of academic engagement of our students. Congratulations to all who have participated in this most excellent event!”



Sincerely,

Christine Givner, Ph.D.
Dean, College of Education



“This year’s Student Research and Creativity Exposition showcases the diverse range and high quality of student creativity and scholarship at SUNY Fredonia. This impressive display of intellectual and creative achievement provides tangible evidence of the depth and variety of learning opportunities and close faculty-student collaboration available across campus. I applaud and congratulate the student participants, faculty advisors, and members of the Office of Student Creative Activity and Research for making this successful event possible.”

Sincerely,

Kevin P. Kearns, Ph.D.
Associate Vice President for Graduate Studies and Research

“The examples of collaboration between faculty and students and interdisciplinary student teams represented in the SUNY Fredonia Student Exposition are perfect illustrations of our University motto “Where Success is a Tradition.” We have brought together our best students and faculty to form a true “learning community” that has advanced knowledge in their respective fields, produced extraordinary creative works, and brought the theories and concepts learned in a course alive to solve a problem or advance an idea.

These projects, works of art, research reports, experiments, and demonstrations whether created by an individual or a team represent the “best learning outcomes” of our University. Students have the opportunity to work with each other in interdisciplinary teams; with faculty from across the University; with leaders of profit, non-profit and governmental organizations; with students and members of the communities in the region; and experience learning opportunities that involve actively engaging their knowledge.



With the opening of the new SUNY Fredonia High Technology Incubator, these projects will include the entrepreneurs at the cutting edge of their fields who will make a contribution to the regional and national economy by making their ideas into tangible products and services for their chosen customer base. Congratulations to the students, faculty, and organizations that participated in the Student Exposition!”

Russell P. Boisjoly, D.B.A.
Dean, School of Business



“Some people would like to claim that research is in competition with teaching, that there is a dichotomy between those faculty who are strong teachers and those who are strong researchers. The fact is, helping students to engage in research and creative activity, allowing them to participate in the scholarly and creative work of faculty, is one of the highest and most effective forms of teaching. Students can understand the value of intellectual and creative activity best when they are actual participants within the process of intellectual exploration or artistic creation. To encourage student research and creative activity is to take students seriously as fully enfranchised partners within the process of their education. Faculty at Fredonia do this very well, and today we celebrate some of the special results of our tradition of helping students become active learners. I congratulate the students who participate in today’s events, and I commend the faculty who have directed and inspired these student efforts.”

Sincerely,

John Kijinski, Ph.D.

Dean, College of Arts and Sciences

Thursday, April 26, 2012
Dods Hall
1:00 p.m. to 6:00 p.m.

All exhibits will be available for viewing throughout the day – students are scheduled to be present to answer questions at the indicated times.

POSTERS AND OTHER PRESENTATIONS
Multi-purpose Room

1:00 p.m. to 1:30 p.m.

AMTNYS - Mathematics Lessons with Potential from Teachers with Potential

Elyssa Adams, Rachel Bracikowski, Courtney Brydges, Andrew Carucci, Nicole Calbi, Amber Clavin, Trevor Delahoy, Brandon DiBerardino, Kyle Erlandson, Mark Heiler, Rebecca Jackson, Mabra Karpie, Stephen Kirsch, Ashley Kowal, Sherrie Maine, Peter Marshfield, James Matte, Jerica Morgan, Kyle Parsons, Jamie Ross, Samuel Schepart, Jesse Spehar, Adam Sprague, Angela Watson, Stephanie Wisniewski, Mathematical Sciences

A Relevant Graphic Novel

Jerome Bass, English

Gender Roles and The Awakening

Kristan Berggren, English

Retrospective Analysis of Shorewood Country Club

Rebecca Catalano, Psychology

DNA Compression

Melih Celik, Computer and Information Sciences

The Downward Spiral of PTSD: Bouncing Back Through the Window of Art

Wayne Ceallaigh, English

A Clockwork Orange

Kayla Carucci, English

African American Soldier and the New Negro Movement

Mitch Cummings, History

Optimism as a Predictor of Complacency

Joseph DeMaria, Psychology

The LaceLocker

Angelo DiMillo, Jessica Schleich, Business Administration

Fringe Literature

Eric Ellison, English

Disney Princesses: Beyond the Age Ratings

Dennine M. Flitt, Communication

Integrated Explanations of Mental Illness and Stigmatizing Attitudes

Justine Gabreski, Psychology

Tolkien and Rowling: Why Such a Different Response to Such Similar Stories?

Krista Guy, English

Rockin' The Commons

Jud Heussler, Communication

Feminism in William Gaddis' Carpenter's Gothic

Alyssa Hill, English

Wars of 1812

Tyffany Howlett, Erin Moses, Jordan Coccagnia, Phil DiFrancisco, Tyler Waterbury, Sam Miller, Blake Schier, History

The Differences and Similarities in Academic Habits between Male and Female College Students

Samantha Hyman, Communication

A Reading of Snow Crash

Josh Jerome, English

The affects a dog has on Preschooler language production

Leah Kerns, Zachariah Braunscheidel, Whitney Riley, Philip Best, Psychology

Christmas Traditions of Puerto Rico

Lindsay Lord, Modern Language

Violence in the Anti-Apartheid Movement

Evan Kiernan, History

Retrospective Analysis of Sullivan's Charbroil

Rebecca Mahoney, Psychology

The Wife of Bath: A Feminish Approach

Melissa Mallaber, English

Women Breaking Gender Roles in the Crusading Period

Roseanna Marciante, Paula Barnett, Kaleigh Shannon, History

Perceptions of a Bearded Man as a Function of Occupation, Sexual Orientation, and Mental Health

Skyelor Menard, Samantha Miosi, Psychology

Study of the Political in "V for Vendetta"

Brielle Messina, English

Insanity in Faulkner's The Sound and the Fury

Carly Morgan, English

Influence of Parents vs. Media on Occupational Gender Norms

Grace Nadeau, Communication

Retrospective Analysis of Alfred University College of Ceramics

Nathan Nichols, Psychology

The Effect of Carbohydrate Supplementation on Anaerobic Performance Levels

David Ridos, Exercise Science

Women In the New Negro Movement

Sarah Roffe, History

Chautauqua County's "Step It Up"

Katelyn Singer, Sociology; Katie Civileto, Interdisciplinary Studies

Marjane Satrapi: The Political is Personal

Rachel Sweeney, English

The Ending of Adventures of Huckleberry Finn: A Reception History

Casey Takacs, English

Retrospective Analysis of 4-H Camp Bristol Hills

William Webster, Psychology

Education of the so-called Mandela's Generation

Jennifer Werfelman, History

Financial Freedom

Clair Wisniewski, Marissa Imiola, Kemoy Wright, Business Administration

Dictionary Based Compression (GZIP)

Baris Yildirim, Computer and information Systems

Metacognition in College Exams

Shaun Zmuda, Kathryn Feather, Psychology

1:30 p.m. to 2:00 p.m.

Bram Stoker's Dracula: The Classic Novel's Show of Racism and the Reception from The Count's Native Homeland

Samantha Brethel, English

Effects of a Parent-Preschooler Shared Reading program on the Parent-Child Relationship and Child Pre-Academic Skills (service learning)

Maryanne Calabrese, Psychology; Danica Carlson, Communication Disorders and Sciences; Jaclyn Faliero, Communication Disorders and Sciences; Jacquelyn Gregory, Psychology; Leanne Kies, Psychology; Elizabeth Krzyanowski, Theatre Arts; Grace Scheible, Psychology; Jessica Schweickert, Communication Disorders and Sciences; Zandra Smith, Communication Disorders and Sciences; Kristina Zic, Psychology

Molecular characterization of a biofilm located at Canadaway Creek

Nicholas Catanzaro, Emily Shea, Biology

The Effects of an Ice Bath on Lower Body Exercise

Lindsey Constantino, Samantha Smithgall, Justine Degand, Jeanine Ducan-Remy, Exercise Science

The Recovery and Reimagining of Zora Neale Hurston

Caitlin Flatley, English

Economic Caste System in Brave New World

Shaena Fleischer, English

Retrospective Analysis of A Furniture Company

Carrie Johnstone, Psychology

Identification of IRES in gurken mRNA

Janelle Gabriel, Jacob Merle, Biology

Brian Turner's Post-Iraq Poetry

Erin Gutekunst, English

The Critical Reception of Robinson Crusoe

Philip Heimbarg, English

Culture and Food: a perfect Combination

Victoria Kazz, Modern Languages

The Bike Lab

Raul Lopez, Kristen Schoenbeck, Jordan Bernstein, Matthew Rockow, Business Administration

Brocton Middle School, Female Empowerment/Mentoring Club

Melissa Mallaber, Women's Studies

Zombies in American Pop Culture

Owen McGuinness, English

Object recognition systems

Seyma Nur Ozdemir, Computer and Information Sciences

Accident or Suicide, and How to Escape the Labyrinth

Lauren Palumbo, English

I Am Legend

Tom Powers, English

The Handmaid's Tale and Modern America

Victoria Radar, English

Skeletal Muscle Fiber Types in Obese Mice

Abbas Rizvi, Kevyn Rustici, Jordan Johnson, Maxwell Denies, Biology

Snow What?

Jeremy Rosen, English

Campus Climate, "Engaging in our Community: Students in Service"

Aimee Salsbury, English

Persepolis

Jenelle Schirmer, English

Military Orders of the Crusades

Geoffrey Simmonds, Kevin Luss, Jonathan Cole, History

The Effect of Garlic Mustard on Forest Soils & Understory Species in Western New York

Renee Solly, Thomas Caggianelli, Jessica Wooten, Brian Schmidt, Biology

Puerto Rico Program

Jenna Treahy, Modern Languages

Effects of Aid on the ANC

Connor Young, History

Retrospective Analysis of Gui's Lumber

Peter Wilkinson, Psychology

2:00 p.m. to 2:30 p.m.

Earthquake History and Hazards in New Jersey

Alysha Alfieri, Geosciences

Out of the Menstrual Closet: Perceptions of Women Who Leak Menstrual Blood

Angela Barney, Psychology

Sports and the New Negro

Brandon Bernard, History

Chautauqua Rural Ministry- The Friendly Kitchen

Christina Boody, English

Physiological Reactions of Preschool Children to the Presence of a Real Dog During a Memory Task

Zachariah Braunscheidel, Jacquelyn Gregory, Psychology

The Tainos

Jenny Capitano, Modern Languages

Muslim Perspectives on Leprosy and Cannibalism during the Crusades

Kara Corlett, Romana Schaeffer, Justin Hubbard, History

The information content of Acheta domesticus songs and the evolution of multiple signals

Andrea Covey, Jeremy O'Reilly, Dan Badzinski, Biology

Fredonia for St. Jude

Megan Dash, Social Work; Patrick Bettcher, Interdisciplinary Studies

Retrospective Analysis of Polito's Bakery

Megan Favale, Psychology

Chautauqua Health Action Team

Blossom Fernandes, Christina Marsh, Sociology

Safety in Swashbuckling: Don't stab the Actors

Sarah Flanagan, Theatre and Dance

SUNY Fredonia Students in Free Enterprise

Justen Floss, Nathanel Zager, Christopher Schilling, Stephany Zambito, Business Administration

In Situ Real-time Visualization of grk mRNA and Sqd Protein Interaction within a Developing Drosophila Oocyte Using Tri-molecular Fluorescence Complementation (TriFC)

Steven Gangloff, Alicia Watson, Nancy Levensailor, Biology

Retrospective Analysis of a High School Soccer Team

Emily Gendron, Psychology

Retrospective Analysis of Fairgrounds YMCA

Christine Goings, Psychology

The War on Vonnegut

Amber John, English

Retrospective Analysis of Santora's Pizzeria

Lauren Kaczowski, Psychology

Effects of Information on Reducing Anti-fat Bias

Kathryn Kirkpatrick, Chelsea Fisher, Psychology

Retrospective Analysis of Bull's Run Grill and Alehouse

Sam Knipper, Psychology

Retrospective Analysis of Nino's Pizzeria

Pamela Kus, Psychology

Healthy Choices School Guide data

Chelsea Leibundgut, Sociology

Gender Representation in Venus and Adonis

Heather Lewandowski, English

Rendering War: Looking at Form, Voice, and Individual Experience in the Poetry of Brian Turner, Yusef Komunyakaa, and Wilfred Owen

Eli Lowry, English

Retrospective Analysis of Bob Evans Restaurant

Kevin Lowther, Psychology

Retrospective Analysis of Gates Chili Colorguard

Alexandria Maley, Psychology

Retrospective Analysis of Critoph Engineering

John Markwardt, Psychology

Social Work Day at the United Nations 2012

Christina Marsh, Social Work

Visiting potential employers

Kurt McGhee, Visual Arts and New Media

Predictors of Preschoolers' Gains from a Parent-Child Shared Reading Program

Brianna Milligan, Psychology

The Trial of Harry Potter: Christian Reception

Tiffany Mowers, English

Retrospective Analysis of LAUB International

Jonathan Nowak, Psychology

An Investigation of the Utilization of Sport Psychologists

Leah Palmer, Psychology

Sylvia Plath: Her Life, Her Work, Her Legacy

Angela Pitts, English

Women and Non-Monogamies

Victoria Radar, English

Mephistophilix: The Demon of the Machine, and the Machine of the Demon

Mike Reeves, English

Writing India: Arundhati Roy

Amanda Rogers, English

Where Do We Go from Here?: Implications of LGBTQ Climate Survey Results

Vanessa Sanchez, Psychology

Effects of response to bias between student and teacher

Ashley Schosek, Psychology

Fasting vs. Feasting

Amanda Solly, Catherine Guth, Mary Miller, Cheryl Yerger, Exercise Science

A review of studies examining simulation of multiple personalities

Alexandra VanBergen, Psychology

Effects of Access to PowerPoint Slides on Memory Retention and Retrieval

Eric Walsh, Dale Haskins, Lucas Hale, Psychology

Examining the Effects of Empathy Levels on Pro-Environmental Attitudes

Brittany White, Brittany Waller, Vanessa Sanchez, Psychology

2:30 p.m. to 3:00 p.m.

Learning About the Causes of Behavior

Courtney Battaglia, Psychology

Exacerbated Flood Hazards of Canadaway Creek

Jake Braxton, Geosciences

Naval Powers in the Fourth Crusade

Rebecca Chriscaden, Jonathan Boylhart, Nicholas Becker, History

The Power of Influence Relating to Social Media

Joseph DeMaria, Leah Palmer, Alexandra VanBergen, Psychology

Art and the New Negro Movement

Justin Dickerson, History

Examination of Executive Functioning Using a Working Memory Task

Amy Fisk, Whitney Riley, Psychology

The Evolving American Dream: Miller's Death of a Salesman Then and Now

Jared George, English

The effects of auditory stimulus on cued recall

Steven Grzybowski, Psychology

Effects of Vicariously Experiencing Failure and Success on Students Personal Self-Efficacy with Solving Qualitative Problems

Alex Hughes, Tom English, Griffin Smith, Psychology

Sigma Kappa

Kelsey Kilminster, Communication

Sleep Deprivation Studies

Christine Linnecke, Exercise Science

Studies on mole-voles

Lindsey Mendez, Danielle Bless, Anthropology

The effects of aversive conditioning on schizophrenics

Paul Mercado, Social Work

Retrospective Analysis of Buffalo City Hall

Leah Palmer, Psychology

Apples and Oranges – Floods and Flumes

Lauren Piche, Geosciences

Political Translation

Amanda Rogers, Alex Ives, Political Science

The Effects of Carbohydrate on Exercise and Cognitive Performance

Samantha Seewaldt, Danielle Buergin, Meaghan LaFranca, Lisa Modera, Exercise Science

Engaging in Our Community Series: Students in Service

Paul Shephard, Philosophy; Jesse Duane, Business Administration - Marketing

SUNY Model European Union

Alexander Stone, Political Science; John Plevel, Social Studies Education; Daniel Palm, Political Science; Amra Cuhel, Video Production; Michael Dean, Political Science; Richard Rogers, Political Science; Laura Imm, Political Science; Maxwell Radley, Political Science; Patrick DePuy, Video Production; Myava Cuhel, Video Production; Timothy Kennedy, Journalism; Rebecca Thompson, French; Carolina Pickens, International Studies

Apartheid and Women's Influence in the Family Unit

Katherine Swanson, History

Internal Attributions and Information Processing Style in Cause-Joining Behavior

Brittany White, Lynsay Paiko, Keri Filsinger, Psychology

3:00 p.m. to 3:30 p.m.

SIFE Regional Presentation 2012

Emily Bird, Business Administration

Stigmatization of drug use across legality and wealth

Zachariah Braunscheidel, Aliana McCreary, Christopher J. Maier, Psychology

Education and the Apartheid in South Africa

Brian Conley, History

Subversive religious groups in crusader states

Damien Delgado, Michael Krauza, Andrew Jones, History

Chautauqua County Health Department

Amanda Garrasi, Lauren Larson, Sociology

IBS Awards

Jud Heussler, Communication

Jazz and Social Protest

Laura Hirst, History

Using Life Skills Group To Increase The Independence For Group Home Residents Who Are Transitioning To Independent Living

Jessica Newberry, Psychology

Retrospective Analysis of Calvary Automation

Branden Prentice, Psychology

The Vagazzled Vulva

Whitney Riley, Psychology

Retrospective Analysis of Tanning Bed

Cassandra Schaefer, Psychology

The Effect of Garlic Mustard on Forest Soils & Understory Species in Western New York
Brian Schmidt, Kyle Carson, Biology

Mean-Variance Portfolio Theory of Investment Science
Weiyi Wang, Mathematical Sciences

Engaging in our community; students in service, InterVarsity Christian Fellowship
Derek West, Volunteer Services

3:30 p.m. to 4:00 p.m.

Stories of Puerto Rican Emigrants... and the Ones That Stayed
Lisa Alberty, Modern Languages

The Old Man and the Sea and The Desire for Liberation
Thomas Avery, English

Retrospective Analysis of Simply Crepes
Lydia Biernat, Psychology

Now and Then: The Continued Conversation on the Gospel of John
Sarah Bradley, English

Science Center Soils Open Window to Fredonia Glaciation
Kyle Burnett, Geosciences, Amanda Bussom, Luke Spencer, Jacob Skudlarek, Geosciences

The Reception of "Gravity's Rainbow" by Thomas Pynchon
Jeannette Chin, English

Identifying Areas for Healthy Improvements in Youth Agencies
Dana Collier, Kara Johnson, Sociology

Retrospective Analysis of A Hospital
David DeGolier, Psychology

Retrospective Analysis of Bed, Bath, and Beyond
John Iburg, Psychology

The Enhancement of Formative Assessments in a Guided Inquiry Classroom
Jade Lauzon, Chemistry

Determination of Methane Generation Potentials from Local Food Waste Streams
Alyssa Medo, Hannah Farley, Jamie Hoffman, Noah Rankin, Chemistry

Retrospective Analysis of Boy Scouts of America
James Nichols, Psychology

Portfolio Management Project
Michael Santoli, Matt Carlson, Vincent Gambino, Business Administration

Retrospective Analysis of Vincenzo's Pizza
Cory Shirley, Psychology

5:00 p.m. to 5:30 p.m.

Advanced Poetry Writing
Samantha Brethel, Katherine Bridon, Jamie Clark, Mackenzie Frazer, Jared George

Alyssa Hill, Joshua Jerome, Kristen King, Lauren Kuss, Eli Lowry, Brielle Messina, Brittany Neddo, Elizabeth Reid, Julie Rummings, Madelein Smith, Christina Stock, English

SUNY Fredonia Brass Quintet

John Bailey, Amanda Willard, John Kresse, Mike Dorato, Music

Retrospective Analysis of Wegman's Food Markets

Victoria Coglitore, Psychology

Retrospective Analysis of Classics V Banquet Facility

Steven Fenush, Psychology

United States political and military involvement in Chilean affairs during the Cold War

Roslyn Grammar, Cory Campbell, Shai-lee Carmel, Jason Trusso, Political Science

Boys and Girls Club in Dunkirk-Playground

Deanna Jelardi, Theatre and Dance

Urban Women Under Apartheid

Dorena Johnson, History

Drug Trafficking in Latin America

Morgan Johnson, Amelia Schunk, Holly Aldrich, Jacob Staring, Political Science

All men are created equal: but is our education?

Keriann Ketchum, Political Science

Causes and Effects of Socio-economic Inequality in Latin America

Louis Loveless, Kristin Italia, Mitch Cummings, Marian Pata, Political Science

Retrospective Analysis of Holimont, Inc.

Jerrica McAndrew, Psychology

Human rights and Peaceful protest

Jenna Morris, Political Science

"Window Water Baby Moving:" Birth as Art or Exploitation

Anne Muscatello, English

Poverty leads to drug trafficking between Colombia and the United States

Nicole Polle, Elizabeth Ely, Jonathan Wood, Ellen Bosco, Political Science

Stock Exchange and Wallstreet

Marisa Richardson, Matthew Mahoney, Business Administration

Diplomacy and Nuclear Weapons Since the Cuban Missile Crisis

Spencer Smith, Kenneth Smith, Jeffrey Luckas, Mike Panebianco, Political Science

5:30 p.m. to 6:00 p.m.

Drugs, Violence, and Power

John Benware, Kevin Koval, David Smalle, Political Science

The Visage of Violence: Analyzing student responses to violent literature in the college classroom

Naomi Burnett, English

The Cuban Missile Crisis: On the Brink of Destruction

Steven Goldman, Charlie Larocca, Tyler Waterbury, Jack Markwardt, Political Science

Pseudo-distance Technique for Color-mapped Image Compression

Basar Koc, Computer and Information Sciences

Income Disparity in South America

Kelsey O'Callaghan, Alyssa Stubblefield, Megan Fink, Jacquelyn Koroma, Political Science

Evaluating the Eutrophication of Eckhardt Pond

Michael McShane, Environmental Sciences

COMPUTER AND OTHER PRESENTATIONS

1:00 p.m. to 1:30 p.m.

Canadian/US Border

Samantha Hyman, Romana Schaeffer, Sheanne Riley, Michael Ball, History

Technology Dissemination Through Gamification

Mark Mackey, James Fefes, Sean Wignall, Brandon Artymowycz, Computer and Information Sciences

1:30 p.m. to 2:00 p.m.

Brandon Bagel House

Brandon Artymowycz, Computer and Information Sciences

Leadership and Military of Native Americans in the War of 1812

Rebecca Chriscaden, Lindsay Rollins, Kara Corlett, Justin Hubbard, History

The War of 1812: The Impact of Enlightened Thought and Geographic Supremacy on Early America's Democracy

Kathleen Farrell, History

Napoleon's Russian Blunder: The invasion of the Russian Empire and the subsequent fall of Napoleon

Bryan Schram, History

1812 Military Technology

Geoffrey Simmonds, Jennifer Smith, Evan Kiernan, Matthew West, History

2:30 p.m. to 3:00 p.m.

South Africa's Greatest Goal: The Use of Sports to Create a New Cultural Identity

Jeffrey DiCocco, History

DNA structures

Cem Sancak, Computer and Information Sciences

3:00 p.m. to 3:30 p.m.

Cross-platform Mobile Web Development

Daniel Lips, Rob Szkutak, Computer and Information Sciences

NeoRealist Film

Amanda Rogers, Nicole Ceppaglia, Modern Languages

5:00 to 5:30 p.m.

Student Experiences

Myava Cuhel, Communication

SUNY Fredonia Brass Quintet

John Bailey, Amanda Willard, John Kresse, Mike Dorato, Music

ORAL PRESENTATIONS

Room 101, Dods Hall

2:00 p.m.

Data Transmission to virtualized servers

Zhuojun Fu, Sean Wignall, Computer and Information Sciences

2:20 p.m.

From Stowe to Stockett: Why the White Voice Still Speaks For the Black Experience

Kristen King, English

2:40 p.m.

Zweig's Return to Relevance

Matthew Pisarski, English

5:00 p.m.

Strategies and Therapies for English Language Learners who Are Refugees (STELLAR)

Sarah Clayton, Language, Learning, and Leadership
(Graduate Student Presentation)

5:20 p.m.

Non-native English speakers (NNES)

Kelly Lisowski, Language, Learning, and Leadership
(Graduate Student Presentation)

5:40 p.m.

Building high school newcomers cross-cultural identities with the 6+1 trait writing model

Birgit Cavalieri, Language, Learning, and Leadership
(Graduate Student Presentation)

Room 102, Dods Hall

5:00 p.m.

The Female Condition

Joyce Abbott, History

5:20 p.m.

The Reception of Silence

Derek Herzog, English

5:40 p.m.

Language or Disability?: Representation, Identification, and Assessment of ELLs for Special Education in Western New York State

Holly Duset, Language, Learning, and Leadership
(Graduate Student Presentation)

Bob Steele Multipurpose Room – Steele Hall

1:10 p.m.

School Curriculums and the English Language Learner

Kali Simko, Language, Learning, and Leadership
(Graduate Student Presentation)

1:30 p.m.

English Language Learners' Perceptions of High-Stakes Exams

Alina Taylor, Language, Learning, and Leadership
(Graduate Student Presentation)

2:00 p.m.

Black Eyed Susan (this is a 25 minute film)

Kimberly Krenzer, Jessica Drake, Communication

3:00 p.m.

SLA Monitoring for ISPs and Customers

Timothy FitzMorris, Matthew Johnson, Computer and Information Sciences

VISUAL ARTS AND NEW MEDIA PRESENTATIONS

How the Moon and Stars Came to Be

Sarah Peck

Le Pecheur Petite

Taylor Hultquist

It's No Fun Being the Only Talking Cactus

Matt Corrigan

Sweet Irony

William Lauko

Biomimic

Lindsay Holmes,

Biomimic

Matt vanLieshout

The Raven - Group Project, Intro to 2D Animation

Ariana Tressel-Orner, Brittany Morelli, Jessica Winner, Stephanie Casella, Taylor Hultquist, Lindsey Alfred, Matt Corrigan, Sarah Peck, Andy Carter, Zakiyah Woodson, Erica Kang

Mentor: Ms. Jill Johnston, Visual Arts and New Media

Emplotment

Anne Muscatello

Maze

Maribel Avila

The Little Angler

Taylor Hultquist

Tilting

Robert Emhof

Cynophobia

Bridget Mackowiak

Emotions Go To War

John Manko

Three Metamorphosis

Max Schwartz

Mentor: Mr. Phil Hastings, Visual Arts and New Media

DANCE PERFORMANCE

Dods Hall Gym, West End

2:30 p.m.

"Embodying"

Choreographer: Sam Kenney

Music: Delirium

Costume Design: Dixon Reynolds

Dancers: Stephanie Byron, Christina Giannitsis, Elizabeth Goretti, Amanda Kellner, Amanda Sahr, Courtney Stewart, Abigail Sullivan, Sydney Thomas

Understudy: Harley Branning

*"Embodying" was chosen for inclusion in the Gala Concert of the 2012 Northeast Regional American College Dance Festival held at Pennsylvania State University.

MUSICAL PERFORMANCES

Room 101, Dods Hall

3:00 p.m.

Reeds at Play

Rachel Bicheler, Erin Rush, Michael Banko, Kelly Gravel

Mentor: Ms. Sarah Hamilton, Music

3:30 p.m.

Songs:

Magic Foot
Not That Smart
Woe is Me
The I Love You Song
Prayer of the Comfort Councillor

Performers:

James Welch, piano
Mary Ryan
Matt Antar
Alex Grayson
Theresa Egloff
Rachel Mulcahy
Madison Osgood
Raphael Santos
Steven Russell
Richard Rosenthal

Mentor: Ms. Jessica Hillman-McCord, Theatre and Dance

Room 102, Dods Hall

3:40 pm.

"Filmaginaires" - Roland Dyens
"Andante ma moderato" - Johannes Brahms
"Rolando" - James Piorkowski

Jahzeel Montes, Music Education

Anthony LaLena, Music Performance

Mario Rubano, Music Therapy/ Performance

Michael Mendoza, Music Performance/ Composition

VOLUNTEER SERVICES PRESENTATIONS

Campus Climate -- Amie Salisbury

Delta Chi - Paul Shephard

Delta Phi Epsilon - Sara Kobel

Fredonia for St. Jude - Megan Dash

Rockin' the Commons (Fredonia Radio Systems) - Jud Heussler

Intervarsity Christian Fellowship (STRIVE Ministries) - Derek West

Sigma Gamma Phi - Nicole Fix

Sigma Kappa - Kelsey Kilminster

GRADUATE STUDENT PRESENTATIONS

5:00 p.m. to 6:00 p.m.

A Volume Conundrum: A Study of Misconceptions of Volume of Cylinders in the High School Mathematics Classroom

Angela Beck, Mathematical Sciences

Reduced TOR Activity Promotes Cap-independent Translation of Gurken during Drosophila Oogenesis

Malachi Blundon, Cara Boyle, Danielle Hindes, Biology

Differences in Perceptual Measures of Nasality and Measured Nasalance in Native and Non-Native Western New Yorkers

Marissa Carmello, Communication Disorders and Sciences

Building high school newcomers cross-cultural identities with the 6+1 trait writing model

Birgit Cavalieri, Language, Learning, and Leadership

Strategies and Therapies for English Language Learners who Are Refugees (STELLAR)

Sarah Clayton, Language, Learning, and Leadership

English Language Learners' Narrations of Their Experiences Learning English in South Korea and The United States

Shauna Condon, Language, Learning, and Leadership

The information content of Acheta domesticus songs and the evolution of multiple signals

Andrea Covey, Jeremy O'Reilly, Dan Badzinski, Biology

Language or Disability?: Representation, Identification, and Assessment of ELLs for Special Education in Western New York State

Holly Duset, Language, Learning, and Leadership

(Please note that Holly will present at 5:40 p.m. in Room 102, Dods Hall.)

Combining the Proverbial Sandboxes: Crossover Fan Fiction and Authorship

Jennifer Golabek, English

Music Integration in Kindergarten

Stacie Gronski, Language, Learning, and Leadership

Eliminate the Substitution or Substitute the Elimination? A Study of Methods Used for Solving Systems of Equations in the High School Mathematics Classroom

Ricardo Hammond, Mathematical Sciences

Using the 'Little Grey Cells': An Examination of Closure in the Works of Agatha Christie

Jacqueline Hebert, English

2011 NCTE Convention: Reading the Past, Writing the Future

Jacqueline Hebert, Kristen Niemi, Elizabeth Krok, Sara Shinder, English

A Correlation Study between Self-Efficacy, Automaticity, and the Mathematics Achievement of Adult Students

Joseph Jagoda, Mathematical Sciences

Perceptions of Genital Deviance

Kimberly Krenzer, History

Black Eyed Susan

Kimberly Krenzer, Jessica Drake, Communication

(Please note this is a short film that will be shown at 2:00 p.m. in the Bob Steele Multipurpose Room.)

Non-native English speakers (NNES)

Kelly Lisowski, Language, Learning, and Leadership

Preparedness of High School Students for Introductory Level College Mathematics Courses

Ashley Martin, Mathematical Sciences

British First World War Poetry

Kristin Niemi, English

A Study of the Misconceptions of Multi-Step Equations in Middle School and College Classrooms

Amber Powell, Mathematical Sciences

Taking Time Or Just Wasting It: A Study of How Time to Complete an Exam Correlates to the Students' Performance on Exams

Nick Raynor, Mathematical Sciences

The Positives About Negatives: A study on the struggles and misconceptions of integer operations in adult education

Joshua Sadler, Mathematical Sciences

School Curriculums and the English Language Learner

Kali Simko, Language, Learning, and Leadership

Misconceptions that mainstream teachers may have about English Language learners

Jennifer Skelly, Language, Learning, and Leadership

The Perfect Review Session

Nicholas Spry, Mathematical Sciences

Mix-Match Variables: A Study of the Effects of Changing Variables in Common Placed Mathematical Formulas on Students Comprehension

Kendelle Sutton, Mathematical Sciences

English Language Learners' Perceptions of High-Stakes Exams

Alina Taylor, Language, Learning, and Leadership

(Please note Alina will present at 1:30 p.m. in the Bob Steele Multipurpose Room)

Exploring the Effectiveness of the Sheltered Instruction Observation Protocol (SIOP) Model

April Walters, Language, Learning, and Leadership/TESOL

Knowing and Using Words

Natalie Weber, Language, Learning, and Leadership

Possible Mutualistic Relationship Between Japanese Knotweed and European Fire Ant

Jessica Wooten, Thomas Caggianelli, Biology

Exploring New Connections: Bridging the Gap Between American and Chinese Education Systems

Kyle Yelich, Curriculum and Instruction

REMARKS

Multipurpose Room – Dods Hall

4:00 p.m.

Dr. Virginia Horvath, Vice President for Academic Affairs

Dr. Jack Croxton, Director of the Office of Student Creative Activity and Research

KEYNOTE SPEAKER

Multipurpose Room – Dods Hall

4:15 p.m.

Keynote Speaker – Dr. Dennis Hefner, President SUNY Fredonia

“Joint Student/Faculty Research: Why It Matters”

RECEPTION IMMEDIATELY FOLLOWING

ABSTRACTS

The Female Condition

Joyce Abbott, History

Mentor: Dr. Markus Vink, History

This work deals with the rights, privileges and responsibilities enjoyed by women during the Dutch Republic. It looks at the three stages of their lives; childhood, adulthood and widowhood. The position of the women of the Dutch Republic was unique for its time and even up to the present day.

Stories of Puerto Rican Emigrants... and the Ones That Stayed

Lisa Alberty, Modern Languages

Mentor: Dr. Vivian Garcia, Modern Languages

Puerto Rico and the United States have a long history and relationship, helping each other economically for decades. People from Puerto Rico migrate back and forth from Puerto Rico to various places in the U.S., including professional workers. They have overcome many obstacles when coming to the U.S., including language barriers and racism. I have interviewed twenty-two people who were born in Puerto Rico, and asked them about their experiences and opinions regarding the United States and Puerto Rico. My poster presentation will display the results of these interviews and my perspective as a Bronx-Born Boricua* who often travels to and from La Isla Del Encanto. I have formally learned more about Puerto Rican culture with Awilda Rosa, and more about the Spanish language with Profesora Violeta Donovan in the University of Puerto Rico. My appreciation and love for my Puerto Rican ancestors is so much deeper now.

(*The term "Bronx-Born Boricua" is coined by Dr. Vivian Garcia.)

Earthquake History and Hazards in New Jersey

Alysha Alfieri, Geosciences

Mentor: Mr. Randy Woodbury, Geosciences

Earthquakes occur daily throughout the world when accumulated strain within the Earth is released along faults. Though not heavily discussed, earthquakes happen in my home state of New Jersey. There is ancient evidence seen in the folds of rocks all over the state and historic records of significant earthquakes centuries ago. Medium-size earthquakes occur about every hundred years and one may arrive soon. New buildings must meet strict codes for earthquake resistance, but buildings constructed before 1977 are vulnerable to medium-sized earthquakes. There are also three nuclear power plants in the state and other critical institutions at risk. Studying soil and bedrock is a good way to predict damage caused by a future quake, such as liquefaction and landslides, and to plan precautions. My project uses Geographic Information System mapping to show and rate these hazards, to inform and prepare people who aren't aware of this earthquake disaster potential.

AMTNYS - Mathematics Lessons with Potential from Teachers with Potential

Elyssa Adams, Rachel Bracikowski, Courtney Brydges, Andrew Carucci, Nicole Calbi, Amber Clavin, Trevor Delahoy, Brandon DiBerardino, Kyle Erlandson, Mark Heiler, Rebecca Jackson, Mabra Karpie, Stephen Kirsch, Ashley Kowal, Sherrie Maine, Peter Marshfield, James Matte, Jerica Morgan, Kyle Parsons, Jamie Ross, Samuel Schepart, Jesse Spehar, Adam Sprague, Angela Watson, Stephanie Wisniewski, Mathematical Sciences

Mentors: Dr. Tedi Cox, Dr. Keary Howard, Mathematical Sciences

From fractions to calculus and plenty in between, plan to view highlights of award-winning lesson plans in middle and secondary mathematics classrooms. Creativity and innovation are featured in these lessons presented by senior Fredonia student teachers. The lesson plans were selected for presentation at the Association of Mathematics Teachers of New York State (AMTNYS) state-wide conference in Rochester, New York.

Brandon Bagel House

Brandon Artymowycz, Computer and Information Sciences
Mentor: Dr. Gurmukh Singh, Computer and Information Sciences

Any small business in modern times needs business transactions to be done with currently available software systems in the market. For example, the business owner or employee working in a company is supposed to give the client a hard copy of money spent by him/her for the transaction made to purchase the goods. In this project, we are creating a new business application that can be used to hand in the bill to the customer/client and that information of transaction will be recorded into the database for paying county and state taxes. This application will be designed and developed using the latest version of Microsoft Visual Studio 2010 installed on University Computers in various buildings of the campus. Using MS Visual Studio 2010, we will design the Graphical User Interface (GUI) and write the relevant algorithm of the application in Visual basic language to accomplish our project.

The Old Man and the Sea and The Desire for Liberation

Thomas Avery, English
Mentor: Dr. Emily VanDette, English

The Old Man and the Sea was the last of Hemingway's great works to be published while he was still alive. Not only did it get the Pulitzer Prize for Fiction, it was also recognized by the Nobel Prize committee as having a large impact on Hemingway receiving the Nobel Prize in Literature in 1961. The author himself said that it was "the best I can write ever for all of my life." What I will investigate is why this novel has been so highly recognized by the literary world as Hemingway's flagship novel. What themes or trends did scholarly readers from Hemingway's own time treat and what does their perspective tell us about society as a whole? What sorts of negative criticism and disputes about the novel's importance or legacy exist? And if there are no major controversies or discrepancies in the novel's reception history, why aren't there?

SUNY Fredonia Brass Quintet

John Bailey, Amanda Willard, John Kresse, Mike Dorato, Music
Mentor: Mr. Raymond Stewart, Music

The SUNY Fredonia Brass Quintet is comprised of five senior music majors in the School of Music. Unfortunately, since one of the group members cannot attend the exposition on the 26th, the group has taken it upon themselves to create a high quality DVD of the performance they will be giving at the Calvin Smith Festival & Brass Quintet Competition in the summer.

Out of the Menstrual Closet: Perceptions of Women Who Leak Menstrual Blood

Angela Barney, Psychology
Mentor: Dr. Ingrid Johnston-Robledo, Psychology

Empirical research on menstruation as a stigmatized condition may inform efforts to help women resist and challenge the stigma. This study assessed the extent to which young women ascribed a stigmatized status to a menstruating target, and to examine psychosocial correlates of the view of menstruation as a stigmatized condition. Participants were randomly assigned to read and respond to one of four vignettes. The level of stigma was manipulated by varying the target's reaction to learning of her menstrual leak through a classmate. We hypothesized that the target women in the menstrual conditions would be more stigmatized than the woman in the control condition, and that women who practiced more sexualized body discipline would ascribe higher levels of stigma to the menstrual norm violator than women without these attitudes and tendencies. The social stigma of menstruation may have negative consequences for girls' and women's well-being, health, and sexuality.

A Relevant Graphic Novel

Jerome Bass, English
Mentor: Dr. Adrienne McCormick, English

Graphic Novels are often ignored in the literary community. I argue that "V for Vendetta" should be taught in college class rooms. I have found some substantial literary articles on this graphic novel through EBSCO and other sources. I plan on raising many points in supporting this text, including its relevance to current American political/human struggles such as the protest on Wallstreet. I can cover current laws which restrict Freedoms which will allow me to compare the governments of the U.S and England, and I

have found some comparisons of the text to certain beliefs evident in some of Shakespeare's writings. I can easily compare this novel to other texts taught in classrooms, and stress the fact that it's relevant and appealing to students which will further fuel the point to teach this book to students.

Learning About the Causes of Behavior

Courtney Battaglia, Psychology

Mentor: Dr. Guy Boysen, Psychology

Stigmatizing attitudes toward mental illness can be a problem because they lead to stereotypes, prejudice, and discrimination. Essentialism is the belief that members of a certain group all have the same set of characteristics, which can be problematic for mental illness because it can lead to stigmatizing beliefs. The current research tested the relation between genetic essentialism and stigma. Participants read one of three descriptions of the cause of mental illness, whether genetics are the essential cause or a probabilistic cause was manipulated in the descriptions. Participants then reported their attitudes about mental illness. Analyses will examine participants' attitudes on mental illness before and after reading the description to determine the relation between essentialism and stigma.

A Volume Conundrum: A Study of Misconceptions of Volume of Cylinders in the High School Mathematics Classroom

Angela Beck, Mathematical Sciences

Mentor: Dr. Keary Howard, Mathematical Sciences

This study explores misconceptions of high school geometry students related to the volume of cylinders. It is hypothesized that tenth grade students in a geometry class will use their prior knowledge of volume and area to find the volume and area to find the volume of a cylinder. This will lead to various misconceptions.

Drugs, Violence, and Power

John Benware, Kevin Koval, David Smalle, Political Science

Mentor: Dr. Ivani Vassoler-Froelich, Political Science

a) The main issue that emerges from this film is that the drug cartels are able to provide money and work for the desperate people who need it, which is not a good thing because they promote violence. This is mainly due to the poor economy in places such as Mexico, where *Maria Full of Grace* takes place. Another issue is the mistreatment of these mules; since they are in an illegal business the leaders of these cartels are not restricted in threatening the mules families and friends lives. These social injustices give all of the power and money to the cartels. Most of their product is transported to the United States, but if the United States were to regulate certain drugs, there would be no need to illegally transport it and the cartels would lose a LOT of money.

b) We believe that this issue is important because the cartels are taking advantage of people less fortunate and giving them money upfront to convince them that it will be worth it. Other times people are forced into the business with threats of violence. It is also important because they are transporting the drugs into the United States where it is then purchased by U.S drug users, whose money then goes straight back to the Mexican cartels.

c) Some of the causes of this issue are the laws in the United States that forbid the use or production of certain drugs. These include but are not limited too cocaine, heroin, and marijuana. These laws force substances like these underground and because of that, organized crime is able to flourish. The consequences are worst for the mules involved in transporting the drug(s) as well as their families. The ones involved have a huge risk of either being sent to jail or even dying. With the cocaine trade if one of the pellets bursts inside of you, you will die.

d) We believe there is a lot to learn with further research into this issue. With more research brings about more awareness and with more awareness brings issues like this to government attention which allows us to think about ways to solve this issue. It's not as easy as just legalizing drugs in the United States, because the drug cartels would find another way to make money. The more we research the more we are able to realize what the prohibition of drugs is really allowing people to do. People's lives are being put at stake and people need to be aware of it. We may not be feeling the effects of it as bad in the United States but in other countries such as Mexico, people are being abused, and executed, just over drugs.

Tentative bibliography:

Isacson, Adam. "Washington's 'New War' in Columbia: The War on Drugs Meets the War on Terror." *NACLA Report on the Americas* 36.5 (2003): 13-18. Print.

This article details the interpretation of drug trafficking in Columbia as terrorism by the Bush Administration of the United States of America after September 11, 2001. It shows the response to the decades of trafficking from Columbia from the United States and how the drug trade in Columbia was affected by the interference of a global power like the United States of America. In addition, it also details how the United States War on Drugs ties into the War on Terror. This article was written by Adam Isacson in the March/April 2003 issue of the *NACLA Report on the Americas*.

Seres, Philippe. "The FARC and Democracy in Columbia in the 1990s." *Democratization* 7.4 (2000): 191-218. Print.

This article concerns the role the Colombian Marxist-Leninist militant guerrilla group, Fuerzas Armadas Revolucionarias de Colombia (FARC), in the armed military and political difficulties in Columbia during the 1990s and how they strengthened themselves monetarily through drug trafficking, as well as the affect those activities had on the country. It shows the destructive consequences of drug trafficking on democracy and human rights and how the natural resources of Columbia, being rich in crops used to produce drugs, leaves it vulnerable to groups like Fuerzas Armadas Revolucionarias de Colombia. The article was written by Philippe Seres in the Winter 2000 issue of the journal, *Democratization*.
Werb, D., Kerr, T., Li, K., Montaner, J., & Wood, E. (2008). "Risks Surrounding Drug Trade Involvement Among Street-Involved Youth." *American Journal of Drug and Alcohol Abuse*, 34(6), 810-820.
At-Risk Youth in Vancouver, Canada are examined to determine the motivation behind their involvement in drug trading and what drugs they deal. 58% of the participants reported having been involved in trading within the six months prior. Most participants were homeless, had been assaulted by police, and needed the money to continue their own addictions.

Gabriela Recio, "Drugs and Alcohol: US Prohibition and the Origins of the Drug Trade in Mexico, 1910-1930", *Journal of Latin American Studies*, Vol. 34, No. 1 (Feb., 2002), pp. 21-42. PDF.

Even though Mexico has been an important player in the international drug trade, this country's history in such illegal ventures has been insufficiently studied. In an effort to begin to understand how and when the country began to be an active participant in such illicit markets, this article first analyses regulations introduced in the United States regarding drug and alcohol consumption, marketing and production and assesses their impact on the Mexican side. Secondly, it argues that Mexico's participation in the narcotics trade; the routes that have developed and the Mexican states involved in this traffic have roots that can be traced to the beginning of the twentieth century at least.

Gender Roles and The Awakening

Kristan Berggren, English

Mentor: Dr. Adrienne McCormick, English

I am reading Kate Chopin's *The Awakening* and wish to explore the role of women in the novel and the controversy that surrounded this particular work.

Sports and the New Negro

Brandon Bernard, History

Mentor: Dr. Jennifer Hildebrand, History

My presentation will address two main topics: how sports were used as or were seen as a way to elevate black status within white America; and how New Negro ideas were expressed through sports (collegiate and professional sports will be examined for both issues). I will also examine the portrayal of athletes during the 1920-30's (both black and white athletes and the portrayals of those athletes). Also, the effects of discrimination on the athletes by fans, coaches, teammates/opposition, etc. will also be examined in my research. This will show me general social effects of black athletes in sports in regards to the New Negro Movement—two subjects which I do not think are often thought of by many as relating to one another when the New Negro Movement (or Harlem Renaissance) is studied—and the greater society.

Reeds at Play

Rachel Bicheler, Erin Rush, Michael Banko, Kelly Gravel, Music

Mentor: Ms. Sarah Hamilton, Music

As we are attending the International Double Reed Society Conference, we would like to present a piece composed by a former SUNY Fredonia faculty member that showcases double reeds. The piece is written by Walter Hartley and is entitled "Reeds at Play." It is scored for three oboes and an English horn.

Retrospective Analysis of Simply Crepes

Lydia Biernat, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

SIFE Regional Presentation 2012

Emily Bird, Business

Mentor: Dr. Donald Barnes, Business Administration

The 2012 SUNY Fredonia SIFE team has produced 7 projects over the course of the academic year that have focused on improving our community's environment, economy, social status, quality of life and standard of living. The projects will be presented in the SIFE Regional Competition in NYC on April 11. It would be our pleasure to relay our experiences and present our projects locally, to the SUNY Fredonia campus and community.

Reduced TOR Activity Promotes Cap-independent Translation of Gurken during Drosophila Oogenesis

Malachi Blundon, Cara Boyle, Danielle Hindes, Biology

Mentor: Dr. Scott Ferguson, Biology

Gurken (Grk) expression is required to specify the polarity of the developing oocyte during *Drosophila* oogenesis. Proper localization and translation of grk transcripts is required to achieve proper axis specification. grk translation initiation has been shown to be cap-dependent and require the activity of the DEAD-box RNA helicase, Vasa. Vasa activity can be repressed by the ATR/Chk2-dependent meiotic checkpoint when DNA double strand breaks (DSBs) persist in meiosis. Unrepaired DSBs in oocyte development of spindle-class mutants activate this checkpoint and result in inefficient grk translation and loss of dorsal fates. This inefficient grk translation is thought to be related to reduced Vasa activity.

In a screen for suppressors of the ventralized eggshell phenotype seen in spindle-BBU mutants, we identified mutations in the *Ink* and *PyK* genes. We show that *Ink* and *PyK* mutations suppresses the eggshell phenotype independent of the DSB repair delay and Vasa phosphorylation seen in *spn-B* or *spn-A* mutants. This suggests that the eggshell phenotype is corrected by overcoming the translational block of grk transcripts seen in spindle mutants. Both *Ink* and *PyK* have been recently identified as members of the TOR signaling pathway. Direct inhibition of the TOR kinase with rapamycin suppresses the ventralized eggshell phenotype in *spn-B* or *vas* mutant females. *Ink* and *PyK* modulate TOR kinase activity through different pathways that converge at the TSC1/2 heterodimer. During dietary starvation, TOR activity inhibits cap-dependent translation by promoting the activity of the translation inhibitor eIF4E binding protein (4EBP). We hypothesize that reduced TOR activity promotes grk translation independent of the ATR/Chk2 meiotic checkpoint pathway. Recent data indicates that this may be achieved by way of IRES-dependent translation initiation of grk when TOR activity is low. This discovery suggests flies are able to maintain the translation of developmentally important transcripts such as grk during periods of nutrient limitation.

Chautauqua Rural Ministry- The Friendly Kitchen

Christina Boody, English

Mentor: Dr. Kirsten Hanley, English

My purpose is to give an explanation of the quality work and services provided to the community by The Chautauqua Rural Ministry- Friendly Kitchen establishment in Dunkirk, New York.

Now and Then: The Continued Conversation on the Gospel of John

Sarah Bradley, English

Mentor: Dr. Emily VanDette, English

My project will focus on the controversies surrounding the Gospel of John. I'll begin with the early Christian church and how past figures such as Heracleon, Irenaeus, and Origen initially received and commented on the gospel and I'll trace their common concerns to the present-day church using interviews with various church authority members. I'll then explore how scholars have addressed these controversies and how they've affected the study of the gospel.

Physiological Reactions of Preschool Children to the Presence of a Real Dog During a Memory Task

Zachariah Braunscheidel, Jacquelyn Gregory, Psychology
Mentor: Dr. Nancy Gee, Psychology

Previous research has indicated that the presence of an animal can reduce physiological reactions to stressful situations. The purpose of this study is to determine if these effects occur with preschool children. The two measures of physiological arousal used in this study are pulse rate and oxygen saturation (SP02) and are determined using a pulse oximeter. Each child wears the pulse oximeter across three conditions; the presence of a therapy dog, a stuffed dog and a human. In each condition, each child is asked to complete a working memory task in which they are to remember the order of basic geometric shapes pointed to by an experimenter. Pulse oximetry and pulse rate will be measured two minutes before the memory task, during the task and two minutes after. We expect that children will experience less arousal in the presence of a therapy dog as compared to the other two conditions.

Stigmatization of drug use across legality and wealth

Zachariah Braunscheidel, Aliana McCreary, Christopher J. Maier, Psychology
Mentor: Dr. Jennifer Dyck, Psychology

Our study examines the question of whether or not the stigmatization which is felt by drug users varies across legality and wealth. To measure stigmatization we will use a social distance scale, which measures subjects personal acceptance of social groups in various contexts. To determine social distance, subjects will be asked to read a series of vignettes which present examples of hypothetical drug users. After reading each vignette, subjects are asked to rate each presented character on a social distance scale. Lower social distance scores will indicate lower stigma. Based on past research, we expect that subjects will have a greater stigmatization against users of illegal drugs than users of legal drugs. We also expect to find greater stigmatization against poor users than rich users. Concurrently, we expect to find the greatest stigma against poor users of illegal drugs and the least stigma against rich users of legal drugs.

Exacerbated Flood Hazards of Canadaway Creek

Jake Braxton, Geosciences
Mentor: Mr. Randy Woodbury, Geosciences

Canadaway Creek is a major water way in the village of Fredonia; historically its energy has been harnessed for use in industrial applications like the grist mill that was located at Riskey street. This hydraulic energy, however, can and has been a threat to Fredonia. As human-made infrastructure impedes and alters the flow of the creek, the extent of 50- and 100-year floods can be magnified by blockages of both natural and unnatural debris. Utilizing the applications of GIS and CAD, as well as flood plain mapping from FEMA, the magnification of flood plains due to debris blockage can be predicted and used to help prevent injuries and loss of life. GIS is primarily used as a reactionary and precautionary tactic to natural disasters, mapping where damage has occurred and planning how to avoid it. With this study GIS is used as a proactive utility documenting where hazardous debris is located and the risk of that debris, giving cleanup crews a priority for abatement, decreasing the risk of flood magnification. This research and report come from GEO 330 and GIS 301.

Bram Stoker's Dracula: The Classic Novel's Show of Racism and the Reception from The Count's Native Homeland

Samantha Brethel, English
Mentor: Dr. Emily VanDette, English

Bram Stoker's classic gothic horror novel Dracula portrays the title character as a menacing and evil villain who must be killed by the protagonists. But is he really? In my research, I want to find out what audiences, both British and Romanian, think about this characterization of a being who kills, but does so

to survive. This portrayal of the foreign character as “evil” is racist; did audiences in Stoker’s lifetime see it that way too? Did the Romanian people think western Europe was racist of anything that was non-British? Had Dracula been British, would his reception by readers have been more sympathetic? Did the British agree with Stoker’s characterization or were they repulsed by the novel? I think there is more to Dracula than meets the eye, and the gung-ho vampire hunters were more macabre than we are meant to think. I’m curious to see if “evil” really defines this complicated undead being. I also plan to research how Romanians today respond to the legacy Stoker’s novel imposed upon their country; much of Romania’s tourism stems from the Dracula folklore. Do they despise Stoker for making their country a haven for fans of vampire media? Dracula is based off of a tyrant named Vlad the Impaler. He was ruthless, and gives a bad name to his country. It’s no mystery that Bram Stoker’s novel is responsible for the vampire phenomenon that still exists in America today, and I want to know what people from Dracula’s homeland think about this and about any negative assumptions that might stem from it.

Iglesia Getsemane Youth Education Project

Doreen Bumpus, English

Mentor: Dr. Kirsten Hanley, English

The purpose of this service project is to assist the Iglesia Getsemani Dabric Christian Youth Center, thru the oversight of Pastor Miriam Lugo-Alfaro, and to assist in developing additional youth programs and ministries in outreach to the community.

Science Center Soils Open Window to Fredonia Glaciation

Kyle Burnett, Geosciences, Amanda Bussom, Luke Spencer, Jacob C. Skudlarek, Geosciences

Mentor: Mr. Randy Woodbury, Geosciences

A mile-thick glacier stood over the Fredonia area 14,000 years ago and plastered dense lodgement till over glacier-scraped Devonian bedrock. When the glacier melted back toward the Buffalo area, Lake Erie basin water rose high in a pro-glacial lake draining westward. Initially, the lake bottom was the top of the lodgement till, but over decades to centuries lake silt settled over the till. Excavated for the new Science Center, this till and silt were analyzed for 30 elements using x-ray fluorescence and were used to model processes at the waning stages of the last Ice Age. Geomorphology lab students made a miniature version of the Fredonia-area soil profile left behind when ancestral Lake Erie once again lowered and flowed easterly, including models of large Buffalo-area rocks floated in on melting icebergs that dropped these "erratics" into the muddy lake bottom that is a our campus lawn today.

The Visage of Violence: Analyzing student responses to violent literature in the college classroom

Naomi Burnett, English

Mentor: Dr. Emily VanDette, English

How does violent fictional literature in the college classroom impact students? What do their responses, as well as the responses in the public sphere, say about the pedagogical choice of including violent literature in college curriculum? Examining students’ responses, as well as public sphere responses, to violent literature in the college classroom may help college professors gain a deeper sensitivity to the impacts of violent literature. Through this increased awareness, the relationships between students and professors can be strengthened—thus strengthening the learning environment of the college English classroom. In order to answer these questions, I will conduct research based on, first, the reception of literature with violent themes within academia. Next, I will compare these responses to the responses of college students themselves. Ultimately, the goal of this project is to increase understanding of the contemporary pedagogical practices that surround the issue of violence in college English curriculum.

The Tainos

Jenny Capitano, Modern Languages

Mentor: Dr. Vivian Garcia, Modern Languages

Over a 12 day period in Puerto Rico, i spent time learning anything and everything i could about The Taino people of Puerto Rico. This group inhabited Puerto Rico prior to any European influences and although they may not have a strong presence in Puerto Rico there are still many different parts of every day life in Puerto Rico that can be tied to the Taino people.

Differences in Perceptual Measures of Nasality and Measured Nasalance in Native and Non-Native Western New Yorkers

Marissa Carmello, Communication Disorders and Sciences

Mentor: Dr. Bridget Russell, Communication Disorders and Sciences

This study measured perceptual nasality using the CAPE-V and nasalance, using the KayPentax Nasometer (KayPentax Inc.) during sustained and connected speech tasks in 20 native and non-native Western New Yorkers. The CAPE-V was administered to each subject and an overall rating of perceived nasality was determined. Nasalance percent was also measured using the Nasometer during sustained vowel tasks and reading of the zoo, rainbow and nasal sentence passages. This data was collected and analyzed using inferential statistics. The results and discussion will indicate if perceived nasality in native Western New Yorkers also results in increased nasalance when compared to non-native Western New Yorkers.

A Clockwork Orange

Kayla Carucci, English

Mentor: Dr. Adrienne McCormick, English

An exploration of how society functions in Anthony Burgess's "A Clockwork Orange" and how our society connects with the main themes of the dystopic society found within the novel.

Retrospective Analysis of Shorewood Country Club

Rebecca Catalano, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Molecular characterization of a biofilm located at Canadaway Creek

Nicholas Catanzaro, Emily Shea, Biology

Mentor: Dr. Ted Lee, Biology

Elevated levels of barium were noticed during a petrological analysis of sandstone located at Canadaway Creek in Fredonia, NY. Lamellar textures observed in the sandstone suggest the noticeably high concentrations of this mineral may be the byproduct of microbial metabolic processes (Berkley and Dykstra, 2009). The objective of this study is to use 16S rRNA gene sequence analysis to identify the microbial species present in these barium rich areas. Genomic DNA was isolated from rust colored biofilms obtained from the creek bed. The 16S rRNA gene was amplified by PCR using universal primers. The PCR products are to be cloned, sequenced and then analyzed to characterize the species present in the biofilm.

Building high school newcomers cross-cultural identities with the 6+1 trait writing model

Birgit Cavalieri, Language, Learning, and Leadership

Mentor: Dr. Karen Lillie, Language, Learning, and Leadership

Schools in the United States are faced with an influx of adolescent English language learners (ELLs). To help with positive identity development for ELLs, welcoming environments can support the process of acculturation. Writing can also assist in building an ELL's identity. The purpose of this project was the creation of a curriculum which will help build cross-cultural identity in ELLs using the 6+1 Trait Writing Model. The impact of cultural differences can be integrated via cross-cultural education in high school using this approach. This curriculum is specifically for newcomer ELLs and uses a multidimensional acculturation model as its framework. It grapples with the challenges the ELLs may face in school and is applied with the 6+1 Trait for literacy identity development. The students can express their identities and culture in experience-based comparisons between first language (L1) and second language (L2) cultures in writing.

The Downward Spiral of PTSD: Bouncing Back Through the Window of Art

Wayne Ceallaigh, English

Mentor: Dr. Adrienne McCormick, English

Soliders, husbands, wives, children, and society at large suffers from the fallout of war. Far more malevolent than outward wounds, the hidden dangers of PTSD buried within turns a return into just another deployment into another warzone: home.

Through artistic expression, a form of therapy has arisen that helps soldiers, and the family of soldiers cope with these inner demons born of the constant need to survive the urban jungles on native soil. Brian Turner, a veteran and prolific poet has given many people who suffer from PTSD from all angles a window to look through, and a way to express the living nightmare that PTSD is. I propose to raise awareness in an artistic manner, showcasing Turner's poetry, and other works of art in the form of a tri-fold poster that will illustrate the therapeutic agency of art.

DNA Compression

Melih Celik, Computer and Information Sciences

Mentor: Dr. Ziya Arnavut, Computer and Information Sciences

This study will introduce some of the algorithms such as compression techniques for biological sequences that DNA includes. It is used for repetitive sequences within the DNA sequences. Most of the algorithms are using the distribution of the symbols for the sequences to encode. These information theories have been adapted successfully to work on biological sequences and data. The use of data compression techniques marked an era in computational biology. Plus, given so many experiments shows us to deal with innumerable sequence of data. From parallel computing to data compression many methods are used. Storing and indexing were a challenge but with new approaches they are not a challenge any more. The results provide so much flexibility for researchers or scholars who are going to make experimental studies about that information.

The Reception of "Gravity's Rainbow" by Thomas Pynchon

Jeannette Chin, English

Mentor: Dr. Emily VanDette, English

I hope to give the audience an idea of what sort of impact the publication of novel can make upon our cultural landscape by using the example of "Gravity's Rainbow".

Leadership and Military of Native Americans in the War of 1812

Rebecca Chriscaden, Lindsay Rollins, Kara Corlett, Justin Hubbard, History

Mentor: Dr. Mary Beth Sievens, History

Our research will be placed on a website that we are creating with the guidance of Dr. Mary Beth Sievens. Our focus will be on the effects of leadership and the military technology and style that Native Americans had during the War of 1812. We will analyze military leaders such as Tecumseh and the power that he held during the War. We will also analyze the military technology that the Native Americans used during the war and their effectiveness. We will also provide maps and pictures of Native Americans in the War of 1812 to give our readers a better understanding of the role of Native Americans in the War.

Naval Powers in the Fourth Crusade

Rebecca Chriscaden, Jonathan Boylhart, Nicholas Becker, History

Mentor: Dr. John Arnold, History

Our research will focus on the rise and emphasis of naval warfare in the Fourth Crusade. Our research will be presented in poster format, which will be divided into three sections. Section one will address why naval power became a necessity in the Fourth Crusade. Section two will focus specifically on the rise of Venice as a naval power in the Fourth Crusade. Our last section will cover leadership and their failures in the Fourth Crusade. We hope to give our audience a better understanding of the rise of naval powers, the rise of Venice, and the Leaders of the Fourth Crusade.

Strategies and Therapies for English Language Learners who Are Refugees (STELLAR)

Sarah Clayton, Language, Learning, and Leadership

Mentor: Dr. Karen Lillie, Language, Learning, and Leadership

Literature in the fields of education and psychology focuses on cognitive and linguistic development and/or rehabilitation for individuals overcoming Post Traumatic Stress Disorder (PTSD). Some refugee

students dealing with PTSD are also English language learners (ELLs). Not only may refugee ELLs need to manage living with PTSD, but they also need to simultaneously master English as a second language to succeed in school. From the spectrum of strategies and therapies for PTSD, it was the goal of this study to investigate what methods may work best specifically with individuals who are refugee ELLs. The purpose of this study was to contextualize (in a specific urban school district) which approaches work best in teachers' and therapists' opinions for these ELLs. Using a snowball sample, therapists and teachers working with refugee ELLs who may be suffering from PTSD were interviewed. Results and implications for those people working with this subgroup of students will be discussed.

Retrospective Analysis of Wegman's Food Markets

Victoria Coglitore, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Identifying Areas for Healthy Improvements in Youth Agencies

Dana Collier, Kara Johnson, Sociology

Mentor: Dr. Linda Dorsten, Sociology

Public health encompasses many different populations and health topics. Due to the increase of obesity in the United States, it is important to identify healthy improvements in our youth. Our project's work with the Chautauqua County Health Department to survey agencies around the community to help promote a healthier, and active lifestyle for their youth. We sent surveys to all the programs that deal with youth. To find out what exercise and food choices were offered and what was available for their youth to do while at the agency. The data is being analyzed, to create a summary of what the agencies could do to help the youth in these communities to promote a healthier and more active lifestyle.

English Language Learners' Narrations of Their Experiences Learning English in South Korea and The United States

Shauna Condon, Language, Learning, and Leadership

Mentor: Dr. Janeil Rey, Language, Learning, and Leadership

I propose to share my findings from interviews I am going to be conducting within the next week with students from Hankuk University in South Korea. I will be asking them questions about learning English as a Second Language with a focus on what motivated/motivates them to learn English. I will be recording and transcribing responses and will then code for common themes, which will be the most important part of my research I will share at the expo.

Education and the Apartheid in South Africa

Brian Conley, History

Mentor: Dr. Steven Fabian, History

During apartheid in South Africa, education was used by the apartheid government in an attempt to repress the black and "Coloured" populations. The question I am researching is in what ways did the government attempt to repress these populations through education, and in what ways did this backfire? How did education become a forefront for the battle for equality, and in what ways was it successful? To answer these questions, I will examine various themes and issues such as the policies of "Bantu Education", the implementation of apartheid legislation, the student groups which resisted, and the changes that took place in the education system.

The Effects of an Ice Bath on Lower Body Exercise

Lindsey Constantino, Samantha Smithgall, Justine Degand, Jeanine Ducan-Remy, Exercise Science

Mentor: Dr. Todd Backes, Exercise Science

Our experiment consisted of 6 Fredonia students who conducted research on whether an ice bath would affect the performance of doing a leg extension exercise.

Muslim Perspectives on Leprosy and Cannibalism during the Crusades

Kara Corlett, Romana Schaeffer, Justin Hubbard, History

Mentor: Dr. John Arnold, History

Our research will focus on the Muslim perspective on leprosy and cannibalism during the Crusades with the help of Dr. John Arnold. Our research will correlate with our studies and assignments for our History Capstone course which is focused on The Crusades. We will be making a poster presentation about our research.

The information content of Acheta domesticus songs and the evolution of multiple signals

Andrea Covey, Jeremy O'Reilly, Dan Badzinski, Biology
Mentor: Dr. William Brown, Biology

Acoustical signaling by males is the predominant form of communication in crickets (Orthoptera: Gryllidae). Male crickets generally produce at least three qualitatively distinct types of song, depending on social context: calling song, courtship song, and aggressive song. In order to compare the structural and functional significance of the three distinct gryllid song types, a longitudinal study was initiated where all three songs of a cohort of males were recorded at various points through the lifespan. Structural aspects of the songs are correlated to the phenotypic attributes of the signaler, and comparisons are currently being made between song types to determine how information content is distributed between them. This synthesis has yet to be accomplished in any gryllid species, and is critical to the understanding of the evolution of multiple signals.

Student Experiences

Myava Cuhel, Communication
Mentor: Dr. Elmer Ploetz, Communication

This work is a video about the experiences of students at the 2012 SUNY MEU conference in Exeter, England.

African American Soldier and the New Negro Movement

Mitch Cummings, History
Mentor: Dr. Jennifer Hildebrand, History

My project will focus on the post war lives of some of the individuals who served with the 369th Infantry during the First World War. The 369th was an all black regiment from Harlem, NY. They spent more days in the trenches than any other American Unit, and were quickly referred to as the Harlem Hellfighters, by the Germans for their fearless composure in combat. I will focus on the lives of the soldiers after the war and attempt to link a connection, if any, they might have had with the New Negro movement. In my project I will answer the question, "Did black soldiers continue the fight for equality at home once they returned from the war?"

Fredonia for St. Jude

Megan Dash, Social Work; Patrick Bettcher, Interdisciplinary Studies
Mentor: Dr. Jean Michelli-Pendl, Curriculum and Instruction

We will have a poster and some videos on a computer to showcase the work that Fredonia for St. Jude has done for St. Jude Children's Research Hospital. Through numerous community services such as Buffalo News Kids Day and our own events such as Up Til Dawn we have raised over \$26,000 and counting. We would like to take this opportunity to display our accomplishments to the students and faculty of SUNY Fredonia.

Retrospective Analysis of A Hospital

David DeGolier, Psychology
Mentor: Dr. Jack Croxton, Psychology

To present a detailed overview of the organization in which i am a part of, and to present how the organization is effected by different behavioral and managerial factors.

(see Psychology abstract on the last page of this book for description)

Subversive religious groups in crusader states

Damien Delgado, Michael Krauza, Andrew Jones, History

Mentor: Dr. John Arnold, History

Optimism as a Predictor of Complacency

Joseph DeMaria, Psychology

Mentor: Dr. Guy Boysen, Psychology

Recently, optimism studies have shed light upon how being optimistic, among other positive benefits, correlates with a greater personal well-being. The current research examined whether maintaining a sense of optimism towards the future is always beneficial or if sometimes being optimistic holds negative effects. Optimism can be conceptualized in two ways: personal optimism and world optimism. Personal optimism pertains to optimism regarding oneself, and world optimism involves optimism regarding humanity in general. High world optimism may correlate with complacency in political and social change behaviors. The current research surveyed college students to test this prediction.

The Power of Influence Relating to Social Media

Joseph DeMaria, Leah Palmer, Alexandra VanBergen, Psychology

Mentor: Dr. Jennifer Dyck, Psychology

In modern culture, the internet has been essential in creating the most accessible way to access news and media. Unfortunately, the legitimacy of internet articles is called into question due to the ability for an individual to illustrate any information as fact. It is important to understand the degree of persuasion of which internet articles can affect individuals. College students will read positive, negative, or neutral articles concerning Facebook friends and will answer a survey designed to determine whether articles have significant influence on students who use Facebook. It is predicted that both the positive and negative articles will have significant influence on undergraduates.

Art and the New Negro Movement

Justin Dickerson, History

Mentor: Dr. Jennifer Hildebrand, History

My project is centered around the artwork of three different New Negro Era artists, Winold Reiss, Aaron Douglas, and Jacob Lawrence, and how their paintings show their interpretation of the "New Negro". Questions I will be engaging are; was the New Negro African, or an American, was this art an act of creative expression or propaganda, and was the New Negro called to assimilate or reject white culture.

South Africa's Greatest Goal: The Use of Sports to Create a New Cultural Identity

Jeffrey DiCocco, History

Mentor: Dr. Steven Fabian, History

Sports were used by South Africans, along with other nations around the world, as a way to counter the oppressive laws and practices of Apartheid through domestic and international social, economic, and political pressure. South Africans also used sports like soccer to forge a new cultural identity as an integral part of a larger national identity. My research will use sports as a way to examine the effects of apartheid, as well as efforts to eliminate it and overcome its legacy in a free and democratic South Africa.

The LaceLocker

Angelo DiMillo, Business Administration

Mentor: Dr. Mojtaba Seyedian, Business Administration

I have been working with a company, Stash Sports, since I originally connected with them for a project for Moj's class. Stash has created a new product called the LaceLocker and I am helping bring it to market. As part of our assignment for Moj's Business Consulting class, we created a survey, put it online, and analyzed it. We are currently preparing for the soft launch of the product.

Language or Disability?: Representation, Identification, and Assessment of ELLs for Special Education in Western New York State

Holly Dusett, Language, Learning, and Leadership

Mentor: Dr. Karen Lillie, Language, Learning, and Leadership

There exists a lack of research regarding the representation of English language learners (ELLs) in special education in Western New York schools. This study contributes to the literature concerning the representation, assessment, and referral process of ELLs for special education services. Teachers from Western New York were surveyed using an online twenty-seven question instrument, including a five-point Likert scale. Descriptive statistics were used to analyze the results. The hypothesis was that ESL teachers and directors, as well as special education teachers and directors, often refer ELLs for special education services due to a misunderstanding of the differing language acquisition needs and stages of ELLs. Results and implications will be discussed.

Fringe Literature

Eric Ellison, English

Mentor: Dr. Adrienne McCormick, English

I would like to use *Neuromancer*, by William Gibson, and the essays I find on it as an example of the value that can be found in using current, fringe - if you will - mediums of literature in a critical way. Such genres as science/fantasy fiction, or even graphic novels, I don't think get critical attention because I think largely they aren't considered to be serious.

ENGLISH 261

The Trident and Student Chapbooks

Michael Anguish, Kristie Beckinghausen, Katherine Bridon, Keah Brown, Peter Byrne, Benjamin Carpenter, Tiffany Conners, Sondra Cummings, Thomas Dean, Mackenzie Frazer, Alyssa Hill, Ingo Hutzenlaub, Joshua Jerome, Alanna La Crout, Elizabeth Martin, Bryanna Martonis, Peter Mason, Brielle Messina, Carly Morgan, Stephanie O'Donoghay, Lauren Palumbo, Carolina Pickens, Angela Pitts, Amy Politi, Jennifer Sard, Zaya Steffen, Zain Syed, Casey Takacs, Maria Ulrich, Alyssa Velk

Mentor: Mr. Dustin Parsons, English

Students put on display the literary magazine and the personal chapbooks they produced in the class Literary Publishing in the Spring Semester of 2012.

ENGLISH 460

Illuminated Poetry: (Re-)Visioning Poetry off the Page

Samantha Brethel, Katherine Bridon, Jamie Clark, Mackenzie Frazer, Jared George, Alyssa Hill, Joshua Jerome, Kristen King, Lauren Kuss, Eli Lowry, Brielle Messina, Brittany Neddo, Elizabeth Reid, Julie Rummings, Madelein Smith, Christina Stock, English

Mentor: Dr. Aimee Nezhukumatathil, English

The students of ENGL 460, Advanced Poetry Writing will display and informally talk about the presentation and craft of visual poetry. The poems presented will be a combination of the students' own original work and a selection of contemporary poems we have studied during the semester. Each visual poem was "written" with a writing instrument (and often ink!) of their own making to further highlight the process of re-visualizing poems in new and surprising ways.

The War of 1812: The Impact of Enlightened Thought and Geographic Supremacy on Early America's Democracy

Kathleen Farrell, History

Mentor: Dr. Eileen Lyon, History

Nineteenth Century North America, commonly referred to as the Northern Theatre facilitated the development of nationalism and enlightened thought, which shaped the surrounding area and influenced the outcome of the War of 1812. The country was at the beginning stages of democracy, and participation in a conflict of this scale helped to solidify the democratic values and ideals. The war also created a strong sense of nationalism and improved morale. The geographic layout of the Northern Frontier allowed for easier navigation and transport, because of the extensive waterways. Ownership of the waterways gave the advantage to the nation in control of the great lakes, which depended on the stage of the war. We aim to show the importance of control over the waterways to success in battle. In addition, the value of Native Americans as allies was crucial; their supreme knowledge of the land and waterways was a resource that neither side could have gone without. The relations Americans established with the Native Americans were strengthened by enlightened thought, which supported the

idea of equality. We argue the significance of the impact that enlightened thought had on early America's social, political, military, and economic policies.

Retrospective Analysis of Polito's Bakery

Megan Favale, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Retrospective Analysis of Classics V Banquet Facility

Steven Fenush, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Chautauqua Health Action Team

Blossom Fernandes, Christina Mars, Sociology

Mentor: Dr. Linda Dorsten, Sociology

The Chautauqua Health Action Team (CHAT) works to improve the health of children by increasing access to healthy foods and aims to decrease chronic diseases. The ongoing issue of childhood obesity influences the need to incorporate fresh produce from local farms into school cafeterias.

Through our research of the Farm to School movement locally and nationally we created a PowerPoint presentation to be presented at a mixer including Food Service Directors, school administrators, and farmers. Connecting my major of Biology with the Program and Public Health, I believe it has the potential to increase the student's interest in the understanding of the source of food, appreciation of agriculture and development of healthier eating habits. As a Social Work major, integrating this Public Health minor and this project, my objective is to realize how positive connections can be made between food and family to promote healthy eating and reduce disparities.

Examination of Executive Functioning Using a Working Memory Task

Amy Fisk, Whitney Riley, Psychology

Mentor: Dr. Nancy Gee, Psychology

Executive function, or high-order cognitive functioning, has several components including goal-oriented thinking and behavior, inhibition, updating working memory, and shifting (Best, 2010). Little research has examined executive functioning in preschool children, and the current study provides a protocol for measuring working memory in preschool children. Participants are shown a set of five geometric shapes, and are asked to play "follow the leader" by pointing out the shapes that the experimenter has indicated. The child is scored based on the highest number of steps in the sequence they are able to correctly model in order. This task was part of a larger study that, among other things, examined the impact of the presence of a real dog, stuffed dog, or a human on both physiological and executive functions. As such, the results will be presented within each of those conditions.

SLA Monitoring for ISPs and Customers

Timothy FitzMorris, Matthew Johnson, Computer and Information Sciences

Mentor: Dr. Junaid Zubairi, Computer and Information Sciences

Our goal of this project is to expand the SLA monitoring project to make it more flexible and interactive with user interface. The SLA agreement besides other administrative stuff, contains the traffic descriptors with limits and bounds for the customer. By using a Lua script implemented by Dr. Zubairi in Wireshark earlier, we can count the packets that belong to different QoS classes on the ISP link. Customers who want to monitor their network and see which classes are being used heavily by their users can use this tool to do so. To accomplish our goal we would like to create a program that analyzes the statistics of traffic by the customer at a specified time and provide suggestions to the customer for adjusting bandwidth share of various classes. In order to do this analysis, we will also expand the Lua script to accept the total number of packets to be monitored and/or total time for which monitoring would be activated. We would also build intelligence into the tool to determine the biggest users of bandwidth, the average end to end delays and other interesting statistics. We will convert it into an automated user friendly tool that can be deployed by customers to monitor their ISP links.

Safety in Swashbuckling: Don't stab the Actors

Sarah Flanagan, Theatre and Dance

Mentor: Mr. Ted Sharon, Mr. Steve Vaughn, Theatre and Dance

The presentation will be a poster featuring photos from the Louisiana Stage Combat Workshop as well as a basic explanation of stage combat safety principles and an overview of basic techniques.

The Recovery and Reimagining of Zora Neale Hurston

Caitlin Flatley, English

Mentor: Dr. Emily VanDette, English

Reception studies of the life of author Zora Neale Hurston reveal a complex and controversial woman. As a writer, she was a recognized master of the narrative who determinedly stayed true to her own aesthetic. As an anthropologist, Hurston sought to preserve African American folklore, and celebrated those traditions by incorporating them into her fiction. Her individualistic ambitions, conservative political opinions, and even literary stylistics often proved to be points of contention for her contemporaries in the Harlem Renaissance movement. After the success of her writing in the 1930's, Hurston found herself struggling to be published later in life, essentially falling to obscurity in her death. The work done to recover Hurston's legacy in the mid 1970's—championed in part by author Alice Walker—provides an opportunity to explore the recent wave of public interest and scholarly treatments of Hurston's life and work, and to historicize those critical receptions.

Economic Caste System in Brave New World

Shaena Fleischer, English

Mentor: Dr. Adrienne McCormick, English

This research paper will discuss how Brave New World proposes that our society has created an economic caste system through labor and control of education based on prejudice and whether or not this is something that is still relevant in our country (the U.S.A) today.

Disney Princesses: Beyond the Age Ratings

Dennine Flitt, Communication

Mentor: Dr. Linda Brigance, Communication

Everybody knows about the Disney Princesses and their effect on young children. For this project I wanted to go beyond the traditional studies involving children. I surveyed males and females aged 15-22 in an effort to see the lasting impact of the Disney Princess, to see if any of the "harmful" effects, particularly those involving gender roles and definition, actually affected children as they grew into adults. I also highlighted patterns in the Disney Princesses in relation to culture and definitions of gender when the princess was created. Overall, I discovered that the Disney Princesses do display gender stereotypes and while the subjects remember the stereotypes the subjects did not necessarily use the princess' definitions of gender in creating their own identity. The presentation is a mix of my own interpretations of the Disney Princesses and opinions expressed by the subjects.

SUNY Fredonia Students in Free Enterprise

Justen Floss, Nathanel Zager, Christopher Schilling, Stephany Zambito, Business Administration

Mentor: Dr. Donald Barnes, Business Administration

The SUNY Fredonia Students in Free Enterprise team will be presenting our project that was performed this past school year known as the FREDcup. We will discuss our main goal which we accomplished as well as other various objectives' we succeeded in performing. At the fair our team will discuss some of the processes we went through in order to achieve our goals as well as the sustainability of our project.

Methods for the position determination of autonomous agents

Zhuojun Fu, Computer and Information Sciences

Mentor: Dr. Reneta Barneva, Computer and Information Sciences

This work proposes a concise overview of various methods for position determination of autonomous agents, and more specifically of mobile robots. The methods we present are for indoor or outdoor

localization, or for both of them. They aim at determining the position of the agent in some coordinate system and its orientation. The position may be determined in the plane or in the space. A variety of devices may be used to gather information, such as digital, sonar, or infra-red cameras or various signal receivers, which may provide single or multiple inputs. For each method, the advantages and drawbacks are summarized.

In particular, we consider the following groups of methods:

- Mapping: the robot possesses prior information about the environment. The map can be two- or three-dimensional and may contain data about obstacles or landmarks. The agent receives signals allowing localizing of its position or may use an odometer allowing it to track its movement on the map from the initial position.
- Semantic surfaces: the agent does not possess prior information about the environment, but there is certain marking that it can recognize allowing it to determine its position in the coordinate system.
- Semantic surfaces with 3D mapping technology: the combination of semantics and mapping technology enhances the accuracy of the agent's position.
- Navigation based on dynamic movement: the agent determine next step of movements based on the corresponding environment data.
- Navigation in unknown environments: the agent detects static or dynamic obstacles and tries to localize some landmarks.

The important related problem of error accumulation is also discussed and approaches for its elimination are given. The thesis provides an extensive list of references.

Data Transmission to virtualized servers

Zhuojun Fu, Sean Wignall, Computer and Information Sciences
Mentor: Dr. Junaid Zubairi, Computer and Information Sciences

This project is for data Transmission to distributed virtualized servers for Dr. Zubairi's flight tracker system. We will work to set up four servers in pizza.cs.fredonia.edu account or four distributed servers, one central server and one sender server could be set up in a vmware enviroment. All of the servers run identical versions of Linux. Initial C programs, which will be given, use UDP sockets to communicate with each other. Sender would handshake with the distributed servers before starting the transmission and send fixed number of packets in specified order. Our job is to ensure that all possible error conditions are accounted for and the transmission is done successfully. We will define the FSM model of the servers and make sure that they are contacted by the main server and the plane server successfully. The data will be recorded as well as the number of packets that are lost or corrupted will be counted. We will work to send the data to the main server for archival purpose.

Integrated Explanations of Mental Illness and Stigmatizing Attitudes

Justine Gabreski, Psychology
Mentor: Dr. Guy Boysen, Psychology

This research consisted of two studies investigating how integrated biological and environmental explanations for violent and non-violent disorders affect stigma. Participants researched biological, environmental, or integrated explanations for violent and nonviolent cases of mental illness. Results indicated that integrated explanations significantly increased beliefs in both biological and environmental causes of mental illness. Also, the level of violence associated with mental illness affected stigma, but the cause of the violence did not impact stigma.

Identification of IRES in gurken mRNA

Janelle Gabriel, Jacob Merle, Biology
Mentor: Dr. Scott Ferguson, Biology

Gurken is a protein integral for directing the orientation of the dorsal/ventral axis within *Drosophila melanogaster* eggs during oogenesis. The translation of the gurken mRNA to protein is tightly regulated within the egg chamber and is sensitive to nutrient availability. In flies and in humans, feeding stimulates the insulin signaling pathway. When insulin levels are high, gurken is translated using a common mechanism that relies on recognition of a "cap" at the end of the RNA. When nutrients are unavailable, this "cap-dependent" mechanism is blocked. It has been recently hypothesized however that gurken can still be translated under a "cap-independent" mechanism. Through the production of various transgene

constructs containing the gurken genes 5' untranslated region and the addition of firefly or Renilla luciferase, it will be determined if gurken mRNA is competent to undergo the "cap independent" translation, also referred to as internal ribosomal entry site (IRES) translation, under conditions of nutrient limitation.

In Situ Real-time Visualization of grk mRNA and Sqd Protein Interaction within a Developing Drosophila Oocyte Using Tri-molecular Fluorescence Complementation (TriFC)

Steven Gangloff, Alicia Watson, Nancy Levensailor, Biology
Mentor: Dr. Scott Ferguson, Biology

Gurken protein must be translated at the dorsal anterior during the later stages of Drosophila oogenesis to ensure proper development of the oocyte. Sqd protein binds to grk mRNA and precludes translation until it reaches this desired location. To better understand this important pathway in development, localization of the Sqd-grk complex was visualized using a novel approach: Trimolecular Fluorescence Complementation. Fluorescent Venus protein was halved, with one domain incorporated into a construct containing MCP viral protein, which binds stem loops engineered into grk mRNA, and the second containing sqd. After mating transgenic stocks containing these constructs, fluorescence appeared in an anterior cortical ring and ring canals via the reconstitution of Venus upon juxtaposition of its domains, revealing these as Sqd-grk interaction sites. However, auto-fluorescence contamination by egg yolk was observed. To reduce this interfering background, this approach will be repeated using GFP, which has a different excitation wavelength than yolk.

Chautauqua County Health Department

Amanda Garrasi, Lauren Larson, Sociology
Mentor: Dr. Linda Dorsten, Sociology

A growing problem addressed locally has been the lack of access to contraception among young adults. Our goal is to raise awareness about pre-existing clinics managed by the county. We're specifically marketing a teen clinic open during after school hours in addition to a general clinic. To aid this problem we chose to promote the clinic technologically to target our demographic. We developed a Quick Response code corresponding to seven flyers in both English and Spanish, tracked using Google Analytics to determine how many times our code was scanned, indicating which posters more successfully reached the audience. As Biology majors and Public Health minors we learned more about not only our field, but how other areas of studies are integrated with Public Health.

Retrospective Analysis of a High School Soccer Team

Emily Gendron, Psychology
Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

The Evolving American Dream: Miller's Death of a Salesman Then and Now

Jared George, English
Mentor: Dr. Emily VanDette, English

Miller's literary landmark is still prevalent in America's literary canon and is considered one of America's greatest dramas. How has the "American dream" evolved since the play's inception, and is Miller's drama still relevant in 21st century America? The purpose of examining Miller and his characters is to define the American dream at the time *Death of a Salesman* first came out, and how that definition has evolved or stayed the same all these years later. How does Miller define success in *Death of a Salesman*? How has the "American dream" evolved? How has it stayed the same? What is Miller saying about capitalism? Why is that important when attempting to define the American dream? How and why has this drama lasted the test of time? All of these questions will help to examine the history behind *Death of a Salesman* and the American dream. This history will help to answer why it is *Death of a Salesman* is still relevant in today's society and help to identify the flaws in America's quest for success.

Also, I will be looking at various reviews on the theatrical productions of the play, illustrating how *Death of a Salesman* continues to captivate theatre audiences. What are the differences between mid-20th century productions and contemporary adaptations? Are there any modern adaptations today? I am sure the reception of this play will vary from decade to decade, hopefully shining light on what "works" in the drama, and what is constantly criticized.

Retrospective Analysis of Fairgrounds YMCA

Christine Goings, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Combining the Proverbial Sandboxes: Crossover Fan Fiction and Authorship

Jennifer Golabek, English

Mentor: Dr. Kirstin Hanley, English

Fan fiction writing communities provide virtual spaces for the development of a strong authorial identity, facilitated by fan writers' experimentation with the writing process, analysis, and interpretation of source text. In looking at fan fiction as a valid method of authorship, it becomes essential to look specifically at the fan fiction genre of crossover fiction, as it moves beyond the idea of fan writers playing in only one set world, and shifts to the idea of fan writers creating across fictional worlds.

Through crossover fan fiction, fan writers are navigating between multiple source texts in order to push the boundaries of characters, settings, and plot points while establishing personal and communal boundaries as legitimate authors. Writers are producing what Mary Louise Pratt refers to as a contact zone, wherein multiple ideas, voices, and viewpoints come together in order to form a cohesive working dialogue between source texts and the fan writer's analysis, which leads to further development of the identity of the writer as well as the writer's ability to make meaning out through fan fiction.

The Cuban Missile Crisis: On the Brink of Destruction

Steven Goldman, Charlie Larocca Tyler Waterbury, Jack Markwardt, Political Science

Mentor: Dr. Ivani Vassoler-Froelich, Political Science

Thirteen Days

After viewing the film "Thirteen Days" the key issue that we found relevant was mainly political in nature. The issue presented is the power struggle between United States and Soviet Union during the Cold War, more importantly during the Cuban Missile Crisis. This is the dominant issue of global politics in the second half of the 20th century. Unlike previous conflicts, this was nuclear in nature, creating a larger problem short term and long term, as these types of weapons could potentially lead to mass destruction. The post-World War Two landscape was bipolar in nature, with the two super powers being the United States and the USSR. Unfortunately they had competing political and economic ideology's (democracy and capitalism for US and socialism and communism for USSR), creating an unstable relationship. Once the Soviet Union acquired nuclear capabilities (that US already established) they both engaged in a rapidly escalating arms race. Over the next several decades they competed for spheres of influence around the world using indirect and proxy warfare. The satellite nation of Cuba posed the largest threat to United States during this period, due to geographic proximity. We believe we will learn how close we came to the devastation of nuclear war. While examining how the United States acted towards its enemy's during this crucial period it may shed light on how we might deal with future adversaries.

United States political and military involvement in Chilean affairs during the Cold War

Roslyn Grammar, Cory Campbell, Shai-lee Carmel, Jason Trusso, Political Science

Mentor: Dr. Ivani Vassoler-Froelich, Political Science

The issue we identified as a group from the movie was the underhanded United States political and military involvement in Chilean affairs during the Cold War. We believe this issue is important because it shows just how powerful and influential the U.S. government was at that time. The U.S. government was using this power and influence in both positive and negative ways during the Cold War period. The U.S. was supporting dictators and military governments while at the same time covertly planning military coups, assassination attempts, and controlling economic means in the country of Chile. Due to the containment policy that the U.S. was following during the Cold War, this influenced how the U.S. handled any situation that dealt with communism and how they dealt with Chilean leaders. Without U.S. foreign policy actions, Chile could very well have become a communist country that would have been run by the military and dictators. As a group we want to learn, through our research, how exactly the U.S. was involved in Chile during the Cold War and if its actions were justified. We also hope to gain knowledge on

how U.S. influence on Chile during the Cold War affected Chile in the future. We plan to find historical and modern day information on how Chile came to be the country that is today.

Music Integration in Kindergarten

Stacie Gronski, Language, Learning, and Leadership

Mentor: Dr. Janiel Rey, Language, Learning and Leadership

This poster presentation shows the findings of an ethnographic case study, examining one master teacher's integration of music into the general education Kindergarten curriculum. This teacher's use of music, and his views, insights, and reasoning for doing so, reveal the importance of music integration into the general education classroom environment.

The effects of auditory stimulus on cued recall

Steven Grzybowski, Psychology

Mentor: Dr. Jennifer Dyck, Psychology

We are conducting a study on the effects of music and memory. We are using a cued recall test coupled with either an instrumental or lyrical version of a popular song to determine the effects of the music on their ability to remember the information in the recall test.

Brian Turner's Post-Iraq Poetry

Erin Gutekunst, English

Mentor: Dr. Adrienne McCormick, English

Tolkien and Rowling: Why Such a Different Response to Such Similar Stories?

Krista Guy, English

Mentor: Dr. Emily VanDette, English

In my Senior Seminar reception studies research paper, I'm going to discuss the Harry Potter series, The Lord of the Rings series, and compare the two receptions. In my research, I've noticed that the audience J.K. Rowling has is more critical of her portrayal of witches, wizards, and the general idea of a fantasy world. That same audience seems to be accepting of Tolkien's world of fantasy. I want to answer the question of "Why". I will address the entire Harry Potter series, books one through 7, and the entire Lord of the Rings trilogy. By using the resources provided by Reed library, I hope to gain a better understanding and explanation as to why the reception s of each series differs. I will use primary and secondary sources to support my thesis and to provide a critical reception studies paper.

Eliminate the Substitution or Substitute the Elimination? A Study of Methods Used for Solving Systems of Equations in the High School Mathematics Classroom

Ricardo Hammond, Mathematical Sciences

Mentor: Dr. Keary Howard, Mathematical Sciences

This research examines different methods of solving systems of equations for middle/high school students, how these methods are taught, and how such methods have evolved in recent decades. It is hypothesized that high school algebra students will show preference to a certain method when solving systems of equations. Students who have not been previously introduced to any method will naturally use "guess and check" over other methods. Furthermore, it is hypothesized that students' general approach to linear systems is "procedural," causing less appreciation for the applications of linear systems as well as the connections among different methods used for solving them.

Using the 'Little Grey Cells': An Examination of Closure in the Works of Agatha Christie

Jacqueline Hebert, English

Mentor: Dr. David Kaplin, English

This poster presents research in narrative theory in the genre of mystery and detective fiction. Specifically, these studies focus on the use of closure, an important narrative element, in the works of Agatha Christie, one of the most principle authors in the genre. These studies examine the different types of closure used in various works and analyze their contribution to the narrative framework, as well as what various theorists (Kermode, Symons, etc.) have said about Christie's work and the technique of closure. This poster presents excerpts of these findings in an interesting and informative way. This

research demonstrates that there is a lot to be examined even in popular and accessible works like Christie's. Christie's storytelling techniques have earned a place in narrative discourse, and this poster/research demonstrates that researchers should be encouraged to pursue their own interests in their studies, even if it is not a traditionally "academic" area.

2011 NCTE Convention: Reading the Past, Writing the Future

Jacqueline Hebert, Kristen Niemi, Elizabeth Krok, Sara Shinder, English
Mentor: Dr. Ann Siegle-Drege, English

This poster will present our experience at the 2011 NCTE Convention, for which the participants attended a variety of seminars. Included in the poster presentation will be photos, the convention program, and key points of the seminars.

The Critical Reception of Robinson Crusoe

Philip Heimbarg, English
Mentor: Dr. Adrienne McCormick, English

I will be doing my research project on Robinson Crusoe and the critical reception to the novel throughout the years. I will be researching different critical reviews and analyzing how a novel that is part of the literary canon has been received and criticized.

The Reception of Silence

Derek Herzog, English
Mentor: Dr. Emily VanDette, English

For this paper, I will examine two modernist European authors whose lost literary work has played an important role in their reception history. Bruno Schulz, although the majority of his literary output was lost, nevertheless had an extraordinary impact on Modernist Literature. He died far too early at the hands of a Nazi Gestapo officer, and the literary word was left only with frustrating clues as to what his lost novel, *The Messiah*, might have contained. The author I will study alongside Schulz is Franz Kafka. Although much of Kafka's work was luckily salvaged, he wished to have it destroyed, and it was only by mere chance that the literary world was granted exposure to his incredible artistic output after his death. By comparing and contrasting these two phenomenal, yet reclusive authors, I will attempt to perform a study of the reception history of silence.

IBS Awards

Jud Heussler, Communication
Mentor: Dr. Laura Johnson, Communication

With the help of the Oscar office Fredonia Radio was able to attend the IBS Conference in New York City. Fredonia Radio members attended many panels on all things college radio. Jud Heussler (General Manager) spoke on 3 panels during the conference. Fredonia Radio also won 3 national awards at the conference.

Rockin' The Commons

Jud Heussler, Communication
Mentor: Dr. Laura Johnson, Communication

Fredonia Radio is putting on Rockin' The Commons from the 9th annual year of the event. This years event will be April 14th. We would like to present as part of the volunteer and community service poster table.

Feminism in William Gaddis' Carpenter's Gothic

Alyssa Hill, English
Mentor: Dr. Adrienne McCormick, English

This is a formal research paper concentrated on a feminist analysis of the novel *Carpenter's Gothic* by William Gaddis.

Jazz and Social Protest

Laura Hirst, History
Mentor: Dr. Jennifer Hildebrand, History

My work will demonstrate how jazz was used as a form of social protest in the New Negro Movement of the early 20th century. I will introduce the jazz aesthetic, which will serve to explain what jazz is, and why jazz was used to protest social conditions. Then I will transition to explain how the jazz aesthetic allowed musicians to protest. I will examine several jazz artists of this time period while placing them in the context of the New Negro Movement. I will discern the issues that they touch upon or do not touch upon, and how that message is conveyed through music and lyrics.

Wars of 1812

Tyffany Howlett, Erin Moses, Jordan Coccagnia, Phil DiFrancisco, Tyler Waterbury, Sam Miller, Blake Schier, History
Mentor: Dr. Mary Beth Sievens, History

We are SUNY Fredonia college students participating in an experimental class about the War of 1812, where we have been taught different perspectives on the wars by three professors. The various perspectives are Russian, British, French, and American. The American point of view is what our website is focused on. We want to teach our audience the effects the different battles of the Niagara Region had on the United States during the War of 1812. In general, we hope to increase the viewers' knowledge of the battles the Niagara Frontier. This team of students have been working together to collect information about the many battles from multiple sources and discovering the effects they had on the military contest and on civilian life in the Niagara Frontier. It is our hope that we will help other students when they need some information about the battles of the Niagara Region.

Effects of Vicariously Experiencing Failure and Success on Students Personal Self-Efficacy with Solving Qualitative Problems

Alex Hughes, Tom English, Griffin Smith, Psychology
Mentor: Dr. Jennifer Dyck, Psychology

An experiment was done to test the effects of differing vicarious experiences on self-efficacy in a single task of a mock GRE. The participants were randomly assigned to a different vicarious experience, in which the outcome of a student that had taken the GRE, which was either a positive outcome or a negative outcome, with a control group that was exposed to neither condition. After being exposed to the vicarious experience, or lack thereof in the case of the control, a general self-efficacy test was administered which was followed by the mock GRE. It is hypothesized that the group who had vicariously experienced the positive outcome will have a positive effect on self efficacy and the group exposed to the negative outcome will have a negative effect for self efficacy.

The Differences and Similarities in Academic Habits between Male and Female College Students

Samantha Hyman, Communication
Mentor: Dr. Linda Brigance, Communication

This research study is intended to discover the differences and similarities in the academic habits between male and female college students. Research was conducted in three different manners. First, literature was reviewed from a variety of different sources, including academic journals and news articles. These sources revealed previous studies done on the topic, generally revealing one of two conclusions. Several studies concluded no significant gender differences in the educational realm. A small number of sources indicated that females generally put forth a higher level of effort than their male counterparts. Additionally, surveys were distributed to an introductory communications class, and six short interviews were conducted with professors in the same department. An even amount of male and female participants were questioned, 13 male, and 13 female. The results supplemented the previous research studied. Male and female academic habits are not significantly different, however females display slightly more effort than males do in the classroom.

Canadian/US Border

Samantha Hyman, Romana Schaeffer, Sheanne Riley, Michael Ball, History
Mentor: Dr. John Staples, History

We are designing a website for our History 399: Wars of 1812 class. Our main focus for our website is the relationship between Canada and the United States during the war. We will show through various primary and secondary sources the social and economic relationships between these two countries. This will consist of life on the home front and trade routes and practices. We will be separating the website into sections for our different types of sources: primary, secondary, and images. Being that Fredonia is so close to the Canadian border and the Niagara Frontier, we hope people will get a better understanding of the relationship between the United States and Canada, and learn how the War of 1812 has impacted history.

Retrospective Analysis of Bed, Bath, and Beyond

John Iburg, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

A Correlation Study between Self-Efficacy, Automaticity, and the Mathematics Achievement of Adult Students

Joseph Jagoda, Mathematical Sciences

Mentor: Dr. Keary Howard, Mathematical Sciences

This research explores the correlation between fluency in basic multiplication, self-efficacy, and academic achievement of adult learners. It is hypothesized that the ability of an adult learner to quickly and accurately recall basic multiplication facts will have a positive correlation with his performance on the Test of Adult Basic Education in Mathematics. Concurrently, an adult learner's self-efficacy across the mathematical categories of the test will have no bearing on test performance.

Boys and Girls Club in Dunkirk- Playground

Deanna Jelardi, Theatre and Dance

Mentor: Mr. Ted Sharon, Theatre and Dance

I would like to present the work I did this past October and November. I worked at the Boy and Girls Club in Dunkirk. We taught a group of children each week, for 5 weeks. Each week we had a theme; they would learn a song, make a craft that has to do with the song, learn and dance, and then perform in front of their parents! The boys and girls learned they were able to accomplish a lot in a few short hours, and had a lot of fun of course!

A Reading of Snow Crash

Josh Jerome, English

Mentor: Dr. Adrienne McCormick, English

The poster will be a presentation of themes in Neal Stephenson's novel Snow Crash as well as criticism relating to the same.

The War on Vonnegut

Amber John, English

Mentor: Dr. Emily VanDette, English

Kurt Vonnegut passed away in 2007 and he left behind a legacy full of satire, humor, and controversial opinions on tense topics. Two of his novels, Slaughterhouse Five and Cat's Cradle, have been banned in several American schools. These two novels address Vonnegut's opinion on war, religion, and society in general. For the purposes of my research project, I am going to research why the books were banned and how those affected had reacted to it. My primary audience will probably be Christians (or other religious followers), pro-war and anti-war critics, as well as comparing contemporary and past critics. I would like to find out why these novels still sit on the banned books lists and also how Slaughterhouse Five has made it into the literary canon. I will also explore how Vonnegut and his fans have responded to the negative critics and the banning of his novels.

Urban Women Under Apartheid

Dorena Johnson, History

Mentor: Dr. Steven Fabian, History

Apartheid in South Africa aimed to control the lives of urban African women. By creating laws that regulated women's movement throughout the country, the Apartheid government attempted to change the South African society. My research will look at the effect that migratory labor laws had on women and society. It is important to understand the women's perspective of Apartheid because it is the women that raise future generations of Africans. I will depict the great lengths that the Apartheid government went through to limit the prosperity of urban African women. This research will prove that despite the many obstacles, urban women were able to triumph over oppression.

Drug Trafficking in Latin America

Morgan Johnson, Amelia Schunk, Holly Aldrich, Jacob Staring, Political Science
Mentor: Dr. Ivani Vassoler-Froelich, Political Science

The prominent issue coming from the film *Maria Full of Grace*, is that of drug trafficking from Latin America to the United States. This issue is political and social, as well as having some cultural aspects and implications. Drug trafficking is a global issue that affects every citizen of the world, whether it be directly or indirectly. By studying this issue, we hope to identify the effects that drug trafficking has on the lower class in Latin American countries as well as further understand what U.S. policy is toward narco-trafficking and the economic impact that is felt in the U.S. for counter narcotics.

Retrospective Analysis of A Furniture Company

Carrie Johnstone, Psychology
Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Retrospective Analysis of Santora's Pizzeria

Lauren Kaczowski, Psychology
Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Culture and Food: a perfect Combination

Victoria Kazz, Modern Languages
Mentor: Dr. Vivian Garcia, Modern Languages

Food is more than just various ingredients prepared and eaten, it has significance other than just relieving hunger. Culture goes hand in hand with the food eaten, how it is prepared and how it is served. Food can be a reflection of the culture and a gateway into understanding the culture. Puerto Rican food has influences as close as their island natives and as far away as Africa and the U.S. These influences combined make up today's Puerto Rican cuisine. And I believe that by researching and understanding Puerto Rican cuisine I could also begin to understand the Puerto Rican culture. My research project will contain two parts; a poster and actual Puerto Rican cuisine. The poster will show the origins of ingredients and cooking methods of Puerto Rican cuisine as well as pictures of food I tried while visiting Puerto Rico. *La Comida Criolla* will be for guests that wish to try the cuisine for themselves.

The affects a dog has on Preschooler language production

Leah Kerns, Zachariah Braunscheidel, Whitney Riley, Philip Best, Psychology
Mentor: Dr. Nancy Gee, Psychology

There are now a number of programs aimed at helping children to learn to read using Therapy Animals as listeners during their practice reading sessions. Previous research has shown that the presence of a dog has a stress reducing impact on blood pressure, and heart rate, and anecdotal evidence indicates that children are more comfortable talking to a dog than to a human. The current study examined the degree to which preschool children were willing to page through a picture book and make up a story about the pictures and then tell that story to a human or a dog listener. The participants were 20 children ranging in ages from 2-4. Four similar picture books were selected and randomly assigned such that each child was measured twice in both the dog and human conditions for a total of four data points per child. Previous analysis of part of this data set

indicated that the children produced more words in the presence of the dog than the human. An analysis of the story related content of the full data set will be presented.

All men are created equal: but is our education?

Keriann Ketchum, Political Science

Mentor: Dr. Ivani Vassoler-Froelich, Political Science

There is a clear educational divide between Hispanic and non-Hispanic students in the United States. Numerous cultural factors, seen and unseen, negatively affect the socioeconomic status of Hispanic families, and, as a consequence, threaten their children's educational experience. Hispanic education in the United States is a complex, multi-layered issue which must be dealt with uniformly, if we as a country are to continue to evolve as a leader in public services, education, and equality among all people. Through analysis of census data, newspaper articles, and database journal articles, this paper attempts to explain the importance and implications of the Hispanic education gap in the United States.

Violence in the Anti-Apartheid Movement

Evan Kiernan, History

Mentor: Dr. Steven Fabian, History

I will be examining the effectiveness of violence and "terrorism" in anti-Apartheid movements. I will specifically focus on Nelson Mandela, Wolfie Kadesh, Umkhonto we Sizwe (Spear of the Nation) (MK), The ANC (African National Congress), the Pan-African Congress and their individual and collective effects and influence on stopping Apartheid. Therefore, the research question being addressed is as follows: what was the effectiveness of violent resistance during anti-apartheid movements? I will begin with a general background on the anti-apartheid groups listed above and the effectiveness of their tactics against the apartheid regime. I will also consider the role and influence of non-violent resistance movements as a point of comparison.

Sigma Kappa

Kelsey Kilminster, Communication

Mentor: Dr. Laura Johnson, Communication

Sigma Kappa will be presenting our philanthropies and events we do around the campus. Our community service is a major part of what we do and we will be displaying that on a tri-fold board for the Creativity Expo. We will present our involvement with the Alzheimer's Association, Gerontology, Maine Sea Coast Mission, 'Inherit the Earth', Toys for Tots and other events we do to help out other groups around campus such as Suicide Awareness, Move in Crew and Fall Sweep.

From Stowe to Stockett: Why the White Voice Still Speaks For the Black Experience

Kristen King, English

Mentor: Dr. Emily VanDette, English

When Harriet Beecher Stowe's novel Uncle Tom's Cabin was first published, it sparked a debate on everything from racism and slavery to the author's sex. Recently Stowe's novel has been once again the subject of controversy, however this time, audiences are concerned with Stowe's race as well as her gender, asking, "what role does a white woman have representing the 'black' experience?" This debate is in conversation with a contemporary controversy surrounding the white Southern author Kathryn Stockett and her popular book The Help, as many critics are concerned with the continued glorification of a white writer telling a black story. This paper will examine the conversation surrounding each novel and ask: Do audiences still look to white authors to define "blackness"? How do Stowe and Stockett use language and sentimentality to their benefit? And finally, what the controversy surrounding each novel says about racism and sexism in contemporary society?

Effects of Information on Reducing Anti-fat Bias

Kathryn Kirkpatrick, Chelsea Fisher, Psychology

Mentor: Dr. Jennifer Dyck, Psychology

Stigmatizing groups based on physical characteristics has negative consequences for society, however, there is no social pressure to prevent expressing prejudice toward overweight people. The apparent cause for obesity is seen as an individual fault, and is also associated with many unfavorable

characteristics. Assigning blame to overweight individuals could be reduced by diminishing the perceived level of controllability of weight. Providing positive characteristics may also challenge the negative stereotypes associated with obesity. We predict these tactics will be useful in reducing anti-fat bias when compared to controllable weight and unfavorable characteristics.

Retrospective Analysis of Bull's Run Grill and Alehouse

Sam Knipper, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Engaging in our Community Series: Students in Service, Delta Phi Epsilon Philanthropies and Community Service

Sarah Kobel, Volunteer Services

Mentor: Ms. Joyce Smith, Volunteer Services

The mission of Delta Phi Epsilon Sorority is to develop in women a social consciousness and a commitment to think and act for the greater good. We assure continuous development and achievement for women. Over the course of the year we strive to give back as much as possible. We have three philanthropies, The National Association for Anorexia Nervosa and Associated Disorders (ANAD), The National Cystic Fibrosis foundation, and the Lupus foundation of Rochester; we cater to each organization with annual events. Our service does not stop there; we branch out and pursue any service that comes our way and are always more than willing to expand our outreach. We participate in numerous campus, community, fundraising and philanthropic events. The sisters of Delta Phi Epsilon are very proud of the hard work, and dedication they put into giving back every year, and look forward to each rewarding experience.

Pseudo-distance Technique for Color-mapped Image Compression

Basar Koc, Computer and Information Sciences

Mentor: Dr. Ziya Arnavut, Computer and Information Sciences

Data compression is essential in resource management and data transmission. With data compression, consumption of expensive resources can be greatly reduced. To minimize transmission, storage or, most often, display restrictions, sometimes there is a need to restrict the number of colors in an image. Color-mapped images are widely used in many applications, especially in World Wide Web, and are usually compressed with Graphic Interchange Format (GIF) or Portable Network Graphics (PNG) without any loss. Unlike the other well known techniques which require two passes on the image data, the pseudo-distance technique (PDT) requires one pass and runs in linear time. In our recent work, we showed that further compression gains are possible when using the pseudo-distance compression technique with the context-model binary arithmetic coder. In this work, we show that when PDT is utilized along with a new linear predictor, better compression gains are possible. Experimental results on a set of test images show that this technique achieves approximately 50% better compression gains than the well-known GIF compressor and 8% better than PNG. Not only has our technique achieved better compression over GIF and PNG, but also over many other techniques.

Black Eyed Susan

Kimberly Krenzer, Jessica Drake, Communication

Mentor: Dr. Jane Jackson, Communication

This is a short film from the 2011 senior capstone class in video production. It was directed by current graduate student, Kim Krenzer. Black Eyed Susan tells the story of a young woman being held in captivity. As the film progresses, we learn about how she came to be in this situation. We witness her descend into madness. A very elaborate sound design by current graduate student, Jessey Drake, enhances the psychological nature of the piece. Running time: 25:02

Perceptions of Genital Deviance

Kimberly Krenzer, History

Mentor: Dr. Jeff Iovannone, History

This will take on the idea of what makes genitals "anatomically correct" and how this dictates gender roles and constructs societal stigmas. These definitions of genital normality criminalizes a set of behaviors and biological properties and classifies them as deviant. A poster presentation will detail the different types of societally assigned deviance, i.e: body modification (piercings, cosmetic surgery), gender reassignment, homosexuality, race, genital mutilation, perceptions of the female anatomy, etc. They will be placed into comparison with scientifically accepted versions of "normal" genitalia.

What Did He Say?

Brittany Krise, English

Mentor: Dr. Emily VanDette, English

The use of different dialects within literature is an element in which many don't give the proper attention. I'd like for readers to see the importance of dialect. Throughout history of literature there have been debates on whether or not dialects are appropriate within literature, especially when they are not grammatically correct. A great example of this debate would be in *The Adventures of Huckleberry Finn* by Mark Twain. Twain's argument is that he uses the different Missouri/Southwestern, and slaver/negro dialects to stay true to the characters within the story. During that time critics such as the Concord library banned the novel because they found it distasteful due large in part to the use of the authentic vernacular. I would like readers to realize the importance of the usage of varying dialects so that they get pieces of the characters and stories that would be lost without it.

Retrospective Analysis of Nino's Pizzeria

Pamela Kus, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Mr. Darcy & Fitting the Cultural Aesthetic: A look at the Evolution of Pride and Prejudice in Film

Lauren Kuss, English

Mentor: Dr. Emily VanDette, English

One of the most replicated stories in literature is Jane Austen's *Pride and Prejudice*. The artistic direction in the films and the way some of the characters have been portrayed has undergone an evolution that always reflects the current popular aesthetic of the culture in terms of history and "the ideal man". The ways scenes have been recreated reveal the values of the American culture and how the current generation wants to see and understand the time period in which the story takes place (the Georgian era in England). One of the most interesting aspects of each film is the point of view from which the story is seen which has changed slightly between characters throughout the years.

Many of the characters have been depicted differently through film and television, but one of the most dynamic transformations is Mr. Darcy. His evolution in appearance also reflects the "ideal" of a man during each generation that the film was recreated. *Pride & Prejudice* is still popular in both audiences of literature and pop culture because its story can be tailored to fit the ideals of both history and men in contemporary society. To reach a well-developed understanding of this novel's unique ability to affect audiences, I will look at the initial reception of the novel as a text and then how directors have reshaped the story to fit into contemporary ideals. This will help solidify the idea that this story is constantly being recreated because of its unique ability to be positively received by a wide and diverse audience.

Retrospective Analysis of Bob Evans Restaurant

Kevin Lowther, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

The Enhancement of Formative Assessments in a Guided Inquiry Classroom

Jade Lauzon, Chemistry

Mentor: Dr. Holly Lawson, Chemistry

In the last five years certain sections of General Chemistry offered at SUNY Fredonia have utilize the Process Oriented Guided Inquiry Learning (“POGIL”) strategy. During that time significant modifications to the way we form and train groups, present new material and, especially in the way we assess student understanding and learning have been implemented. Our poster will summarize these strategies and the multiple ways we perform assessments from in-class quizzes, group summaries, individual forum postings, online homework and out-of-class-time scheduled exams. We will also emphasize the positive effect that the implementation of Guided Inquiry and its modification have had on students’ opinions toward Chemistry.

Healthy Choices School Guide data

Chelsea Leibundgut, Sociology

Mentor: Dr. Linda Dorsten, Sociology

The health and well-being of our children is the foundation of their future. By implementing and promoting healthy choices into our schools is key to success. With rising childhood obesity rates a healthy school guide is very important. By providing all Chautauqua County public schools with this guide we hope in bettering the youth in our community. We examined the Healthy Choices School Guide data and supporting organizations and updated all information. Information included implementing lunch school mandates, obesity rates and ongoing programs such as Farm to School. We provided these schools with healthy fundraising options as well as contact information for ala carte including low sodium and low fat options. Our speech major connects with this topic by helping implement a healthy environment in the public school system where we will be employed in the future. It also connects by working with swallowing disorders as a speech major, and looking at diets and healthy eating options for students and the elderly.

Gender Representation in Venus and Adonis

Heather Lewandowski, English

Mentor: Dr. Adrienne McCormick, English

I am in the English Senior Seminar class this semester. Basically, I want to research, define, and interpret how Venus is casted in the poem by William Shakespeare. I want to explore the way she is portrayed and fully dive in to why she was created this way.

Sleep Deprivation Studies

Christine Linnecke, Exercise Science

Mentor: Dr. Todd Backes, Exercise Science

Our research project is to study how sleep deprivation affects cognitive and athletic performance. The subjects will be tested under normal conditions, and under conditions where they have been sleep deprived. Testing such as this is interesting to college students, because sometimes it’s hard to find time to get sleep! This project will show how losing sleep actually affects our bodies.

Cross-platform Mobile Web Development

Daniel Lips, Rob Szkutak, Computer and Information Sciences

Mentor: Mr. Michael Mendez, Computer and Information Sciences

Applied mobile web development projects in game programming designed to support a variety of platforms via one centralized application. Projects adapt look, feel and interaction to support Apple, Android, and traditional desktop devices without creating separate applications for each platform. By using a combination of web development languages and frameworks, these programs automatically select styling based on the device detected. No application stores are required for distribution, and updates are never needed as all program changes are loaded the next time a device opens the application.

Non-native English speakers (NNES)

Kelly Lisowski, Language, Learning, and Leadership

Mentor: Dr. Karen Lillie, Language, Learning, and Leadership

Assessments can be difficult for those students who are non-native English speakers (NNES). These students may not be able to fully demonstrate their knowledge and capabilities because of the linguistic complexity of the assessments. Although test accommodations may aid students to a certain degree, the

linguistic complexity of test items usually appears as poor academic achievement among this subgroup of students. Therefore, assessments that are linguistically modified without diluting the content would deem beneficial for NNES. This curriculum project addresses the issue of linguistic complexity on academic content area assessments to meet the linguistic needs of NNES students. In this project, teacher-created assessments from a middle school science curriculum underwent a linguistic modification process to help make the tests more accessible to NNES. This project was designed as a tool to guide content area teachers in evaluating their own assessments for linguistic complexity to help highlight NNES' knowledge in their classrooms.

The Bike Lab

Raul Lopez, Kristen Schoenbeck, Jordan Bernstein, Matthew Rockow, Business Administration
Mentor: Dr. Donald Barnes, Business Administration

The Bike Lab was a partnership with Students in Free Enterprise and students in the Campus Climate Challenge, to create a bike sharing program on campus.

Christmas Traditions of Puerto Rico

Lindsay Lord, Modern Languages
Mentor: Dr. Vivian Garcia, Modern Languages

Although Puerto Rico is considered an "unincorporated territory" of the United States, the Christmas traditions are very unique and different to their culture. Beginning that day after Thanksgiving, these celebrations last until the middle of January, creating an atmosphere that is exclusive to this island. After researching and experiencing first hand some of these festivities, my presentation will focus on the music, food, church services and decorations that define a Puerto Rican Christmas season.

Causes and Effects of Socio-economic Inequality in Latin America

Louis Loveless, Kristin Italia, Mitch Cummings, Marian Pata, Political Science
Mentor: Dr. Ivani Vassoler-Froelich, Political Science

Many issues emerged from the 2004 film "The Motorcycle Diaries". One issue which stands out is the social inequality among people within Latin America which has resulted in political instability and turmoil in the late 1950's and early 1960's. The inequality that existed among the social classes at this time in Latin America contributed to the division of political views. By riding a motorcycle across Latin America, it allowed the two main characters to witness the extent of poverty that existed in Latin America. By viewing these inequalities first hand, it allowed them to grasp the various reasons for the political instability within the region. Contributing issues are not only economic issues that have created social inequality, but also deeper structural issues that exist within the society. These issues created divergence in political views that shape the policies of a nation-state. Another major issue is the people that draft these policies usually exist in the higher social class and form these policies to revolve around the higher class, often neglecting the needs of the poor. This can create the divergence among policies needed to unite a nation-state and to help progress with economic prosperity. By conducting more research, we can identify the specific structural issues within a society and the contributing economic factors leading to social inequality. By learning this, we would be able to solve similar problems in the future.

Rendering War: Looking at Form, Voice, and Individual Experience in the Poetry of Brian Turner, Yusef Komunyakaa, and Wilfred Owen

Eli Lowry, English
Mentor: Dr. Adrienne McCormick, English

This presentation will look at poems in Turner's Phantom Noise, Komunyakaa's Dien Cai Dau and Owen's collected poems. I will analyze the different uses of form, subjective voice, and the depictions of war according to the poet's memory or, as in Owen's case, immediate involvement in it. This is an interesting comparison of poets not only because they fought in wars many years apart but because the distance from war at which their poems were written (for each publication) was considerably different: Turner's a few years after his return; Komunyakaa's 13 years after; and Owen's were written in the trenches (he died at war).

Technology Dissemination Through Gamification

Mark Mackey, James Fefes, Sean Wignall, Brandon Artymowycz, Computer and Information Sciences
Mentor: Mr. Michael Kelly, Computer and Information Sciences

We've set out to examine the efficacy of leveraging games as a means to encourage the declining newspaper industry to adopt specific new technologies. Newspapers have chosen to oppose innovation in a vain attempt to hang on to their quickly fading glory. We believe a solution can be gamified and that the solution itself is games. Including an augmented reality video game based on the optical recognition of print media in select newspapers is sure to increase sales. It will demonstrate to the industry the necessity of adopting rather than opposing new technologies. Using augmented reality, the game will spawn a three dimensional virtual pet dinosaur on top of the published image target. If the publishers can be convinced to run the article, it will serve in to validate the use of gamification to disseminate needed technologies.

Retrospective Analysis of Sullivan's Charbroil

Rebecca Mahoney, Psychology
Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Retrospective Analysis of Gates Chili Colorguard

Alexandria Maley, Psychology
Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

The Wife of Bath: A Feminist Approach

Melissa Mallaber, English
Mentor: Dr. Emily VanDette, English

A feminist approach to Chaucer's character the Wife of Bath, through the lens of reception studies.

Brocton Middle School, Female Empowerment/Mentoring Club

Melissa Mallaber, Women's Studies
Mentor: Dr. Iclal Vanwesenbeeck

A mentoring program designed to help young females achieve their goals through empowerment and self esteem.

Women Breaking Gender Roles in the Crusading Period

Roseanna Marciante, Paula Barnett, Kaleigh Shannon, History
Mentor: Dr. John Arnold, History

Our poster will deal with women during the crusading period that deviated from stereotypical gender roles. Our study will focus on women acting or being portrayed in a masculine light. These women broke away from societies label for them by participating in battle, accompanying crusaders to the Holy Land, as well as serving as intercessors with God under the occupation of sainthood. Our research seeks to redefine the modern historian's view of the traditional role of women during the medieval period. We will present our findings through medieval artwork, literature, and research we have collected pertaining to this phenomenon.

Retrospective Analysis of Critoph Engineering

John Markwardt, Psychology
Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Social Work Day at the United Nations 2012

Christina Marsh, Social Work
Mentor: Dr. Rolanda Ward, Social Work

The 29th Annual Social Work Day at the United Nations theme for 2012 is, "Partnering with the United Nations: The Social Work and Social Development Global Agenda." Information focusing on the objectives of social workers, students, and practitioners from around the world and how they are joining efforts to make a difference in the lives of people worldwide through social, economic, and sustainable measures will be presented at this event.

I will report on the event through the creation of a poster, focusing on projects and issues related to international social work and social development and the critical role social work plays in the international arena from my observations and participation in the Social Work Day at the United Nations.

Preparedness of High School Students for Introductory Level College Mathematics Courses

Ashley Martin, Mathematical Sciences

Mentor: Dr. Keary Howard, Mathematical Sciences

This research examines the ability of students in introductory level college mathematics courses to recall fundamental information that they learned in high school mathematics courses. It is hypothesized that students will have difficulty in completing questions regarding Algebra, Geometry, and Algebra II and Trigonometry topics including Probability, Circle Geometry, Exponents, Transformations, Graphing Equations and Points, Quadratic Equations, the Quadratic Formula, and Factoring.

Retrospective Analysis of Holimont, Inc.

Jerrica McAndrew, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Visiting potential employers

Kurt McGhee, Visual Arts and New Media

Mentor: Ms. Megan Urban, Visual Arts and New Media

We will be presenting our trip to Boston and the valuable information we received from potential employers. We will have one or two posters explaining our trip and what we got out of it.

Zombies in American Pop Culture

Owen McGuinness, English

Mentor: Dr. Adrienne McCormick, English

Project will correlate events and legislation of the cold war era to the origination of G. Romero's 1968 horror film "Night of the Living Dead". In the early 2000's, American cinema saw a similar resurgence and interest in zombie cinema which can be directly tied into the events of 9/11. In comparing these two eras, we may understand the American obsession with zombie culture.

Evaluating the Eutrophication of Eckhardt Pond

Michael McShane, Environmental Sciences

Mentor: Mr. Randy Woodbury, Environmental Sciences

Eckhardt Pond, 13 acres, is in Erie County near Hamburg, NY. Around the year 2000, the pond had depths of five to six feet of clear water and contained large mouth bass, sunfish, bull head, and possibly other species. A decade later, the pond is now very shallow with maximum depths of only two and one-half feet deep with a brown/green water color. It is hard to see through the water more than two inches during late summer after peak algae growth. All species of fish except for bull head are believed to no longer be present. In a very short time this pond has gone through vast stages of eutrophication; the big question this study examines is why has the pond become so shallow and full of algae and what has caused the majority of the fish to die?

Determination of Methane Generation Potentials from Local Food Waste Streams

Alyssa Medo, Hannah Farley, Jamie Hoffman, Noah Rankin, Chemistry

Mentor: Dr. Sherri Mason, Chemistry

According to the USDA, more than 25% of all the food we produce world-wide is simply thrown away without being consumed. The production of meat alone accounts for at least 18% of all of our greenhouse gas emissions worldwide. Anaerobic digestion (AD) processes offer a source of renewable energy through the use of anaerobes to decompose food waste (the feedstock) to produce methane gas, an easily transported and clean-burning fuel. This methane can then be utilized to generate electricity and heat in an overall carbon neutral process. Additionally the digested feedstock is rich in nutrients and can be utilized for compost fertilizer. Following a campus food waste assessment completed in the Spring of 2011, we are now working to determine the methane generation potential of our campus food waste stream, as well as other local organic waste.

Studies on mole-voles

Lindsey Mendez, Danielle Bless, Anthropology
Mentor: Dr. Joy Bilharz, Anthropology

Studies on mole-voles have found correlations between mc1r gene variances and mandibular symmetry. The mc1r gene affects hair color and skin pigmentation. Variances in this gene can cause a decreased tanning response (light skin) and red hair coloration. This study attempts to explore this concept in Homo sapiens. Through mandibular measurement and the sequencing of the mc1r gene in 200 human subjects, data is being gathered to see if there is a possible correlation between increased mc1r gene variances and mandibular symmetry.

Perceptions of a Bearded Man as a Function of Occupation, Sexual Orientation, and Mental Health

Skyelor Menard, Samantha Miosi, Psychology
Mentor: Dr. Jack Croxton, Psychology

The goal of this study was to determine the effects of occupational stereotypes, sexual orientation, and diagnosis of clinical depression on a fully bearded man. The occupations were CEO of a bank, college professor, or he was described as unemployed. The person was also described as homosexual or heterosexual. Finally, half of the time the person in the picture was described as clinically depressed. The design was a 3X2X2 factorial and a total of 121 subjects participated in the experiment. Each group viewed the same picture but was randomly assigned to one of the 12 conditions created by the manipulation of the three independent variables. The dependent variables were a set of personality traits and emotions. The occupation and mental health of the target person had a significant impact on the impressions of our subjects. The effect of sexual orientation was less. Additional findings will be shared at the Exposition.

The effects of aversive conditioning on schizophrenics

Paul Mercado, Social Work
Mentor: Dr. Rolanda Ward, Social Work

I plan to do research involving the effectiveness of aversive conditioning on the mentally ill (especially schizophrenics) who are self medicating themselves with nicotine. I am a SUNY Fredonia senior social work intern at the adult home Southern Tier Meadows which is headed by the organization Southern Tier Environments for Living. STEL serves those who have severe and persistent mental illnesses. During my field placement, I have noticed that many of my clients smoke cigarettes and an extremely alarming rate. Not only is it very detrimental to their physical health (one client has been hospitalized due to an acute onset of COPD), but it is actually affecting the social relations in the home. This is why I sought a solution to this problem. According to the material I learned in Practice with Individuals and Small Groups, a behavior like smoking has three parts to it. The antecedent can be a trigger that would come before the behavior. The behavior is the actual result of acting out on the antecedent. The consequence is what happens as a result of the behavior. My clients get a craving to smoke (antecedent), reach for the cigarettes and smoke it (behavior), and feel the physiological effects of nicotine on the body as a result (consequence). Aversive conditioning works by pairing an unwanted stimulus to the behavior. I will first find out what the client does not like specifically about smoking. I will then find a way to represent this and attach it to their cigarette box. For an example, if a client does not like that cigarettes cause emphysema, I will staple a picture of diseased lungs on their cigarette box. This will make them associate smoking with the unpleasant stimulus. This will hopefully change their feelings about smoking from positive to negative. In this way, this intervention will work on the consequence portion of this behavior.

Study of the Political in "V for Vendetta"

Brielle Messina, English

Mentor: Dr. Adrienne McCormick, English

My final research project for Senior Seminar, and the topic I will be studying for the expo, is a discussion of the graphic novel "V for Vendetta," which was recently turned into a film. The novel exposes a fiction commentary on government, politics, and war, as expressed in a graphic novel. The context of this novel is what makes it most interesting, and I will be comparing it to Perspolis, another example of political writing in comic form, but one that presents a nonfiction story with commentary on politics. I will be using the help of critical analysis of the use of graphic novels in writing the political. Another reason I find this so interesting is how it is laced with symbolic references that I will be expressing in the expo.

Predictors of Preschoolers' Gains from a Parent-Child Shared Reading Program

Bryanna Milligan, Psychology

Mentor: Dr. Andrea Zevenbergen, Psychology

In a Chautauqua-county based shared reading program involving preschool-aged children and their parental figures, the parents and children work together to gain something positive out of the shared reading process. Measures used in this study are the Child Behavior Checklist for ages 1 ½-5, the Parenting Stress Index, a demographic questionnaire completed by the parent, and a measure of child expressive vocabulary. Connections between children's behavior problems and parental stress will be assessed. Also, connections between family income and the children's gains in expressive vocabulary from books used in the reading program will be assessed. Last, we will assess if child behavior problems or parental stress predict children's expressive vocabulary gains from the reading program.

Insanity in Faulkner's The Sound and the Fury

Carly Morgan, English

Mentor: Dr. Adrienne McCormick, English

I will do a critical/research based analysis of Benjy's narrative in William Faulkner's novel The Sound and The Fury and discuss the implications of Faulkner's decision to use a narrator who is mentally ill.

Human rights and Peaceful protest

Jenna Morris, Political Science

Mentor: Dr. Ivani Vassoler-Froelich, Political Science

There are assumed human rights that every human on this earth is entitled to. However, these rights are not always respected; leading to slavery, oppression, economic hardship, malnutrition, terrorism, illness, torture and often murder or death. When situations like this occur, people eventually rise up and retaliate against those disrespecting their human rights. There are two general types of retaliation that we have seen throughout history; peaceful protest and violent protest. In this project we will be looking at different examples of peaceful protest against human and civil rights violations throughout history and into the modern day era. We find this issue to be important because violence and torture towards other human beings be it inflicted by governments or other citizens, is simply unacceptable. Through our research we hope to find a correlation between successful nonviolence protest movements, and the lasting peace to follow.

The Trial of Harry Potter: Christian Reception

Tiffany Mowers, English

Mentor: Dr. Emily VanDette, English

Since the Harry Potter series by J.K. Rowling has been in the public sphere there has been much debate over whether or not the books are suitable for children. This debate has gone so far that the books have been banned in some regions due to the controversy that surrounds them. I now plan on taking a closer look at the Christian reception to this series. I'm interested in discovering how many Christians who fight against the books have actually read through them and the difference in reception between those who have and have not completed the series. I hope to be able to create an argument in favor of the Harry Potter series focused mainly around Christian reception.

"Window Water Baby Moving:" Birth as Art or Exploitation

Anne Muscatello, English

Mentor: Dr. Emily VanDette, English

Featuring images of a woman giving birth, the short film *Window Water Baby Moving* has elicited strong, often polarizing responses. Created by Stan Brakhage, respected structuralist and experimental filmmaker, this film has fueled debate over what is considered art. While many view the work as avant-garde, at the forefront of expression, others such as feminist scholars argue the film is a violation of womanhood. Filmed in 1958, the polarizing debate surrounding the film's reception continues to be of critical importance. As a visual society, representations of women in cinema become part of our common psyche, enforcing or perpetuating gender constructs. However, experimental filmmakers, often create work to critique cultural forms. Analyzing the debate over this film can reveal society's concept of gender as a construct well as what is believed art has the right to express.

Influence of Parents vs. Media on Occupational Gender Norms

Grace Nadeau, Communication

Mentor: Dr. Linda Brigance, Communication

This study looks at the difference between the understanding and acceptance of gender norms by individuals in college, who have been influenced by not only their parents but also the media. The study involves an interview of six people, three men and three women, who have different geography and backgrounds as well as research on media that is typically watched by either gender.

Using Life Skills Group To Increase The Independence For Group Home Residents Who Are Transitioning To Independent Living

Jessica Newberry, Psychology

Mentor: Dr. Dani McKinney, Psychology

The overall goal of the study is for consumers to learn the basic skills that a person needs to live independently. The participants in the study are currently living in a transitional group home where the goal is to allow them to eventually live in independent housing. Within the group home setting residents do learn how to be more independent but do not have many skills in the way of living on their own. This group tries to teach the main skills that the residents will need to successfully live independently. This study will focus on two learning objectives that are part of the overall program at the facility. The learning objectives are: To learn to understand benefits included as part of employment, and learn the ability to obtain information from human resources through the employer and To learn about the taxation process at the state and federal levels.

Retrospective Analysis of Boy Scouts of America

James Nichols, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Retrospective Analysis of Alfred University College of Ceramics

Nathan Nichols, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

British First World War Poetry

Kristin Niemi, English

Mentor: Dr. Birger Vanwesenbeeck, English

This poster presentation identifies and explores British First World War poetry, honing in on the features of this writing and its place in the 21st-Century. While much attention has been paid to the trench or soldier poets – largely middle-class officers of the Western Front, like Owen and Sassoon – the opposite is true of civilian and women poets.

The inevitable goal for this presentation is a behind-the-scenes investigation to consider the multiple roles and voices of the war. To do so, a retrospective look to poets such as Tennyson and Hardy is necessary, as well as a look forward to how the war and its poetry factor into our lives today. Almost a century later,

what traces can be seen of this literature? Most researchers, like Fussell, accede to the durability of Great War writing, tracing its influence throughout modern life. A resurgence of texts concerning the First World War, such as the recent film adaptation *War Horse* and the British television adaptation of *Birdsong* are evidence of this, not to mention late 20th-Century (and early 21st-Century) writings by Pat Barker, Peter Whelan, and children's author Michael Morpurgo. The tendency – perhaps a need – to return to this war can be directly linked to the poetry it generated, as the dominant form of expression. Moreover, this poetry collectively forms a significant glimpse into British lives and minds at war.

Retrospective Analysis of LAUB International

Jonathan Nowak, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Object recognition systems

Seyma Nur Ozdemir, Computer and Information Sciences

Mentor: Dr. Ziya Arnavut, Computer and Information Sciences

Since interaction of intelligent systems with industry, interest in image recognition has been growing. Also, this interest has been spreading every area of machine vision systems. Object recognition system is an important branch of machine vision systems. These systems have been used in medical, security, and agriculture area. In this work, I study different object recognition techniques. As an example; I developed a facial recognition application. In this project, the aim was to be able to recognize people from side view photo with little flexibility. The application compares some information of a given photo with some information of preprocessed photo in a database and gives matching result.

Income Disparity in South America

Kelsey O'Callaghan, Alyssa Stubblefield, Megan Fink, Jacquelyn Koroma, Political Science

Mentor: Dr. Ivani Vassoler-Froelich, Political Science

Income disparity in South America is a serious issue that leads to a disproportionate amount of poverty in nations. The lack of economic equality negatively affects the possible growth of the lower classes causing the continuation of wide spread poverty. We want to study the causes of income disparity in South America; there are a number of possible factors such as industrialization, lack of education and accessibility to resources and even racial prejudice. Even the influence of the United States and Europe may also be very important in figuring out why there is income disparity in South America, and how it may be fixed so South American countries can have better economies and higher standards of living.

A Reading Intervention for Preschoolers with ADHD Symptoms

Lynsay Paiko, Psychology

Mentor: Dr. Andrea Zevenbergen, Psychology

This study examines the relationship between dialogic reading and language gains in children with ADHD symptoms. Previous research indicates that preschoolers with ADHD symptoms show significantly more difficulties in pre-literacy skills. In effort to potentially improve the outlook for these at-risk preschoolers, interventions such as shared reading in the home need to be examined. Participants in this project consisted of three parent-child dyads from the Western New York area. Each of the children had significant symptoms of ADHD. We predict that these children will demonstrate language gains over the course of repeated shared readings of picture books. This research question will be assessed through coding of transcripts of each dyad's shared reading sessions. Understanding the effects of dialogic reading on preschool children with ADHD symptoms could aid in finding appropriate interventions for children with ADHD symptoms.

Retrospective Analysis of Buffalo City Hall

Leah Palmer, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

An Investigation of the Utilization of Sport Psychologists

Leah Palmer, Psychology
Mentor: Dr. Bruce Klonsky, Psychology

Professional sports teams tend to underutilize sport psychology services and typically do not provide these psychologists the recognition that they deserve. This may be because the utilization of psychological services can be seen as a weakness to competing teams and the public. It is important to see how relevant the issue of underutilization or underreporting usage of sport psychology is. A content analysis of NBA teams' websites and Sporting News Official NBA Guides for the listing of sport psychologists, mental skills consultants, and similarly named professionals was done from 1988 to present. This was also done for WNBA teams from 2000 to present. Teams will be contacted if there is a need for clarification about their usage of sport psychology services. It is predicted that professional sports teams have increased use of sports psychology over time, and that the use of sport psychology is still not widely accepted.

Accident or Suicide, and How to Escape the Labyrinth

Lauren Palumbo, English
Mentor: Dr. Emily VanDette, English

I demonstrate how people reading John Green's *Looking for Alaska* interpret the death of the protagonist, Alaska Young. While I think the mystery surrounding her death makes for good fiction, as humans, we want to have answers for everything. I also address the question Miles quotes often in the text, "How will we get out of this labyrinth?" The labyrinth he's referring to can mean many things: living, dying or suffering, and they all have valid points within the text. I think that this book is extremely relevant in today's society. Countless people have thought about the issues provided by the text such as how to be a good person and how to live one's life. Using articles about suicide statistics and how different readers responded to Alaska's death, I was able to gather some answers to these much discussed questions.

Apples and Oranges – Floods and Flumes

Lauren Piche, Geosciences
Mentor: Mr. Randy Woodbury, Geosciences

Calculating stream flow is an important procedure for geologists and hydrologists to assess potential flood damage. Flow can be measured continuously with a stream gauge or periodically through experimentation. Some use a tennis ball, which is clearly visible and light in water. In our case, an apple and an orange were used because they are both biodegradable; thus they will not have negative impacts on the environment if lost. An experiment observed the rate of decomposition of an apple and an orange in Canadaway Creek water. This experiment was conducted to better understand the environmental impact of using a biodegradable product during stream flow analysis, and also to calibrate a local bridge as a flow-rate flume.

Zweig's Return to Relevance

Matthew Pisarski, English
Mentor: Dr. Emily VanDette, English

I plan to examine the reception surrounding Stefan Zweig, both in the public sphere and in the academic world to find out why his work has started to make a return. There will also be a brief examination of the critical reception of his work in his own time. The purpose of this is to figure out why there has been an increased presence of Zweig's work, including recent film adaptations of his work and biographical movies of his last days. I plan to find a connection between the sentiments of contemporaneous people in the Habsburg Empire and a similar state of mind in today's society. I also wish to dispel the negative reaction to his work that has been exhibited recently, and prove that a Zweig revival is a worthwhile and valuable endeavor.

Sylvia Plath: Her Life, Her Work, Her Legacy

Angela Pitts, English
Mentor: Dr. Emily VanDette, English

I want to focus on Sylvia Plath and how her personal life is represented in her writing and the reception of her personal life's presence in her work because Plath's popularity did not reach its peak until after her death. Some questions I will ask are: How much of Plath's personal turmoil is present in her writing? How

did people respond to her work after she committed suicide? How does Plath's depression affect reception of her work? To answer these questions I will do a lot of research on her personal life. Also, I will read some of her poetry, *The Bell Jar*, letters she wrote to her mother. There have been a lot of different types of art influenced by Sylvia Plath including movies, music, and plays. I want to see how she inspired these.

Poverty leads to drug trafficking between Colombia and the United States

Nicole Polle, Elizabeth Ely, Jonathan Wood, Ellen Bosco, Political Science
Mentor: Dr. Ivani Vassoler-Froelich, Political Science

The primary issue presented within the film *Maria Full of Grace* is how poverty leads to drug trafficking in Colombia and the United States. Poverty is an issue that can be considered political and economic. The issue is political because money is brought in by the less fortunate to endorse people in position of power in Colombia. Culturally, Colombia is one of the top countries trafficking cocaine. Colombia is a developing country, with a high rate of poverty. Those who act as drug mules earn more than they would in any other job in Colombia. Maria's family relies on her income to support them and when she quits her job she needs a quick source of income. Drug trafficking is a relevant issue because it is still an ongoing problem. The causes and consequences of drug trafficking can be political and economic related. Politically the money made from drug smuggling creates conflict in Colombia. Economically Colombia is poor and does not have many jobs to offer. Maria had to drop out of school in order to work and support her family, similar to other families in Colombia. As a result many Colombians resort to smuggling drugs as a way to earn money for themselves and their families. From conducting research we will better learn about poverty statistics and violence in Colombia.

A Study of the Misconceptions of Multi-Step Equations in Middle School and College Classrooms

Amber Powell, Mathematical Sciences
Mentor: Dr. Keary Howard, Mathematical Sciences

The purpose of this study is to test the hypothesis that students, both at the middle school and college levels, will make the most mistakes using the distribution property and integer operations when solving multi-step linear equations. It was also test that both groups will make the same frequency of mistakes. During this study, students will take a 15-question test containing different types of multi-step linear equations appropriate for 8th graders according to the state and national mathematics standards. Polling SUNY Fredonia faculty and using questions from old state assessments generated the instrument. Evaluating the equations students solved, with the number and types of mistakes made for each problem will generate student scores. The scores will be compared to a survey that students answered about their confidence in solving these types of problems.

I Am Legend

Tom Powers, English
Mentor: Dr. Adrienne McCormick, English

Retrospective Analysis of Calvary Automation

Branden Prentice, Psychology
Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Women and Non-Monogamies

Victoria Radar, English
Mentor: Dr. Jeannette McVicker, English

One of the first things noted in many of my Women's Studies classes has been the role of a woman's sexuality and how it reflects on her. It is often noted that women who are seen as promiscuous are seen in a very negative light while men are rewarded. This has always been a point of interest for me, but I will explore the role of sexual activity on a more specific level.

The Handmaid's Tale and Modern America

Victoria Radar, English
Mentor: Dr. Adrienne McCormick, English

I will be exploring the similarities and differences between Margaret Atwood's *The Handmaid's Tale* and modern American Political rhetoric.

Taking Time Or Just Wasting It: A Study of How Time to Complete an Exam Correlates to the Students' Performance on Exams

Nick Raynor, Mathematical Sciences

Mentor: Dr. Keary Howard, Mathematical Sciences

This study explores if there is any correlation between the time students take to complete an exam and their score. In other words, should students take as much time as they can to complete an exam, check it over, and redo it maybe. Or is it better for the students to take the exam, at their own pace and hand it in. We are looking to see if we can more accurately tell the students if they should take their time and be more meticulous or if they should go with their first instinct when answering questions.

Mephistophilix: The Demon of the Machine, and the Machine of the Demon

Mike Reeves, English

Mentor: Dr. Adrienne McCormick, English

In this paper I intended to prove that the Wachoski brother's movie, *The Matrix* is a modern version of Christopher Marlowe's, *Doctor Faustus*. In *Doctor Faustus* we see that the issue is religion, and in *The Matrix* is technology, but the actual issue is our desire for knowledge and power. The authors make use of a devil, the technical term being vehicle, to show and exercise control over the victims in their works. In *Doctor Faustus* this devil is quite literally that, a devil named Mephistopheles, and in *The Matrix* the devil is only a devil by nature, a computer program called the Matrix

Stock Exchange and Wallstreet

Marisa Richardson, Matthew Mahoney, Business Administration

Mentor: Dr. Linda Hall, Business Administration

The Business Club got the opportunity to visit the Stock Exchange and tour with Bower Securities. Highlights included watching the opening bell, meeting the star of *Mad Money*, Jim Kramer, and running around the floor to follow a trading specialist.

The Effect of Carbohydrate Supplementation on Anaerobic Performance Levels

David Ridos, Exercise Science

Mentor: Dr. Todd Backes, Exercise Science

Our project is going to focus on the nutritional aspect of exercise, testing the effect that a carbohydrate-electrolyte supplement has on high intensity anaerobic exercise. We will be looking at if the carbohydrate- electrolyte supplement has any effect on increasing a subject's absolute peak power, and decreasing fatigue index during an anaerobic cycling test. Our hypothesis states that; Ingestion of Gatorade prime supplement will increase an athlete's absolute peak power, and decrease fatigue index during the anaerobic cycling test, compared to if the athlete does not ingest the supplement prior to the exercise test. Therefore ingestion of the Gatorade Prime carbohydrate -electrolyte supplement prior to high intensity activity/competition will increase the athletes overall performance levels.

The Vagazzled Vulva

Whitney Riley, Psychology

Mentor: Dr. Ingrid Johnston-Robledo, Psychology

Standards for attractive, sexualized vulvas are narrow and currently include the removal of most public hair, genital surgeries, and other forms of genital modification. This is seen in both popular culture (e.g., pornography, celebrities) and in the literature on women's genital modification practices (Ramsey, Sweeny, Fraser, & Oades, 2009). The purpose of this exploratory study was to compare women and men's perceptions of this new trend in genital modification, use of pornography, and perceptions of different vulvas. One hundred and seventy nine participants (117 women and 62 men) completed an Internet survey that assessed attitudes toward the vulva. Preliminary results confirm a tendency for both men and women to evaluate the hairless vulva as more attractive than the vulva with large amounts of pubic hair. Further, it appears that this preference is somewhat reflected in both women's body hair

practices and men's hair level preferences. Implications for women's sexual subjectivity will be considered.

Skeletal muscle fiber types in obese mice

Abbas Rizvi, Kevyn Rustici, Jordan Johnson, Maxwell Denies, Biology
Mentor: Dr. Scott Medler, Biology

Skeletal muscles represent the major metabolic engine of the body. In conditions including type II diabetes, individuals develop serious problems with energy metabolism. One facet of this disease is that the skeletal muscles in diabetics are less capable of burning glucose aerobically. Whole muscles are composed of a mosaic of different physiological fiber types, ranging from slow aerobic fibers to fast anaerobic fibers. Evidence from human studies suggests that obesity is associated with a shift in muscle fiber types, from aerobic to anaerobic fibers. We studied the skeletal muscles of mice that were fed a high fat diet and became obese, to determine whether obesity in itself might lead to a fundamental change in fiber types. We used myosin heavy chain (MHC) as a fiber type marker and compared muscle fiber types from obese mice, with those of controls.

Women In the New Negro Movement

Sarah Roffe, History
Mentor: Dr. Jennifer Hildebrand, History

For my paper, I am going to compare and contrast how women in the New Negro movement were able to deal with the issues of racism, sexism or both through their art. The issue will be engaging because I plan on incorporating examples of art, and focusing on specific female New Negroes and their responses through their art.

I intend on researching a few female artists and I will use their art to highlight just how they presented the issues of racism or sexism in their art. The New Negro movement was a male dominated movement, and there was internal conflict between the women of the time choosing to focus on the issue of racism or sexism, or even both. I intend on looking into several female New Negroes to see their opinion on the matter.

Writing India: Arundhati Roy

Amanda Rogers, English
Mentor: Dr. Adrienne McCormick, English

For this research project, I have studied Arundhati Roy's literature and political essays. For the presentation, I will tie both her fiction and nonfiction together and come to a conclusion about how the writer Arundhati Roy realizes the power of her words by moving to political action.

NeoRealist Film

Amanda Rogers, Nicole Ceppaglia, Modern Languages
Mentor: Dr. Chiara DeSanti, Modern Languages

During last semester, Nicole and I took an Italian NeoRealism film class. For the final project, we created a video based on one of the films we watched during the semester. We would like to display the film.

Political Translation

Amanda Rogers, Alex Ives, Political Science
Mentor: Dr. Alexander Caviedes, Political Science

Last semester, Alex Ives and I both did independent studies with Professor Caviedes. Each of us translated newspaper articles and looked at different key topics in two different countries. We compiled and coded the findings and then wrote an article explaining what we found.

Snow What?

Jeremy Rosen, English
Mentor: Dr. Adrienne McCormick, English

I am interested in getting to know fairy tales by the Brothers Grimm a little better. With this I think of Snow White and the Seven Dwarfs. I am very familiar with the Disney story that was very family friendly and had

its "happily ever after" but I know the original was not so light-hearted. While we recognize fairy tales as a woman waiting to be rescued by her prince, I see that there was more psychology to it. With my research I certainly look forward to seeing what the brothers had in mind. I also want to know more about other people's interpretations. So many adaptations of this and other Grimm fairy tales are so straightforward. I am intrigued to see what other people have to say. This does go along with the aforementioned psychological representation. I think getting into a Grimm fairy tale will be an interesting project. There are so many obscure tales written by the brothers. I do want to learn more about the original version of one that has been made family friendly.

The Positives About Negatives: A study on the struggles and misconceptions of integer operations in adult education

Joshua Sadler, Mathematical Sciences

Mentor: Dr. Keary Howard, Mathematical Sciences

The purpose of this study is to examine previous research which refers to methods for solving integer operations and tying in these operations into classes pertaining to adult education. The idea is to discover the misconceptions that include errors that result from common operations, i.e., negative plus negative numbers and negative times negative numbers.

Campus Climate, "Engaging in our Community: Students in Service"

Aimee Salsbury, English

Mentors: Dr. Christina Jarvis, English and Ms. Joyce Smith, Volunteer Services

Campus Climate Challenge is growing a generation-wide movement to stop global warming, by reducing the pollution our communities and colleges down to zero, and leading our society to a clean energy future. Our mission is to create a relationship between our community, our students and our environment. One measure in which this is done is through our clean-ups. We host numerous clean-up events throughout each semester ranging from Pt. Gratiot Beach, Canadaway Creek, Dunkirk and Fredonia. Over 500 lbs of waste has been collected in the Dunkirk and Fredonia communities in the past. We hope that these projects serve as reminders that we all breathe the same air and drink the same water and we must protect all that we share by keeping it clean.

DNA structures

Cem Sancak, Computer and Information Sciences

Mentor: Dr. Reneta Barneva, Computer and Information Sciences

There are several algorithms used to analyze DNA structures. In my presentation I will be going over algorithms that can calculate rates of substitution, comparison and predict the outcome. Along with my calculations, I will be presenting a graphical model of an animated DNA and show how these algorithms apply to various sections. The demonstration will be on the fly and spectators can visually see how these algorithms work on a sample DNA.

Where Do We Go from Here?: Implications of LGBTQ Climate Survey Results

Vanessa Sanchez, Psychology

Mentor: Dr. Ingrid Johnston-Robledo, Psychology

Studies of the quality of life for lesbian, gay, bisexual, transgender, queer, and questioning individuals reveal that there may be a "chilly climate" for sexual minorities on university campuses (Eliason, 1996; Brown, et al., 2004). The purpose of this study was to assess, via an online campus climate survey: LGBTQ individuals' perceptions of the campus climate toward sexual minorities, their experiences with various forms of discrimination on campus, perceptions about LGBTQ people and their experiences, attitudes toward programming and policies that may improve the quality of life and campus climate for LGBTQ individuals (e.g., changes in curriculum, student activities, diversity training, policies, programming). Approximately three hundred members of the campus community responded to our survey. Preliminary results reveal a relatively warm climate for this population, but LGBTQ respondents did report various forms of hostility and bias that point toward the need for support for future programming and initiatives to further improve the climate.

Portfolio Management Project

Michael Santoli, Matt Carlson, Vincent Gambino, Business Administration

Mentor: Dr. Dave Yi, Business Administration

The goal of this project is to conduct research on the stock prices of two major companies that are traded on the NYSE. The range of the data will be from January 1, 1992 – February 1 2012. We will then analyze and compare the results to help draw conclusions on which stock would be more profitable to invest in based on specific financial values calculated from our research. The two companies we will be conducting research on are Hewlett Packard and General Electric. The main financial values we will be focusing on are alpha values, beta values, correlation coefficients, expected returns and risk.

Retrospective Analysis of Tanning Bed

Cassandra Schaefer, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Persepolis

Jenelle Schirmer, English

Mentor: Dr. Adrienne McCormick, English

I will be researching into the background of the graphic novel Persepolis and applying it to the political lens we have been studying in Senior Seminar.

The Effect of Garlic Mustard on Forest Soils & Understory Species in Western New York

Brian Schmidt, Kyle Carson, Biology

Mentor: Dr. Jonathan Titus, Biology

Garlic mustard (*Alliaria petiolata*) is a non-native that establishes monospecific stands in forest understories. Garlic mustard may be a successful invader of mature forest understories by inhibiting mutualistic interactions between native plants and AM fungi. In 2007, 36 1-m² plots were set up in a moist deciduous forest with three treatments. These treatments were as follows: areas of high garlic mustard density with the garlic mustard left intact, areas of high garlic mustard density with the garlic mustard repeatedly removed, and areas where there was no garlic mustard. Species response to garlic mustard removal was assessed and % mycorrhizal inoculum potential (MIP) measured each year. No significant richness differences were detected between treatments perhaps due to a depauperate species pool. Plots with high garlic mustard density had the lowest MIP, which indicates that garlic mustard may be inhibiting this critical mutualist and that MIP recovers with the removal of garlic mustard.

Napoleon's Russian Blunder: The invasion of the Russian Empire and the subsequent fall of Napoleon

Bryan Schram, History

Mentor: Dr. Eileen Lyon, History

The focus of our website will be on the failed invasion of the Russian Empire by the French Empire, under the control of Napoleon Bonaparte. Throughout our website we will focus on the various causes and actions that resulted in the failure of Napoleons invasion of Russia. Among these reasons, we will derive the various tactics used by the Russian military, the style of warfare that they implicated. In correlation of this, we will look into the political, economic and social aspects of the time period, both locally and globally to be able to conclude how and why they directly caused the invasion and the ensuing war. Within the breakdown of our website we will research various engagements, such as Borodino, and the various individuals within those engagements such as Napoleon, Alexander I and General Mikhail Kutuzov. Through this website we will show how the downfall of Napoleon is, in part, a direct result of his invasion of the Russian Empire and the tactics used by the Russian Military were crucial towards victory.

Effects of response to bias between student and teacher

Ashley Schosek, Psychology

Mentor: Dr. Guy Boysen, Psychology

While incidents of bias are far from eradicated on college campuses, little academic research has been conducted to investigate the most successful means of bias management in the classroom. To

understand more about this topic, undergraduates completed anonymous surveys directly assessing the perceptions of either another student or a professor when responding to the hypothetical use of a sexist stereotype in the classroom; the surveys also measured gender stereotypes and sexism. Analyses will compare the effects of a response to bias when it comes from a student versus a professor. The results will inform professors' responses to classroom bias and, therefore, help to create a comfortable learning environment for all students by minimizing the occurrence of biased statements in the college setting.

The Effects of Carbohydrate on Exercise and Cognitive Performance

Samantha Seewaldt, Danielle Buergin, Meaghan LaFranca, Lisa Modera, Exercise Science
Mentor: Dr. Todd Backes, Exercise Science

We are doing a research project on the effects of carbohydrates on exercise and cognitive performance. It consists of four 21 year old female subjects. Subjects will do an exercise task one week while on a normal diet. It will be followed up by a cognitive test. During the second trial, subjects will be on a no carbohydrate diet for three days before completing the exercise and cognitive tests. Our hypothesis is that a no carbohydrate diet will decrease subjects' exercise and cognitive performance.

Effects of a Parent-Preschooler Shared Reading program on the Parent-Child Relationship and Child Pre-Academic Skills (service learning)

Maryanne Calabrese, Psychology; Danica Carlson, Communication Disorders and Sciences; Jaclyn Faliero, Communication Disorders and Sciences; Jacquelyn Gregory, Psychology; Leanne Kies, Psychology; Elizabeth Krzyanowski, Theatre Arts; Grace Scheible, Psychology; Jessica Schweickert, Communication Disorders and Sciences; Zandra Smith, Communication Disorders and Sciences; Kristina Zic, Psychology
Mentor: Dr. Andrea Zevenbergen, Psychology

The SUNY Fredonia Shared Reading Project, which is a service-learning course on campus, mentors families of preschoolers in shared reading techniques. Subjects from Chautauqua County participated on a volunteer basis. At the first visit, the child participant's vocabulary was evaluated based on words that are found in four picture books that are supplied by the county. These books are read by the parent and child multiple times over a 4 week period using shared reading techniques (i.e., *dialogic reading*) that are demonstrated by an instructional video. The subject's vocabulary is then re-evaluated after the 4 week period. The data, including a final interview with the parent, will be analyzed to determine if there are positive changes in the parent-child relationship and the child's pre-literacy skills from the beginning to the end of the reading program.

Engaging in Our Community Series: Students in Service

Paul Shephard, Philosophy; Jesse Duane, Business Administration - Marketing
Mentor: Mr. Andrew Szuba, Curriculum and Instruction

We will be presenting a poster that shows the numerous community service events Delta Chi has performed, including Operation Breakfast Rescue, Boys and Girls Club, Slush Rush, Fall Sweep, Miss Delta Chi, Silver Creek Basketball Support, and more. We will try and show the benefits of helping out the community.

Retrospective Analysis of Vincenzo's Pizza

Cory Shirley, Psychology
Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

School Curriculums and the English Language Learner

Kali Simko, Language, Learning, and Leadership
Mentor: Dr. Karen Lillie, Language, Learning, and Leadership

There are many children currently in the United States that do not have English as their first language (L1). Many classrooms throughout the country need curriculums in place that can support these learners. The question is how can educators enhance the current curriculum that is being used in a school to best meet the needs of the English language learner (ELL)? This project used a current mathematics

curriculum of a local school district and created and enhanced lesson plans to meet the needs of the ELLs. Each lesson was evaluated using a five point Likert-scale to provide a holistic rating of the linguistic complexity of the test items. The rating was done on the original lesson to evaluate the difficulty of the language, and then on the enhanced lesson plans to be sure the complexity was reduced. Potential implications are also discussed.

Military Orders of the Crusades

Geoffrey Simmonds, Kevin Luss, Jonathan Cole, History
Mentor: Dr. John Arnold, History

The time period of the Crusades saw the formation of many military orders, the Templars, Teutonic and Mamluk were counted among this number. The intention of our presentation is to show that although the forming of these military orders during the Crusades were religiously and culturally different in their organization, the employment of these orders were fundamentally similar. This will be accomplished through the use of comparisons of structuring, equipment and the actual employment of the military orders during the Crusades, using primary and secondary sources to provide evidence in support of the conclusion that the orders were relatively the same and served the same basic principals in the area in which they were formed.

1812 Military Technology

Geoffrey Simmonds, Jennifer Smith, Evan Kiernan, Matthew West, History
Mentor: Dr. John Staples, History

We intend to show advancements in military technology, tactics and strategy through the time period of the Wars of 1812. The proposed website design will emphasize improvements that dramatically changed the face of warfare for most of the century that followed the Wars of 1812. Different sub-sections of the webpage will explore aspects of these changes in more depth, looking at logistics, artillery, naval combat and small arms in addition to the tactical and strategic changes of the era. The sub-sections will be individually referenced with both primary and secondary source analysis utilized, and covers the North American War of 1812, Napoleonic Wars of Europe and the Great War of Russia in hopes of fostering better understanding of the conflicts.

Chautauqua County's "Step It Up"

Katelyn Singer, Sociology; Katie Civiletto, Interdisciplinary Studies
Mentor: Dr. Linda Dorsten, Sociology

Our "Mind Map" integrates the dynamics of Public Health. We can extend the map to illustrate the connections through our Public Health minor to incorporate the ideas of each of our individual majors. We focused in on psychology and hospital administration. This project extends the path drawn by the 2008, government funded, "Steps to a Healthier NY." Step it up focuses specifically on ways to become active in Chautauqua County. The Step It Up program focuses on extending life expectancies, decreasing the rates of obesity, diabetes and asthma throughout the community. This confluence of these three areas exemplify the immediate relations between one's personal wellbeing and the opportunities surrounding them.

Misconceptions that mainstream teachers may have about English Language learners

Jennifer Skelly, Language, Learning, and Leadership
Mentor: Dr. Karen Lillie, Language, Learning, and Leadership

In recent years, there has been an increase in the number of English language learners (ELLs) that have moved to the rural communities. In fact, according to Berube (2002), it is estimated that 44% of ELLs in the United States currently living in rural communities. Unfortunately, many rural teachers do not have the tools, preparation, or experience to provide the proper education this population needs. In some rural schools, ELLs are placed in the classrooms with teachers who have never worked with ELLs before and may have a misperception about who ELLs are and what this subgroup of students' needs might be. This study looks at the beliefs that teachers in rural Western New York may have about ELLs, and whether or not these beliefs are linked to popular myths about ELLs and ELL education. A survey of twenty-five questions in Likert-scale format was sent to teachers of grades K-12 in twelve different schools within Chautauqua County. Results and implications will be discussed.

Berube, B. (2002). Managing ESL programs in rural and small urban schools. Teachers of English to Speakers of Other Languages, Inc. (TESOL): Alexandria, VA.

Diplomacy and Nuclear Weapons Since the Cuban Missile Crisis

Spencer Smith, Kenneth Smith, Jeffrey Luckas, Mike Panebianco, Political Science
Mentor: Dr. Ivani Vassoler-Froelich, Political Science

Our poster is going to be based on the 2000 movie "Thirteen Days," which focuses on the Kennedy administration's response to the 1962 Cuban Missile Crisis. Our project will seek to show the United States' foreign policy regarding nuclear weapons since their invention, with an added emphasis on the effect that the Cuban Missile Crisis had on U.S. diplomatic relations with states that have, or are seeking nuclear arms.

Fasting vs. Feasting

Amanda Solly, Catherine Guth, Mary Miller, Cheryl Yerger, Exercise Science
Mentor: Dr. Todd Backes, Exercise Science

We tested and analyzed the effects of fasting compared to a normal fed state on exercise performance.

The Effect of Garlic Mustard on Forest Soils & Understory Species in Western New York

Renee Solly, Thomas Caggianelli, Jessica Wooten, Brian Schmidt, Biology
Mentor: Dr. Jonathan Titus, Biology

Garlic mustard (*Alliaria petiolata*) is a non-native that establishes monospecific stands in forest understories. Garlic mustard may be a successful invader of mature forest understories by inhibiting mutualistic interactions between native plants and AM fungi. In 2007, 36 1-m² plots were set up in a moist deciduous forest with three treatments. These treatments were as follows: areas of high garlic mustard density with the garlic mustard left intact, areas of high garlic mustard density with the garlic mustard repeatedly removed, and areas where there was no garlic mustard. Species response to garlic mustard removal was assessed and % mycorrhizal inoculum potential (MIP) measured each year. No significant richness differences were detected between treatments perhaps due to a depauperate species pool. Plots with high garlic mustard density had the lowest MIP, which indicates that garlic mustard may be inhibiting this critical mutualist and that MIP recovers with the removal of garlic mustard.

The Perfect Review Session

Nicholas Spry, Mathematical Sciences
Mentor: Dr. Keary Howard, Mathematical Sciences

This research explores the different approaches to the standard high school pre-exam review session. It is hypothesized that Algebra 1 students will experience the highest achievement on an exam after having a teacher led review session including a practice quiz, rather than a group work review sheet, or strictly a practice exam, or playing a review game the day before the exam.

SUNY Model European Union

Alexander Stone, Political Science; John Plevel, Social Studies Education; Daniel Palm, Political Science; Amra Cuhel, Video Production; Michael Dean, Political Science; Richard Rogers, Political Science; Laura Imm, Political Science; Maxwell Radley, Political Science; Patrick DePuy, Video Production; Myava Cuhel, Video Production; Timothy Kennedy, Journalism; Rebecca Thompson, French; Carolina Pickens, International Studies
Mentor: Dr. Alexander Caviedes, Political Science

The participation of the SUNY Model European Union conference in Exeter, England and the interactions between the ministers by student which were observed by the Press Corp. Members of the Fredonia delegation wrote individual essays on their impact on either the, Corepers, the Financial ministers, the Foreign Affairs ministers, or the Heads of Government to change legislation. The Press Corp. observed and watched the meeting that unfolded and also wrote third person works that showed the interaction between the ministers. The conference allowed students to interact in a cooperative and interactive mock European Union with delegates becoming mock roles of large importance.

Mix-Match Variables: A Study of the Effects of Changing Variables in Common Placed Mathematical Formulas on Students Comprehension

Kendelle Sutton, Mathematical Sciences

Mentor: Dr. Keary Howard, Mathematical Sciences

This study explores the mathematical concept of variables. Variable understanding is a key element in higher order mathematical thinking. Variables encourage students to expand their mathematical thinking and comprehension. It is hypothesized that students experience difficulty and misunderstanding in solving mathematical formulas when the well-known variables are changed or rearranged. Students will also have difficulty when challenged with variable only questions. For instance students will have most difficulty if variables are changed or rearranged in the Pythagorean Theorem, slope, and the y-intercept.

Apartheid and Women's Influence in the Family Unit

Katherine Swanson, History

Mentor: Dr. Steven Fabian, History

I intend to address how the cohesion of the rural African family unit was affected by Apartheid in South Africa during the mid twentieth century. Even though apartheid affected traditional gender roles in the rural South African family, women continued to maintain family cohesion. With their husbands absent, wives became more independent, taking on more traditional male responsibilities. Traditional beliefs and culture also play a significant role in family design. In some areas of South Africa, "chiefs and male elders conspired to keep women in the rural areas" (Roer-Strier, Dorit, and Roberta G. Sands). I will also explore how the pressure to migrate to the cities to further support family needs affected the rural family unit. I conclude that, despite divisive external forces, the family unit stayed strong primarily through the female/mother role's influence.

Marjane Satrapi: The Political is Personal

Rachel Sweeney, English

Mentor: Dr. Adrienne McCormick, English

Senior Seminar Final Project. Discussing how Satrapi shows how politics directly and indirectly affect the personal life of citizens.

Marcus Garvey and Internationalism during the "New Negro" Movement

Chad Szymkowiak, History

Mentor: Dr. Jennifer Hildebrand, History

I will describe in a few ways how Marcus Garvey/ the UNIA "Back to Africa" movement was part of the "New Negro" values and how the "New Negro" ideas meshed with the thoughts/goals/values of a large international black population during the Harlem Renaissance/ "New Negro" movement. Also, I will tie in several of my own questions, that will help ask how Marcus Garvey planned for his new government and how these questions relate to the "New Negro" values. Overall, this topic is very interesting to me. It is not mentioned that much either in African-American history or the United States' history, for that matter. I have a variety of issues to address and values to explain too. This topic deals with people's viewpoints, politics, and a worldly perspective.

English Language Learners' Perceptions of High-Stakes Exams

Alina Taylor, Language, Learning, and Leadership

Mentor: Dr. Karen Lillie, Language, Learning, and Leadership

English language learners (ELLs) are mandated under federal legislation to take standardized tests in mathematics, even if they arrive in the United States with limited English proficiency the day the test is given. The problem is that standardized tests, which are intended to measure knowledge and skills in a content area, really become assessments of English proficiency for ELLs. The purpose of this study was to investigate ELLs' perceptions of high-stakes assessments and of the legal accommodations offered to them. The quantitative, attitudinal surveys provided information regarding students' experiences and opinions on taking the New York State Regents exam in mathematics and the accommodations they used. The researcher hypothesized that ELLs may hold negative perceptions of the New York State Regents exam in mathematics. Also, it was hypothesized that ELLs may report mixed feelings about accommodations on the exam. Data taken from the surveys will be analyzed and discussed.

The Ending of Adventures of Huckleberry Finn: A Reception History

Casey Takacs, English

Mentor: Dr. Emily VanDette, English

I plan to analyze the final chapters of *Adventures of Huckleberry Finn* and, more to the point, the history of their reception by audiences throughout the book's lifetime. I plan on looking at the various ways that these chapters have altered the book's legacy, as opposed to an ending of any other sort

Calculation of the Second Order Energy Corrections for Rydberg States of Molecular Hydrogen

Gregory Terho, Physics

Mentor: Dr. Erica Snow, Physics

We are calculating the second order energy corrections to highly excited states of molecular hydrogen through perturbation theory. The corrections are small, but important contributions to the determination of certain properties of molecular hydrogen. The calculations were performed in Mathematica to make the analysis more transparent. Making these calculations more obvious will be helpful to the understanding of students who participate in this research in the future.

Puerto Rico Program

Jenna Treahy, Modern Languages

Mentor: Dr. Vivian Garcia, Modern Languages

At the beginning of my Puerto Rico Program, I found a statistic that really interested me about the differences in the literacy rates between the United States and Puerto Rico. However, when I arrived in Puerto Rico to start my course work, I surprisingly found that the bilingualism on the island to be more of a prevalent education topic than the literacy rates. Also, by listening to different native speakers, I heard a lot of interesting pronunciations of words that made expanding my knowledge a lot of fun and very exciting.

A review of studies examining simulation of multiple personalities

Alexandra VanBergen, Psychology

Mentor: Dr. Guy Boysen, Psychology

Dissociative Identity Disorder (DID) is a mental disorder characterized by more than one personality existing within a single individual. This disorder has been a topic of controversy concerning its etiology. Studies of people simulating DID can be a factor in resolving an aspect of this controversy. A literature review was conducted on studies involving a comparison of people with DID to people simulating DID. Results showed that differences between the groups are inconsistent. Use of blinding procedures and the populations used to simulate were also varied. Overall, the results indicate that skepticism about the unique nature of DID is warranted.

Volunteer and Community Services

"Engaging in Our Community: Students in Service"

Amie Salsbury, Campus Climate; Delta Chi - Paul Shephard; Delta Phi Epsilon - Sara Kobel; Fredonia for St. Jude - Megan Dash; Rockin' the Commons (Fredonia Radio Radio Systems) - Jud Heussler; Intervarsity Christian Fellowship (STRIVE Ministries) - Derek West; Sigma Gamma Phi - Nicole Fix; Sigma Kappa - Kelsey Kilminster

Mentor: Ms. Joyce Smith, Volunteer Services

Volunteer and Community Services is a part of Campus Life. Its purpose is to connect students with the community and provide volunteer opportunities. Volunteering allows students to contribute to the community in a meaningful way while gaining firsthand experience, skills and knowledge in a variety of ways. A primary objective of the *Engaging in Our Community* series is to identify and build college and community partnerships, enhance cultural and economic connections, and foster civic responsibility and engagement. This endeavor recognizes accomplishments and progress attained by student volunteers and community partners while raising awareness about future opportunities and possibilities. Students will showcase their volunteer and community service projects/experiences on posters or slideshow demonstration of pictures.

Effects of Access to PowerPoint Slides on Memory Retention and Retrieval

Eric Walsh, Dale Haskins, Lucas Hale, Psychology

Mentor: Dr. Jennifer Dyck, Psychology

Use of PowerPoint slides as a teaching aid has become widely practiced in university classrooms. While there have been many studies on its effectiveness as a teaching aid, there have been few studies on how online access to PowerPoint slides before lectures can affect student performance in class. In this study, we will research these effects by giving two groups of college psychology students a lecture on music history with one receiving the PowerPoint slides of the lecture beforehand and the other taking traditional notes. Both groups are given two quizzes, one short quiz directly after the lecture and another long quiz 6-8 days after the lecture. We hypothesize that the students with the lecture printout will show better short term retention on the short quiz but that the students with traditional notes will perform better on the long quiz due to better active listening and encoding in class.

Exploring the Effectiveness of the Sheltered Instruction Observation Protocol (SIOP) Model

April Walters, Language, Learning, and Leadership/TESOL

Mentor: Dr. Karen Lillie, Language, Learning, and Leadership/TESOL

Few empirical studies specifically address the effectiveness of the Sheltered Instruction Observation Protocol (SIOP) as a professional development tool or an instructional model. This study attempted to add to the literature regarding the effectiveness of SIOP. Approximately 200 teachers from several schools in Western New York were surveyed electronically to inquire about the grades and subjects they taught, years of teaching experience they had, type of training or professional development they'd had, and presence of English language learners (ELLs) in their classrooms. Selected survey respondents were observed using the SIOP evaluation rubric and then interviewed. Survey, observation, and interview data were analyzed in attempt to answer the following questions: Is SIOP an effective model to be used by individuals teaching English language learners? Do teachers without SIOP training work as effectively with ELLs as SIOP-trained teachers as defined by the SIOP evaluation rubric?

Mean-Variance Portfolio Theory of Investment Science

Weiyi Wang, Mathematical Sciences

Mentor: Dr. Lan Cheng, Mathematical Sciences

Mean-Variance Portfolio Theory of Investment Science, and some actual investing examples.

Knowing and Using Words

Natalie Weber, Language, Learning, and Leadership

Mentor: Dr. Clara Beier, Language, Learning, and Leadership

This poster presentation will address techniques to use with young children for decreasing the vocabulary gap that are effective for all populations, including English Language Learners. The poster will highlight the importance of early vocabulary development on latter reading comprehension and academic achievement. Interactive strategies for teaching vocabulary words during shared storybook readings will be presented.

Retrospective Analysis of 4-H Camp Bristol Hills

William Webster, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Education of the so-called Mandela's Generation

Jennifer Werfelman, History

Mentor: Dr. Steven Fabian, History

I will explore the education of black South African children after the fall of apartheid. How has education changed in the post-apartheid era? How are schools educating the so-called Mandela's generation? After the fall of apartheid, South African schools have had to change curriculum to address equal education and to break down the barriers created by the racism of apartheid. This research will expose and evaluate the successes and failures of this transformation.

Engaging in our community; students in service, InterVarsity Christian Fellowship

Derek West, Volunteer Services

Mentor: Ms. Joyce Smith, Volunteer Services

For the last four years, about 30 students from InterVarsity Christian Fellowship have returned a week early in January to spend four days serving in the local Fredonia/Dunkirk Community. This year over 300 service hours were earned at locations including Rural Ministries, St. Columbians, The WCA Home, Dunkirk Boys and Girls Club, Harvest Chapel West, in addition to local churches and schools. The students gave up their comfortable beds to move into the Fredonia First United Methodist Church where they cooked all meals or had them provided through donations. The goal of this trip is to provide InterVarsity Christian Fellowship with a chance to serve God by serving the community around Fredonia and each other. This year the group became incredibly close through the variety of jobs they completed.

Examining the Effects of Empathy Levels on Pro-Environmental Attitudes

Brittany White, Brittany Waller, Vanessa Sanchez, Psychology

Mentor: Dr. Jennifer Dyck, Psychology

The current study examines the relationship between an individual's level of empathy and their concern for the environment. Previous studies have demonstrated that higher levels of empathy have been correlated with increased concern for nature and aspects of the environment. Participants included SUNY Fredonia students and the study is a 2x2 between subjects design; variables will be empathy (high versus low) and slideshow content (images of nature in distress versus images of man-made material objects in distress). Researchers predict that individuals who receive the high empathy condition and view the images of nature in distress will show the greatest amount of measurable empathy and environmental concern. By understanding the relationship between these phenomena, researchers hope to better understand how to more effectively encourage pro-environmental attitudes, potentially in the form of a public service announcement.

Internal Attributions and Information Processing Style in Cause-Joining Behavior

Brittany White, Lynsay Paiko, Keri Filsinger, Psychology

Mentor: Dr. Suthakaran Veerasamy, Psychology

The present study seeks to examine the relationship between internal attributions and processing styles of individuals in cause-joining behavior. Previous research has shown that people process information on either a rational (head) or experiential (heart) level which is reflected in their actions and decisions making. The present study sought to examine how processing style affects people's decision making when joining causes. Participants included SUNY Fredonia students and the study was a within subjects design, including a pretest and posttest with a video stimulus in between. The video stimulus content critiques cause-joining behavior. Researchers predict that individuals who process information rationally will be expected to experience more incongruence between the pre and posttest, than individuals who score high in experiential thinking after viewing the stimulus. Researchers hope recognizing the mode of information processing that individuals engage in will aid in the creation of a more honest and understanding relationship between individuals.

Children's Categorization Strategies in the Presence of a Therapy Dog

Raela Wiley, Emily Lipski, Philip Best, Psychology

Mentor: Dr. Nancy Gee, Dr. Justin Couchman, Psychology

This experiment used a trained therapy dog as a learning tool to encourage more adult-like cognitive processing. Children learned to categorize stimuli into two groups. Perfect categorization could be achieved by focusing on either overall family resemblance or a single-feature rule, with or without the presence of a dog. Test stimuli were used that would belong to one group based on family resemblance, but also had the single-feature rule of the other group. Categorization of these stimuli determined the cognitive strategy. We hypothesize that in the presence of a therapy dog, children will rely more upon the single-feature rule. This would suggest that the dog might encourage them to focus on adult-like modes of processing.

Retrospective Analysis of Gui's Lumber

Peter Wilkinson, Psychology

Mentor: Dr. Jack Croxton, Psychology

(see Psychology abstract on the last page of this book for description)

Financial Freedom

Clair Wisniewski, Marissa Imiola, Kemoy Wright, Business Administration

Mentor: Dr. Donald Barnes, Business Administration

Financial Literacy is the ability to understand finance at a micro and macro economic level, and how it pertains to our everyday lives. Our SIFE team found it vital to teach these skill sets, to the younger generation, and to encourage lifelong learning and comprehension. Financial Literacy does not necessarily need to be taught in a dry, statistical approach, but rather in a way that attracts the attention of younger students.

In order to educate the students of the Boys & Girls Club, we devised a three-tier program, which included three half hour lessons, and lasted three weeks. Our target demographic was children in grades 6th-8th. These lessons were compiled to meet the expectations and knowledge of the students and it was important for us to make the lessons easily understood and retained by the students. The first lesson that we decided to educate the students on was based on deciphering the difference between needs and wants. This is essential to any person, whether they be young or old, as it can help increase financial security as well as knowledge about spending situations.

The second lesson was about learning SMART Goals. SMART is an acronym, which stands for Specific, Measurable, Achievable, Relevant, and Trackable. Being smart and reasonable when setting goals can help a person achieve long-term success and prosperity. The final lesson that we taught was about allowances and savings. Since the age group that was being educated wasn't in the work force yet, you can imagine how important education on allowances and the savings of that allowance can be.

In order to test and recognize if the students were indeed retaining the material that was being taught, we established a set of weekly assessments that included assignments and quizzes. The established assessments served as barometer to gauge the learning capabilities and comprehension of the students. Incentives were given to the top performing students, whom would answer questions correctly and volunteered during the lessons.

Over the course of the program, the team and program director saw positive results, as students were recalling information, and parents of the students continued to give positive feedback, as they learned new things themselves. Due to the success of this project our team is in the process of implementing a Financial Literacy course at SUNY Fredonia. The concept of such course is not being currently taught at SUNY Fredonia and we believe that a course along these lines is essential for any student entering a new chapter of their lives. In cooperation with School of Business Administration chairman, our team has developed a syllabus as a guideline for the course. In addition to having the course approved by the department chairman, our team has found a faculty member that has been approved to teach the course, and a textbook has been selected. Due to the lengthy process of having the course approved by the University Senate Council, the 2012-2013 SIFE will be charged with forerunning this sustainable project.

Possible Mutualistic Relationship Between Japanese Knotweed and European Fire Ant

Jessica Wooten, Thomas Caggianelli, Biology

Mentor: Dr. Jonathan Titus, Biology

Japanese knotweed, *Fallopia japonica*, is an invasive herbaceous perennial first introduced to North America in the late 1800's. Japanese knotweed outcompetes native species and threatens biodiversity through the formation of thick dense colonies and rhizomatous root systems. Despite these detrimental factors associated with Japanese knotweed, little is known about possible symbiotic relationships associated with this species. The European fire ant, *Myrmica rubra*, has been identified crawling around the stem and leaves of Japanese knotweed, however no studies have examined why these ants are present. The European fire ant is an aggressive ant known to protect colonies during periods of disturbances. This potential mutualistic relationship can be possible by the contribution of nectar to the ants by extrafloral nectaries located on the stalks of Japanese knotweed while the European fire ant can protect the plant from herbivory. Examination of a possible relationship between these two species will take place in field studies along the riparian zone of Canadaway Creek in Fredonia, NY and Tifft Nature

Preserve in South Buffalo, NY. Disturbances that will be used include rustling of leaves and stems to mimic vibration, a wire brush on leaves to mimic herbivory, and gluing a Japanese beetle, *Popillia japonica*, to Japanese knotweed to stimulate an invasion. Investigation of the behaviors associated with the European fire ant after those disturbances will aid in understanding the relationship it has with Japanese knotweed.

Exploring New Connections: Bridging the Gap Between American and Chinese Education Systems

Kyle Yelich, Curriculum and Instruction

Mentors: Dr. Mira Berkley, Dr. Robert Dahlgren, Curriculum and Instruction

The topic that will be presented will address this educator's firsthand experience traveling to China with a delegation of American Educators, "Chinese Bridge for American Schools: New Development." This poster will address the opportunity for American educators to view the way the Chinese structure their educational system, the basic foundations of the Chinese educational system and a comparison of the American and Chinese educational systems. Additionally, the benefits of these two world powers sharing knowledge gained in educating their nations' youth through international educational exchanges will be explored. Viewers of this poster will be exposed to a critical analysis of the benefits of traveling abroad and witnessing first hand the schools, educators and students in China.

Dictionary Based Compression (GZIP)

Baris Yildirim, Computer and Information Systems

Mentor: Dr. Ziya Arnavut, Computer and Information Systems

Computers are not good at redundancy. Computer programs repeat the same instructions over and over again. On the other hand, computer storage borders are certain, so it becomes a scarce resource. Data compression algorithms make the compressed data smaller than the original data. Computer scientists have been studying for using computer storage more efficiently since the 1960s. One of the well-known compression algorithms is Gzip, which is found by Jacob Ziv and Abraham Lempel. Gzip is a software application that is for file compression and decompression. The "G" stands for gratis and Gzip stands for GNU and usually refers to the GNU Project's implementation. Gzip is based on the DEFLATE algorithm which includes Huffman coding and Lempel-Ziv (LZ77). Lempel-Ziv algorithm is a technique of lossless data compression which is called dictionary based compression.

Effects of Aid on the ANC

Connor Young, History

Mentor: Dr. Steven Fabian, History

Umkhonto we Sizwe (MK), the Spear of the Nation, was the armed wing of the African National Congress (ANC) whose goal was to violently overturn the Apartheid government in South Africa. This group operated both inside and outside the borders of South Africa, through varying means of support. My study seeks to investigate how the funding that the ANC/MK, namely from other nations, impacted the activities, behaviors, and ideological basis of the MK. Examples of nations who supported the actions of MK include: the Soviet Union, China, and other Warsaw Pact nations. This study will analyze the extent to which this impact was felt on the ANC, and MK in particular.

Metacognition in College Exams

Shaun Zmuda, Kathryn Feather, Psychology

Mentor: Dr. Justin Couchman, Psychology

Do you know how well you're doing while you're taking an exam? Should you go with your first guess on a multiple choice question, or revise if you are uncertain? Two overlapping groups of 62 participants were given an exam and asked to rate their confidence on each question. Results indicated a strong correlation between confidence ratings and the number of participants who got the question correct. However, confidence ratings were not as good at predicting individual performances. Participants were also asked to note when they revised an answer. Although almost all students reported hearing from a professor, and believing, that they should go with their first guess, a statistically significant number of revised answers were correct.

Psychology Abstract

Organizational Psychology: Retrospective Analysis Projects
Mentor: Dr. Jack Croxton, Psychology

Students in PSY 347, Organizational Psychology, were required to critically analyze an organization that they were previously a member of or one that they are currently affiliated with. First, they provided an overview of the organization, followed by a description of their role within the organization. Then they analyzed it, using a set of concepts from the course. Finally, they provided a set of recommendations for improving the organization. Their presentations are taking place throughout the day and all begin with the title, "A Retrospective Analysis of..."