

THE SENIOR SYMPOSIUM

SHARE YOUR PASSIONS

April 19, 2013

Sponsored by the
Center for Teaching and Learning



HOBART AND WILLIAM SMITH COLLEGES



HOBART AND WILLIAM SMITH
COLLEGES

Office of the President

April 4, 2013

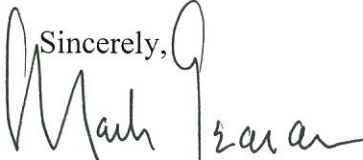
Dear Members of the Hobart and William Smith Community,

Hobart and William Smith Colleges have a rich and unique history rooted in interdisciplinary teaching and research. Under the mentorship of our faculty, HWS students work in classrooms, laboratories, studios and in the community to pursue skills and interests at an advanced level and build rewarding personal and academic relationships.

The Senior Symposium is our opportunity to come together to recognize that sustained and sophisticated work. It's also a chance to celebrate the students who push the bounds of intellectual engagement and the faculty members whose deep commitment make this possible.

Whether they're presenting independent projects, creative works or scholarly research, the students participating in the Symposium have the unique opportunity to give voice to their work and exchange ideas across the diverse HWS community.

I am proud of the more than 100 seniors and Masters in Teaching students who chose to participate in the Colleges' fifth Senior Symposium. I am grateful to the many faculty members who have mentored these students and who encourage them to tackle complex research and creative topics. Finally, I am thankful to the Center for Teaching and Learning and to Dr. Susan Pliner and her staff for their vision and leadership in making the Senior Symposium possible.

Sincerely,

Mark D. Gearan
President



HOBART AND WILLIAM SMITH
COLLEGES

Office of the Provost

Dear HWS Community,

I am very proud of our students' scholarly and creative work, as well as their research and community-infused projects. At Hobart and William Smith Colleges, we are fortunate to see and celebrate our students' intellectual passion in the Senior Symposium. The event represents multiple aspects of what makes a liberal arts education so valuable: interdisciplinarity, close student-faculty interaction, attention to multiple learning modes and opportunities, and a high standard of rigor and intellectual engagement. As Provost and Dean of Faculty, I look forward to sharing these great examples of what a Hobart and William Smith College education can produce, with the greater HWS community.

I also want to express my gratitude to the faculty and staff who have nurtured these students and their work throughout their time at HWS, and to those who have mentored and sponsored the students as they prepared their Senior Symposium presentations. I am also grateful and to those who will take time from their busy schedules to moderate panels on April 19th. Welcome all and thank you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Titilayo Ufomata'.

Titilayo Ufomata
Provost and Dean of Faculty

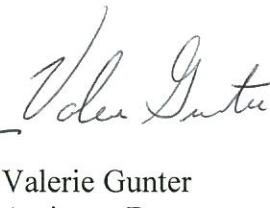
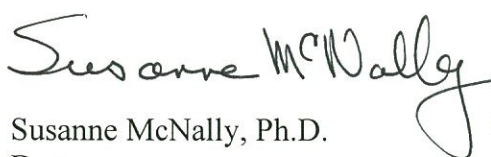
HOBART
AND
WILLIAM SMITH
COLLEGES

Members of the HWS Community:

The *Senior Symposium* is an exciting event which reflects and honors the depth and breadth of engagement among Hobart and William Smith students in a diverse spectrum of academic and creative interests. It makes visible that which is often invisible, the long hours and hard work students dedicate to the intellectual journey during their four years at the Colleges. Most importantly, it provides an opportunity for students, under the guidance of faculty advisors, to engage each other as teachers and learners.

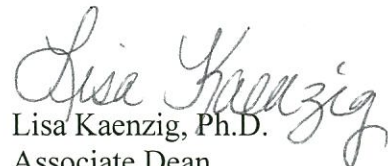
As your Deans, we join with the Center for Teaching and Learning in applauding those who are participating in the first Senior Symposium as presenters. This is an important academic achievement that you now have as part of your legacy. We also want to applaud the volunteer stewards who will assist in the organization of the day and the faculty and staff who will serve as panel moderators. The Deans also join in the welcoming of all members of the HWS community to this wonderful demonstration of student teaching and learning.

Sincerely,



Susanne McNally, Ph.D.
Dean
William Smith College

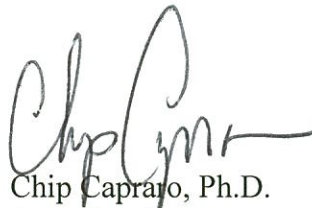
Valerie Gunter
Assistant Dean
William Smith College



Lisa Kaenzig, Ph.D.
Associate Dean
William Smith College



Eugen Baer, Ph.D.
Dean
Hobart College



Chip Capraro, Ph.D.
Associate Dean
Hobart College



David Mapstone
Assistant Dean
Hobart College



HOBART AND WILLIAM SMITH
COLLEGES

Dear Hobart & William Smith Colleagues, Students, and Friends:

It gives me great pleasure to invite you to join the CTL at the fifth annual Senior Symposium. We honor the academic interests, research, passion, and creativity of the 2013 Senior classes and MAT candidates by attending the day-long Senior Symposium conference on April 19th. The Senior Symposium is a visible and tangible representation of the diversity and breadth of the work our students pursue, as well as an example of a community that collectively celebrates student achievement. This 5th year milestone is the continuation of a rich tradition here at the Colleges.

The Center for Teaching and Learning believes that in order to create, innovate, inspire, and lead lives of consequence, our journeys begin with 4 cornerstones: we ENGAGE in our own learning processes in order to ACCOMPLISH the goals we set so that we can EMPOWER ourselves and others and ENRICH our lives as learners and teachers. The Senior Symposium is a culmination of students' journeys: an opportunity for them to empower and enrich the HWS community by engaging in interdisciplinary dialogues about their intellectual accomplishments.

I would like to extend my sincere thanks to the dedicated staff of the CTL: Ruth Shields, Caitlin Caron, Susan Hess, Evelyn Sperry, Sam Vann, David Silver and our exceptional student assistants for their dedication and hard work towards making this event possible.

Hobart and William Smith Colleges is truly a special place for learning and living. I hope that you share in my excitement for this event, which highlights the wonderful array of academic opportunities available to our students. I look forward to seeing many of you on April 19th!

Sincerely,

A handwritten signature in pink ink, appearing to read 'Susan M. Pliner', with a long, sweeping underline.

Susan M. Pliner, Ed.D.
Associate Dean of Teaching, Learning, and Assessment
Director, Center for Teaching and Learning

ACKNOWLEDGEMENTS

The fifth annual Senior Symposium was made possible by the vision, leadership, and efforts of many in the Hobart and William Smith community:

Office of the President
Office of the Provost
Offices of the Hobart and William Smith Deans
Office of Communications
Digital Learning Center

Center for Teaching and Learning

Caitlin Caron, Susan Hess, Sharafudin Mirzayee, Afrika Owes, Julia Leavitt,
Susan Pliner, Ruth Shields, David Silver, Evelyn Sperry, Sam Vann, Kyle Zaverton

Information Technology Services

Rob Beutner, Juliet Habjan Boisselle, Roy Dewar, Ed Edington, Kelly McLaughlin,
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Abstract Writing and Presentation Workshop Facilitators

Sarah Berry, Hannah Dickinson, Amy Forbes, Keoka Grayson, Morgan Hopkins, Khuram
Hussain, Jamie Landi, Jessie Marullo, Amanda Shaw, Ben Ristow, Jeremy Wattles,
and many CTL Writing Fellows

Sincere thanks are extended to the students, faculty advisors, faculty moderators, department administrative assistants, staff, alumnae, and all who have contributed to the success of this year's event.

RESEARCH SUPPORT AND AWARDS

Symposium students have received generous support for their academic projects from the following organizations, programs, and funds:

Charles H. Salisbury International Internship Stipend

Study-in-Japan Grant, Center for Global Education

Students International Initiatives Fund Grant, Center for Global Education

Benjamin A. Gillman International Scholarship

Provost Office, Hobart and William Smith Colleges

Dr. Franks, Provost Office, Hobart and William Smith Colleges

Hobart Deans Office

Biophysical Society 2013 Education Travel Award

Undergraduate Research Grant, Rochester Academy of Science

Undergraduate Research Grant, Top Proposal Award, Rochester Academy of Science

Kloman Fund Grant, Hobart and William Smith Colleges

Environmental Studies Fund Grant, Hobart and William Smith Colleges

Senior
Symposium
2013
Presenters

SENIOR SYMPOSIUM 2013 PRESENTERS

Presenter	Department/Program	Sponsor	Panel Time	Room
Abel, Alexander	Art and Architecture	Phillia Yi	11:15 - 12:10	Sanford Room
Abrams, Jennifer	Education	Khuram Hussain	10:10 - 11:05	Sanford Room
Anderson, Ellie	Environmental Studies	Beth Kinne	4:05 - 5:00	Sanford Room
Ashburn, Paul	Sociology	James Sutton	9:05 - 10:00	Geneva Room
Bartsch, Tristan	Dance	Donna Davenport	10:10 - 11:05	Geneva Room
Beneduce, Jennifer	Education	David Silver	4:05 - 5:00	Geneva Room
Berkley-Cramer, Kazia	Education	Khuram Hussain	10:10 - 11:05	Sanford Room
Biasiucci, Christina	Art and Architecture	Phillia Yi	11:15 - 12:10	Sanford Room
Biasiucci, Christina	Art and Architecture	Phillia Yi	12:20 - 1:15	Learn Lab
Blake-Whitney, Lauren	Education	Khuram Hussain	3:00 - 4:00	Library Atrium
Boghosian, Elizabeth	Education	Khuram Hussain	9:05 - 10:00	Presentation Room
Campbell, Brandon	Psychology	Brien Ashdown	10:10 - 11:05	Learn Lab
Cappio, Laura	Geoscience	Tara Curtin	10:10 - 11:05	Learn Lab
Carmichael, Keira	Music	Charity Lofthouse	1:55 - 2:50	Learn Lab
Carson, Jordan	Economics	Felipe Rezende	12:20 - 1:15	Learn Lab
Chang, Jiaqi	Education	Khuram Hussain	12:20 - 1:15	Sanford Room
Coster, Caroline	Environmental Studies	Beth Kinne	12:20 - 1:15	Geneva Room
Crawford, Kelsey	Dance	Donna Davenport	10:10 - 11:05	Geneva Room
Criniti, Claire	Sociology	Renee Monson	8:00 - 8:55	Sanford Room
Crisco, Rachel	Psychology	Portia Dyrenforth	9:05 - 10:00	Learn Lab
Crossan, Eleanor	Environmental Studies	Beth Kinne	12:20 - 1:15	Geneva Room
Day, Michele	Psychology	Emily Fisher	4:05 - 5:00	Sanford Room
Ditcheck, Rebecca	History	Clifton Hood	11:15 - 12:10	Geneva Room
Donnelly, Maeve	Environmental Studies	Beth Kinne	12:20 - 1:15	Geneva Room

SENIOR SYMPOSIUM 2013 PRESENTERS

Presenter	Department/Program	Sponsor	Panel Time	Room
Dosky, Caroline	Dance	Donna Davenport	10:10 - 11:05	Geneva Room
Dosky, Caroline	Education	Khuram Hussain	12:20 - 1:15	Sanford Room
Dreyer, Hilary	Anthropology	Brenda Maiale	8:00 - 8:55	Sanford Room
Dunn, Haley	Sociology	Kendralin Freeman	8:00 - 8:55	Sanford Room
Ekstrom, Emily	Writing and Rhetoric	Sam Cappiello	1:55 - 2:50	Learn Lab
Ellis, Brianne	Anthropology	Brenda Maiale	11:15 - 12:10	Geneva Room
Faughnan, Kristen	Economics	Elizabeth Ramey	1:55 - 2:50	Geneva Room
Francisco, Nathan	Center for Global Education	Thomas D' Agostino	11:15 - 12:10	Geneva Room
Frantz, Zachary	Sociology	James Sutton	9:05 - 10:00	Geneva Room
Freedline, Joshua	Anthropology and Sociology	Ilene Nicholas	3:00 - 3:55	Sanford Room
Gallop, Amy	Psychology	Daniel Graham	1:55 - 2:50	Learn Lab
Garvey, Arthur	Environmental Studies	Beth Kinne	12:20 - 1:15	Geneva Room
Goral, Kim	Media and Society	Leah Shafer	9:05 - 10:00	Geneva Room
Gunn, Patrick	Geoscience	Tara Curtin	3:00 - 3:55	Geneva Room
Hadley, Rachel	Psychology	Brien Ashdown	9:05 - 10:00	Learn Lab
Hafer, Elizabeth	Education	Mary Kelly	1:55 - 2:50	Sanford Room
Halkyard, Kelly	Sociology	James Sutton	9:05 - 10:00	Geneva Room
Halkyard, Kelly	Education	Khuram Hussain	1:55 - 2:50	Sanford Room
Halkyard, Kelly	Education	Khuram Hussain	12:20 - 1:15	Sanford Room
Harris, Emily	Psychology	Portia Dyrenforth	9:05 - 10:00	Learn Lab
Haun, Lindsey	Writing and Rhetoric	Cheryl Forbes	11:15 - 12:10	Geneva Room
Hill, Kelsey	Education	Khuram Hussain	4:05 - 5:00	Sanford Room
Hynd, Matthew	English	Robert Carson	4:05 - 5:00	Learn Lab
Joubert, Jordunn	Dance	Donna Davenport	10:10 - 11:05	Geneva Room

SENIOR SYMPOSIUM 2013 PRESENTERS

Presenter	Department/Program	Sponsor	Panel Time	Room
Joubert, Jordunn	Psychology	Michelle Rizzella	1:55 - 2:50	Learn Lab
Kittle, Jessica	Psychology	Portia Dyrenforth	9:05 - 10:00	Learn Lab
Krifka, Molly	Music	Charity Lofthouse	4:05 - 5:00	Geneva Room
Kuhn, Jillian	Psychology	Brien Ashdown	4:05 - 5:00	Geneva Room
Leavitt, Julia	LGBT Studies	Maggie Werner	8:00 - 8:55	Sanford Room
Leous, Courtney	Environmental Studies	Beth Kinne	12:20 - 1:15	Geneva Room
LoPresti, Morgan	Education	Khuram Hussain	8:00 - 8:55	Learn Lab
Lucas, Noah	Environmental Studies	Beth Kinne	12:20 - 1:15	Geneva Room
Lucas, Noah	Education	Khuram Hussain	3:00 - 4:00	Library Atrium
Marra, Megan	Education	Khuram Hussain	8:00 - 8:55	Learn Lab
Martin, Anastasia	Psychology	Portia Dyrenforth	8:00 - 8:55	Geneva Room
Martin, Nathan	Biology	Kristy Kenyon	4:05 - 5:00	Learn Lab
Mathis, Callan	Media and Society	Linda Robertson	9:05 - 10:00	Learn Lab
McCarthy, Jillian	Philosophy	Eugen Baer	9:05 - 10:00	Sanford Room
Mele, Alessandra	Art and Architecture	Nicholas Ruth	9:05 - 10:00	Sanford Room
Mendoza, Lilliana	Education	Khuram Hussain	8:00 - 8:55	Learn Lab
Miller, Cameron	Education	Khuram Hussain	8:00 - 8:55	Learn Lab
Mitchell, Tiffany	Education	Khuram Hussain	11:15 - 12:10	Learn Lab
Moreau, Youdlyn	Music	Charity Lofthouse	9:05 - 10:00	Sanford Room
Morosky, Lauren	Education	Khuram Hussain	12:20 - 1:15	Sanford Room
Moshier, Catherine	Russian Area Studies	David Galloway	10:10 - 11:05	Learn Lab
Mucciarone, Leah	Biology	Susan Cushman	3:00 - 3:55	Geneva Room
Nannig, Bridget	Education	Khuram Hussain	11:15 - 12:10	Learn Lab
O'Leary, Tess	Education	Khuram Hussain	11:15 - 12:10	Learn Lab

SENIOR SYMPOSIUM 2013 PRESENTERS

Presenter	Department/Program	Sponsor	Panel Time	Room
Parente, Peter	Education	Khuram Hussain	11:15 - 12:10	Learn Lab
Paufve, Matt	Biology	Meghan Brown	3:00 - 3:55	Geneva Room
Pawlak, Kathryn	Biology	Luciana Cursino Parent	8:00 - 8:55	Geneva Room
Pawlak, Kathryn	Biology	Susan Cushman	1:55 - 2:50	Sanford Room
Peraro, Leila	Chemistry	Justin Miller	9:05 - 10:00	Sanford Room
Perkins, Emily	Philosophy	Eugen Baer	12:20 - 1:15	Learn Lab
Perkins, Emily	Education	Khuram Hussain	9:05 - 10:00	Presentation Room
Phail, Evan	Education	Khuram Hussain	9:05 - 10:00	Presentation Room
Pollard, Kevin	Biology	Caitlin Caron	1:55 - 2:50	Geneva Room
Prescott, Sarah	Environmental Studies	Beth Kinne	12:20 - 1:15	Geneva Room
Ragan, Kathleen	Education	Khuram Hussain	8:00 - 8:55	Learn Lab
Reindel, Alison	Education	Jim MaKinster	8:00 - 8:55	Geneva Room
Romanazzi, Julianna	English	Laurence Erussard	3:00 - 3:55	Sanford Room
Rowe, Lucia	Education	Khuram Hussain	10:10 - 11:05	Sanford Room
Saetama, Sandra	Environmental Studies	Beth Kinne	3:00 - 3:55	Geneva Room
Sarokin, Hannah	Anthropology	Brenda Maiale	4:05 - 5:00	Learn Lab
Schneider, Samuel	Chemistry	Kristin Slade	3:00 - 3:55	Sanford Room
Serrano, Josh	Education	Khuram Hussain	8:00 - 8:55	Learn Lab
Shils, Nathaniel	Political Science	Stacey Philbrick Yadav	12:20 - 1:15	Learn Lab
Silberlicht, Jacob	Environmental Studies	Beth Kinne	12:20 - 1:15	Geneva Room
Snyder, Cameron	Environmental Studies	Beth Kinne	4:05 - 5:00	Sanford Room
Stoner, Krissy	International Relations; Classics	Vikash Yadav; Leah Himmelhoch	3:00 - 3:55	Sanford Room
Szwejbka, Elizabeth	Education	Khuram Hussain	11:15 - 12:10	Learn Lab
Taylor, Blake	Sociology	Jason Rodriguez	11:15 - 12:10	Sanford Room

SENIOR SYMPOSIUM 2013 PRESENTERS

Presenter	Department/Program	Sponsor	Panel Time	Room
Thomas, Patrice	Sociology	Kendralin Freeman	11:15 - 12:10	Sanford Room
Vallabhaneni, Deepak	Biology; Chemistry	Sigrid Carle	4:05 - 5:00	Learn Lab
Van Dorp, Megan	Religious Studies	Richard Salter	1:55 - 2:50	Geneva Room
Van Nostrand, Zoë	Education	Khuram Hussain	12:20 - 1:15	Sanford Room
Walls, Kellsey	Environmental Studies	Beth Kinne	4:05 - 5:00	Sanford Room
Wasmund, John	Education	Khuram Hussain	10:10 - 11:05	Sanford Room
Welter, Julia	Education	Khuram Hussain	8:00 - 8:55	Learn Lab
Williams, Augusta	Geoscience	Neil Laird	12:20 - 1:15	Learn Lab
Williams, Kian	Environmental Studies	Beth Kinne	3:00 - 3:55	Geneva Room
Wilson, Halie	Writing and Rhetoric	Cheryl Forbes	1:55 - 2:50	Sanford Room
Woods, Amanda	Education	Khuram Hussain	12:20 - 1:15	Sanford Room
Zhong, Congjing	Economics	Felipe Rezende	4:05 - 5:00	Sanford Room
Zhong, Congjing	Environmental Studies	Beth Kinne	12:20 - 1:15	Geneva Room

Senior
Symposium
2013
Schedule

8:00 - 8:55 Panels

Location	Presenters	Abstract Title	Department/Program
Routes to Health (Moderator: David Slade)			
Geneva Room	Anastasia Martin	Healthy Patterns: Susceptibility to Emotional Contagion and Its Relationship to Emotional Regulation Strategies	Psychology
	Kathryn Pawlak	Analysis of Virulence and Pathogenicity Genes from the Genome of the Plant-Associated Bacteria <i>Curtobacterium</i> Strain ER1.4/2	Biology
	Alison Reindel	Cows, Cats, and Care: Communication in Different Veterinary Practices	Education
	Questions and Answers		
Teacher Professionalism and Student Equality (Moderator: Mihaela Petrescu)			
Learn Lab	Morgan LoPresti; Lilliana Mendoza; Cameron Miller; Josh Serrano	Are Teachers Professionals?	Education
	Megan Marra; Kathleen Ragan; Julia Welter;	Revolutionizing Early Education: Promoting Equality through Policy and Structure	Education
	Questions and Answers		
Social Bonds (Moderator: Chip Caparo)			
Sanford Room	Claire Criniti	Operation of the Sexual Double Standard	Sociology
	Hilary Dreyer	Chicha, Drink of The Gods: A Means of Social Cohesion in Bolivian Society	Anthropology
	Haley Dunn	"Let's Talk": Dialogue Groups for Racial Justice	Sociology
	Julia Leavitt	They Know More than We Think: An Observation of LGBT Youth Exploring Sexualities through Tumblr.com	LGBT Studies
	Questions and Answers		

9:05 - 10:00 Panels

Location	Presenters	Abstract Title	Department/Program
Media and Message (Moderator: Jonathan Forde)			
Geneva Room	Paul Ashburn; Zachary Frantz; Kelly Halkyard	Perceptions of Race and Crime at Hobart and William Smith	Sociology
	Kim Goral	Communicating Climate Change: Methods and Deficits of Environmental Broadcast Journalism	Media and Society
	Questions and Answers		
Perception and Identity (Moderator: Meghan Brown)			
Learn Lab	Rachel Crisco; Emily Harris; Jessica Kittle	Collegiate Athlete's Playing Time and Self-Esteem	Psychology
	Rachel Hadley	Perceptions of Intersecting Group Identities: Gender and Ethnicity among College-Aged Women	Psychology
	Callan Mathis	The Social Illness: Socially Constructed Perceptions and Associations	Media and Society
	Questions and Answers		
Children's Literature Home and Abroad (Moderator: Sarah Berry)			
Presentation Room	Elizabeth Boghosian; Evan Phail	Reading Through Someone Else's Eyes: Children's Literature Here and Abroad	Education
	Emily Perkins	Building Classroom Tolerance through Multicultural Literature	Education
	Questions and Answers		

9:05 - 10:00 Panels

Location	Presenters	Abstract Title	Department/Program
Creation (Moderator: Nick Ruth)			
Sanford Room	Jillian McCarthy	The Loss of Duality: What Does Knowledge Mean When We Lose Ourselves?	Philosophy
	Alessandra Mele	"I Don't Know": Confronting the Unanswerables within the Process of Image Making	Art and Architecture
	Youdlyn Moreau	Words, Music and Emotions: Triadic Transformations in <i>Open Scars</i>	Music
	Leila Peraro	Developing Anticancer Therapeutics in an Undergraduate Lab	Chemistry
	Questions and Answers		

10:10 - 11:05 Panels

Location	Presenters	Abstract Title	Department/Program
Multidisciplinary Movement Education (Moderator: Charity Lofthouse)			
Geneva Room	Tristan Bartsch	Moving to Teach, Moving to Learn	Dance
	Kelsey Crawford	Play and Movement Education	Dance
	Caroline Dosky	Rubrics, Checklists, and Analyses: Addressing the Role of Descriptive Observational Assessment in Teacher Preparation and Growth	Dance
	Jordunn Joubert	Movement Education in the Classroom: Embodied Learning	Dance
	Questions and Answers		
Past to Present (Moderator: Susan Cushman)			
Learn Lab	Laura Cappio	Historic Changes in Mercury Fluxes to Two New York Finger Lakes	Geoscience
	Brandon Campbell	Vygotsky in Context	Psychology
	Catherine Moshier	Accidental Traveler: Tales of a Cossack Wanderer	Russian Area Studies
	Questions and Answers		
Civil Rights Narratives (Moderator: Scott MacPhail)			
Sanford Room	Jennifer Abrams; Lucia Rowe	Minority Education in a Society Dominated by White Supremacy	Education
	Kazia Berkley-Cramer	Not Just Rosa Parks? Civil Rights Narratives for Kids	Education
	John Wasmund	Written by the Victors: Countering the Hegemonic Discourse of an American History Textbook	Education
	Questions and Answers		

11:15 - 12:10 Panels

Location	Presenters	Abstract Title	Department/Program
Cultural Systems (Moderator: Chris Annear)			
Geneva Room	Rebecca Ditchek	Upper Class Women and Their Transition from Victorianism into Modernism	History
	Brianne Ellis	Nobody's Children: Social Exclusion and Embeddedness among Street Children in Rio de Janeiro, Brazil	Anthropology
	Nathan Francisco	Japanese Society: Inner Reflection through Outward Thinking	Center for Global Education
	Lindsey Haun	Fiction + History = Healthcare Reformation: How Social Perceptions of Mental Illness Influenced the Quality of Psychiatric Nursing Care from 1750-1918	Writing and Rhetoric
	Questions and Answers		
Social Justice and Education (Moderator: Donna Davenport)			
Learn Lab	Bridget Nannig; Tess O'Leary	The School to Prison Pipeline: Is It Being Addressed?	Education
	Tiffany Mitchell; Peter Parente; Elizabeth Szwejbka	Combating Social Injustice in Education	Education
	Questions and Answers		
Solutions (Moderator: Kristin Slade)			
Sanford Room	Alexander Abel; Christina Biasiucci	Sustainable Community Development in Downtown Geneva	Art and Architecture
	Blake Taylor	Cultivating Community: People, Expression and the Overcoming of Socio-Economic Hardships	Sociology
	Patrice Thomas	Charter School: Haiti	Sociology
	Questions and Answers		

12:20 - 1:15 Panels

Location	Presenters	Abstract Title	Department/Program
Fracking Out Loud (Moderator: Robin Lewis)			
Geneva Room	Eleanor Crossan; Maevè Donnelly; Noah Lucas; Jacob Silberlicht; Congjing Zhong	Hydrofracking through the Media and Music	Environmental Studies
	Caroline Coster; Arthur Garvey; Courtney Leous; Sarah Prescott	Fracking and Aggressive Non-Violence	Environmental Studies
	Questions and Answers		
Rethinking (Moderator: Emily Fisher)			
Learn Lab	Christina Biasiucci	Nowhere Left to Hide	Art and Architecture
	Jordan Carson	Is There a Tipping Point between Excess Debt and Lower Growth?	Economics
	Emily Perkins	The Power and Purpose of Metaphor: Making the Abstract Concrete and Visual	Philosophy
	Nathaniel Shils	The Resource Curse Thesis: Normativity of Capitalist Ethics and Desert	Political Science
	Augusta Williams	Winter Bird Migration Observed by WSR-88D Radar in the Vicinity of the Great Salt Lake, Utah	Geoscience
	Questions and Answers		
Challenging Silence (Moderator: Naomi Rodriguez)			
Sanford Room	Jiaqi Chang; Lauren Morosky Zoë Van Nostrand; Amanda Woods	Privilege, Hope, and the Color 1	Education
	Caroline Dosky; Kelly Halkyard	The Power of Silence: Using Dance to Incite Change	Education
	Questions and Answers		

1:55 - 2:50 Panels

Location	Presenters	Abstract Title	Department/Program
What You Eat (Moderator: Suzanne McNally)			
Geneva Room	Kristen Faughnan	Growing Money: Redefining the Value of Food	Economics
	Kevin Pollard	Cabbage Resistance to Onion Thrips	Biology
	Megan Van Dorp	You Are What You Eat: A Lesson on Eating Your Pets	Religious Studies
	Questions and Answers		
Aesthetics and Perceptions (Moderator: Margueritte Murphy)			
Learn Lab	Keira Carmichael	Not All Meters are Created Equal: How We Perceive and Perform Unusual Metric Patterns	Music
	Emily Ekstrom	Exploring Mathematics and Poetry through American Sign Language: Factors for Translation	Writing and Rhetoric
	Amy Gallop	Aesthetic Stability: How We Remember the Paintings We Forget	Psychology
	Jordunn Joubert	Lexical Ambiguities: The Effect of Context on Lexical Processing	Psychology
	Questions and Answers		
School and Community (Moderator: Jeremy Ortloff)			
Sanford Room	Kelly Halkyard	"Where the Sidewalk Ends": How Residential Segregation Affects Educational Equity	Education
	Kathryn Pawlak	Truancy as a Public Health Issue	Biology
	Halie Wilson	Write It Out(side)!	Writing and Rhetoric
	Elizabeth Hafer	From School to Community: A Resource Guide for Geneva Youth and Family Support Services	Education
	Questions and Answers		

3:00 - 3:55 Panels

Location	Presenters	Abstract Title	Department/Program
Ecological Disruptions (Moderator: Beth Kinne)			
Geneva Room	Patrick Gunn	Calibrating Paleoclimate Indicators through a High-Resolution Investigation of Modern Sedimentation in Seneca Lake	Geoscience
	Leah Mucciarone	Stories of the Asian Elephants of Thailand: Repairing the Broken	Biology
	Matt Paufve	The Bloody-Red Shrimp (<i>Hemimysis Anomala</i>): Potential Impacts of a New Invasive Species in Seneca Lake	Biology
	Sandra Saetama; Kian Williams	A Hydrofracking Newsletter at HWS	Environmental Studies
	Questions and Answers		
Context (Moderator: Jason Rodriguez)			
Sanford Room	Joshua Freedline	Investigating Cultural Identity: A Look at Pueblo Culture through Time with a Focus at San Ildefonso	Anthropology and Sociology
	Julianna Romanazzi	The Art of Love: Origins and Introduction of Love as a Central Theme in Medieval Literature	English
	Samuel Schneider	Yeast in Context: The Effects of Macromolecular Crowding on the Enzyme Kinetics of Yeast Alcohol Dehydrogenase	Chemistry
	Krissy Stoner	Treachery and Justice in the Mytilene Debate	International Relations; Classics
	Questions and Answers		

4:05 - 5:00 Panels

Location	Presenters	Abstract Title	Department/Program
Movement (Moderator: Eric Nelson)			
Geneva Room	Jennifer Beneduce	Teaching: I Thought It Was Simple	Education
	Molly Krifka	Spatial Awareness: Analysis of Musical Spaces in an Andean <i>Huayno</i>	Music
	Jillian Kuhn	EMDR as a Successful Therapeutic Intervention for Guatemalans Experiencing Symptoms of Trauma	Psychology
	Questions and Answers		
Identity: Determining and Disrupting (Moderator: Matt Crow)			
Learn Lab	Matthew Hynd	Who Wrote Εικων Βασιλικη?	English
	Nathan Martin	Understanding the Developmental Mechanisms That Create Sexual Dimorphism during Moth Antennal Development	Biology
	Hannah Sarokin	The Anthropologist and the Other: A Reflection on Visual Methodology	Anthropology
	Deepak Vallabhaneni	Can HWS Knockout Cancer? Testing Drugs That Have Never Been Made Before	Biology and Chemistry
	Questions and Answers		
Social Impact (Moderator: Judith McKinney)			
Sanford Room	Ellie Anderson; Cameron Snyder; Kellsey Walls	Imagining Natural Gas Development near HWS	Environmental Studies
	Michele Day	Relationships between Community Identification and Sexism at Hobart and William Smith	Psychology
	Kelsey Hill	Effect of Socioeconomic Status and Attitudes	Education
	Congjing Zhong	China's Real Estate Market: Is the Bubble Bursting?	Economics
	Questions and Answers		

Senior
Symposium
2013
Abstracts

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SUSTAINABLE COMMUNITY DEVELOPMENT IN DOWNTOWN GENEVA

Alexander Abel, Christina Biasiucci, and Nathan Weiss

This year I worked on a sustainable community development project with two group members, Nate Weiss and Alex Abel. In this project, my group members and I were assigned a site area on Castle and Linden Street in downtown Geneva. Our overall goal was to make a proposal to improve conditions of this section of downtown Geneva, focus on the needs of the property owners and the community members and incorporate sustainable options in our proposal.

Before coming up with our proposal, we did extensive research on the history of downtown Geneva, specifically Castle Street of course and documented the changes that the town has seen over the last 50 years. We accessed this information through the internet, the historical society and city hall. Then, we interpreted the current conditions on Castle Street: What are existing themes and trends on the city plan of this section? What is currently enhancing this part of downtown? and What are some issues present that we can approve upon? We interacted with and asked the opinions of many local residents in Geneva as well many HWS students since we feel that both groups have a huge influence on downtown Geneva and want to see it shine.

We will be presenting our proposal to the board of owners in Geneva at the end of this semester.

MINORITY EDUCATION IN A SOCIETY DOMINATED BY WHITE SUPREMACY

Jennifer Abrams and Lucia Rowe

How can children access their own education if the information they receive does not correlate with their own culture or experiences? The education curriculums used in the United States reflect the white normative structure that dominates our society. In this project, we plan to investigate the ways in which the education of minorities is impacted by curriculums that can make schools sites that incite change in levels of racial inequality in our society.

This research question originated from an interest in the essay titled “Does the Negro Need Separate Schools?” where W.E.B. Du Bois expresses the importance of teaching various subjects from an African American perspective instead of from the perspective developed in a society that fosters white supremacy. Du Bois’ position is strongly rooted in Afrocentric curriculums that effectively construct a bridge between the African American student and the material. We will conduct research on theories behind this form of education to make claims about how effective Afrocentric education is in creating change in our society.

We hope to find that the multicultural curriculum is a positive force in education that not only works to successfully educate minority students, but also empowers them to remedy the structural racial inequality in our society.

IMAGINING NATURAL GAS DEVELOPMENT NEAR HWS

Ellie Anderson, Cameron Snyder, and Kellsey Walls

As part of the Senior Integrative Experience (ENV 301) in Environmental Science, students are investigating impacts of a fast-developing regional issue: unconventional development of natural gas, also known as “hydrofracking.” Of particular interest to us is the dissemination and reception of information on hydrofracking.

Our group investigated how HWS/Ontario County might be impacted were hydrofracking activity to take place in the area. We used Facebook as a medium to expose HWS students to created images depicting natural gas development activities on and near campus and in Ontario County to get viewers to think about what it would be like to live in close proximity to this type of activity. In addition, we posted articles related to hydrofracking on the course Facebook page.

We will analyze responses to those posts to determine impact, if any, on students’ interests and attitudes toward “fracking” at HWS.

PERCEPTIONS OF RACE AND CRIME AT HOBART AND WILLIAM SMITH

Paul Ashburn, Zachary Frantz, and Kelly Halkyard

As students with social justice concerns, we feel that racial stereotyping in crime reporting and statistics contributes to biased perceptions of crime. In order to examine our hypothesis as part of our Sociology Research Practicum course, we plan to survey a random sample of students to evaluate their perceptions of crime and determine where they receive information about crime in Geneva.

We hope to determine which sources to analyze, such as local media, e-mail notifications, etc. We then will conduct a content analysis of these sources, particularly looking for racially biased language in reporting. We will determine how accurate students' perceptions of crime are when compared to the Clery Act statistics.

MOVING TO TEACH, MOVING TO LEARN

Tristan Bartsch

My project explores the question “How has my experience with “Take 10!” lessons in North Street School (NSS) classrooms shaped: 1) my understanding of education as a profession, 2) my identity as a teacher, and 3) my conception of movement education?”

Although I have never taught children in a classroom setting before, my Dance Education Seminar Service Learning Course has sent me into North Street School this semester to teach 3rd, 4th, and 5th graders. Generating a spirit of collaboration with the NSS teachers has been important, as well as developing my lesson plans with my co-teacher, Jordunn, and de-briefing regularly with our Site Leader and Teaching Assistant, Caroline.

Unlike the more experienced teachers in the seminar, I share with the NSS teachers a sense of exploration of foreign concept. The educators have knowledge of how to teach, while I have knowledge of how to move to encourage creativity and embodiment of curricular concepts, and yet neither of us share the same expertise. While I develop skills to be able to deliver lessons in the classroom and appreciate the challenges of teaching, I hope the NSS teachers are developing skills to use movement as a teaching tool and an appreciation for embodied learning.

This project will result in specific exercises and lesson plans designed for NSS teachers. The movement lessons have the potential to enrich students’ experiences in the classroom, opening them up to new ways of learning and academic engagement. My hope is that the teachers will incorporate these new lessons into their daily classes, relating movement to specific curricular content. Through my project I will advocate for an experienced educator’s ability to take on the role of movement facilitator just as I, as a dancer, have taken on the role of teacher this semester.

TEACHING: I THOUGHT IT WAS SIMPLE

Jenn Beneduce

Here I am after four years: I know, now, that teaching is not just about academics. It is about teaching children to become successful, teaching in a way that they can relate to themselves, planning and preparing, taking what you learn from one classroom and applying it to another. Now I know that teaching is taken for granted; it should not be.

My journey began after being accepted into the education program here at Hobart and William Smith Colleges, and it has been a roller coaster ride: a tutor placement in my sophomore year, an assistant teaching position with a special education teacher, studying abroad in France learning French while teaching in French – and that’s when my education experience became really interesting. Now I am student teaching and I am more confident that being in a position to care for, teach, and learn around children is my dream, but I am still learning. With every new realization comes new questions: why do we teach this way instead of another way? Why does this student pay attention during Math but not ELA? What can help hold students’ attention for a whole period?

I want my presentation audience to understand my teaching philosophy and where it came from: I believe that it is up to teachers to help students know that they can make a difference in the world, and that each and every student has a different way of learning. I think I am ready to take on this challenge, yet privilege, of being an educator.

NOT JUST ROSA PARKS? CIVIL RIGHTS NARRATIVES FOR KIDS

Kazia Berkley-Cramer

Children's nonfiction picture books have the opportunity to make history interesting, exciting, and accessible. They have to carefully straddle the line between fact and fiction, simplicity and truth. It is vital that we as a culture look at the literature we produce for children and examine whose history and culture benefits from that telling.

What are children learning about the role of women in the civil rights movement from their public libraries? How do authors, illustrators, the publishing industry, and librarians facilitate the perpetuation of or the breaking away from the dominant narrative, constructed and perpetuated by people in power, that Americans learn about who was involved in the civil rights movement?

By looking at the collections of my local library and the Geneva Public Library, I will examine how children's nonfiction picture books contribute to or work against our nation's dominant narrative about women in the civil rights movement. I will analyze the books in these collections through a close reading. While I believe that the majority of the books I will find contribute to the dominant narrative, I hope to discover some books that push back against this narrative as well.

NOWHERE LEFT TO HIDE

Christina Biasiucci

Through my bronze sculpture mask-making project, I was able to think more critically about different kinds of masks: How does a mask speak about the person behind it? How does a person identify with a mask? Does a person hide who they are behind their mask, or do they express it?

Sculpting involves many steps, especially bronzing. Most of these steps are redundant with any sculpture, especially the steps that proceed after making the original sculpture and the mold for it. So, although there are many steps, once the mold is made there is not much leeway for manipulating the sculpture. This means the observation portion of creating the sculpture should be held to the highest importance of all these steps.

For my project, I did not want to study and sculpt the face through observation, but instead through replication before making alterations. I made my mold directly from my own face with plaster bandages. Once I had four wax masks with this single mold I was able to reuse, I played with different textures on the different masks, which changed the surface of the face but not necessarily the overall structure of it. My goal was to take these originally identical masks and change the viewer's perception of each individual mask with the influence of the different surface exteriors.

It is our faces that signify who we are to the rest of the world. In the past, the mask has been used to cover the face for entertainment purposes in order to take on the role of another person, for protection, and for religious purposes.

These masks are all placed on identical stands. The viewer is now faced with the mask instead of being able to hide behind them. When you can't hide behind the mask, the only option left is to identify with it. I want to viewers to ask themselves; "How do I identify myself?" and "What would my exterior look like if I were to expose my identity to the rest of the world?"

INTEGRATION: AN IDEA OF THE PAST?

Lauren Blake-Whitney and Noah Lucas

Is there a correlation between various school community characteristics such as geography; parents' education levels; school district resources; school special education programs; race, gender and economic divisions; and the lack of integration in today's schools? In our session we will answer this question through the use of online and printed sources as well as interviews to determine where these various classifiers possibly intersect, if they intersect at all, and how they are layered upon one another and interconnected. We believe we will find a strong correlation between geography and the intersection of race, class and gender, in regards to this lack of integration.

I hope our project will bridge the knowledge gap and provide students, parents, educators and policy makers with information and a more comprehensive understanding. Our study also showcases an exploration of U.S. litigation, its help and hindrance towards Special Education in public schools, and the relationship between policy-makers and social climate surrounding inclusiveness. Additionally, this project will examine the legislative history of Special Education, specifically, the implications of the Disabilities Education Act and Rehabilitation Act, and ways to further support students with special needs and suggest policies for improved Special Education services.

READING THROUGH SOMEONE ELSE'S EYES: CHILDREN'S LITERATURE HERE AND ABROAD

Elizabeth Boghosian and Evan Phail

As the country becomes increasingly multicultural, education would be expected to be more culturally aware, but even at the level of children's literature, the majority of books remain in the Caucasian American perspective. The non-Hispanic White percentage (63% in 2012) decreases every year in the United States. In 2012, a year when the Cooperative Children's Book Center (CCBC) received 3,600 books, only 271 (7.5%) of which were about people of color, meaning 92.5% represented Caucasian Americans. In addition, the number of minority authors was less than 7%.

Why are American children's books populated with white children and not children of other races? For Evan's portion of this project, he will research publishing in order to understand why there are not more diverse authors and books in the Children's Literature genre and how that can be changed. Evan expects to find that there are not enough multicultural children's books because there are a consistent low number of diverse authors writing for the majority of the genre.

For her portion of this project, Elizabeth will address the question by creating a children's book intended for the elementary level. The title will be, Frankie and Gogo, and their AWESOME MAGICAL TRAVELING BACKPACK. Readers will follow the companions, a 12 year-old boy and his best buddy, a changing gecko, to eight countries around the world.

Together, these two portions of this project will help us address cultural awareness.

VYGOTSKY IN CONTEXT

Brandon Campbell

“Who is Lev Vygotsky, and why is he important?” My Honors thesis seeks to answer these questions from both a psychological and a historical perspective.

Vygotsky was a Soviet psychologist whose career aligned with the early years of Stalin’s regime. Much of Vygotsky’s work presented new ways of thinking about child development. However, truly understanding the initial influence of Vygotsky’s work presents a great challenge. There exist few details about his life, especially after the mid-1920s. His career in psychology lasted only a decade before his early death in 1934. Furthermore, his work was officially banned in 1936.¹

My project examines both Russian history and Vygotsky’s psychological work. Several of Vygotsky’s theories remain relevant, including the “Zone of Proximal Development” and “Internalization.” Examining the circumstances surrounding Vygotsky’s career provides unique insight into the origin and structure of his theories. Uncovering such details is a valuable endeavor, as it highlights the continued relevance of a historical period to modern psychology.

¹ Kozulin, A. (1990). *Vygotsky’s Psychology: A biography of ideas*. Cambridge, MA: Harvard University Press.

HISTORIC CHANGES IN MERCURY FLUXES TO TWO NEW YORK FINGER LAKES

Laura Cappio

Mercury (Hg) is a toxic trace metal that has multiple natural (e.g., volcanism, soil erosion, biomass burning) and anthropogenic (e.g., coal combustion, waste incineration) sources.¹ Hg can spread from the atmosphere to the hydrosphere and biosphere quickly. In NY, 83 lakes, reservoirs, and ponds and four rivers are on the Department of Health's fish consumption advisory list due to elevated Hg levels.²

Layered lake sediments can be used to document changes in Hg pollution over time. Most Hg lake sediment studies focus on remote localities impacted by global atmospheric inputs or urban sites affected by local point sources. To assess historic changes in Hg loading to two rural NY Finger Lakes, we analyzed sediment cores collected from Conesus Lake and Canandaigua Lake. We selected these lakes to determine whether erosion of soils from agriculture and urbanization over the last century contributed significant Hg to the lakes.

Hg concentrations in each core were measured at a 1-cm interval. The age of sediment layers in one core from each lake was established radiometrically. We multiplied the Hg concentration by the sedimentation rate to determine the Hg flux to each lake every year. The timing of peak Hg fluxes to these lakes is coincident with maximum atmospheric Hg emissions in the Great Lakes region during the 1940-1970s. These results are consistent with Hg fluxes in Honeoye, Seneca, Owasco, Skaneateles, and Otisco Lakes.^{3,4} The magnitude of Hg fluxes in all lakes but Seneca depends on the watershed to lake surface area ratio; an additional local Hg source may be contributing Hg to Seneca Lake.

¹ United States Environmental Protection Agency, 1997. Mercury Study Report to Congress EPA 425-R97-003, Washington D.C.

² NY State Department of Health, 2008, Chemicals in Sportfish and Game: 2008-2009 Health Advisories: NYS Department of Health, 32 p.

³ Cappio, L., Carver Dionne, L., Cummings, E. G., George, M., Guay, K., Gunn, P. J., Koehlein, K., Stewart, M., Abbott, A. N., Curtin, T. M., 2013 Historic changes in mercury fluxes to three New York Finger Lakes (USA). Association for the Sciences of Limnology and Oceanography. p. 62.

⁴ Bookman, R., Driscoll, C.T., Engstrom, D.R., and Effler, S.W., 2008. Local to regional sources affecting mercury fluxes to New York lakes. Atmospheric Environment. 42, 6088-6097.

NOT ALL METERS ARE CREATED EQUAL:
HOW WE PERCEIVE AND PERFORM UNUSUAL METRIC PATTERNS

Keira Carmichael

My project will focus on the musical phenomenon of how we, as humans, respond to unequal meter. Specifically, I will focus on how the untrained ear listens to a piece for the first time and how unequal or ambiguous meters can create confusion when we try trying to interpret meter without visual clues.

Drawing upon the methodology of Lerdahl and Jackendoff¹ as well as Christopher Hasty², I will illustrate the process of meter perception by comparing examples of even meters from the Western Classical music tradition with regular meters containing maximally smooth unequal patterns in the electronic dance genre and meters featuring unequally sized beats found in Eastern European dance music.

In addition to outlining meter perception and comparing differing types of patterns, I will discuss how this study impacts my field experience in my teaching placements. I plan on applying what I have learned not only to my future teaching occupation, but in a vocal summer camp I have started and will be directing this summer.

As my focus is on vocal music in a highly western tradition and perspective when working with vocal ensembles, the study of meter perception and rhythmic and metrical constructions will allow me to help new musicians perceive and understand these metrical layouts. This will not only expand their understanding of diverse music but will also open up new musical opportunities for performance, pedagogy, and analysis.

¹ Lerdahl, Fred, and Ray S. Jackendoff. *A Generative Theory of Tonal Music*. Cambridge: Massachusetts Institute of Technology, 1983. Print.

² Hasty, Christopher. *Meter as Rhythm*. New York: Oxford University. 1997. Print.

IS THERE A TIPPING POINT BETWEEN EXCESS DEBT AND LOWER GROWTH?

Jordan L. Carson

There is probably no hotter topic than the impact of government budget deficits, debt on long-run growth and fiscal consolidation. The Great Financial Crisis (GFC) has caused a sharp rise in budget deficits in most nations as tax revenues fall short and as governments bailout necessary financial institutions and pursue countercyclical policy (Nersisyan and Wray, 2010). There are two common ways to view the effects of government debt on national solvency. Reinhart and Rogoff's work in *This Time is Different* demonstrate the negative impacts of public debt on economic growth and financial stability. Some economists may say that just because nations can always print money to pay their debt does not mean they will always print money to pay their debt. Reinhart and Rogoff's work is indeed inconclusive, however; they do not distinguish between countries that operate on different exchange rate regimes. This notion is at the heart of modern monetary theory (MMT), in which a government controlling their currency does not have to engage in contractionary deleveraging.

In this paper for an Independent Study with Professor Felipe Rezende, I distinguish between the two very operationally different exchange rate regimes, their effect on domestic policy, and effects on national sovereignty. I then remodel Reinhart and Rogoff's study to argue that their work is not relevant to floating exchange rates, as in the United States of America.

Reference:

Nersisyan, Yeva, and L. Randall Wray. "Does Excessive Sovereign Debt Really Hurt Growth? A Critique of This Time Is Different, by Reinhart and Rogoff." *Working Paper No. 603* (2010): 1-18. Print.

PRIVILEGE, HOPE, AND THE COLOR 1

Jiaqi Chang, Lauren Morosky, Zoë Van Nostrand, and Amanda Woods

All of us are here to learn, but is HWS an equal playing field?

This group presentation examines three ways to address this question. The first response discusses ways in which American students are the beneficiaries of a cultural advantage that provides them academic privilege over international students. Characteristics of classroom environment, academic culture and dominant belief systems put international students at a disadvantage within the classroom and in their academic careers.

The second response examines how a group of students, staff, and faculty decided to take action against racial prejudice within the HWS community. They recognized that there was a communal silence, reinforced by a history of oppression, and evasion around the subject of race inequality. The Race and Racism Coalition (RRC) was formed to create a community dialogue and active response to issues of race. What does being a collaborative group for change mean within the HWS community? What barriers of socialization, bureaucracy, and social discomfort could possibly inhibit the progress of the RRC? How do the relationships between students, staff, and faculty, who normally coexist in a hierarchical model work together in a democratic organization for change?

The third response recognizes a divide on our campus among groups, yet appreciates the variety of interests, and cultures at HWS. We decided to create an event for our multicultural and diverse campus that will bring together different groups by reaching out to students of various race, ethnicity, social and economic backgrounds, gender, and sexual orientations. This event, 'The Color 1: HWS,' will be made in the likeness of the ColorRun™ races. Participants will make a one mile loop around campus that offers HWS students a color-filled celebration of the semester and intends to be an all-inclusive, campus-wide event.

FRACKING AND AGGRESSIVE NON-VIOLENCE

Caroline Coster, Arthur Garvey, Courtney Leous, and Sarah Prescott

With the release of Josh Fox's documentary, *Gasland*, in 2010, there has been a surge of media attention surrounding the chemical leakage and problems associated with fracking (unconventional extraction of natural gas). In our ENV 301 Senior Integrative Experience, our class sought to test various information mechanisms and assess how different forms of communication impacted the opinions of those who saw and hear information about fracking on the HWS campus.

The goal of our group's project is to provoke awareness regarding chemicals used in hydrofracking fluid. Our method is Aggressive Non-Violence; we created a group we call Students For Hydrofracking Education (SHE), and we are displaying posters around campus, as well as a sound demonstrations and an interactive white board in Scandling Center. We are a collaborative group of students at HWS trying to spread awareness, address misconceptions, and bring about clarity about the chemicals associated with hydrofracking.

PLAY AND MOVEMENT EDUCATION

Kelsey Crawford

The American culture values time based on productivity. The same principle applies to how time is used in the classroom. Students are expected to demonstrate their understanding of the skills and concepts that they are taught; otherwise teachers can be accused of not spending instruction time wisely. Given that the benefits of play and movement are not as apparent as other commonly taught subjects in childhood education, teachers are hesitant to allow time for them in the classroom.

My interests in play and movement education stem from the work that I have done on my MAT thesis on the importance of play in childhood education, along with the knowledge that I have gained from my Dance Education Seminar this semester. As a non-experienced dancer, I have benefited from seeing the value of movement education in and outside of the classroom. Through this course, my service learning experience at North Street School has taught me that play and movement education are often thought of as one in the same; however, there are vast differences.

My research, therefore, explores three questions: 1) How does movement education differ from play? 2) What are the educational benefits of both play and movement in the classroom? and 3) How can those benefits influence the way teachers design their lessons?

My research will lead to recommendations for ways in which American educators include play and movement in the classroom to exploit the critical developmental implications of these learning modalities.

OPERATION OF THE SEXUAL DOUBLE STANDARD

Claire Criniti

Previous research reveals the ways in which the sexual double standard continues to inform gender scripts in the social contexts of college campuses. However, much of the literature relies on self-reports of women's experiences with the sexual double standard and there is little about men's experiences.

My research team who conducted field research on a small liberal arts college campus over a two-week period, observing students' conversations about "hooking-up" in a variety of public and semi-public settings. Our data include nine conversations in all-women social groups, six conversations in all-men social groups, and nine conversations in mixed-gender social groups.

We found that both men and women were more likely to label women "sluts" than men, but both men and women judged men's and women's sexual behavior differently depending on whether they were interacting in single or mixed gender settings. The findings also revealed that "hook up stories" operated as a group bonding mechanism, but for different reasons in all-men and all-women social groups.

COLLEGIATE ATHELETE'S PLAYING TIME AND SELF-ESTEEM

Rachel Crisco, Emily Harris, and Jessica Kittle

As of the 2010-2011 school year, 26% of students at Hobart and William Smith Colleges participated on a varsity athletic team. Intuitively, there are reasons to believe that participating in collegiate athletics could be either beneficial or detrimental for well-being. Being a collegiate athlete could potentially increase well-being because of the benefits of regular physical activity, team support and success through athletic talents. However, it is also plausible that this additional burden of participating in athletics detracts from the well-being of athletes. Previous research by Armstrong and Oomen-Early (2009) found a relationship between self-esteem and social connectedness in collegiate athletes as compared to non-athletes (Armstrong & Oomen-Early, 2009). Lockhart, Black and Vincent (2010) looked at how Division 1 athletes perceive themselves, focusing on worth and self-esteem as the main factors and found that self-worth is not dependent on the amount of playing time that an athlete receives.

Our study compared playing time with overall well-being in athletes. The participants in this study were 216 male and female athletes at Hobart & William Smith Colleges, including athletes from the football, hockey, lacrosse, soccer, and basketball teams. We surveyed athlete volunteers at the end of each team's respective practices. Participants completed a variety of scales assessing playing time, self-esteem, social connectedness, and satisfaction with life.

We found that there were positive correlations between playing time and life satisfaction, self-criticism and self-esteem.

Armstrong, S. & Oomen-Early, J. (2009). Social Connectedness, Self-Esteem, and Depression Symptomology Among Collegiate Athletes versus Non-Athletes. *Journal of American College Health*, Vol. 57 (5), pp. 521-526.

Lockhart, B., Black, N., & Vincent, W. J. (2010). Perceptions of self of Division I team and individual sport athletes. *Perceptual and Motor Skills*, 110(2), 517-521. doi:10.2466/PMS.110.2.517-521

HYDROFRACKING THROUGH MEDIA AND MUSIC

Eleanor Crossan, Maeve Donnelly, Noah Lucas, Jacob Silberlicht, and Congjing Zhong

To investigate the impact of information media on the Hobart and William Smith community as part of the full-class investigation into hydrofracking information dissemination in our ENV 301 course, our group's goal was to reach HWS community members in an accessible, enjoyable way. We took essential information and put it into a format that is easy to learn from: pop songs.

We developed our own lyrics for popular, catchy songs that will grab the listener and give a different perspective on an issue that is often seen in the news media today. We have done a broad spectrum of research in effort to recognize and represent various sides of the issue, and hope that our listeners will use our information to make decisions about the issue in their own way.

We hope to learn more about the effectiveness of social media in general, and pop songs in particular, as a method of disseminating information about an issue in unconventional ways.

RELATIONSHIPS BETWEEN COMMUNITY IDENTIFICATION AND SEXISM AT HOBART AND WILLIAM SMITH

Michele Day

As a coordinate college, we provide a unique research opportunity to study gender attitudes, feelings of community, and sexist beliefs. The purpose of this research was to gain a better understanding of these attitudes and test to see whether priming one particular college leads participants to have more positive or negative attitudes towards our variables of measurement.

I surveyed 70 participants enrolled in psychology courses at the colleges. I manipulated the inclusivity of participants' salient identity: In the inclusive condition, participants were primed to consider their identification with the colleges overall. In the separate condition, they were primed to consider their identification with Hobart OR William Smith. Participants answered questions focusing on community, gender attitudes, benevolent sexism, hostile sexism, and demographics.

Results indicated that after controlling for gender, results were not significant as a result of priming. However, both hostile and benevolent sexist attitudes negatively correlated with community attitudes. In addition, benevolent sexism negatively correlated with gender attitudes. Finally, students who identify with Hobart and William Smith positively correlated with community attitudes. Further research should be done with a larger sample size to increase the power to detect some small effect sizes, but this exploratory research suggests some trends in the types of communities people identify with and their levels of sexism.

UPPER CLASS WOMEN AND THEIR TRANSITION FROM VICTORIANISM INTO MODERNISM

Rebecca Ditchek

My project seeks to understand the transformation at the end of the Victorian Era during which modes of thinking shifted from Victorian thought to Modernist ideals, as represented by upper class mothers and daughters. Mothers were instilled with the Victorian values such as order and masking one's emotions, whereas daughters that were born at the end of the Victorian Era experienced two different ideologies: their mothers' Victorian values and the new modernist values like expressing true emotion and the promotion of individual self-development.

In my project, the life of Elizabeth Rose Carson is utilized as illustration. Carson was a Geneva resident, and the Geneva Historical Society preserved her diaries. Through Carson's personal writings, the pressures of older Victorian ideals such as obedience and order are illustrated. Carson's diaries also offer insight into the world of upper class women who experienced self-development due to the impact of modernist ideas.

My goals for this project are twofold: to actively analyze and gain perspective into the ways in which mass culture affected upper class women in America, and to use Elizabeth Rose Carson as a specific example of how the mentality of upper class women shifted during the end of the Victorian Era.

RUBRICS, CHECKLISTS, AND ANALYSES:
ADDRESSING THE ROLE OF DESCRIPTIVE OBSERVATIONAL
ASSESSMENT IN TEACHER PREPARATION AND GROWTH

Caroline Dosky

My project explores two questions: “How does an analysis of teaching behaviors influence the growth and development of teachers?” and “How can the observation of my peers’ teaching behaviors translate into mentoring the North Street School teachers within the movement workshop we offer at HWS?” This two-hour workshop, designed and taught by William Smith students, is for Geneva elementary school teachers who are interested in adding movement to their teaching methodologies and pedagogical values.

My interest in this project stems from my role as a Teaching Assistant and Site Leader for the Dance Education seminar class this semester. This class has a service-learning component: HWS students are teaching movement-based lessons at North Street School in both the classroom setting and a before-school program. I am coordinating the efforts and communication between the school and the seminar students. I am also observing the students on a weekly basis in the school, using the teaching behaviors checklist that we generated together as a class.

I came to this project after realizing the dramatic difference between assessing teacher effectiveness through value-based judgments and reaching conclusions based upon descriptive observational analysis. The depth of the observational analysis and the specificity of the content are far more useful than opinions. The chart of teacher behaviors provides unloaded talking points that generate a dialogue between teachers and an opportunity for productive reflection.

This investigation will result in recommendations for integrating movement into the elementary curriculum and for observing teaching behaviors to facilitate teacher effectiveness.

THE POWER OF SILENCE: USING DANCE TO INCITE CHANGE

Caroline Dosky and Kelly Halkyard

Through our work in Civil Rights Education this semester, we have explored the concept of the dominant narrative, the hegemonic story of historic events that ignores diverse perspectives, juxtaposed against the historically rich narrative of the Civil Rights Movement.

As active members in the Dance Department, we are interested in connecting two academic disciplines: history and dance composition. We will research two companies that explore themes related to social justice, Axis Dance Company and Abraham.In.Motion. We will then collaborate to compose two unique pieces related to the theme of the dominant narrative.

Dance is an optimal vantage point for understanding our world through the use of symbolism, figurative language, and the body as a form of expression. Through a social justice lens, we aim to explore art's role as a change agent. We will explore the following questions: (1) What are the compositional challenges of choreographing based on historical themes? (2) How does dance serve as a catalyst for engaging viewers in a discussion around difficult themes?

This investigation will result in reflections and observations about the compositional process, the two choreographed pieces, in addition to an analysis of the conversation that emerged following the viewing of the dances.

CHICHA, DRINK OF THE GODS: A MEANS OF SOCIAL COHESION IN BOLIVIAN SOCIETY

Hilary Dreyer

Known as “the drink of the gods,” *chicha* is a traditional fermented beverage made of corn that is central to social cohesion in Bolivia. In the town of Cochabamba, where I did the field work in Fall 2012 for my Honors project in anthropology, and the neighboring town of Tarata, the customs associated with drinking *chicha* demonstrate a variety of cultural norms, including realms of religion, in offerings to the Pachamama (Mother Earth); gender roles in the drinking establishments of *chichería*; and history maintained through fermentation practices.

Drinking culture in Bolivia is an important means of creating social bonds and the atmospheres that it embodies demonstrates a wide range of the cultural juxtaposition found in in the country. I conclude that the cultural complexities that surround the fermented corn drink of *chicha* serve as metaphor for Bolivia’s social interactions including realms of religion, gender, and, indigenous pride.

“LET’S TALK”:
DIALOGUE GROUPS FOR RACIAL JUSTICE

Haley Dunn

My presentation will be the culmination of a yearlong research project that involved an investigation of the use of dialogue groups to address racial inequality at the micro level of personal experience and at the macro level of structural inequality.

Dialogue groups about racism and inequality are not new, but I believe that there needs to be more emphasis on using dialogue as means of facilitating understanding of the institutional nature of racial inequality. The goal of my project is to examine how dialogue groups have been used and to present my own model for a dialogue group. My project began as an investigation of racial inequality in our society and my desire to find ways that ordinary individuals can be involved with social change. As a social justice major with a concentration in racial justice, I have taken many courses that have explored racial inequality and I have found that students are often pessimistic about the possibility for regular people to have an impact in the face of such a complex and entrenched problem. Dialogue groups will not solve racial inequality, but they do offer a chance for individuals to be involved in the struggle for justice.

This project is ongoing and I am looking into the possibility of employing my model for dialogue groups in the Geneva community before the end of the semester.

EXPLORING MATHEMATICS AND POETRY THROUGH AMERICAN SIGN LANGUAGE: FACTORS FOR TRANSLATION

Emily Ekstrom

How can unique linguistic forms like mathematics and poetry be understood cross-culturally and across modalities, as they must be by the Deaf community? As part of my combined disciplines of English, Mathematics, and Cognition, Logic and Language, I am interested in looking at the process of translating from English prose or mathematics into American Sign Language (ASL).

A closer look at the process reveals the difficulties in translating a verbal language into a physical, visual form. Interpreters must decide whether to stay true to the author or instructor's form and intent, to rely on their own understanding of the subject matter, or to focus on the deaf audience's understanding of the material presented as perceived from feedback cues. I have discovered that the process of translating any text into ASL requires many choices made by the interpreter. These choices and the intended audience allows for translations for the same text to look drastically different. This is important from an academic perspective in our understanding of how the Deaf culture understands English literary tools and also the subtle differences between something like a number and an integer.

Using an E.E. Cummings poem and a mathematical "Proof by Contradiction," I will discuss how the translation process and product may vary. Through this presentation, I will debunk assumptions about how ASL translation works to help the audience achieve a greater appreciation for ASL as a language and for the complexity of interpretation between different languages and modalities.

NOBODY'S CHILDREN: SOCIAL EXCLUSION AND EMBEDDEDNESS AMONG STREET CHILDREN IN RIO DE JANEIRO, BRAZIL

Brianne Ellis

Street children are a fixture in many urban landscapes and an enduring subculture of the urban poor. My project for Honors in Anthropology seeks to understand the complex networks that street children in Brazil create as a response to marginalization. As they navigate street life, children residing in urban Rio de Janeiro employ diverse strategies to survive on the streets. Although many representations portray them as violent, beggars, vulnerable, drug abusers, and homeless, they cannot be defined as a homogenous population because they encounter a wide range of different experiences.

In my analysis I draw on Pierre Bourdieu's theories of social capital and habitus to argue that street children create social networks that are reinforced through symbolic reciprocal exchanges, such as the emotional and economic support of street gangs and street families.

One of my main objectives is to gain perspective into the ways in which street children are socially excluded from the dominant society yet create their own institutions. I conclude that outside advocates who intend to intervene must do so in the same cultural terms in which street children are enmeshed.

GROWING MONEY: REDEFINING THE VALUE OF FOOD

Kristen Faughnan

Industrial agriculture poses many questions for today's world, affecting realms from sustainability to equity to human health. In recent years, many of these concerns have come to popular attention, as books such as *The Omnivore's Dilemma* and films such as *Food, Inc.* have reached wide audiences and alternative food systems have risen to greater visibility. However, the implication of larger economic attitudes and structures in these issues has been less emphasized. My goal in this project for Honors in Economics is therefore to move attention away from individual food companies, and toward the systemic foundations that enable, encourage, and even require this behavior.

My work begins with a discussion of economic theory, and in particular the traditions of Marx and Veblen. Through this examination, I construct an alternative understanding of capitalism as a social system that prioritizes monetary value over other means of worth. I then apply this understanding to modern agriculture, using the commercial chicken industry as a case study to illustrate overarching trends. In this analysis, I show how commodification and the search for profits have led to developments that benefit commercial bottom lines while harming consumers, animals, and natural environments.

Ultimately, my work questions the effectiveness of price as a means to value and distribute food, arguing that it cannot reflect much of what we find most valuable about these products. I believe that shifting attention to this discrepancy between process and purpose may ultimately enable our society to grapple with agricultural issues more effectively and more consciously.

JAPANESE SOCIETY: INNER REFLECTION THROUGH OUTWARD THINKING

Nathan Francisco

My intent in working on this project was to take my own experiences in Japan (from both the Summer of 2008 and the Fall of 2012) and try to place them into a context that can be understood easily by myself and others as a method to open our minds to ways of thinking we may not be accustomed to or understand otherwise.

The desire to do this project came from my strong support of "Global Citizenship," as I feel that people can learn more about themselves by focusing outward on social concepts that aren't a part of their own lives to recognize the subjectivity of their own ways of thinking and living in a global context.

The data I used is strictly based on two separate diaries I kept during both my experiences in Japan. I compared and contrasted my entries between the two and how my thoughts evolved over time, including my mistakes and the lessons I learned. I then used the notes I made during my time abroad, as well as my own knowledge of Japanese society and the Japanese language, to put the data into context and discuss what we can learn from these differences.

INVESTIGATING CULTURAL IDENTITY: A LOOK AT PUEBLO CULTURE THROUGH TIME, WITH A FOCUS AT SAN ILDEFONSO

Joshua Freedline

During the fall of 2011, I spent a semester in Santa Fe, NM, studying the archaeological and anthropological history of the Pueblo people. The Pueblo people have a vast amount of history within the archaeological record, spanning over 10,000 years from a time during the Neolithic Period, where the climate of the Southwest was much like British Columbia. Besides the physical evidence of the evolution of this Nation, there are many accounts of rich ethnographic material from the six major language groups of the Pueblos.

My project focuses on key aspects of present day Pueblo culture that are visible in the archaeological evidence of their ancestors from nearly 2,000 years before today. Some examples that I plan on utilizing are the development of the kiva (religious architecture), the building styles of Pueblo residences, and pottery motifs. Regarding pottery, I will go into depth on one current Pueblo's style, the Pueblo of San Ildefonso.

Using the many pictures and my research, I will paint a picture of how diverse Pueblo culture is. There is also a private sector of Pueblo life that I cannot share, but I will discuss how being included in this side of their lives gave me a deep appreciation for their cultural identity.

AESTHETIC STABILITY: HOW WE REMEMBER THE PAINTINGS WE FORGET

Amy Gallop

The connection between psychology and art is fascinating, but rarely examined. Recent research has shown that aesthetic preference remains constant over time for elderly populations (Graham, Stockinger, & Leder, 2013): Alzheimer's patients were asked to sort images in order of their preference; despite an inability to recall these images two weeks later, the patients' ordered preferences remained consistent when they performed the task a second time. Would children show the same responses?

I will explore aesthetic stability from a developmental perspective in order to determine when this mechanism might emerge. I hope to study the potential presence of aesthetic stability in children from the Geneva community. Such investigations will provide a more comprehensive understanding of our visual and aesthetic perceptions of the world. Findings regarding aesthetic stability support a push for incorporating the arts into therapy, interventions, and school curriculums.

COMMUNICATING CLIMATE CHANGE: METHODS AND DEFICITS OF ENVIRONMENTAL BROADCAST JOURNALISM

Kim Goral

Climate change has been on the public radar since the 1980's, with fluctuations in media attention over the past 30 years. Public awareness of all aspects of climate change leads to a more informed and proactive society, and the news industry, as the premier source by which the public is informed, is responsible for providing this information. Unfortunately the current broadcast news industry structure often prioritizes profit over content, leading to less "hard news" on the media agenda, and climate change only receives media attention when it can be associated with breaking news (i.e. Hurricane Katrina, Superstorm Sandy, Gulf Oil Spill) or when it is on a political agenda (UN Conferences, Government Agency Climate Reports, Presidential Agenda).

My Honors thesis combines my studies in Media and Society, Journalism and Geoscience through an exploration of the quality and frequency of environmental reporting in broadcast news with a central focus on climate change coverage. My thesis explores the history of climate change media exposure, the role of the broadcast news industry, and the practices of broadcast journalism that promote or prohibit climate change coverage.

Through a detailed analysis of nightly broadcast news coverage during the 2012 news cycle, I have evaluated the current media priority of climate change, the quality of coverage and the journalistic choices governing news selection. I offer a usable reporting format that will correct the deficits seen in current environmental journalism practices, shifting the priority of newscasts away from financial gain and back towards content.

CALIBRATING PALEOCLIMATE INDICATORS THROUGH A HIGH-RESOLUTION INVESTIGATION OF MODERN SEDIMENTATION IN SENECA LAKE

Patrick Gunn

Sediments deposited in Seneca Lake, NY have a distinct layered appearance that may form as a result of changes in climate and/or non-climate variables. Previous study of sediment cores collected from this lake show that calcite (CaCO_3), a common mineral, comprises an important component of the layered sediment.¹ Water and sediment trap samples were studied to reconstruct the factors controlling the production and accumulation of calcite in the lake. Because paleoclimate studies routinely use changes in the stable oxygen isotopic composition ($\delta^{18}\text{O}$) of calcite preserved in lake sediment to infer changes in paleotemperature, the major focus of this work is to determine how actual lake water temperature compares with predicted temperature.

Working with Professor Tara Curtin, I measured the $\delta^{18}\text{O}$ of weekly lake water samples, as well as the mineralogical composition and the $\delta^{18}\text{O}$ of calcite in sediment collected by sediment traps suspended in the water column in the lake. Physical and biological factors appear to control mineral precipitation of calcite in Seneca Lake. Calcite precipitates during late summer and autumn when warm water temperatures ($>20^\circ\text{C}$) reduce the solubility of calcite in the lake, and biological productivity increases pH by lowering the dissolved CO_2 in surface waters.² The temperature reconstruction using the $\delta^{18}\text{O}$ of the calcite and lake surface water reveals that calcite acted as a reasonable proxy for temperature from July through September when the lake was thermally stratified. During the remainder of the year, reconstructed temperatures exceeded actual temperatures by as much as 15.8°C . Sediment resuspension from storms occurring in late autumn through spring during isothermal conditions may explain why calcite is a poor predictor of lake water surface temperature. As a result, it is possible that temperature reconstructions of lake surface waters using mean $\delta^{18}\text{O}$ of calcite preserved in sediment cores will overestimate the actual temperature. Based on the study thus far, the difference between calculated and actual temperature would be approximately 4°C .

1

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2

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PERCEPTIONS OF GROUP INTERSECTING IDENTITIES:
GENDER AND ETHNICITY AMONG COLLEGE-AGED WOMEN

Rachel Hadley

Gender and ethnicity are two group identities that are closely connected and often intertwine in Western society (Ruthellen & Harway 2012), yet there is still a lack of research on the perception of these intersecting identities in regards to ethnic and cultural out-group members (Greene & Way 2005).

In this project, undertaken to explore the perception of these intersecting identities in women, female participants (N = 24) completed an adapted Bem Sex Role Inventory with two different targets: a white American woman and a woman of an ethnic minority group (Hispanic American, Asian American, and African American). Results showed that white women ($m = 4.98$) were perceived as more feminine than ethnic minority women ($m = 4.66$; $t = -3.83$, $p = .001$). Data collection is ongoing, and will shed more light on these results. These findings will help researchers understand the way group identities are shaped by a complex world, and how gender identity and ethnic identity intersect and influence group bias and discrimination.

FROM SCHOOL TO COMMUNITY: A RESOURCE GUIDE FOR GENEVA YOUTH AND FAMILY SUPPORT SERVICES

Elizabeth Hafer

After a voluntary semester shadowing the Geneva High School's School Social Worker my senior year, I became curious to learn more about the prevention and intervention resources available for local at-risk children and adolescents. This interest is compounded by my present quest to become a School Psychologist. School Psychologists collaborate with various school and community resources to provide the appropriate supports for children and adolescents. I turned my voluntary work into an independent study under the tutelage of Professor of Education Mary Kelly, where I explored the various resources that Geneva and the larger Ontario County provide for their at-risk youth: Head Start, The Child Advocacy Center for the Finger Lakes, School Social Work, The Ontario Youth Council, Geneva Public Library, Healthy Families of Ontario, Safe Harbors, and The Center of the Finger Lakes. I investigated these resources to determine what services they offer and what types of children they advocate for. The purpose of this study is to create a resource guide of available youth services specific to the Geneva area. This guide will outline which resources help specific at-risk populations. It will also explain what services each resource provides, and other specific logistics such as cost, and location.

“WHERE THE SIDEWALK ENDS”: HOW RESIDENTIAL
SEGREGATION AFFECTS EDUCATIONAL EQUITY

Kelly Halkyard

How does housing discrimination and residential segregation impact schooling for children? Segregation and unequal funding are still apparent in the American school system 50 years after the *Brown v. Board of Education* decision. What does it take to solve this problem and what mechanisms are in place that might be holding us back?

As a Sociology major conducting an Independent Study, I will study one city in the United States to see how the structure of school funding by property taxes, and therefore neighborhood isolation, creates extreme inequalities for children who live in the same city.

My theory is that there is a cyclical relationship between residential segregation, school inequalities, and social problems. Due to unequal funding for schools, minority children who receive substandard educations are more likely to eventually end up in jail, on welfare, and in low-wage jobs. I expect to find legacy policies concerning housing and school funding that are racially biased and in place to benefit the privileged.

FICTION + HISTORY = HEALTHCARE REFORMATION: HOW SOCIAL PERCEPTIONS OF MENTAL ILLNESS INFLUENCED PSYCHIATRIC NURSING CARE FROM 1750-1918

Lindsey Haun

My project for Honors in Writing and Rhetoric examines the social perceptions of psychiatric nursing characters portrayed in British fiction written in or set between 1750 and 1918. My goal is to gain an insightful and creative understanding of how social perceptions influenced the development of the psychiatric nursing profession, and to subsequently predict how this history affects the psychiatric healthcare system today.

Using the novel/short story as a form of public discourse, I track nursing characters' overall standard of healthcare, physical characterizations, and any other idiosyncratic qualities to gather insight about the public's views concerning mental illness. Between 1750 and 1918 the quality of mental healthcare, a field considered completely separate from that of general healthcare until the late nineteenth century, grew exponentially. It evolved from an unregulated system fraught with bribery and abuse to one that was standardized and required medical knowledge from all of its employees. My research indicates that social perception had a very large impact on the quality of mental healthcare: if the public was not accepting of those with psychiatric disorders as members of society, the quality of care that these patients received directly mirrored this sentiment.

This finding can arguably be extrapolated to insight into modern practice. Awareness and acceptance of psychiatric illness is not where it needs to be today, and it is likely that modern psychiatric care shows a continued manifestation of the historical pattern.

EFFECT OF SOCIOECONOMIC STATUS AND ATTITUDES

Kelsey Hill

I believe socioeconomic status and attitudes of teachers and students in the classroom have an astounding effect on academic achievement. In general, poverty stricken areas have students who do not get the support at home that reinforces and continues the learning from the classroom. Thus, those students might not be as confident in the classroom and then associate negative feelings with academics. In those poverty stricken areas, there are not enough resources for the students in the classroom, let alone at home, and the teachers are then forced to decide how much of his/her own money he/she can or is willing to spend each year which is a stressor. I have been student teaching in rural and city areas where there is a broad array of socioeconomic statuses. I was also lucky to go to well-funded public schools. I am going to conduct interviews and surveys in contrasting areas of socioeconomic status to examine the relationship between economic means, attitudes, and academic achievement.

WHO WROTE ΕΙΚΩΝ ΒΑΣΙΛΙΚΗ?

Matthew R. Hynd

Eikon Basilike is the purported memoir of King Charles I and apology for his policy from the Long Parliament of 1642 through the two Civil Wars. With 34 editions of this controversial book published in 1649 alone, it rivals the Authorized Version of the Bible in religious and political consequence.

Who is the true author of *Eikon Basilike*? Since Francis Madan's *New Bibliography* appeared in 1950, historians have presumed that John Gauden was the 17th-century Royalist ghostwriter of *Eikon Basilike*, rather than its apparent author, King Charles I. This project undertakes to survey the authorship controversy from 1649 to 1950.

I agree that *Eikon Basilike* was in fact written by Charles Stuart, and that Gauden's suspicious claim (upon the Restoration in 1660) was made in pursuit of ecclesiastical preferment.

I continue to make progress in my search of the 17th-century pamphlet debates on the authorship controversy, and hope to publish a fresh, exhaustive defense of Charles Stuart as the sole author of *Eikon Basilike*.

MOVEMENT EDUCATION IN THE CLASSROOM: EMBODIED LEARNING

Jordunn Joubert

I will examine the integration of movement as an educational tool in the classroom: How is dance defined? How is movement defined? How can concepts be taught with movement? How does the combination of movement and content produce embodied learning? What are the benefits of incorporating movement in the classroom?

This project grew from my interest in education and child development. Students who are exposed to the arts in a process-oriented, creative approach that does not place emphasis on a perfect product, are encouraged to participate in the arts. And through the incorporation of movement lessons, teachers are able to encourage students to explore their creativity.

I am currently examining the definitions of movement education and embodied learning in my Dance Education Seminar. I am creating lessons that integrate movement and class content for 3rd, 4th, and 5th grade classrooms. Each of these classes are participating in a pilot program called Take 10!, which allows students to get up and move for ten minutes. By using movement to introduce and review curricular concepts, students will learn how to embody class material. This will help students make stronger connections to the curriculum while they are engaged creatively. Final lesson plans will be organized and included in my senior dance portfolio. The results of these lessons and my service learning experiences will also influence my pedagogy as an educator in the future.

LEXICAL AMBIGUITIES: THE EFFECT OF CONTEXT ON LEXICAL PROCESSING

Jordunn Joubert

A current debate amongst psychologists centers around when context influences the meanings readers access of an ambiguous word. The purpose of my study for Honors in Psychology is to examine the linguistic processes that occur when readers encounter an ambiguous word (i.e., a word with more than one meaning). Specifically, I am interested in determining whether readers will access the contextually appropriate meaning of an ambiguous word or all meanings of the ambiguous word. For example, does the context of “rivers and storms” constrain readers to access only the contextually appropriate meaning of “bank” (i.e., a river bank) or will they access all meanings, even if they are contextually inappropriate (i.e., a river bank and a financial institution)?

Presently, I am collecting data that will enable me to examine further lexical processing of ambiguous words with an eye tracker. I hypothesize that the strength of context will influence how readers access meaning of lexically ambiguous words. I expect that my findings will allow me to support a current lexical processing model. My results will be included in my Honor’s Thesis and contribute to current psychological research on reading.

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SPATIAL AWARENESS: ANALYSIS OF MUSICAL SPACE IN AN ANDEAN *HUAYNO*

Molly Krifka

In this presentation, I will explore spatial elements of music analysis to highlight how space relates to music making in terms of its place of performance, and how music is conceived of spatially in terms of both verticality and horizontal movement through time.

The song *Sirinitay* pertains to the genre *huayno*, one that I have come to know well in my own musical practice, travels and research conducted in the field of Cusco, Peru. I frame my discussion of musical space by first commenting on the nature of physical performance space. I use my own recording of a live performance; therefore I am able to relive that experience in the process of transcribing what I captured on video. The performance took place in a Cusqueñan cultural center and teahouse called La Esencia, “The Essence.” Local Cusqueñan people, not tourists, dominated that venue, which itself was physically placed in a very touristic nucleus of the city of Cusco, a nucleus that often commodifies cultural “essence;” this particular performance did not attempt the latter.

In my analysis I discuss how the *huayno* melody makes use of a pentatonic scale system, a five-note collection that encompasses both G major and E minor. The pentatonic scale is spatially symmetrical and therefore can easily move between major and minor qualities. Second, the piece’s rhythmic meter changes in relation to the melodic stresses, creating acceleration in the work’s second half. Lastly, I transcribed the melody of “*Sirinitay*” to isolate melodic line and contour, another element of spatial and temporal movement that interacts with the scale and rhythm to create *Sirinitay*’s particular character.

EMDR AS A SUCCESSFUL THERAPEUTIC INTERVENTION FOR GUATEMALANS EXPERIENCING SYMPTOMS OF TRAUMA

Jillian Elizabeth Kuhn

Professor Ashdown and I have been working on research that he and his colleagues conducted during summer 2012, in Guatemala. I chose to focus on this study because of my interest in trauma. This interest stems from an internship working with children who have suffered from emotional, physical and sexual abuse and trauma. With this study, I was able to focus on a therapy that could potentially help this population.

Guatemala has a low ratio of psychologists to the general population (6.89 per 100,000 people), which makes it imperative that therapeutic treatments are successful, effective and efficient. Eye Movement Desensitization and Reprocessing (EMDR) is a therapeutic intervention that is used to treat symptoms of trauma and Post Traumatic Stress Disorder (PTSD).

The current study explored the effectiveness of EMDR therapy on lowering the levels of symptoms of psychological trauma. Seven participants with moderate to grave symptoms underwent three one-hour sessions of EMDR over a period of 2-3 months. The frequency and intensity of symptoms they experienced decreased significantly after the therapy. Symptoms did not decrease (or increase) in a control group.

These results suggest that EMDR could serve as a short-term, successful type of treatment for therapists to utilize with clients who manifest symptoms of psychological trauma. With evidence that three therapeutic sessions of EMDR are able to reduce symptoms of trauma and PTSD, it would be extremely valuable for therapists in Guatemala to be trained in EMDR.

THEY KNOW MORE THAN WE THINK: AN OBSERVATION OF LGBT YOUTH
CONSTRUCTING ONLINE IDENTITIES THROUGH TUMBLR.COM

Julia Leavitt

Young LGBT people use tumblr, a blogging community that allows users to post photos, links, texts, videos, quotes, and audio to their own accounts, which are all public domains, as a means to explore alternative sexualities and in doing so they have created a sex positive source of education. My goal is to analyze and interpret how young sexual minorities use tumblr. Through my own observations as a tumblr blogger, I have noticed a trend among young queer spectrum people, particularly lesbians, to publicize their own uninhibited sexualities.

What I found was a diverse range of LGBT stylistic identities ranging from gothic, hipster, butch, lipstick, even lesbians who look like Justin Bieber. Beyond their identities, their blogs ranged from topics such as activism centered on self-mutilation to body modification to erotica. Most interestingly, the majority of users that I found were under the age of eighteen.

My findings suggest that tumblr has created an internet based sub-community where LGBT people can explore and construct online identities without fear of social ostracism.

ARE TEACHERS PROFESSIONALS?

Morgan LoPresti, Lilliana Mendoza, Cameron Miller, and Joshua Serrano

This study explores teaching and the value of teachers as professionals from two dimensions: The National Education Policy Center's De-Professionalization of Teachers and Teach For America (TFA). The National Education Policy Centers De-Professionalization of Teachers focuses on the effects of newly implemented reform policies on current teachers. The reforms created evaluate teachers based on several factors.

We plan to answer the following questions: (1) Do these reforms ultimately de-professionalize or professionalize teachers? (2) How can these reforms be improved by policymakers? (3) Are teachers professionals even if they have a set of rules to follow in order to do their jobs? Leaving teachers to be evaluated by state tests devalues them as professionals as does the Teach For America program. While this program aims to provide a solution to educational inequality, individuals who make longer commitments and are certified are best equipped for this fight.

We propose a definition for the profession and forms in which programs like TFA can fulfill their mission more effectively. Is teaching being valued as much as it should be? As citizens who are a part of the educational system, we need to know how TFA and different reforms impact the future of teaching, educators and our students.

REVOLUTIONIZING EARLY EDUCATION: PROMOTING EQUALITY THROUGH POLICY AND STRUCTURE

Megan Marra, Kathleen Ragan, and Julia Welter

How do we effectively counteract the implications of unequal opportunities with which our students enter the American school system? To determine what demands should be made by policymakers by today so that we can more appropriately meet the needs of our students, it is imperative to evaluate the efficacy of past policies and current early education models that have failed to narrow the achievement gap.

Our project is a way of taking what we have collectively learned in both the classroom and community over the last few years to propose an alternative that we feel could help to solve one of society's biggest issues. It is our thinking that implementing a universal early education system will help to equalize the opportunities that form the foundations on which students enter the current education system. This will encourage more equal access and understanding among students while promoting diversity understanding at a young age.

HEALTHY PATTERNS: SUSCEPTIBILITY TO EMOTIONAL CONTAGION AND ITS RELATIONSHIP TO EMOTIONAL REGULATION STRATEGIES

Anastasia K. Martin

Emotional contagion is the idea of catching other people's emotions, such that one begins to feel and experience similar emotion. Emotional contagion and emotional regulation (the use of strategies to increase or decrease an emotional response) are two unique processes in the development, experience, and output of emotions. Previous research has found a link between these two processes, such that individuals level of emotional regulation can affect their susceptibility to emotional contagion (Papousek, Freudenthaler, & Schuler, 2008; Papousek, Freudenthaler, & Schuler, 2011).

This study examined whether specific emotional regulation strategies are related to susceptibility to emotional contagion. Undergraduate participants (n = 152) completed the Difficulties in Emotional Regulation Scale (DERS), the Emotional Contagion scale (EC), the Emotional Regulation Questionnaire (ERQ), and a measure of personality traits (IPIP) on computers via SurveyMonkey. Individuals who reported using cognitive reappraisal to regulate their emotions were significantly more susceptible to happy emotions. Suppression of emotion was associated with less susceptibility to catching positive and negative emotions. Individuals with high levels of difficulties in emotional regulation tended to report more susceptibility to negative emotions and/or less susceptibility to positive emotions. An examination of the Big Five personality traits showed that Extraversion, Agreeableness, and Emotional Stability had the highest associations with both emotional contagion and emotional regulation.

The results support the hypothesis that specific emotional regulation strategies have a significant relationship with the susceptibility of emotional contagion for specific emotions. Overall there appears to be a "healthy" pattern of associations, such that more positive emotional regulation strategies and emotional susceptibilities are related to one another.

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UNDERSTANDING THE DEVELOPMENTAL MECHANISMS THAT CREATE SEXUAL DIMORPHISM DURING MOTH ANTENNAL DEVELOPMENT

Nathan Martin

In this project I am investigating the genetic mechanisms that drive the development of sexual dimorphic antennal structures of *Heliothis virescens* moths. Sexual dimorphism is a common feature of sexually reproducing organisms. Dimorphic differences can either be seen morphologically, ornamentally, or behaviorally. Such differences could be attributed to differential gene expression between males and females during their early development.

In order to address this question, I am using techniques such as RT-PCR to assess the expression of various genes associated with the formation of the antennae. I hypothesize that the dimorphism occurring within this moth species could be attributed to the presence of the *double-sex* (*Dsx*) gene, a gene found to contribute to sex determination in *Drosophila* (Camara et. al. 2008).

Preliminary results have demonstrated the change of expression of several genes during development for both sexes; however I have yet to assess the differences between males and females at various developmental stages. I am attempting to clone the moth version of *Dsx* to address the intersection between patterning and determination. Pending further results, discovering what factors, i.e. differential expression of genes, contribute to the dimorphic development of the male and female antennal structures in moths may provide evolutionary insights into the process of sex determination.

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THE SOCIAL ILLNESS: SOCIALLY CONSTRUCTED PERCEPTIONS AND ASSOCIATIONS

Callan Mathis

People often make quick decisions and assumptions about others based on socially constructed notions about race. I want to challenge the assumption that an individual can be identified based solely on his or her skin color. I am preparing a documentary that traces my genealogy back to my great grandmother. In addition, I will also interview relatives about their racial identity and attitudes toward racial identity as they were growing up. I am also interviewing students of color on campus to understand their experiences of how they are identified.

The foundation of this project came from several personal experiences. In the past I have been confused for biracial, Puerto Rican, Brazilian, Pakistani, Indian and several other races. There has also been an instance when a person approached me asking what my race is because “he could not figure it out”. These frequent confusions prompted me to question people’s associations of blackness.

This project is intended to challenge socially constructed perceptions of race and identity by tracing my heritage from Spanish, Native American, African American and Anglo-European origins. The point is to make it clear that individuals cannot be identified by their appearance.

THE LOSS OF DUALITY: WHAT DOES KNOWLEDGE MEAN WHEN WE LOSE OURSELVES?

Jillian McCarthy

What is nondual experience and how is it expressed linguistically? What does nondual experience mean for knowledge? A nondual experience is an experience where the person who has the experience loses the awareness of the distinction between herself and what she experiences. In this project I provide an alternative to how we tend to view knowledge in our everyday lives. When we understand knowledge to be not a dual relationship between subject and object, as the Western philosophical tradition tells us, but a nondual experience where the subject of knowledge *is* the knowledge itself, we open ourselves to the possibility of nondual experience in our own lives. This position challenges traditional Western accounts of knowledge by questioning the assumption that knowledge is a relationship between knower and known.

For my honors project in philosophy I present a selection of passages from works of five mystics to show examples of nondual language, imagery, and metaphor in their writing. Second, I provide a linguistic analysis of how they use language, arguing that language takes on a performative rather than a descriptive function, where an experience is enacted to bring about a similar experience in the listener. I next present a threefold account of nonduality that highlights three aspects of nondual experience: nondual perception, action, and thought. Finally, I present my own argument for knowledge through identity, a kind of nondual knowledge that is gained through the loss of awareness of a subject who has knowledge as being any different from knowledge itself.

“I DON’T KNOW”: CONFRONTING THE UNANSWEARABLES
WITHIN THE PROCESS OF IMAGE MAKING

Alessandra Mele

Fascinated by the innate beauty of geological maps, and the unique qualities of antique papers, I began collaging and painting on found materials in my studio art classes. Exploring the subtle ways to connect the materials to one another and assembling interesting compositions became intriguing to me, and was soon the focus of my artistic pursuits. The explorations, inventions, and discoveries that amounted are brought forth in my Honors work.

The innocent exploration I originally pursued has unfolded into deep questions that arise from process, to which I have found many of the answers are “I don’t know.” The experience of working consistently, which emerged in my work for long periods of time, has revealed to me the levels of artistic invention I am capable of reaching. As I work towards the general goal of combining the materials into activated, compelling compositions with definitive spatial relationships, complicated questions inevitably arise. How do I reconcile tensions between what is conceptual about my work and what is perceptual? What makes any one piece of work successful? What is decorative, what is significant? What is significant form¹? Is that a form or is it a shape? When is the piece done?

Looking to art history and theory has provided illumination as I navigate the ambiguities of my process. Paul Cezanne’s invention in describing forms, the cubists’ handling of space as they confronted the two-dimensional with the three-dimensional in the *papier collé*, and surrealism’s reliance on play of thought, rather than reason to create surprising juxtapositions -- all have impacted my work. Considering these influences, and how their concepts emerge and propel my own work, I hope to present my investigation, along with its obscurities, as an inventive set of successful images that don’t have all the answers.

¹Bell, Clive. “The Aesthetic Hypothesis”. 1914. Modern Art and Modernism. Ed. Francis Fascina and Charles Harrison. New York: Harper and Row, 1982.

COMBATING SOCIAL INJUSTICE IN EDUCATION

Tiffany Mitchell, Peter Parente, and Elizabeth Szwejbka

Our project explores a single question: “What do charter schools teach us about an education system capable of combating social injustice through schooling?”

Our interest in this project stems from a combined interest in Education and other coursework in Public Policy. In fall 2012 we spent the semester in Washington, D.C. interning on Capitol Hill and at The Department of Education. We spent time working with teachers in an underperforming elementary school in a disadvantaged community. An astute understanding, passion, and knowledge of the political process gained thereby were invaluable in the construction of this project.

We began by exploring the linkages between social justice and education. For the purposes of this abstract we define social justice as an environment based on principles of equality and understanding the rights of all human beings. We are interested in exploring the ways in which the education system, particularly charter schools, can impact the lives of working class children as they transform into adults competing with their upper and middle class counterparts.

In the creation portion of our project, we envision a national education policy capable of addressing the many social justice issues that plague the American schools. We plan to investigate successful school models, private, public and charter, in order to develop a plan for national education reform capable of addressing social justice issues. Our plan seeks to give schools the necessary freedoms required to combat their own unique social justice issues. In regard to education, this would include access to resources for all students and schools, providing students with an adequate curriculum and learning environment, and the proper tools to succeed outside of the classroom.

WORDS, MUSIC & EMOTIONS: TRIADIC TRANSFORMATIONS IN *OPEN SCARS*

Youdlyn A. Moreau

This presentation focuses on the harmonic language of my original composition, entitled *Open Scars*. During the songwriting process, I noticed musical principles embedded in my piece that I had not developed intentionally and that differed from more standard harmony patterns. I will uncover and explain chordal movements and patterns throughout the verse, chorus, and bridge, and connect these movements to the underlying meaning of the lyrics.

The process of chordal progression in my song is known as triadic transformation. Triadic transformations connect triads of different quality (major going to minor, and vice versa) and are defined chiefly by the process of voice-leading parsimony.¹ In other words, each three-note chord is connected to the next in the smoothest possible way, with each note of a chord able to move to a note in the next chord by common tone (staying on the same note) or semitone (the smallest units of movement in Western music). What is intriguing about triadic transformations is that the chord relationships are distinguished by this voice-leading parsimony and differ significantly from Classical and Jazz conventions. Classical composers such as Mozart and Beethoven customarily used I-IV-V-I, or i-iv-V-i in minor; in Jazz, the standard progression (although usually elaborated by improvisation) is ii-V-I.

In *Open Scars*, the chord movements and progressions illustrated by triadic transformational theory highlight not only the harmonic conventions of the song, but also allow the emotional message to become even more meaningful as I connect the transforms with the melancholy expressed in the melody and lyrics.

¹ Straus, Joseph N. *Introduction to Post-Tonal Theory*. Pearson, 2004. p. 159.

ACCIDENTAL TRAVELER: TALES OF A COSSACK WANDERER

Catherine Moshier

My project's motivation stems from my current independent study, an oral history which records the stories and family narratives of George Elyseev, a resident of Seneca Falls, whose family history is a unique part of Russian history. My interest in this research stems from my love of Russia, history and genealogy.

The son of a decorated Cossack officer, George Elyseev was born in Paris after his parents fled Russia. He then traveled with his family to India, Southeast Asia, and back to France before settling in the United States. Mr. Elyseev's father's effects were important in establishing the museum collections of the Kuban Cossacks in Krasnodar, Russia. Due to Mr. Elyseev's participation in Russian Department events, I learned of his family history and became interested in collecting the stories.

Using oral history methodology, this project brings together the stories of Mr. Elyseev and his parents for his children and for our greater knowledge of his history. After starting with general questions about his childhood and his parents, we moved on to deeper conversations on topics such as his feelings upon arriving in America, his parents' emotions about leaving their homeland, and the challenges of adaptation to multiple cultures. As a firsthand account, this project is a unique compilation, not just personally for Mr. Elyseev's family, but because it allows us to better understand immigrants and the significance of assimilation.

STORIES OF THE ASIAN ELEPHANTS OF THAILAND: REPAIRING THE BROKEN

Leah Mucciarone

My objective for this presentation is to promote awareness of wild Asian elephant loss in Thailand. My trip to Thailand led me to a passion for conservation and protection of this endangered species.

Volunteering at the Elephant Nature Park, founded by Lek Chailert, where the elephants she rescues from logging or shows reside, has allowed me to observe the dangers this species faces. In the Karen Hill Tribe, ten hours north of the city of Chiang Mai, I observed how in this poor village the use of rice and cornfields changed the land, but these crops are the village's main source of economic income. The land and the elephants provide Thai people living in the most isolated places in the mountains of Thailand a way for income. While sustainable farming has been introduced into this land and wild elephants now live here because of Lek's work, there are still many areas in Thailand where sustainable farming and positive reinforcement is not used among the elephants.

Asian elephants have been domesticated for centuries using the method called the *phaajaan*, or crush, a ceremony in which young elephants are isolated in a pen and beaten, starved, and tortured for days. This practice is believed to force an elephant into submission by breaking its spirit so that they will follow commands when working. Asian elephants are also impacted significantly by habitat fragmentation, which prevents elephants' natural movement patterns and disrupts their family dynamics.

To promote awareness of this declining population, I am researching how human's actions through domestication and habitat fragmentation impact the natural cycle and movement patterns of the Asian elephant in life threatening ways.

THE SCHOOL TO PRISON PIPELINE: IS IT BEGING ADDRESSED?

Bridget Nannig and Tess O’Leary

Schools are ideally institutions where students go to better themselves, their minds, and their lives: teachers should be showing students how to follow their dreams and find their passions and schools are supposed to be the safe haven of a neighborhood, a place where students feel at home. Schools instead are used as pawns in a political game that keeps minorities and underprivileged Americans in their place at the bottom of the ladder. With zero tolerance policies, metal detectors, and police officers, schools have become more and more like prisons. Indeed, the similarities between school and prison today make it easier to see why so many of the students move their way down the conveyor belt into the prison system.

By exploring the idea of the “school to prison pipeline” we hope to uncover ways in which the effects of this process can be alleviated. Approaches to education need to be changed in order for students to stay in schools and off the track towards state detention facilities.

Say Yes to Education, Inc. is one of these approaches. Say Yes is a national, non-profit education foundation committed to dramatically increasing high school and college graduation rates for our nation's urban youth. We hope to discover the impact this organization has had on the inner city youth of Syracuse. We hope to reveal a justified need for more initiatives such as Say Yes that seek to challenge the “school to prison pipeline.”

THE BLOODY-RED SHRIMP (*HEMIMYSIS ANOMALA*):
POTENTIAL IMPACTS OF A NEW INVASIVE SPECIES IN SENECA LAKE

Matt Paufve

Invasive species represent a significant ecological and economical threat; for example, the zebra mussel (*Dreissena polymorpha*), an invasive species established in the Great Lakes as well as the Finger Lakes, causes economic damages in the billions of dollars annually. Aquatic invasive species also have far-reaching ecological impacts that affect commercial and recreational fisheries, conservation efforts, and other ecosystem services.

The bloody-red shrimp (*Hemimysis anomala*) recently became established in the Great Lakes and soon after was found in Seneca Lake. It potentially occupies an empty niche in the Seneca Lake ecosystem because of its omnivorous feeding habits and near-shore habitat preference, characteristics that contrast the preferences of the lake's native Mysid shrimp. To understand the potential impact of the bloody-red shrimp in Seneca Lake, studies that investigate this species' diet and position in the food web are imperative. My aim is to understand the effect of seasonality on feeding habits, as water temperatures and available prey populations vary throughout the year.

My early results indicated that higher feeding rates are associated with winter temperatures, which has implications for which prey will be most impacted by this new resident.

ANALYSIS OF VIRULENCE AND PATHOGENICITY GENES FROM THE GENOME OF THE PLANT-ASSOCIATED BACTERIA *CURTObACTERIUM* STRAIN ER1.4/2.

Kathryn Michelle Pawlak

This research was inspired by a BIO220 laboratory class with Professor Cursino-Parent, where I was introduced to genome annotation using Bioinformatics softwares. As part of this research project, we are now investigating the presence of virulence genes in the genome of *Curtobacterium*, ER1.4/2 strain, which might have ability to cause disease in plants.

Curtobacterium sp. are Gram-positive bacteria that can live inside of plants as endophytes and have the ability to cause disease such as wilting disease in dry beans (1). *Curtobacterium* strain ER1.4/2 was isolated from branches of healthy sweet-orange (*Citrus sinensis*) (2). The genomic DNA of this bacterium was extracted and the whole DNA sequencing was performed using next-generation DNA sequencing by the Illumina Hiseq 2000 method. The genome annotation of *Curtobacterium* strain ER1.4/2 was initially performed using a AST (Rapid Annotation using Subsystem Technology) server (3). The draft genome contains 3,692,034 bases consisting of 906 contigs with a GC content of 71.6 %. The software SOAPdenovo was used for another assembly round totalizing 94 contigs (4). The genome has 65 RNA genes including 6 rRNA operons and 59 tRNAs predicted by RNAmmer and tRNAscan (5,6) and 2,459 genes have unknown functions. In addition, the genome has 3,357 protein coding genes divided into 29 categories, named subsystems. One subsystem is called Virulence, Disease and Defense and includes 38 genes. It contains 22 types of antibiotic resistant genes and 10 type-IV pili genes, which are directly involved either in helping the pathogen move inside the plant and/or in delivering toxins and other molecules to plant cells, contributing to the pathogen's ability to migrate and colonize and therefore causing disease.

We are currently investigating whether unknown genes could be related to pathogenicity and we will compare these genes to other known plant pathogen genomes to gain insights about the biology of *Curtobacterium*.

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TRUANCY AS A PUBLIC HEALTH ISSUE

Kathryn M. Pawlak

My project explores how truancy is a community-wide public health issue. Statistical evidence shows that truancy is an indicator of a wider problem: missing class impacts performance and graduation rates and therefore nurtures a life of poverty, unemployment, and criminal activity. I explored the causes, impacts and awareness of truancy through two different research components from a public health perspective.

First, I researched the risk factors of truancy, which include interpersonal relationships at school, family factors, and economic restrictions that affect a child's scholastic achievement. Second, I investigated how dental- and asthma-related absences, the two leading health-related absences, contribute to truancy. Third, I examined the connection between school attendance and healthy lifestyles. Since truancy is a prevalent issue in the Geneva School District, I worked with Susan McGowan, social worker from the Geneva High School (GHS), to investigate how these issues affect the local community.

To attempt to combat truancy in GHS, I created a multimedia (letter to parents, posters, stickers) anti-truancy campaign for the city of Geneva. I designed 20 posters with varying audience impact to raise awareness in the community. For example, I designed stickers for elementary children to be distributed by local physicians, while for the high school students, posters were targeted to demonstrate the impacts of not going to school. Local parents and students of the GHS community are currently surveying the posters. During the next phase of this investigation, Susan McGowan will use this data to put the campaign into action. We expect that this multimedia campaign will help decrease the rates of truancy community-wide.

DEVELOPING ANTICANCER THERAPEUTICS IN AN UNDERGRADUATE LAB

Leila Peraro

Many pharmaceutical companies today are working on developing the most effective drugs for cancer treatment. Depsipeptides are small bicyclic molecules that are emerging as a new class of potent and selective anticancer therapeutics. FK228, commercially known as Romidepsin, belongs to this category and has now been approved to be used as a chemotherapeutic agent against T-cell lymphoma.

I have spent the last two summers in Prof. Justin Miller's lab, where we work on modifying the structure of FK228 and thus creating "analogs." Modifying the structure means changing its specificity in order to create more potent and selective drugs with reduced side-effects for the patients. During the summer of 2012 I focused on developing a laboratory manual for students in organic chemistry II (CHEM 241), including a protocol for the solid-phase synthesis of these analogs. The official title of this project is the "HDACi Cancer Therapeutic Laboratory Project."

The lab manual is a guide for a semester-long project where students experience real and advanced research as conducted in an organic chemistry lab. Implementing this project in the organic laboratory creates an opportunity to increase comprehension through hands-on work and create unique compounds using procedures developed in the Miller lab. This project also works in cooperation with the Biology department, where students in Cell Biology (BIO 232) will test the activity of these analogs against cancer cell lines.

THE POWER AND PURPOSE OF METAPHOR: MAKING THE ABSTRACT CONCRETE AND VISUAL

Emily Callahan Perkins

The traditional theory of metaphor, which has persisted for twenty-five hundred years in the philosophical and literary traditions, treats metaphors as irrelevant to fundamental questions about the nature of the world and knowledge of it, but these traditional views must be challenged. Metaphors are pervasive in everyday life – not just in language, but in thought and action. Because metaphors have the ability to render abstract concepts more concrete, we have the ability to communicate about abstract and intangible experiences by means of them.

For my honors project, I exemplify the cognitive importance of metaphors in three steps: first, I give a summary of human and language evolution; second, I develop a theory of metaphorical communication; and third, I apply that theory to the classroom to shape educational philosophy and enhance student learning. I hope my project will show how metaphors are relevant to every aspect of the human condition, and that they allow people to communicate feelings and experiences in a way that cannot be expressed in literal terms. It is for these reasons that metaphors should be regarded as a valuable and utilized tool in classrooms and in society at large.

BUILDING CLASSROOM TOLERANCE THROUGH MULTICULTURAL LITERATURE

Emily Callahan Perkins

The United States is increasingly a multicultural society, with white students today accounting for only half of all students in public schools, down from four-fifths in 1970, yet the traditional curriculum taught is dominantly Eurocentric. This means roughly half of this country's children are not learning about their own cultural backgrounds and traditions. The purpose of my project is to show the importance of shifting the focus of what is taught to broaden students' views about cultural differences and to celebrate the diversity of others.

I investigate ways to reach this goal through the usage of multicultural literature. While I believe multicultural literature is beneficial at any educational level, I have chosen to specifically focus on lessons for the primary education curriculum. Using this media helps to awaken students' curiosity about other cultures, to reflect on their personal lives and experiences, to enhance understanding of other cultures, and to raise their consciousness of social justice. All of these skills lead to greater tolerance within the classroom walls, creating a safer, more enriching learning environment.

CABBAGE RESISTANCE TO ONION THRIPS

Kevin Pollard

The agricultural industry faces many problems in producing the highest quality and quantity of product to meet demands and maximize profits, especially when facing insect pests that devour the food resource. Specifically, pesticides provide poor pest management for onion thrips, a small insect that eats, breeds, and lives in the enclosed environment of cabbage leaves. Different cabbage breeds, three “resistant” and three “susceptible,” exhibit different resistance because of UV light reflectance. My research further investigated the mechanisms of these differences by counting onion thrips within onion heads and measuring reflectance of leaves.

In order to test these differences with a treatment of kaolin clay, six different cabbage breeds were treated to examine the different UV light spectra reflected from treated and untreated head and outer leaves. The six cabbage breeds exhibited varied numbers of onion thrips located in the cabbage heads, depending upon the amount of light reflected from the outer leaves. Higher reflectance from the outer leaves led to higher numbers of thrips inside the head.

The results suggest that reflectance of the outer leaves, emphasized by kaolin clay, increases the number of thrips in the cabbage product. The findings reveal the most resistant strands of cabbage based on the amount of UV light reflected from outer leaves.

COWS, CATS, AND CARE: COMMUNICATION IN DIFFERENT VETERINARY PRACTICES

Alison A. Reindel

The field of veterinary medicine is extremely diverse, as veterinarians are trained to work with any and every species of animal, from guinea pigs to giraffes. However, veterinarians most often specialize in large animal or small animal medicine. Due to the differing needs of the animal appointments, clientele, and general organization of the veterinary practice, veterinarians are likely to communicate and interact with clients in these practices differently.

My study for my Masters of Arts in Teaching used an intrinsic case study model to develop a better understanding of communication in different types of veterinary practices. I spent three weeks observing veterinarian-client interactions in a large animal, small animal, and a therapeutic-rehabilitation veterinary practice. I recorded and analyzed extensive field notes to develop three independent cases that highlighted the communication patterns observed at each practice. My research demonstrated that: a) different types of veterinary practices offer greater opportunities for patterns of effective communication, b) effective communication is essential for establishing a productive relationship with clients, and c) veterinarians need to be able to tailor their interactions with clients accordingly to best serve the client and patient.

Interpersonal and communication skills are therefore critical to the success of a veterinarian. Practicing effective communication in the field of veterinary medicine can increase client satisfaction, compliance, and ultimately improve patient health.

THE ART OF LOVE: ORIGINS AND INTRODUCTION OF LOVE AS A CENTRAL THEME IN MEDIEVAL LITERATURE

Julianna Romanazzi

Love has long been a subject of western literary culture. From the heroines of medieval tales and Shakespeare to femmes fatales and *Twilight*, it has lasted as a driving force in many different genres. However, love did not always receive such high regard. In fact, until the twelfth century love received very little regard at all. So why the major shift? Why then? And out of all possible subjects, why did medieval people choose love?

My project looks at the origins of love as narrative and the introduction of courtly love and love rhetoric to medieval literature. It seeks to show the introduction of love as a result of cultural, historical, literary, and economic developments and the subsequent changes they brought to the medieval world.

A HYDROFRACKING NEWSLETTER AT HWS

Sandra Saetama and Kian Williams

Hydrofracking, sometimes called “fracking,” is a method for natural gas development of concern to Central New York residents. In our ENV 301 Senior Integrative Experience course, we investigated the impacts of various communication campaigns aimed at conveying information to the HWS campus community.

Using the work produced by other groups in the class, our group created a weekly newsletter to expose the campus community to information about hydrofracking, including potential benefits and drawbacks. The newsletter includes neutral and biased content, much like that people are exposed to in real life, and also leads readers to the other projects other groups in the SIE are conducting.

We will assess the impact of the newsletter by administering a survey at the end of the 3-week information campaign.

THE ANTHROPOLOGIST AND THE OTHER: A REFLECTION ON VISUAL METHODOLOGY

Hannah Sarokin

There is an inevitable reaffirmation of Otherness within the nature of anthropology. Even when the discipline seeks to diminish the gap between a perceived “us” and “Other” and point to universal humanity, ethnographic work almost always entails a differentiation between the anthropologist and those studied. Thus, the ways the anthropologist actively chooses to represent “the Other” are significant.

My project focuses on the historical trajectory of the anthropological use of visual tools, from material culture artifacts to photography and film, and how anthropology as a discipline has continuously sought to establish a legitimate scientific approach to the study and representation of human beings. Throughout the history of visual anthropology these methods have evolved repeatedly towards establishing a credible scientific paradigm, yet the very nature of humans studying humans entails subjectivity and bias.

My interest in this project stems from the seminar Visual Anthropology, which inspired me to question visual representations of culture on the basis of ethics and bias, as well as to think reflectively on anthropology itself.

YEAST IN CONTEXT: THE EFFECTS OF MACROMOLECULAR CROWDING ON THE ENZYME KINETICS OF YEAST ALCOHOL DEHYDROGENASE

Samuel Schneider

Enzymatic reactions are generally only studied in dilute solutions that do not represent the conditions found in cells. In fact, the cellular environment is similar to an egg, with high concentrations of proteins and other molecules that contribute to an increased viscosity. Therefore, developing tools to replicate conditions found within cells will provide a more realistic context for studying reactions.¹

My Honors project under the guidance of Professor Kristin Slade focuses on the enzyme alcohol dehydrogenase (ADH) from yeast, which has medical implications and industrial applications including fermentation for brewing, baking, fuel cells, and biosynthesis.² Particularly, this project aims to provide a foundation for how the rates of the reaction involving ADH are impacted by crowded biological environments. We have tried to recreate the conditions of the cell using long, bulky chains of sugar molecules in order to simulate the physical environment.

Through increasing the concentration of these crowding solutions, we see two effects on ADH. First, the rates of the reaction are independent of crowding effects (both size and shape). Second, there is a negative effect on binding as the size and concentration of molecules in solution increases. Therefore, the activity of this enzyme is related to how it experiences its physical surroundings. These findings suggest a need to reevaluate the kinetics of enzymes previously studied only in dilute solutions.³

¹ J.R. Ellis. Macromolecular crowding: obvious but underappreciated. *TRENDS in Biochemical Sciences*. **2001**, *26*, 597-604.

² de Smidt, O.; du Preez, J.C.; Albertyn, J. The alcohol dehydrogenase of *Saccharomyces cerevisiae*: a comprehensive review. *FEMS Yeast Research*. **2008**, *8*, 967-978.

³ Zhou, H-X.; Rivas, G.; Minton, A.P. Macromolecular crowding and confinement: biochemical, biophysical, and potential physiological consequences. *Annu. Rev. Biophys.* **2008**, *37*, 375-397.

THE RESOURCE CURSE THESIS: NORMATIVITY OF CAPITALIST ETHICS AND DESERT

Nathaniel Shils

In this paper, I seek to expose the ethical positions and conceptions of merit-based “just deserts” underlying the discourse of the resource curse in development economics and political economy.

I begin by examining the ways in which the capitalist myth of a causal relationship between work and prosperity faces challenges from both financial and resource rentierism (deriving revenue by leasing natural resources externally). Both forms of rentierism provide great wealth with little labor, i.e. production defies what economists refer to as the labor theory of value. To evade this contradiction, the resource curse thesis shifts to an explanatory story about resources that links responsible management with desert of prosperity, and irresponsible management with disaster. This story implies certain normative judgments about how unearned wealth should be managed, grounded in a particular capitalist ethics that is rarely explicitly acknowledged as such, and therefore difficult to contest. The masking of this ethics is particularly problematic, given that the resource curse discourse’s focus exclusively on producer states implies a disavowal of the consumer role in perpetuating the curse. This focus casts the problem as that of the “other” while providing prescriptions for remedying the curse solely in the realm of the producer.

I argue that there is a direct analogy between how capitalism disciplines individuals to pursue moderation, discipline, and self-control in order to escape poverty and how the curse disciplines states to escape the curse. The case studies of Norway and Nigeria illustrate the deep normativity of this academic and policy discourse through analysis of the role of “exceptionalism” in academic explanations and policy prescriptions.

TREACHERY AND JUSTICE IN THE MYTILENE DEBATE

Krissy Stoner

What is Justice? Could it even be just to kill or enslave an entire city-state as punishment for rebellion? My study concentrates on Thucydides' account of the Mytilene Debate in 427 B.C. and how it reveals, through the Constructivist framework, the complex identity of Athens during moments of revenge in the Peloponnesian War.

I am translating the debate from Ancient Greek into English in order to better understand the context and meaning of what is being said. Through this close reading and analysis I will show the complexity of Athenian Identity and how it shapes both justice and Athens' outlook on International Relations. It is through studies like this that we are truly able to understand societies and their interactions in International Relations.

CULTIVATING COMMUNITY: PEOPLE, EXPRESSION, AND THE OVERCOMING OF SOCIO-ECONOMIC HARDSHIPS

Blake Taylor

I was born in Honduras, I have lived in the Sacred Valley of Peru, and I have worked in Oaxaca, Mexico. These experiences have fueled my passion for social activism and cultivating community for overcoming and alleviating familial and economic hardships in ways that are beneficial to communities.

Based on the theory that pursuits and passions with creative outlets can inspire social change, my project in Oaxaca, funded in part by an NGO in Mexico, was to organize the orphans and children with whom I worked to complete a mixed-media art project. Through the voices and stories, through mixed media visual and sound expressions, we worked to inspire just and collective social activism. The children were able to relate to each other and turn their creative expression into community as cultivated within.

True social justice exists as a reciprocal dialogue between people. Our world is riddled with poverty and marginalization, and even though the youth live in the harsh reality of this, they have the potential to overcome.

CHARTER SCHOOLS: HAITI

Patrice Thomas

Ever since their inceptions, charter schools have been presented as the panacea for our educational problems; however, studies on the effectiveness of charter schools reveal mixed findings, with some schools performing slightly better than traditional public schools and majority performing far worse. These studies inform this paper, in which I analyzed and determined exactly what constitutive aspects of the charter school model work and which do not, focusing on charter schools in Haiti.

Findings from the literature review, in conjunction with analysis of the socio-economic setting of Haiti and interview with teachers in Haiti, subsequently reveal whether the charter school model yields exceptional results for the educational advancement of students in Haiti. The study concludes with suggestions for future research on areas of studies that can further elucidate points of concern in creating an effective model of education, here and abroad.

CAN HWS KNOCK OUT CANCER? TESTING DRUGS THAT HAVE NEVER BEEN MADE BEFORE

Deepak Vallabhaneni

Cancer chemotherapy is targeted towards antagonizing the characteristics of metastasizing cancer cells. One of those characteristics is upregulation of HDAC activity, causing silencing of tumor suppressor genes. One class of drugs, HDAC inhibitors, combats cancer by increasing gene expression, especially that of tumor suppressor genes, which block cancer development. Depsipeptides are one chemical class of HDAC inhibitors, led by FDA approved drug FK228. Analogs of FK228, synthesized by Professor Justin Miller's research group, were evaluated for their anti-cancer activity using U937 lymphoma cells. Spiruchostatin A was found to induce apoptosis (programmed cell death) in U937 cells while a novel FK228 analog did not induce apoptosis. This may be because of a slight structural difference between the novel FK228 analog and Spiruchostatin A, indicating this difference is crucial to a depsipeptide's anti-cancer activity.

YOU ARE WHAT YOU EAT: A LESSON ON EATING YOUR PETS

Megan R. Van Dorp

What makes the human-bovine relationship unique, and how is that relationship manifested in the cultures of Spain, Argentina, and the United States? This multidisciplinary project, grounded in my majors of Spanish and Hispanic Studies and Latin American Studies, uses the lens of Anthropology and Cultural Studies to analyze the human-bovine relationship.

The Companion Species Manifesto by Donna Haraway states that humans generally are not companions with the animals that they eat. In contrast, I argue that humans can be companions with the animals that they eat, specifically cows, because this is part of the unique beauty of reciprocity within the human-bovine relationship. The human-bovine relationship can also be seen via bullfighting in Spain, *gauchoesque* (cowboy) culture in Argentina, and via my personal relationship with dairy cattle in the United States.

Growing up on a family farm in rural Upstate New York, I never realized before coming to HWS that basic knowledge about the origin and production of food is not instilled in all children. This realization enlarged when I observed bullfighting in Spain and gaucho culture in Argentina. In Spain, I observed a bullfight firsthand and visited *ganaderías* (ranches) with the goal of interviewing Spanish farmers. In Argentina, I explored the literature, poetry, cuisine, and landscape that shape *gauchoesque* culture.

I propose that these combined experiences allow me to argue for a new perspective on the human-bovine relationship. Counter to Haraway's belief that eating and companionship are mutually exclusive, I propose that humans can benefit from a reciprocal relationship with cows. This project has revealed how people's relationships to food influence culture. Opportunities for further study on this topic include studying this relationship in Asia, India, Australia, and Africa.

WRITTEN BY THE VICTORS: COUNTERING THE HEGEMONIC DISCOURSE OF AN AMERICAN HISTORY TEXTBOOK

John Wasmund

The historical perceptions of many high school students in the United States are largely shaped and influenced by the history textbooks used in their classrooms. Unfortunately, many social studies textbooks are often ineffective in promoting a holistic understanding of history, and instead present a limited historical narrative that is largely shaped by the most dominant historical perspectives. Unlike college courses where students are more likely to be subjected to wide variety of historical dialogues, many high school history teachers rely solely on history textbooks as the primary means through which they transmit knowledge to their students. I argue that the way in which many textbooks are written reinforces the construction of a “dominant historical narrative” that is imbedded in our mainstream discourse.

I provide a written critique on the use of history textbooks in public schools through the analysis of a widely used American history textbook distributed by a major publishing corporation. I will specifically examine the manner in which it covers the Civil Rights Movement. I will also create a supplemental curriculum plan to accompany this textbook and promote a more diverse and complex understanding of the American Civil Rights struggle.

My project is not intended to belittle the use of textbooks in high school history classes, but rather promote a more holistic approach to teaching history. This can be achieved through implementing a variety of alternative historical dialogues into the classroom in order to present a counter narrative to history textbooks.

WINTER BIRD MIGRATION OBSERVED BY WSR-88D RADAR IN THE VICINITY OF THE GREAT SALT LAKE, UTAH

Augusta Williams

Radar, first developed for enemy detection during World War II, has become a fundamental tool in weather forecasting. As radiation waves are sent out into the atmosphere, waves are returned when they encounter any particle. The intensity of the return provides information on the size and shape of the particle. Although radar is most commonly used to determine where and what type of precipitation is in the atmosphere, radar can also be used to document bioscatter. As Larkin et al. described, “to the radar, birds are effectively very large raindrops” (2002).

The current study investigates for Honors in Geoscience bird migration events, specifically of waterfowl, in the vicinity of the Great Salt Lake, Utah, using Weather Surveillance Radar-1988 Doppler (WSR-88D) from Salt Lake City, Utah (KMTX). Documentation of past archived radar data have resulted in 281 migration events identified in the months of November through January for the winters of 1997/1998 through 2011/2012. Nearly all migration events observed by radar had start times between 5pm and 6pm MST and durations of less than 2 hours. The largest frequency of events was observed during the month of December. Past research has indicated a variety of relationships between weather conditions and migration activity. The current study has utilized surface analyses and meteorological measurements at Salt Lake City, Utah of both surface and atmospheric profiles for event and non – event days.

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WRITE IT OUT (SIDE)!

Halie Wilson

Comma woes, spelling sorrows, fragment frustrations—as a Writing Fellow at Hobart and Williams Smith Colleges, I hear many moans and groans about writing. Guiltily, I too used to voice such complaints until I became involved in the Writing Colleagues program during my first year of college. The program transformed my perspective on the writing process; the five-paragraph format, the ban on first person, and other rules that made writing feel restrictive and burdensome were deconstructed. Writing, as I learned, is not a chore, but an art form: a creation molded from different styles and structures; a mosaic of self-expression; and a canvas exhibiting your personality, interest, and beliefs. Most importantly, writing serves as a space to document your every-changing outlook on the world. Therefore, why not immerse yourself in the outdoors during the writing process.

I believe the combination of being in nature and performing writing activities can not only spur inspiration, but can also change the way students think about writing. What was once a tedious desk job can become an engaging adventure.

During my last college semester, I've decided to further develop my experiential learning philosophy through an independent study project. My research examines the benefits and drawbacks of experiential learning and the strategies used by current programs. Based on my research, I am creating my own outdoor lesson plan, focused specifically on writing skills, and teaching the lesson to the local Roots & Shoots program: an international environmental education program founded by Jane Goodell. By putting my philosophy into practice I can test the effectiveness of my experiential writing approach and determine its viability in the real world.

CHINA'S REAL ESTATE MARKET: IS THE BUBBLE BURSTING?

Congjing Zhong

The housing price in Hong Kong, expected to rise in 2013,¹ is normally about \$2,000 to \$3,000 per square inches. Because of the high housing price, more than 30% of house buyers have become “house slaves” since their housing loans have accounted for over half of their total income. Even the home rentals in Chinese have become increasingly out of reach for middle-class people. Bursting housing bubbles are a mess, as the US recession taught us. What will happen in China? The Chinese government and scholars even claim there is no bubble in the Chinese housing market.

My project will combine my analysis of the macroeconomics theories with the current policy trends in China. In March 2012, Chinese Premier Wen Jiabao answered the call of the public, assuring that his government would keep fighting one of the factors behind booming prices: speculation. My project will show how booming steel and cement industries and increased revenue in taxes for local governments mean that a bubble burst in China wouldn't spell doom for the homeowner – instead, local governments will take the brunt of the slowdown or bubble burst as result of their heavy reliance on real estate revenues.

¹ http://www.chinadaily.com.cn/hkedition/2012-12/05/content_15986337.htm