Building Healthier Communities in the Dominican Republic:
Promoting students’ critical thinking skills by engaging low-resource communities in research and action.

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Why?

To understand the social determinants that perpetuate poor health conditions in low-resource settings

To combine public health, social sciences, and community-engaged research to identify innovative ways to improve communities’ health and well-being in a more sustainable way

To promote policy and systems change

To build on long-term (14 years) collaboration with Iberoamerican University (UNIBE)
Objectives

To use CBPR to study the health situation of a low-resource community by adapting an evidence-based protocol from the CDC (CHAnGE)

To use findings to identify actions for improvement by capitalizing on community strengths and with community leaders and their partners

The project fosters multi-level partnerships with local gov. and non-gov. organizations, and two universities (CU/UNIBE)

To provide collaborative, multi-disciplinary and cross-cultural learning experiences for Clemson and UNIBE (Research Track) students

Youth engagement initiatives seek to incorporate youth in ongoing efforts to improve community’s health
2016: **Community Health Assessment** in Las Malvinas II: Cultural and linguistic adaptation of CDC CHAnGE. Community assets and health needs identified.

2017: **Community Health Improvement Plan**: Worked with community leaders and partners to improve sanitation, access to clean water and access to health care.

2017: Tigers Building Healthier Communities abroad: **Student Org.**

2018: **Participatory Youth Action Research.**
Student Learning Outcomes
Assignments

- Presentations on theoretical frameworks informing the initiative
- Service learning program development
- Essay/Meta-cognition report
Essay: One to two pages single space essay

• What do you understand the importance and/or contribution of this project is. Please incorporate or build upon theoretical and methodological aspects learned in class including:

• A multidisciplinary approach

• An ecological systems framework perspective (Bronfenbrenner)

• A Community-engaged research approach

• Assets-based Community Development

• Systems’ improvement and social change
Essay: (Cont.)

• How do you think you have had and/or continue benefitting, as a student and researcher, from your involvement in this project. Please consider elements of your relevant contributions to the project such as:

• Cross-cultural experience
• Research design
• Translational research by adapting instruments to the DR context
• Marketing and promotion of the study abroad
• Advocacy for the project
• Team work
• Leadership skills development by leading specific tasks
• Adapting to work in a constantly evolving real life project
...The last part of the quote mentions that if rocket scientists or neuroscientists really wanted a challenge, then they would have chosen community development as their career. I never appreciated this quote until I began my work in this Creative Inquiry... But after working with Dr. Moore on this project for the past year and a half, I have grown to appreciate this statement. Not only is it true, but it does not even begin to explain the intricacy of community development, and more specifically, our research project... is that community development is all the things that have to be done *in order* for a community to advance. This requires a multidisciplinary and mixed methods approach, something that, if you can believe it, is even more difficult than it sounds...(Lauren, C.)

The BHC in the DR CI program contributes not only to bettering Las Malvinas II physically, but also to developing Clemson students through improving their global awareness and advocacy. When studying Las Malvinas II and analyzing ways to help improve the community, we are encouraged to consider all possible aspects of health. Overall, through my participation... I have grown as a student and a researcher, and in broader terms, I’ve become a better critical thinker and investigator. The program has made me a better student by pushing me to solve my own problems and identify what resources I can use to aid me in finding a solution. Also, I have developed my skills in working with a group. Through the various projects we worked on, I have been able to explore group dynamics and recognize new ways to work efficiently with others. The program has also helped me to improve my leadership skills. As I took lead roles in projects and activities, I was able to discover leadership potential in myself which I can use in and out of the classroom. (Gutler, S.)
Meta-Cognition Journal

Critical Thinking demands explicit awareness, monitoring, control, and evaluation of one’s thinking. In the *meta-assignment* students should reflect on and describe their thinking processes (metacognition, self-regulated learning) for the essay required to complete in this course. No page limits.

How did you arrive at your response about your experience participating in the BHC in the DR project?

What skills did you use or improve by writing this essay, and when will they be useful in the future?

What learning value did this task have?

What would you do differently?

What advice would you give next cohort of students before they do this assignment (preparation, strategies, pitfalls, value)?
Assignments

- Advocacy and partnership building initiatives for the project across campus and elsewhere as applicable. (e.g., CDC, CEDC)

- Website/PR development
  
  http://bhcabroad.sites.clemson.edu/index.html#

- Students association (TBHCA/Tigers Strengthening Communities)
Assignments

- Cultural and linguistic adaptation/research protocols and instruments’ development
- Community-engaged field research (data collection and analysis)
- Posters, papers or presentations prepared/submitted/presented
Global Competency Outcomes: CU students will learn to apply knowledge, skills, and behaviors to their lives and careers in a global context.

To better understand characteristics and particular circumstances that shape life patterns for families and communities in the DR, and how these patterns and processes determine the health and well-being of these communities.

K1 and K3

S1 and S3
Global Competency Outcomes: CU students will learn to apply knowledge, skills, and behaviors to their lives and careers in a global context

- To increase students' cross-cultural understanding of public health issues affecting developing countries. B1 and B3.

- To learn and apply social research and CBPR methods (qualitative/quantitative/mixed methods). S1, S2, and S3.
Global Competency Outcomes: CU students will learn to apply knowledge, skills, and behaviors to their lives and careers in a global context

- To engage in group discussions and reflection on global health through conversations in-classroom and at conferences and symposiums. K3, S3, and B3

- To learn how to translate/adapt US-evidence-based protocols to developing countries. S1 and S2
# LEVELS OF GLOBAL LEARNING

The Clemson Forward plan prioritizes high-impact global engagement as a means of preparing students to succeed in life and career. This Levels of Global Learning summary sheet was developed to illustrate practical ways faculty can infuse global learning into their courses. It functions as a companion to the Global Competency Matrix developed by the Global Learning Taskforce.

## LEVEL ONE: AWARENESS

Students encounter an international reference:

- Professor illustrates universal principles of architectural design by showing pictures of famous global structures.
- Students read an article on how doctors in Hong Kong are using the Chinese tile game Mahjong to treat dementia.
- Professor displays a list of modern English words that are Arabic in origin.

## LEVEL TWO: INTERACTION

Students interact with international viewpoints and perspectives:

- Students discuss food insecurity with their peers at a Thai university via Skype.
- The on-site director of an international NGO lectures via Zoom and responds to student questions.
- Students attend a Chinese New Year gathering with local experts from China.

## LEVEL THREE: INTEGRATION

Students evaluate and apply international perspectives:

- Identify transferrable elements from Singapore’s Smart Nation playbook to enhance US efforts to attract foreign entrepreneurs.
- Reimagine elementary education in the US based on Finland’s educational system.

## LEVEL FOUR: ENGAGEMENT

Students collaborate across cultures and create shared value:

- Urban planning students use augmented reality to complete a revitalization assignment with Italian students.
- Write a progressive novel with Japanese students using an online collaborative writing platform.
- Marketing students work with their peers in France and Senegal to develop a global strategy for UNICEF.

## LEVEL FIVE: IMMERSION

Students experience another culture through focused and ongoing engagement:

- Students participate in an Education Abroad program to the Marshall Islands to explore climate change.
- MBA student completes an internship at the headquarters of an automotive plant in Monterrey, Mexico.
- Attend a 3-week campus program conducted exclusively in a foreign language and comprised of foreign elements.
Global Competency Outcomes Survey

Hypothesis: Students who went abroad will have higher global competency scores as compared to students who participated in the program but did not travel abroad.

Adapted from “The OECD PISA global competence framework”

Level 1 Awareness (like exposure)
Level 2 Interaction (discuss, lectures, attend event)
Level 3 Integration (in the psyche)
Level 4 Engagement (be present and into the context - actually went abroad)
Level 5 Immersion
Global Competency Outcomes Survey

Global Competency Levels:
Level 1 Awareness: 24
Level 2 Interaction: 18
Level 3 Integration: 13, 15
Level 4 Engagement: 22, 23
Level 5 Immersion: 22, Demo 24 & 16

Global Competency Outcomes:
K1: 24
K2: 14
K3: 13
S1: 19b, 20
S2: 19a,c,d,e,f
S3: 15, 18
B1: 16, 21
B2: 23
B3: 17

Global Competency Constructs:
Self-efficacy regarding global issues: 13
Awareness of global issues: 24
Perspective-taking: 14
Adaptability: 15
Interest in learning about other cultures: 16
Respect for people from other cultural backgrounds: 17
Awareness of intercultural communication: 18
Contact with people from other countries: 22
Global mindedness: 19
Student’s engagement (with others) regarding global issues: 23
Interest in national and global issues: 20, 21
Global Competency Outcomes Survey

“Perceived global learning gains”

To what degree did participating in this CI team...

- encourage your sense of global responsibility
- help you with being informed about global and international issues
- prepare you for life and work in an increasingly globalized era
- impact your understanding of how your actions affect global communities
- influence your ability to seek international opportunities out of your comfort zone
- affect your ability to speak a second language
Sign in from the ArcGIS Maps ribbon to unlock map
Socioecological Model of Health

Healthy Communities: Community Reinvestment

Maslow’s Hierarchy of Needs
Self-Actualization
Reaching one’s potential

Assets-based Community Development

Internally focused
Relationship driven
Focused more on positive aspects
Focused in what is already present in a community

Public Policy
National, state, local laws
Community
Relationships among organizations
Organizational
Organizations, social institutions
Interpersonal
Family, friends, social networks
Individual
Knowledge, attitudes, skills

Spiritual
Emotional
Intellectual
Financial
Environmental
Social
Physical

Healthy Communities: Community Reinvestment

Achievement, confidence, etc.
Social
Belongingness, love, etc.
Safety
Security, freedom from fear, etc.
Physiological
Oxygen, water, food, etc.
Community Engagement: Community-academic partnerships

- Encompasses more than just a classroom teaching approach, but all of the ways that university faculty, students, and research institutes engage with communities.

- Collaboration between higher education institutions and their larger communities for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity” (Driscoll, p. 6).
[CENSO POBLACIONAL: LAS MALVINAS II - BRISAS DE LAS MALVINAS 2011]

SANTO DOMINGO, REPÚBLICA DOMINICANA
Community Health Assessment

**SECTORS**
- Community at Large
  - Institutions/community orgs.
  - Health Care
  - School
  - Work

**MODULES**
- Public Health Priorities
  - Sanitation
  - Education
  - Chronic Disease Management
  - Vaccine Preventable Diseases
  - Unwanted Pregnancy

**METHODS**
- Focus Groups (2)
  - Community at Large
- Interviews
  - 1. Neighborhood Association
  - 2. Las Malvinas School
  - 3. Health Area Directorate
  - 4. Industrial Park
  - 5. Environmental Authority
- Household Survey (GIS)
  - 1. Assets
  - 2. Risks Factors
  - 3. Disease History
Focus Groups: Community at Large

Interviews with Key Informants

GIS Household Survey
Sign in from the ArcGIS Maps ribbon to unlock map
### CHANGE Tools

#### Community Health Assessment and Group Evaluation

**COMMUNITY-AT-LARGE**

**COMMUNITY’S NAME:** Las Malvinas II, Santo Domingo, Dominican Republic

<table>
<thead>
<tr>
<th>Module Score Summaries</th>
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<tbody>
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### Five Sectors Average

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<td>Education</td>
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<td>Unwanted Pregnancies</td>
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<td>Vaccine-preventable Diseases</td>
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<td>21</td>
</tr>
<tr>
<td>Chronic Disease Management</td>
<td>21</td>
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Plan de Mejora de la Salud Las Malvinas II
Enfermedades Crónicas

**Meta II:** Construir una comunidad saludable donde sus residentes tengan toda la información y el apoyo necesarios para acceder a una atención de salud de calidad que les permita participar en comportamientos saludables y cuidados preventivos

**Estrategia:** Fomentar una mejor nutrición mediante una iniciativa de alimentación saludable

**Objetivo:** Establecer un huerto comunitario

**Recursos necesarios:** Frutas y hortalizas frescas, suelo fértil, acceso al agua, espacio, barriles de agua

<table>
<thead>
<tr>
<th>Fortalezas de Nivel 1</th>
<th>Fortalezas de Nivel 2</th>
<th>Fortalezas de Nivel 3</th>
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<tbody>
<tr>
<td>Espacio para el jardín</td>
<td>Club cultural y Deportivo Las Malvinas</td>
<td>Club Rotario de Santo Domingo</td>
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<tr>
<td>Mano de obra</td>
<td>Iglesias locales</td>
<td>Ministerio de Agricultura</td>
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<td></td>
<td>Junta de Vecinos</td>
<td>Fundación para la paz</td>
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<td>UNIBE</td>
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**Estrategias basadas en recursos**

<table>
<thead>
<tr>
<th>Programa</th>
<th>Información</th>
<th>Referencias</th>
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</table>
| Iniciativa del Programa Eco-Huertos | Iniciativa del Programa Eco-Huertos en Santo Domingo para iniciar jardines de verduras escolares para fomentar sistemas de jardinería, mejorar los programas de ciencias naturales en la escuela y ofrecer espacio educativo. | [Http://www.globalfoundatio
nd.org/project_huertos.asp](http://www.globalfoundatio
nd.org/project_huertos.asp) |
Lessons Learned: Challenges and Opportunities
Lessons learned/Opportunities

- Engagement of respected community members who have credibility and visibility
- Incorporating assets in the CHIP previously identified in the CHA
- Proxy Trust (Lucero, 2013): Las Malvinas II towards UNIBE
- Proactive attitude of Las Malvinas II Neighborhood Association: Participatory budget
- Addition of governmental and non-governmental organizations (Bridging Social Capital)
- Student engagement Clemson and UNIBE
Addressing power differentials among researchers and community members (Israel, Schulz, Parker & Becker, 1998)

Historical mistrust (Cook & Jackson, 2012)

Availability of funds and continuous government involvement

Partners' time availability (CHIP)

Changes in the amount and diversity of resident families
Summary of Project Accomplishments

Community Systems and Environmental Changes
- Primary Health clinic almost finished
- Water supply in all households
- New land for school
- Regular and more frequent trash pickup

Coalitions and Organizations
- Las Malvinas II Coalition (2016)
- Student Organization “TBHCA” (2017)
- Multi-disciplinary/bi-national student research teams

Research and Programmatic Reports/Plans
- Community Health Assessment (2016)
- Community Health Improvement Plan (2017)
- Youth Engagement Research (2018)

Project Dissemination
- Local and national presentations (12)
- Two papers submitted for publication
- Articles published in newspaper/magazines in DR and SC
Questions???