

VIEWPOINT

Global Learning Experiences, Interprofessional Education, and Knowledge Translation: Examples From the Field



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INTRODUCTION

There is strong support for the use of firsthand learning for students to apply classroom/didactic skills and to accomplish measurable outcomes beyond what formal academic programs generally provide.¹⁻³ This type of learning may take various forms, depending on the purpose, location, timing, curriculum, program requirements, financial considerations, and perhaps others. The length of the experience appears secondary to its intensity.⁴⁻⁷ Although one may choose settings for total immersion either within the United States or abroad, this article focuses on 3 global experiences with similar goals; each with a focus on interprofessional (IP) team composition and interactions. The experiences took place on 3 different continents: Malawi in southeastern Africa (2014 and 2015), Brazil, in South America (2015), and Hong Kong, in China (2014 and 2015). Student and faculty teams each represented 2 to 3 disciplines from the following University of Maryland, Baltimore (UMB) professional schools: Dentistry, Nursing, Social Work, and Medicine (Physical Therapy). The size of each team was 1 to 2 faculty and 3 to 4 students. Funding was provided by the UMB Centers for Global Education Initiatives and Interprofessional Education.

Built on a framework of structured and unstructured encounters, these global experiences highlighted activities in 3 categories (Fig. 1): preimmersion (before the experience), immersion (during the experience), and postimmersion (after the experience). Based on student and faculty comments, these 3 examples appeared to have had a

significant effect personally and professionally on the team participants during and after the learning activities, an effect that has extended into their chosen careers, as well as outreach, volunteer, teaching, and other professional projects. For some of the participants, the global experience has become a part of their personae, influencing various daily activities, and affecting many ongoing decisions and feelings about global events and their current and future roles.

Experiential learning theory (ELT) formed the basis for the projects. This theory suggests that learning is a process that transforms experiences into knowledge. The global learning activities included observation, hands-on activities, and student reflection.⁸ Through various methods, students internalized the abstract ideas and concepts, experimented with the concepts in real-life situations, reflected on the process and outcomes, and gained practical knowledge in the workplace. Learning activities were developed using the 4-stage ELT cycle and integrated into the 3 project phases.

Unique to the global experiences was the makeup of students and faculty from several professional disciplines, unified as a team through common goals and mission, but distinctive in their divergent personal and professional perspectives. As an IP team, the sum was greater than its individual parts because the team prepared and participated in the experience together, reflected together, and created several follow-up activities together. The team learned about and from each other as they worked closely to further develop and implement a goal-driven project with new global partners.

GLICKMAN: MALAWI (2014 AND 2015)

The Malawi IP project was a combined research and educational initiative to help meet the strategic needs of the Kachere Rehabilitation Centre (KRC) in the less-resourced southeastern African country of Malawi. The purpose was to investigate the status of community reintegration and postrehabilitation, to provide continuing professional development (CPD) for KRC staff, and to engage in an intense cultural learning experience. For 3 weeks in both 2014 and 2015, 3 students representing the University of Maryland (UM) schools of Medicine (Physical Therapy), Nursing, and Social Work and Physical Therapy faculty participated in the global experience. Cultural and IP activities throughout the project gave background, increased understanding, and broadened perspectives. The UM Institutional Review Board (IRB) and the Malawi College of Medicine Research, and Ethics Committee approved the research protocols.

Preimmersion. Planning for the in-country visit with students was discussed and confirmed through emails and Skype conversations. Blackboard was used for organizing and documenting all activities, processes, for formal communications, and as a resource repository. There were several in-person team meetings, including a campus reception and ceremony honoring the grant recipients and a conference call to introduce team members. The initial meeting was used to review logistics and helped to acquaint the team members. We met in a local restaurant to begin the bonding process. Project orientation conversations provided basic knowledge about our local partners, background, and the demography of Malawi. A discussion of the professional project perspectives and relevant book titles were exchanged.

We met 3 times formally to review project details, tools for data collection, and overall research plan. Campus orientation meetings prepared team members on proper dress and greetings, language and customs, safety and security expectations, health concerns, research ethics, and other critical logistics. Trip itineraries and travel health protections were reinforced. IRB training was completed; research protocols with expectations of the team were reviewed.

Immersion. Located in Blantyre, Malawi, KRC is the only inpatient rehabilitation facility for 17 million people. It admits individuals to its 40-bed hospital who have neurologic disorders, particularly stroke and spinal cord injury/infection, for up to

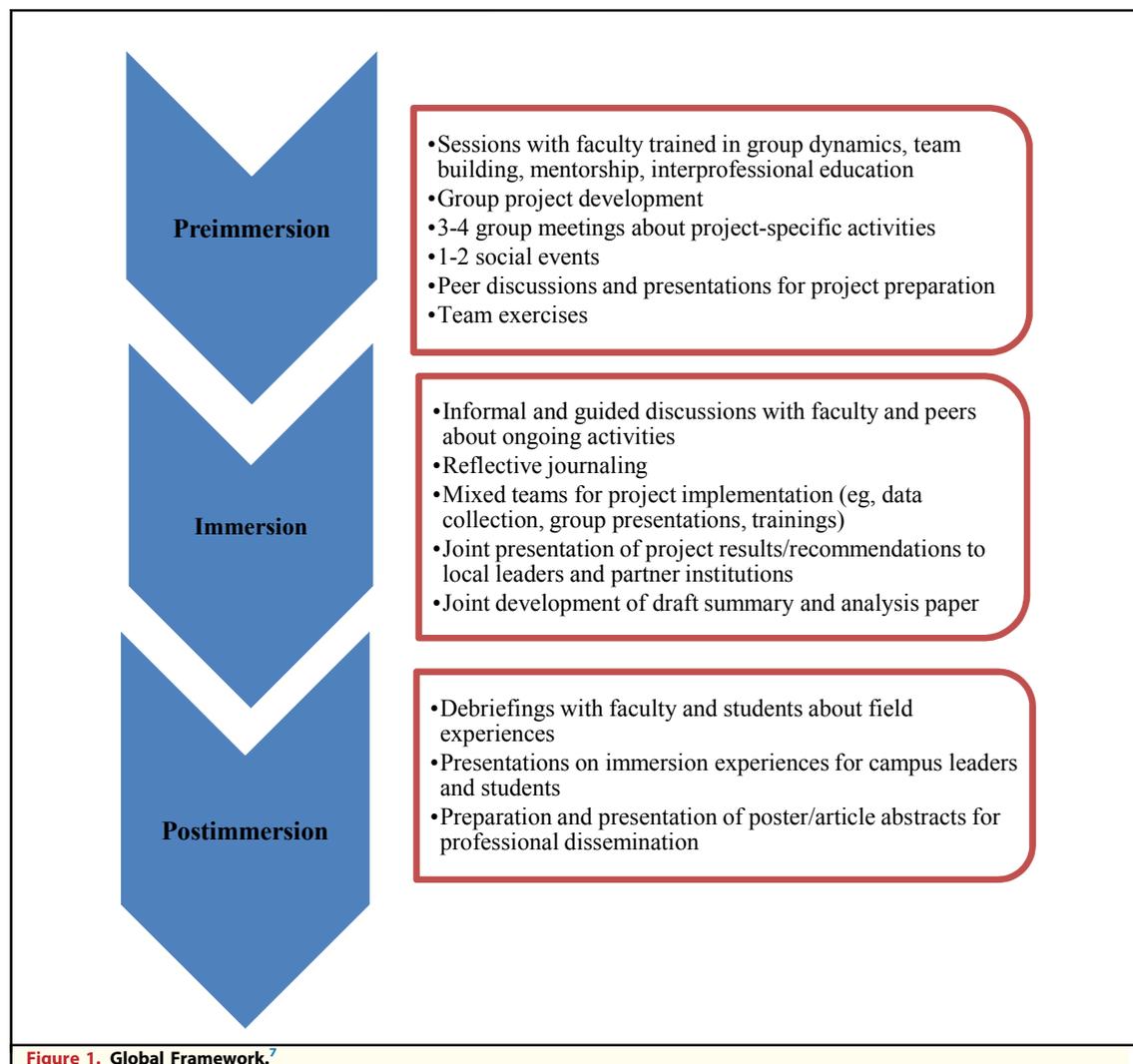
several months. After discharge, clients return to their homes and local community with little or no outpatient rehabilitation services. Environmental barriers within the homes and immediate area are the most critical reason preventing or impairing reintegration into their former life. Lack of running water within the home, structural barriers for wheelchair and mobility-device users, poor access to the main hub of roads, public transportation, markets, and convenience facilities is common, even in “suburban” communities.

The research component of this project used mixed methods to formally investigate the status of community reintegration for a recent sample of discharged KRC clients,⁹ with a scale based on the Activity and Participation domain of the International Classification of Function, Disability, and Health. Per UMB faculty oversight and guidance, the team interviewed clients and their caregivers, and collected home observation data.

The educational component of the intervention included CPD sessions in several areas of physical therapy clinical practice for KRC staff, particularly the use of evidence-based treatment approaches to rehabilitation. One training session for guardians (client caregivers) was devoted to helping them understand expectations for clients after discharge.

Cultural Immersion Activities. These activities included daily community-living experiences within Malawi and special points of interest: Lake Malawi, Malawi National Park, Majete Wildlife Reserve, Satemwa Tea Plantation, and the Bangwe Handicraft Factory. The Mulanje Village visit was a highlight with its opportunity to learn about the political, social, health, economic, habitat, and culture of a typical village community. The serenade by a large group of bubbly children and meetings with several local residents and village officials were among the most memorable. To show respect for the Malawi culture, we frequently wore long skirts, pants, and chitenjes (sarongs) to home visits.

We toured 2 special health care facilities near KRC, the private Beit CURE International Hospital for people with orthopedic conditions, and the Queen Elizabeth Community Hospital (QECH), a government-run, public, acute care facility. These experiences plus the ones at Kachere and in the community reinforced for us how health disparities may inhibit the quality of patient care and outcomes. For example, we were told by QECH personnel that patients in extremely poor health are frequently denied admission to that facility and literally “sent away.” We saw that patients living



outside of the suburban areas who rely on public transportation to obtain health care services may avoid getting them because of the inconvenience and associated transportation costs.

We spent several hours observing KRC staff at work. Similarities to US practices were noted at first glance, but there were definite differences in the amount of time for each patient's care. Particularly impressive was the focus and devotion of the client guardians on their loved ones. As primary caregivers in Africa after injury or illness, the *guardian* culture is key to each client's level of success in community reintegration. These experiences provided the student team members with reflections for their future professional roles.

Communications with UMB colleagues through widely available social media included Facebook postings, blogs, and emails. The team was able to

disseminate real-time information about the project, the environment, and the people, albeit slowly! As we lived and breathed our experiences, family, friends, and colleagues shared our observations and heard our thoughts. This process may have helped us to clarify and reinforce our feelings about the experience.

Team reflection activities included many discussions and writing projects. Each student used personal written journals to capture feelings about observations, interactions, and more specifically about health care in Malawi, cultural life, and the IP process. We engaged in informal discussions on a daily basis to *debrief* and *process* what we had just experienced. Active listening and constructive feedback on thoughts/feelings/questions from the day's activities facilitated the team's relationships

and allowed for a healthy interchange of professional perspectives. At days' end, we discussed and summarized the research data.

Interactions with the on-the-ground Malawi team helped us become more immersed in the local culture. In-person exchanges helped us understand and learn how to interact appropriately, particularly in a culture where formality is more typical than in the United States. Conversations on our last days in Malawi focused on ways to best sustain the project in the context of a strategic collaborative approach to potential longer-term changes for Kachere staff.

Postimmersion. The affect of this global experience made impressions on each of the team members during the time abroad, immediately afterward, and extending into their future. We saw local applications immediately and anticipate many more for the long-term, particularly sensitivity to our ever-expanding global world. Follow-up projects included summary reports for campus officials and colleagues, presentations for colleagues and students, and initial work on the development of papers, posters, case reports, and specialized assignments to meet specific student-school requirements and scholarly agendas. The following amalgam of comments reflect the personal effects from our global experiences in Malawi: "In addition to learning from the people of Malawi, I cherished the opportunity to learn from the members of my team...the value of determination and hard work, and an appreciation for the beauty of humanity, a cheery attitude, and the strength to face heartbreaking situations in order to lend a helping hand. While in Malawi, I was confronted with the disparities of our global community and the health discrepancies that can alter and define patient outcomes. I have continued to communicate with the head nurse at the community hospital, share resources, and extend my outstretched hand. I returned to Malawi as a new nursing professional, adding another global chapter to my portfolio. What happens in one aspect of the world influences the health status of the rest of the world. I must approach each of my clients with a cultural sensitivity that embraces the wisdom, awareness, and tolerance of cultures. The most valuable part of working with the team was that we helped each other process what we experienced each day—evaluating how our values changed the lens through which we interpreted the day's events and how looking at the experience through another perspective (personal and professional) could affect our opinions. All of these experiences—cultural

and IP—have shaped me to be a better person and professional...on many levels. The home visits made me more aware of environmental factors and the functional demands of different cultures. From a local in-country contact, the Malawi collaboration resulted in two funded IPE [interprofessional education] projects, presentations, posters, a manuscript, and an extensive Fulbright Project. Our partnership continues to expand, based on common goals, the promise of sustainable activities, and a commitment to making an important difference for the people of Malawi...We feel so fortunate for these opportunities!"

RAMBOB: BRAZIL (2015)

The Brazil IP project studied firsthand Brazil's unique model for mitigating the HIV epidemic. The Brazilian National AIDS Program is recognized worldwide as the leading example of an integrated HIV/AIDS prevention, care, and treatment program in a developing country.¹⁰ For 2 weeks in 2015, 3 students representing the schools of Dentistry, Nursing, and Social Work and one faculty from the School of Dentistry observed the services provided in a HIV treatment center. Students participating in this project gained international IP experience that will help them learn the skills needed to enter the workplace as a member of the collaborative practice team in a diverse environment. They also obtained a better understanding of how IPE and collaborative practice can play a significant role in mitigating many of the challenges faced by people living with HIV/AIDS.

Preimmersion. Before departing for Brazil, the team had 3 face-to-face meetings to review the project's objectives, activities, and assignments; to build team relationships; and to discuss overall logistics. Students attended lectures to foster cultural learning and also received an overview of the HIV/AIDS condition by one of the infectious disease specialists at the UMB Joint AIDS Community Quest for Unique and Effective Treatment Strategies Initiative. The students were given a list of common Portuguese phrases and experienced Brazilian cuisine at a local restaurant. Proper greetings, customs, and relevant safety and health tips were reviewed to further understand the best strategies for working on this project in Brazil. Students were required to write a group report of activities and an individual reflection paper.

Immersion. The global destination was Salvador, in the state of Bahia, and more specifically at the

Centro Estadual Especializado em Diagnóstico, Assistência e Pesquisa (CEDAP), a federally funded reference center for sexually transmitted diseases (STDs)/HIV/AIDS. At CEDAP, research, diagnosis, and treatment are priorities. In addition to treatment-related appointments, CEDAP provides sexual education courses, exercise programs, computer and dance classes, and physical therapy. As a public health unit of Sistema Unico de Saude-(SUS), CEDAP gives free comprehensive health care to people living with HIV/AIDS. All staff at CEDAP work interprofessionally, focusing on collaboration among the health care team to address the multifactorial treatment of patients with HIV/AIDS. All members of the team are located within the center at the same time; therefore, patients visit multiple providers on the same day.

Students mainly observed the services provided in this center and the impact of IPE stressing collaborative practice (CP) on improving health outcomes for people living with HIV/AIDS. Each student shadowed professionals from their field of study as well as other departments. In the words of the nursing student: “My shadowing experience with the infectious disease specialist was one that taught me the strong importance of utilizing all members of the health care team. As a student nurse, I have learned how necessary it is to work with other health care members, especially the physician since we spend a great deal of time communicating with one another.” The students also took extensive notes on how the program functions and their observations of professional teamwork, and eventually integrated the notes and developed recommendations that could apply to the local communities in Baltimore.

The program included a didactic component with lectures from various health care professionals. Reflective of the culture in Brazil, these lectures were an open and honest dialogue between the students and the speakers. The students not only learned about the Brazilian health care system but also about its drawbacks and advantages. Considering the recent and ongoing changes in US health care, the discussions were highly pertinent to the students as they enter their own communities as providers. Students were able to observe that the IP team approach is not merely a collection of relevant providers and the team is more than a function of its component parts. Critical to the success of the team is strong communication among the professionals, especially at the clinic level in understanding

how the various coordinated treatments support patient care.

Postimmersion. Students participating in this project gained international IP experience working with many different health care professionals, including social workers, pharmacists, physicians, dentists, nurses, physical therapists, psychologist, and a variety of other specialists who were providing care to patients with HIV/AIDS in Brazil. This helped the students learn the skills needed to enter the workplace as a member of the collaborative practice team in a diverse environment. They also have a better understanding of how IPE and CP could play a significant role in mitigating many of the challenges faced by people living with HIV/AIDS. Upon return to the United States, the students prepared a group report and gave a presentation to members of the UMB community, highlighting their findings, specifically their roles in the HIV/AIDS epidemic:

1. Advocating for the patient;
2. Educating on primary prevention and education for the community on HIV/AIDS;
3. Empowering individuals to play an active role in their own health and understand HIV/AIDS and medications; and
4. Encouraging treatment adherence.

After the experience, students reported several unexpected discoveries about the patients they observed:

1. Compliance with HIV/AIDS treatment can be very complex and affected by many factors;
2. There is condom-use refusal, despite knowing the partners' HIV-positive status; and
3. Persisting inability to access care because of stigma and prejudice.

The take-home messages included:

1. Provide care for all patients using a team approach;
2. Show compassion when providing care; and
3. Always encourage HIV testing with treatment program compliance.

One student remarked: “It was stunning and inspirational to see a team of health care workers from different disciplines work so tirelessly toward a common goal. There is a general sense of camaraderie among the specialists, with each one bringing their own perspective and expertise to the table—from the pharmacist to the dentist, from the infectious

disease physician to the nurse. These individuals empower and motivate each other and in turn their patients. They are compassionate and tireless in encouraging treatment success. The educational experience in IP care was strengthened by having traveled with students from different graduate schools. We each explained our own perspectives to patient care and educated each other on our individual roles as providers. I have a much clearer understanding of what each provider actually does, and what resources are available to the patients. In the future, I will be able to refer my patients correctly based on their needs. Working every day with students from social work and nursing was educational in its own right.”

Moving From Global to Local. The prevalence of HIV/AIDS in the city of Baltimore makes the topic highly applicable, as it ranks second in the United States, with >16,000 known cases. Overall, the IP approach to health care where providers communicate and work as a team improves the success of treatment outcomes. It is a model that has been implemented in large health care systems, such as the University of Maryland and Johns Hopkins Health System. The participating students recommended that Baltimore community-based clinics establish the following:

1. A mandatory educational session for all patients following the diagnosis of HIV/AIDS to educate them about the different aspects of this condition;
2. An IP approach to treating and following up on people living with the condition; and
3. The development of a medication affordability program to improve consistent access to lifesaving medications.

The participating students were able to apply the knowledge gained globally to their respective careers in the city of Baltimore and beyond. In their words:

“I believe that this experience in Salvador, Brazil helped all of us to become better professionals and serve our patients/clients not just here in Baltimore but in any community where we may practice our professions. This experience and knowledge gained is priceless as a professional but has also been important in my personal growth as a citizen of the world and member of a community.”

“This interprofessional trip to Brazil has opened my eyes a great deal to the different resources people that I can reach out to as a nurse. I have learned that although I do not have all of the answers, I should

be able to rely on my team to work through problems in order to provide the best care that I can.”

“Shadowing the physicians and dentists in Brazil taught me that even within an imperfect medical system, excellent and selfless care is what matters most. As such, this has become a personal goal I strive for daily as I provide medical care to my patients.”

LEE: HONG KONG (2014 AND 2015)

The Hong Kong IP project explored topics related to palliative and end-of-life (EOL) care in Hong Kong, China. Palliative care, provided by a team using a holistic approach, is used to control symptoms, improve quality of life, and promote advanced planning for patients with chronic noncurable diseases.¹¹ Guided by the ELT,^{8,12,13} the purpose of these 2 projects was to bring knowledge and skills learned in a global setting to local Chinese Americans (ChAm) in the United States. Specific aims were to:

1. Explore the experiences and beliefs of advance care planning (ACP) among Chinese health professionals;
2. Explore characteristics of communication that facilitate ACP in a Chinese population for the cultural context;
3. Explore dynamics of an IP team as they assist in facilitating the ACP discussions for a Chinese population; and
4. Promote IP collaborations.

The global portion of the project was 3 weeks in 2014 and 2 weeks in 2015 with students from the schools of Dentistry, Nursing, Medicine, and Social Work and one faculty from the School of Nursing. The research portion of the project was approved by the UM IRB.

ACP is “a process that involves preparing for future medical decisions in the hypothetical event that individuals are no longer able to speak for themselves when those decisions need to be made.”¹⁴ It is an essential element in providing quality EOL care. ChAms are the largest Asian group in the United States, with a population of >4 million.¹⁵ Traditional Chinese (TC) culture does not include engaging in discussions of death and dying. TC are described as being less active in making health decisions and reluctant to share personal values. Discussion of these topics is not

deemed necessary or appropriate culturally.¹⁶ To promote ACP in the ChAm community, an IP team, using a culturally sensitive approach, is critical for delivering information and facilitating these discussions.

Preimmersion. Before the global encounter for each group, students met face-to-face 3 times for introductions, to set common goals for the team, to discuss expectations, and to review learning activities and timelines. These meetings were conducted in an informal setting that fostered team relationships and cultivated a friendly learning environment. Topics for the meetings also included knowledge and skills in effective communication, teamwork, ACP, Chinese culture, and preparation for travel.

Immersion. Students traveled to Hong Kong where they participated in an International Conference on Grief and Bereavement in Contemporary Society, a multidisciplinary, international palliative care conference. They also attended the International Conference of the China Association for Intercultural Communication where they learned more about these topics and engaged in discussions and sharing of roles and responsibilities among other global health care professionals. With UMB faculty oversight and guidance, they participated in a mixed-method research study, which included recruiting participants, collecting, and analyzing data, and preparing an abstract that was presented in an IP care conference¹⁷ and invited to post on the World Health Organization's Education for Health Professionals' website.¹⁸ These activities provided opportunities to work with professionals from different disciplines and to practice problem solving, effective communication, and teamwork. Group reflection meetings were held with faculty to promote additional team learning. As a formal group, the students attended a Chinese festival, tea tasting, Tai Chi classes, Guzheng performance, and a calligraphy show, as well as tours of health care facilities. Students also made time for hiking, Dim Sum tasting, sightseeing, and shopping.

Postimmersion. Upon their return to the United States, the team concluded the project with preparations for presentations, publications, reports, and continued reflective discussions. Although the students had participated in conducting mixed-method research and learned the mechanics of data collection and analysis, they also practiced teamwork and communication under multiple circumstances. They learned from each other during the project, gained a better understanding of the responsibilities of different disciplines in providing

palliative care, and felt much more comfortable to work in an IP and global setting. This is reflected in the postconference and reflection journals, as noted in the following quote: "The experience has been eye-opening in how different cultures function differently in the same type of medical field, meaning that they all practice Western medicine, but the decisions made for the patient are based on different factors and different visions...I used the experiences gained in this project to develop a proposal for Asian Americans that is funded by the...UM School of Nursing."

Moving From Global to Local. The following are 4 examples of how global learning from this project was transferred to the local community:

1. The cultural learning that was experienced during the total immersion in a global setting increased students' exposure to Chinese culture and their engagement in cultural activities and adaptation, with the potential knowledge transfer to ChAm patients in the United States.
2. The research findings provided formal data on attitudes toward ACP among Chinese health care professions and the communication strategies to initiate ACP to local ChAm. A collaborative relationship between the University of Hong Kong and the University of Maryland's School of Nursing has now been established and we are working on the development of an exchange program for students to expand their knowledge and experience. This project will focus on serving the Asian population in the United States and Hong Kong.
3. Through team interviews and discussions with other health care providers, the students gained knowledge from professionals who have had rich experiences in caring for the Chinese population. This knowledge can be used to develop interventions that promote ACP in local ChAm populations.
4. The IP experience prepared these students to work effectively with other professions to provide quality care as one student concluded: "Through this trip and program, I have grown a better understanding of other professions and interprofessional relations and teamwork."

CONCLUSIONS

Particularly important to these projects was the IP team approach. The inclusion of students and faculty from divergent professional backgrounds and personal perspectives added a rich layer of detail that deepened the overall project value. Students and faculty from different disciplines, with varying cultural backgrounds, priorities, and perspectives,

brought a broad spectrum of colors to this project's palate. They learned from each other; explored feelings, reactions, and ideas; shared experiences; and worked together for a unified goal. No better opportunities exist for experiential learning than ones that combine didactic, fieldwork, and intense cultural

exposure with time for reflection! Fortunately for faculty and students, these projects have been supported and encouraged by the UMB president and campus leaders, with designated funding from the Centers for Global Education Initiatives and Inter-professional Education.

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