

ADVANCING HUMANITY IN CAMBODIA

Learning Community

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FROM VISION TO APPLIED, COMMUNITY-BASED RESEARCH: SEVEN YEARS OF THE CAMBODIAN LEARNING COMMUNITY

Jo Ann Burkhardt, McMaster Fellow

The 2009-2010 academic year marked the sixth year of operation of the Cambodia learning community. From 2003 through 2010, the McMaster School for Advancing Humanity has sent to Cambodia over 60 Defiance College undergraduate and graduate students and more than a dozen faculty and staff representing numerous majors from all academic divisions. During these years, I have been privileged to experience the evolution of Helen and Harold McMaster's concept of advancing humanity from vision to the applied, community-based research of interdisciplinary learning communities focused within the Kingdom of Cambodia in Southeast Asia.

Within these learning communities, both fellows and scholars have worked together to meet the needs of our community partners in Cambodia. In meeting the needs of our community partners, we, as members of the learning communities, have benefitted from the confluence of the application of interdisciplinary knowledge, democratic practices, and intercultural competence with a commitment to mutual benefit.

In thinking about benefits to scholars over the years, I tend to categorize these benefits within an equilateral triangle-like framework of (a) personal, individual accomplishments, (b) disciplinary victories, and (c) contributions to social justice. I have described and categorized these scholar benefits over time by observing behavior, listening during reflection sessions, and reading scholar journals. These are my perceptions, sometimes affirmed by scholars or in similar observations by a community partner or a co-fellow within the learning community.

In working with Cambodian learning community scholars, I have been witness to many personal, individual accomplishments, each one unique and contextually bound to some aspect of our travels and work with community partners. These accomplishments have been both loudly proclaimed and quietly demonstrated. One scholar conquered a fear of heights while climbing untethered the ancient, rocky, wall steps to the top of Angkor Wat, the highest place of worship for the ancient Khmer people. Another scholar demonstrated personal bravery as she left her fear of flying behind her during the 17-hour flight across the Pacific Ocean. Again and again, it has been a wonder to witness scholars shedding layers of self-doubt as they navigate everyday life in an unfamiliar place, venturing out and through Cambodian culture as global citizens.



When given the opportunity to delve deeply into disciplinary knowledge and then apply that knowledge within authentic experiences, these new global citizens have also demonstrated disciplinary victories. The authentic experience can happen in any context, such as working with a translator to answer the “why” and “how” questions of medical professionals in Phnom Penh and Battambang, and it is always a magical moment when a scholar realizes that disciplinary knowledge can be applied to “advance humanity” and to empower fellow global citizens. I consider it a disciplinary victory when a 20-year-old microbiology major can transfer his knowledge of malaria formation within the human body to a group of undertrained physicians a long way away from the labs in Tenzer Hall.

I have also observed a math education major’s disciplinary victory as she worked with willing villagers serving as teachers to use hands-on activities that made concrete the abstract concepts of algebraic problem solving. When a small group of teachers clapped and cheered at a group’s ability to utilize a handmade balance scale to demonstrate understanding of equalities, disciplinary victory was evident. This scholar applied her math knowledge in an authentic manner. Her deep understanding of an algebraic concept allowed her to lead teachers to a previously unknown pedagogical space which in turn might allow their students to gain needed math knowledge.

Based on my observations, disciplinary victories have a number of attributes. Somewhere between conducting research in Defiance and providing training in Cambodia, scholars begin to use specific disciplinary vocabulary and language. They become articulate and precise when discussing the application of disciplinary knowledge. As scholars implement projects, I overhear them discussing with faculty fellows a connection made, a concept made clear, and the application of textbook knowledge made apparent. Through journal entries and comments made during periods of debriefing and reflection, students routinely acknowledge these cognitive turning points. It appears that what surprises and pleases scholars most is that their transfer and application of disciplinary knowledge grows into interdisciplinary knowledge capable of works of social justice. They have moved from stockpiling knowledge and checking off requirements for an academic degree to the notion that they can, through their own acquisition and transfer of knowledge, empower people to create their own knowledge and then apply it to solving complex problems. In so doing, McMaster scholars begin to construct their sense of personal responsibility to and within the global community.

As a faculty fellow, I have benefited from work within the McMaster School. In working with the pedagogies of undergraduate research and

international community-based research, I have also become an active member of a global community. I have been privileged to work with scholars who will or have become leaders within their chosen profession. Working with these scholars has allowed me opportunities to work collaboratively in developing strategies and to engage in democratic practices while facilitating the important work of the McMaster School within the Cambodian learning community. Most important to my professional development, I have learned how to work and teach within an interdisciplinary framework. Within this framework I have witnessed scholars making connections across disciplines and applying specific disciplinary knowledge to solve complex problems in collaboration with scholars from other – and on the surface, seemingly unrelated – disciplines. Observing scholars crossing traditional boundaries has been a delight, and by crossing these boundaries, scholars have created an opportunity where often neglected world problems can be solved with a commonality of purpose.

This commonality of purpose has also benefitted our community partners. My primary community partner for these past seven years has been Sophie Leng Stagg, executive director of the Southeast Asia Children's Mercy Fund. Sophie survived the brutal regime of the Khmer Rouge between 1975 and 1979 within the Kingdom of Cambodia. In late 1979, Sophie was able to immigrate to the United States as a young teenager to begin a new life.

After nearly 20 years as a U.S. citizen and as a young wife and mother, Sophie Leng Stagg dedicated her life to the health and welfare of women and children in Cambodia. I had the distinct pleasure of meeting Sophie on the Defiance College campus in the spring of 2000 when she was brought to campus to tell her story of her life under the Khmer Rouge. Due to an incredible amount of circumstance, a few years following her Defiance visit, we met again and talked for hours about the nature of public education in Cambodia. I was struck by her passion for her ongoing work in Cambodia and we decided to attempt a partnership whereby I would work on behalf of and in partnership with the Southeast Asia Children's Mercy Fund.

Together Sophie and I have created a partnership through which the needs of two distinct organizations, the McMaster School for Advancing Humanity and the Southeast Asia Children's Mercy, have been met. It might be suggested that through a shared vision, Sophie and the McMaster School have advanced humanity. I think Harold McMaster would be pleased.

REFLECTING ON REFLECTION: FACILITATING CRITICAL THINKING IN A LEARNING COMMUNITY

Fred W. Coulter, Ph.D., CFLE, McMaster Fellow

In May of 2010, the eighteen members of the Cambodian learning community travelled half way around the world to implement McMaster projects in three regions in Cambodia. With all the excitement surrounding international travel to a very different place than Northwest Ohio, learning community members needed a way to process information and experiences, and to share their thoughts with the community. Just sitting around and talking seemed to leave the discussion developing at random. Moreover, the emphasis of the learning community was on developing scholars' critical thinking skills. While reflecting on personal experience was valued, the focus was on how reflection could enable members to think critically about what they were experiencing within the context of the McMaster School's mission of advancing humanity.

In order to explain the process and product of the learning community's reflection, this paper is written in three sections. The first section introduces a two-part model of reflection developed by Donald Schon (1983) that emphasizes stages termed reflection-in-action and reflection-on-action. The second section describes two instances (of many) in which the learning community engaged in reflection-on-action of their experiences in Cambodia. The third section offers suggestions for future research.

LITERATURE REVIEW

Reflection-in-Action and Reflection-on-Action

The two-part model of reflection developed by Donald Schon (1983) and described in *The Reflective Practitioner: How Professionals Think in Action* was used to guide the learning community's reflection sessions. The first part of the model, reflection-in-action, is described as reflection during an experience. Schon (1983) describes this as thinking on one's feet as the situation unfolds. Split second decisions are made based on past experience, intuition, and feelings.

The practitioner allows himself (*sic*) to experience surprise, puzzlement, or confusion in a situation which he finds uncertain or unique. He reflects on the phenomenon before him, and on the prior understandings which have been implicit in his behaviour.

He carries out an experiment which serves to generate both a new understanding of the phenomenon and a change in the situation. (Schon, 1983, p. 68)

Thus, reflection-in-action is done in the moment based on past knowledge and experience. By contrast, reflection-on-action is done after the situation has past. This is a time to reflect on what happened, why it happened, and what were individuals' and the group's reaction to it. Schon (1983) describes it as:

When a practitioner makes sense of a situation he (*sic*) perceives to be unique, he *sees* it *as* something already present in his repertoire. To see *this* site as *that* one is not to subsume the first under a familiar category or rule. It is, rather, to see the unfamiliar, unique situation as both similar to and different from the familiar one, without at first being able to say similar or different with respect to what. The familiar situation functions as a precedent, or a metaphor, or...an exemplar for the unfamiliar one.

Using the reflection-on-action model, the learning community gathered as a whole on a regular basis during their time in Cambodia to discuss members' experiences. The format was to focus on a single topic and have members speak from their own experience. Members were given the opportunity to speak freely about their experiences. The group leader modeled not interrupting the speaker or needing to make comments right after the speaker had finished. Members processed what the speaker had to say through a pause in the reflection session and then the next speaker started to reflect on his or her experience. After all the members had spoken, then members of the Learning Community could offer a general reflection to what had been said. Very often, these general reflections were how others' reflections added to a particular member's experience. The end result was that the reflections enhanced everyone's experience of a situation through the layering of other's reflections.

METHODOLOGY: THE LEARNING COMMUNITY AND REFLECTION-ON-ACTION

A Reflection-on-Action Session Focused on Coping with the Heat

When we arrived in Phnom Penh, the temperature was in the high to mid-nineties with high humidity. Even the local residents said it was hotter than usual. One of the learning community's first tasks was to become familiar with the culture of the city and the best way to accomplish that task was to go to the markets. At the Orussey Market, members shopped for fabric that later would be tailored into suits, shirts, and skirts. The sights, sounds, and

smells of the market could be overwhelming at times, especially in the fish section. After gathering up our cloth, it was off to another landmark, the Olympic (or Russian, as it is commonly called) Market to be fitted by a tailor.

We arrived at the Russian Market in five tuk-tuks, covered but open four-person carriages hitched to small motorcycles. We ventured inside and like the previous market, it was ripe with overpowering sensations to overpower. After a bit, one of the leaders said he was taken aback by the heat, jet lag, and sensory overload and recruited another leader to accompany him to an air-conditioned restaurant for a cold drink. The leader's suggestion of a cold drink would be an example of reflection-in-action. He was not feeling well and made a split second decision to find relief. After a bit in the cooler and calmer environment along with a cold drink, the leader felt much better and returned to the market to meet the group for the trip back to the hotel. This reflection-in-action experience became the focus of the first reflection-on-action for the learning community.



When the Learning Community convened in the one of the larger air-conditioned hotel rooms (a triple), the reflection leader asked members to talk about how they handled the heat. The responses ranged from, "not very well, because I become crabby so you may want to stay away from me" to "lots of baby powder to reduce chafing." Everyone shared their experience, because as a learning community we were going to have to come to grips with the fact that we would be spending the next three weeks in high temperatures and humidity with breaks in air-conditioning for lunch, dinner, and sleep. This reflection-on-action led members to take advice from others about how to

cope with the heat and how to interact with each other under such extreme conditions.

A Reflection-on-Action Focusing on Members' Academic Disciplines

In a few days, many of the projects were implemented in Phnom Penh. These projects ranged from water sampling to trainings in microscope use, first aid, non-violent games, micro-lending, and marketing, to a teacher in-service. In preparation for leading these training sessions, scholars needed to become experts of their projects and disciplines in order to reflect-in-action to participants' questions. When participants, who were professionals in health care, human services, and teaching, asked questions, scholars needed to formulate accurate intelligent answers at a moment's notice. The scholars were well prepared and did an admirable job and their experience of reflecting-in-action became the focus of another reflection-on-action session. The scholars were asked to describe how their discipline (business, social work, education, science, sport management, and international global studies) helped them to formulate answers to specific questions, but more generally how discipline served as a lens through which to view their experience during the trainings.

As expected, each discipline brought a unique perspective. The biology major's experience with physicians, clinicians, and lab technicians was medically related. The global studies major's perspective was steeped in the history, culture, and language of Cambodia. The social work majors looked at how their trainings would empower participants of their workshops in first aid, natural birth control, and non-violent games to help children cope with the stress of domestic violence. The business students explained how their business model could help women start their own small businesses. The sport management major's experience with children using stretchy thick rubber tubing called Thera-Bands helped to promote physical activity. Finally, the education students' in-service presented new teaching methods to Cambodian teachers. Each discipline offered a different perspective on being in Cambodia and, in turn, each learning community member could experience how his or her discipline interrelated with other disciplines to help fulfill the McMaster School mission of advancing humanity.

SUGGESTIONS FOR FUTURE RESEARCH

With the apparent success of using Schon's (1983) model of reflection, further research needs to be conducted to determine specific benefits of its implementation. Two research questions would help guide the method of data collection and analysis. First, "What themes emerge as members of the learning community talk about their reflection-on-action of a focused

topic?" Second, "What are the learning community members' reactions to participating in the reflection-on-action discussions?" Future research can use the first question to assess the common themes that emerge from members' discussions and whether those themes are specific to particular disciplines and/or projects, and use the second question to help determine the efficacy of implementing the model.

Data collection for the first question would consist of writing extensive field notes immediately following the reflection-on-action session. After all the field notes are recorded, a qualitative analysis searching for emerging themes would be conducted. Once the themes are identified, the question is then posed, how are they similar and how are they different and why? Once the first question is answered, data from the second question can be analyzed. For the second research question, several open-ended questions could be asked of the learning community members, such as, "What was your impression of participating in the reflection-on-action sessions?" and, "By participating in the reflection-on-action sessions, what have you learned about yourself as a scholar, associate fellow, or fellow in the process?" A final question could be, "Were there benefits to completing your project by participating in the reflection-on-action process?" Once again, the responses could be coded for emerging themes. As before, the themes can be compared and contrasted to evaluate the efficacy of conducting the reflection-on-action sessions.

CONCLUSION

Implementing regular reflection-on-action sessions as described by Schon (1983) appeared to have enriched learning community members' experiences while in Cambodia in May of 2010. The reflection-on-action sessions focused on topics ranging from how members handle the extreme heat to how viewing their work in Cambodia through the lens of their academic disciplines influenced their experience. While, the learning community's general reaction to reflection-on-action was positive, further research needs to be conducted to discover the benefits of such sessions for all Cambodian learning community members.

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LESSONS IN FOSTERING NEW RELATIONSHIPS: A SCHOLAR'S RETURN TO CAMBODIA

Rachel Flad, McMaster Scholar

My second trip to Cambodia in two years proved to be a rather unique experience for my growth personally and academically. My first trip to Southeast Asia was a truly eye-opening experience. From the sights and smells, to language and transportation, every day was full of new experiences that I knew I would never forget. During our learning community meetings throughout the year, it was impossible to put into words the experiences that lay ahead of my fellow scholars, but I also had no idea how my project would transform this and future McMaster trips.

LITERATURE REVIEW

Arsenic contaminated drinking water has been pegged as a large public health concern over the past 20-30 years. The level of arsenic toxicity varies from case to case depending on the rate and method of exposure and the amount ingested by the individual. There are many symptoms of arsenic exposure, ranging from skin lesions to stomach and intestinal cancers (Luu, 2009, pp. 455-456). The World Health Organization (WHO) has taken steps to warn individuals of potential health risks associated with drinking contaminated drinking water, and states that drinking water with 10µg/l or less of arsenic is safe for consumption (Smith, 2004, p. 39). Seven of Cambodia's provinces have high enough levels of arsenic in the groundwater to contaminate the drinking water supply. There are consistent arsenic levels of 300-1,000 ppb which is over 30 times the recommended levels from the WHO. However, individuals who have weakened immune systems or are malnourished are still at a heightened risk for arsenic poisoning even at that level (Smith, 2004, 39). Further, water-related diseases are the leading cause of Cambodia's infant mortality rate of 24 for every 1,000 live births (Feldman et al., 2007, p. 101). Since arsenic is a naturally occurring element in the Earth's crust, there is no way to completely eliminate the problem, though organizations from around the world are joining the fight to combat this deadly situation.

Resource Development International (RDIC), a non-government organization (NGO) based in the United States, is tackling the challenge of providing clean drinking water for all Cambodians. In 2008, only 41% of all Cambodians had access to safe drinking water (Murphy et. al, 2009, p. 562). RDIC has both an on-site laboratory to analyze water samples and an area to produce the low-cost ceramic water filters that have impacted so many Cambodians

throughout the central part of the country (Buschmann et al., 2008, p. 7). But arsenic contamination is not just a rural issue; it is commonly found in urban centers as well (Feldman et al., 2007, p. 106). The clay filters produced by RDIC have been a huge success, but there have been issues of outside contamination of the filters during cleaning (Murphy et al., 2009, 567-569). The remediation of this problem will not occur overnight, but will need continuous work in the years to come so that one day, all Cambodians have access to clean drinking water.

METHODOLOGY

I initially made contact with Resource Development International during Fall 2009. My primary contact was Andrew Shantz, the laboratory director at the Phnom Penh office. Through much communication, Andrew and I arranged a time for the Defiance College group to come to the RDIC compound to take a tour, learn more about the organization's focus, and to discuss future collaborations between RDIC and Defiance College.

Our meeting yielded great results as our group got a detailed tour of the facilities that RDIC uses to produce the clay water filters, and learned about the impact these filters have in providing clean drinking water to rural villages, and about the impact of RDIC's educational program in the local schools. During the next couple of days after the initial visit, McMaster scholar Brittany Coats, McMaster fellow Dr. Don Buerk, and I returned to RDIC to assist with basic data calculations and to begin discussions on what a future partnership between RDIC and Defiance College would entail.

CONCLUSION

The opportunity to begin a new partnership was a truly eye-opening and rewarding experience. Many things can be done to improve and continue the initial arsenic research project and the partnership with Resource Development International which has the potential to incorporate scholars from nearly every major on campus. To name just two, science majors will be drawn to this project with its apparent science emphasis, while education majors can collaborate with RDIC to refine the techniques used in schools to teach proper hygiene. Though I did not have the chance to provide clean drinking water to all Cambodians (which I will be the first to admit was my initial goal as a McMaster scholar), I hope that the partnership between Defiance College and Resource Development International has a long and prosperous tenure.

REFLECTION

This opportunity to travel to Cambodia for the past two years has helped me grow both personally and academically and I hope to continue to

travel internationally, even after my graduation from Defiance College. Cambodians have taught me the true importance of community and strengthened my belief that family can strengthen any bond between individuals and communities. Even though Cambodia has an extremely dark and depressing past, the future looks bright and prosperous. With the assistance from NGOs like RDIC, and partnerships with institutions of higher learning like Defiance College, Cambodians can begin to have access to the basic essentials and the technology to help them progress in the future.

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INTRODUCING CAMBODIAN WOMEN TO MICROFINANCE

Kim Lammers, McMaster Scholar

Preparation for my McMaster project began long before I got to Defiance College. While I am in my second year of the Master in Business Administration program, my previous service program experience with Project Affinity, gained while working on my bachelor's degree from Baldwin-Wallace College in Berea, Ohio, laid the groundwork for my work in Cambodia. Through Project Affinity I spent one summer volunteering in Cleveland, particularly at Cleveland's Women Crisis Center, a homeless shelter for women. When I learned that the Cambodian learning community worked with a women's shelter I was interested in helping. My connection with Sarah Plas who had been working on a micro-lending project the previous two years encouraged me to use my expertise in business to continue her project and help the Cambodian Women's Crisis Center.

LITERATURE REVIEW

History of Micro-lending

Micro-lending was started by Professor Muhammad Yunus in Bangladesh in 1977. Having seen severe poverty in his country, Yunus, a professor of economics, believed that he and his students could do something about it. When his students came back with information that forty-two stool makers in Jobra were unable to get a loan that totaled twenty-seven dollars, a frustrated Yunus pulled out the money from his own pocket and told his students to loan it to the workers. Yunus went on to work with banks and the government and gave micro-loans until he was able to officially open the Grameen Bank in 1983. Since then, micro-lending agencies have been created all over the world, using Yunus's Grameen Bank as a model (Yunus, 2003).

Cambodia's Credit History

Cambodia lost all forms of banking during the Khmer Rouge's oppressive reign. After the Khmer Rouge's loss of power, Cambodia became the People's Republic of Cambodia which was heavily controlled by the Vietnamese and continued with the Communist theory. At this time the banking system was inefficient, had feeble credit policies, and was rampant with mismanagement (Chou, Hoy, Soung & Pen, 2006; "Developing," n.d.). Following the Paris Peace Accords the United Nations created peacekeeping operations in Cambodia that included the United Nations Transitional Authority in Cambodia (UNTAC). With the entrance of UNTAC and other non-government organizations Cambodia began to emerge from its isolation and became the State of Cambodia and today the Kingdom of Cambodia. Proper banking systems were created throughout Cambodia

along with micro-finance (Chandararot, 2002; Chou, Hoy, Soung & Pen, 2006; “Developing,” n.d.; Derks, 2008).

Women and Micro-loans

Horrible stories of the oppression of women exist all over the world (Kristof & WuDunn, 2009). Women are forced into prostitution, beaten, and starved. Women are not seen as equals with their male counterparts and therefore are not given the same health care, nutrition, or rights. Micro-lending is a program that has been traditionally modeled towards women for many reasons. Not only are women more likely to use the income that they make to improve the home, nutrition, and schooling of their children, many of these women also would not be given loans were it not through a micro-lending agency. Women are empowered through the process of receiving loans and creating businesses, and as women bring money into the family home they are often respected more by their husbands, beaten less or not at all, and often have fewer children (Kristof & WuDunn, 2009).

In Cambodia, sex trafficking has become a problem in modern times. Families will either knowingly sell or be tricked into selling their daughters into brothels. Women can also be kidnapped or taken from their families and forced into sex work. Some women, desperate to make a living, may choose to enter into the brothels on their own volition. While in the brothels it is common for brothel owners to push drugs on the prostitutes, and once the prostitutes are addicted they will be less likely to leave because they receive their fixes through the brothel owners. Brothel owners will also loan prostitutes money, or if they have purchased the women then the women become indentured servants until their debts are paid (Derks, 2008). Shelters like the Cambodian Women’s Crisis Center help both women who want to leave prostitution and women who have suffered domestic violence or other difficult situations. For these women there are few options to independence, but through micro-finance loans they are given the chance to become entrepreneurs (Cambodian Women’s Crisis Center, 2006).

PLAN

Once in Cambodia, researching the local markets will be necessary to observe the ways that the culture conducts business. With these limited observations, the scholars will meet with the staff of the Cambodian Women’s Crisis Center (CWCC). The seminar with the staff will entail establishing vocabulary, determining interest, and setting goals through a workshop. A list of simple business terms will be created and translated before going to Cambodia which the scholar will discuss with the staff and add to or amend as appropriate for the CWCC. A drawing activity will be created to both determine the women’s interests and to establish a dialogue to ensure that

the interests are achievable and realistic.

Because Cambodian women do not typically create goals of these sorts, explaining what goals are and how they can be beneficial will need to be discussed. Once a basic understanding is established, women will be given a goal-setting activity that will challenge them to think about what they want for themselves and their businesses, and what steps they will need to take to accomplish their goals. By stating their goals the women will have accomplished the first step in creating their business plan.

This project only encompasses one part of a business plan and two portions of the loan model that the CWCC would like to enact. Scholars in the following years will continue taking one step at a time until the training manual and activities are created for the entire loan model.

REFLECTION

In the markets

While in Cambodia we were able to witness and participate in many different types of consumerism. Cambodians do not have set prices for their goods and services, but rather negotiate prices, a practice that must be considered when setting prices for products. The business owner must set an initially higher price, but also know how low they are willing to negotiate down while still maintaining a profit.



At the Cambodian Women's Crisis Center

The training manual was presented at three locations of the CWCC: Phnom Penh, Sisophon, and Siem Reap. The CWCC locations varied by the number of women and children at the shelters, and urban versus rural settings. In Phnom Penh, the training occurred in a meeting room that had chairs, a conference table and air conditioning, but in Siem Reap training took place on the floor of a deck that overlooked a courtyard. While all the locations were adequate, the differences demonstrate the spectrum in which the CWCC operates their shelters.

The staff at the shelter really enjoyed the manuals, activities, and the arts and craft supplies that we left with them. Staff at all three locations stated that their largest obstacle was having the women participate in the activities and use the arts and craft supplies because the women had never before used such supplies and might therefore be uncomfortable with them. The women are also at different stages while at the CWCC. For example, women who have recently been removed from a violent situation may have a harder time working through the process. It was suggested that the staff work with the counselors and take the process slowly as each woman may have a different pace for developing her business plan.

REFLECTION

On a personal level, visiting Cambodia was extremely challenging due to the different foods, high temperatures, travel, and cultural transitioning required. The experience will assist me in working within a group setting during demanding situations, listening and working with others over caring solely for my own wants and needs. Because Cambodian culture is a community-based culture which differs from the individualistic culture of the United States, this experience has caused me to look outside of myself and expand my view of the world. This differing perspective will assist me in business and in life, and I am truly appreciative to the McMaster School at Defiance College for giving me this opportunity.

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TRAINING CAMBODIAN TEACHERS TO UTILIZE DIRECT INSTRUCTION

Harmony Beck, McMaster Scholar

Teaching is my passion. The sound of young children on the playground is like music to my ears. My love for children led me to become an early childhood education major at Defiance College, and when I learned of the McMaster School's project in Cambodia, I felt that it was the perfect opportunity to learn more about my future profession. As a non-traditional student, I took a huge leap outside my comfort zone and left my husband and young son to travel across the globe to share both my passion for teaching and my knowledge and skills of the direct instruction teaching method with teachers across the globe.

LITERATURE REVIEW

Because I would be spending an extended period of time in Cambodia, I began by investigating the education system. Prior to this project I was unaware of the reign of the Khmer Rouge and the genocide that regime inflicted in the late 1970's. From 1975-1979 the Khmer Rouge destroyed most of the foundation of modern education including books, buildings, and various educational resources. In *Cambodia: A Country Study* Ross (1987) states, "90% of that country's teachers were killed during the Khmer Rouge reign" (Ross, 1987). Over thirty years later Cambodia is still rebuilding their education system along with many other aspects of the country's infrastructure.

Upon learning of this tragedy I began to feel that not only was my project needed in this country, but also that my passion for education would truly make an impact on their education system. Due to limited educational resources, Cambodia's teachers would highly benefit from this teacher training session. In 1998 the Cambodian Ministry of Education, Youth and Sport released statistics found during a study of teacher education. Of the country's teachers, 6% have a primary education only, 77% only attended lower primary school, 14% attended upper secondary school, and only 3% have a higher level education (Tan, 2007).

To ensure that I would provide a high-quality teacher training while in Cambodia, I gained a full understating of the direct instruction teaching method. Direct instruction is a well planned, organized, and sequenced method of teaching where the teacher demonstrates a lesson step by step.

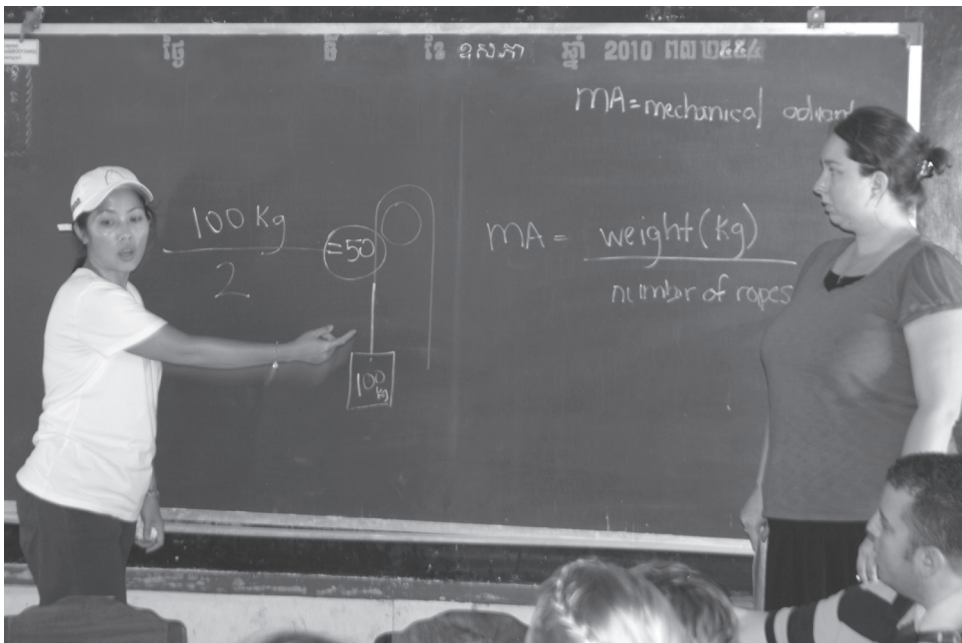
The purpose of direct instruction is to convey information in as precise manner as possible (Beyer, 2008, p. 196).

PROJECT DESCRIPTION

After completing extensive research on both the direct instruction teaching method and Cambodia's education system, I created teacher-training literature to be distributed to teachers during my training session while in Cambodia. This direct instruction manual consisted of an in-depth breakdown of each phase of this teaching method as well as a section pertaining to the educational psychology related to utilizing direct instruction in the classroom.

IN-COUNTRY ACTIVITIES

When I was in Cambodia, I had the opportunity to conduct two teacher training sessions in the public school system. The first session was in a large school in the capital city, Phnom Penh. The second was in a smaller school in Battambang, in the northern part of the country. Both training sessions were highly successful, and the teachers were both receptive of the information I was giving and thankful to receive the training materials. Many of the teachers and school administrators at these sessions informed me of their plans to distribute the materials to those who were unable to attend. It was at that point that I knew my project was successful, and I am hopeful for how the materials I prepared can positively impact future teachers and students.



REFLECTION

When I first arrived in Cambodia in May 2010 I was overwhelmed by the vast differences of daily life in the United States and Cambodia. However, it was not long before I began to immerse myself in the rich culture and surroundings. The Cambodian people I encountered were some of the kindest, most sincere individuals I have ever met and many, including the teachers at the schools, shared stories of their lives and the hardships they have endured. From conversations with teachers I gained an understanding that, regardless of the resources available, a teacher's ultimate goal is to help his or her students become successful both academically and in life.

While in Cambodia I was blessed with the opportunity to work with Sophie Stagg and the Southeast Asian Children's Mercy Fund. I will forever be touched by the experience of helping those less fortunate than myself.

In addition to being immersed in and experiencing a new culture, I developed a deeper understanding of my own teaching philosophy, which will undoubtedly enhance my future profession. I am grateful to be part of the continued advancement of humanity through the McMaster School.

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TEACHING ACTIVE LEARNING IN CAMBODIAN SCHOOLS

Andy White, McMaster Scholar

Over the past three years while pursuing a degree in early childhood education I have learned so much about different teaching styles and how they can be a benefit to the classroom. When I found out during my McMaster application process that schools in Cambodia were interested in active learning and how to apply it to their classrooms, I felt this fell into my area of education very well. I knew what active learning was and believed I could show Cambodian teachers how it can be a major benefit in the classroom. Because the teachers in Cambodia also requested active learning examples around physical science lessons, I had to expand my project to understand the six simple machines and how they can be used in the active learning style. My interest and knowledge coupled with Cambodian teachers' needs and desires presented a great opportunity to travel outside my comfort zone and experience a brand new culture while focusing on education.

LITERATURE REVIEW

According to Mickelson, Kaplan, and MacNeily (2009), "active learning is a metacognitive process, defined as the ability of the learner to monitor his or her current levels of mastery and understanding, thereby providing the individual with a picture of how he or she learns. During active learning the student takes control of his or her own learning." The authors cite Bonwell and Eison as defining active learning as "anything that involves students in doing things and thinking about the things they are doing" (Mickelson, Kaplan, & MacNeily, 2009). While active learning can be broken down into a various of taxonomies, Mickelson, Kaplan, and MacNeily (2009) emphasize Graffam's "3 key components: (1) intentional engagements, (2) purposeful observations and (3) critical reflection."

In "Active Learning Across Borders: Lessons From an Interactive Workshop in Brazil," Kille, Krain, and Lantis (2007) build on the work of other researchers as they emphasize active learning's benefits. First, "active learning enriches student understanding of key concepts in international affairs." Second, active learning "can create powerful and effective learning environments by encouraging students to take risks and to express their views on complex and controversial issues." Third, active learning "increase[s] the retention of knowledge" (Kille, Krain, & Lantis, 2007). As University of London's Dr. Mary Dengler (2008) states in "Classroom Active Learning Complemented by an Online Discussion Forum to Teach Sustainability," "Active learning means that rather than students passively

receiving information, they are interactively engaged in their learning through activities that foster development of critical thinking. Active learning may include activities both in and beyond a classroom setting. In the classroom, active learning may occur through a range of activities: role-playing, small-group work, integration of multimedia images and sounds, guided classroom discussions, and writing exercises.” By Dengler’s (2008) definition, active learning as a teaching method can be beneficial in a classroom when used in a correct manner. In addition, active learning is adaptable, allowing students to gain their own understanding through personal learning experiences (Dengler, 2008).

Active learning has also been used throughout the medical field, making the case that active learning can be used not only in education but also in other fields. In “Active Learning through Role Playing,” Poling and Hupp (2009) state that the medical and science fields planted seeds of active learning. Poling and Hupp (2009) emphasize the ways “simulations and role plays,” which originated in “medical, science, and engineering courses,” are now used by “a wide variety of subjects like history, political science, and sociology.” In “The Peer Active Learning Approach for Clinical Education: A Pilot Study,” Stevens and Brenner (2009) examine how active learning was found to be beneficial in the medical field as “students who are actively engaged in guided discussions and group work are more likely to develop problem solving and CT skills.” Stevens and Brenner (2009) have



tested and found true that, “actively engaged students may have improved opportunities to evaluate and explain their own ideas and practice” in clinical settings specifically (Stevens & Brenner, 2009).

While active learning can be implemented in a classroom in many ways, classroom discussions and role-playing are two of the simplest and most beneficial. According to “The Role of Active Learning in College Student Persistence” by Braxton, Jones, Hirschy, and Hartley (2008), “Classroom discussions, a form of active learning, wield a positive influence on social integration, subsequent commitment to the institution, and intent to return to the focal university in the subsequent fall semester.” They continue, “Although they found a positive link between active learning in the form of class discussions and subsequent institutional commitment and the intent to return, their primary focus centered on the role of active learning in fostering the social integration of students” (Braxton, Jones, Hirschy, & Hartley, 2008). Poling and Hupp (2009) concur, stating, “Role playing of real world scenarios is appealing in many disciplines because it requires students to actively imagine how they would adapt to different contexts and can therefore impart a sense of empathic understanding for different life circumstances.” They also emphasize other advantages “ranging from student enjoyment and interest to long term retention of material” As evidenced, active learning, which can be incorporated into the classroom in many ways, benefits not only the classroom but also social engagement from student-to-student or student-to-teacher.

PROJECT DESIGN

After completing my review of literature I began to focus on how I could use this new knowledge and apply it to the classroom in ways that would be easy for teachers in Cambodia to understand. I began first by creating an active learning lesson plan template that I would use to present each lesson plan, believing that this consistency would help both me and the teachers in Cambodia to understand how to set up an active learning lesson plan. When I completed the template I started creating lesson plans that could be translated and given to the teachers, beginning with an introduction lesson to simple machines followed by a lesson plan for the pulley, wheel and axle, lever, and screw. I combined the inclined plane and wedge lesson plans since they are closely related. Along with each lesson plan I had an assessment worksheet for the teachers that they could choose either to use or not use after each lesson was completed. Prior to leaving for Cambodia we also went shopping for supplies need for the presentation of each of the lessons. This way we did not have to worry about gathering and finding supplies once on the ground in Cambodia.

PROJECT DELIVERY

Once in Cambodia I felt prepared and excited to begin my project that I had been working on for about a year. I was told once we had arrived that I would be presenting my project two times while on the ground. My first presentation was in a computer lab at a school in Phnom Penh, an urban area. During this presentation I felt that the teachers did not fully understand what I was trying to say and that they were concerned because they did not feel that they had the proper equipment to present these lessons. They also showed concern about the high number of students in their classrooms that made it difficult for students to focus on the lesson they were teaching. Once we explained how they could place students into groups and how to gradually incorporate active learning into the classroom they were much more willing to listen. Working with other scholars, we also demonstrated how active learning might look in their classrooms. This was a major help because the teachers could actually see how these lesson plans might work and benefit their own students.

My second presentation was at a more rural school in Battambang that had invited in teachers from several area schools. I walked in to a full classroom of teachers eager to listen to what my presentation and very open to active learning. These teachers enjoyed watching a small group of scholars demonstrate what these lessons might look like in their own classrooms, and they asked questions about how to keep control of a full classroom and how the assessment would look at the end of each lesson. This made me feel very good about the training my ability to successfully communicate with them about active learning. Since this would be my last training for our trip we decided that we would give away the supplies we had brought with us for the teachers to use in their classrooms. Their gratitude surpassed the supplies themselves, which I had not thought of as being all that much. My experience at the second school was much more positive than at the first as I not only completed a part of my project on teaching active learning strategies but had also experienced how grateful the teachers were for such small supplies.

REFLECTION

Through my teacher training experience in Cambodia, I learned similarities and differences between education in Cambodia and the United States. Unlike in the United States, in Cambodia students sit at long tables and must stand when they talk, showing respect to the teacher as they direct their attention to the teacher rather than the class. Similar to classrooms in the United States, students enjoy each other's company, talking and playing together on the playground. In both the United States and Cambodia,

students are pretty well behaved and know that the classroom is a place for learning.

On a personal level I learned so much about myself and about Cambodia. First, I learned how to travel outside of my comfort zone and experience a culture much different than my own. Second, I learned that working within a developing country can help bring hope and possibility to areas that may lack them, and that showing concern and teaching skills can make a difference. Third and specific to my project, I learned never to take for granted a piece of rope or a screwdriver, because when I started handing such materials out to the teachers their faces lit up and I knew that they could think of a million different things to do with these small tools.

Three weeks in Cambodia has made a huge impact on my life. I experienced a place in the world that I never expected to see three years ago and have brought back a deeper appreciation for what I am given every day and how I can use it, even if it is the smallest thing in the world. Finally, with my career I plan on getting more involved in service and to start spreading the word around my community about this small country in Southeast Asia. Even small Defiance College can help advance humanity across the globe.

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MALARIA IN CAMBODIA: TAKING A BITE OUT OF A PREVENTABLE PROBLEM

Brittany Coats, McMaster Scholar

Asking me why I wanted to become a McMaster Scholar is like asking why I wouldn't try to improve and save the lives of less fortunate people on the other side of the world. If I had the chance, then why wouldn't I? I read about the Khmer Rouge and the terrible things they did to the Cambodian people. It was so depressing just knowing what Cambodians went through, and knowing that they still suffered made me feel for them even more. I wanted to help, and I knew that if I got accepted to be a McMaster Scholar, I could.

A freshman at the time, I thought that, as a sophomore molecular biology major, I could put my science background and research skills to good use in order to benefit humanity in Cambodia. I wanted to take on a science-based project and saw in the 2008 McMaster Journal that Rachel Baker and Sarah Stopke had collaborated on a project to train physicians on using microscopes to diagnose malaria. Since I am pursuing a career in pathology, I took great interest in continuing this project.

LITERATURE REVIEW

As a result of the Khmer Rouge, physicians were either forced out of the country or, even worse, killed. Only ten doctors remained after the reign was over. The new Vietnamese regime tried training as many individuals to be physicians as possible but the quality was questionable and did not meet international standards. As a long-term result of the genocide, not only was there a lack in basic education for citizens, but also professional education. Although some progress has been made in medical education, education and professional capital have been rebuilding at a slow pace since the early 1990s. In addition to this hindrance, continued lack of framework in the medical field has contributed to Cambodia's struggle with medicine (Stills, 2001). Medicine in the public sector of Cambodia is extremely underfunded, lacking electricity, drugs, water, and equipment (Heng, 1995). For every 100,000 people in Cambodia, there are only thirty doctors, compared to 270 doctors per 100,000 in the United States (Brandling-Bennett, 2005). As a result, the country ranks 166th out of a total of 191 countries in health system performance, while the United States ranks 15th (Pilszczek, 2001).

Consequently, Cambodian physicians are in need of microscopes to properly identify malaria. Access to something this simple would help physicians diagnose malaria at its earliest stages, resulting in less complicated cases

and fewer deaths (Baker, 2008). Several countries battle malaria; however, malaria in Cambodia is the most uncompromising and deadliest malaria in the world. Malaria is one of the biggest health problems in Cambodia and can be held responsible for sixteen percent of all hospital patients and fourteen percent of total patient deaths, not including the cases that are dealt with privately. A progress report in 2004 conducted by Cambodia's National Centre for Parasitology, Entomology, and Malaria Control (CNM) states, "The main problem is that the hyperendemic areas are remote, with little or no development, and very poor" (Chatterjee, 2005).

Of the four different species of malaria, three have been identified in Cambodia: *Plasmodium falciparum*, *Plasmodium vivax*, and *Plasmodium ovale*. As of 2008, 53% of Cambodia's citizens residing in malaria endemic areas were infected with malaria. Between 2001 and 2008, the total number of cases dropped from about 122,000 to about 81,000, and the number of deaths decreased from 476 to 209 (World Health Organization, 2009). Despite this decrease, occasional increases arise due to some progress and advancements in diagnosis of malaria where discovering malaria has become more prevalent (Roll Back Malaria, 2005; Incardona, 2005). Even with these advancements, medical attention is still desperately needed (Chatterjee, 2005). This disease is preventable and curable, and can be treated in just 48 hours if caught early; unfortunately, if diagnosis is delayed due to lack of resources, treatment is also delayed which can potentially lead to death (Baker, 2008).

GETTING READY

The ultimate goal for my project was to teach Cambodian lab technicians how to diagnose malaria using a microscope. This required me to first collect microscopes to distribute in Cambodia. I was able to collect twenty-two microscopes from St. Francis de Sales High School in Toledo, Ohio, and because they were of two different types I also created a manual on how to use each. I knew from Rachel Baker and Sarah Stopke's project that there was no electricity during the day and that I needed an alternative light source for my demonstration. I found a small, flat, battery-powered LED light source small enough to fit underneath the stage of the microscope in order to resolve this problem. Before leaving for Cambodia we ordered one of these lights for each microscope so that the lab techs could use the microscopes whenever they needed. In addition, we ordered *Plasmodium falciparum* malaria slides, KimWipes, lens wipes, and immersion oil for both demonstration purposes and to distribute to lab technicians in Cambodia.

The second part of my project required me to research the microscopic diagnosis of the three species of malaria found in Cambodia. I used this

information to formulate my manual on how to diagnose malaria using a microscope. I also researched information about the life cycle of malaria and making blood smears to include in this manual. Once all the manuals were completed, they were then translated into the Khmer language to be given to lab technicians in Cambodia.

IN-COUNTRY ACTIVITIES

While in Cambodia, I presented at three locations, one in urban Phnom Penh and two in rural Battambang. My intention was to first introduce the basic parts of the microscope and demonstrate how to use a microscope using the malaria slides. Next, I was going to have them use the microscopes themselves and draw what they saw to ensure they knew how to use the microscope. At the end I wanted to go through the microscopic diagnosis of malaria and how to identify malaria in its different stages.

The first presentation was at a hospital in the capital, Phnom Penh. I presented to three of their lab technicians, but was unable to in the lab. They said that they were already experts on using microscopes, so I showed them the battery-powered light source. I then began to go through my microscopic diagnosis of malaria manual but they wanted to go through it on their own later. Most of the remaining time was spent discussing other needs that they had, such as medication for malaria treatment and information on tuberculosis. In addition, they said that the materials I provided them would be distributed to benefit a sister hospital in a more rural area.

The second and third locations I presented at were located in the rural town of Battambang. Representatives from five different clinics in the area came for my second presentation at a nearby clinic. I first trained one representative from each clinic on how to use the microscopes and how to use the battery-powered light source. Two of the five people said they knew how to use a microscope, although they could not create a clear image of the slide when I had the group use the microscopes on their own. I, as well as my fellow colleagues, checked everyone's progress to make sure they were using the microscopes correctly. We were there for about two hours, and most of my presentation consisted of the microscope training. Not much time was left to discuss the diagnosis of malaria, so again I gave them the manuals for them to look at another time as I did in Phnom Penh.

My third and final demonstration was at a hospital in Battambang. I demonstrated to the only two lab technicians there how to use the



microscopes with the battery-powered lights, because they, like the lab techs in Phnom Penh, also knew how to use microscopes. I also gave them the manuals on how to diagnose malaria for them to look at later.

REFLECTION

My research, for the most part, resembled the reality of what I saw on the ground in Cambodia. Of course, the urban and rural locations of my demonstrations made a difference. Those at the clinic in Battambang did not know very much. Three of the five representative lab techs did not know how to use the microscope, and the two that said they did know how could not do so perfectly. The other two locations seemed similar in knowledge, although the hospital in Phnom Penh was more advanced than the hospital in Battambang. The lab technicians in Phnom Penh knew a lot about microscopes and malaria, and I was surprised but very glad that they knew as much as they did. The lab techs in the hospital in Battambang knew how to use the microscopes as well, which surprised me after my demonstration at the clinic. The lab techs in Battambang also knew how to diagnose malaria, and even said that they were very good at it. In their lab room, they had photographs of microscopic malaria posted throughout. Some of the pictures were even the same ones that I had included in my manual.

In Battambang, both the clinic and the hospital lacked medical equipment and were very underfunded. This was noticed as well in Phnom Penh

but not to the same extent. Phnom Penh's hospital did express a need in medicine for malarial treatment, but they did not seem to need the microscopes as much as the other locations I visited. Consequently, Phnom Penh will distribute some of the materials to their rural sister hospital. By contrast, the Battambang hospital had only two microscopes in their single laboratory room.

Indeed, much of Cambodia was very poor and not very developed, as stated in my research. I saw several marshy areas that would make a person susceptible to malaria. In the province Beanteay Meanchey, I received statistical information about medical personnel and malaria, though I had difficulty understanding their statistics. While I did not present in Beanteay Meanchey province, I see this location as one that could definitely use assistance in the future as they have on average fewer than nine doctors for every 100,000 people compared to the national average of 30 doctors for every 100,000 people (Ministry of Health, 2009).

This project has helped me realize how fortunate I am to have access to the resources and materials we have here in the United States, because Cambodia does not even come close. Here in the United States, microscopes are something we learn to use as early as junior high or even elementary school. Seeing that some medical personnel in Cambodia did not know how to use a microscope was heartbreaking, so to be able to teach them how to use a microscope left a deep impression on me. It felt amazing, because now they can take what they now know and use that information for a variety of things, not only to diagnose malaria, but to diagnose other diseases as well. In addition, they can teach others, and in the process save lives along the way. Being able to know this has given me a burning desire to continue helping in Cambodia.

At an academic level, I have become extremely familiar with using microscopes, what the different parts are and what each part is responsible for doing. I also learned how to microscopically diagnose the different species of malaria at their different stages, information that helped me feel more confident about my current direction and has erased some of the doubts I had about going into such a difficult science. This project has also encouraged me to continue considering pathology as a career.

I know my McMaster project in Cambodia has made a life-lasting impact on me. Professionally, I can see myself carrying this experience into whatever profession I choose, especially if I choose a career in pathology. Making trips to Cambodia on occasion to share my research is also something I will definitely consider. In my personal life this experience has given me

an even stronger desire to continue helping people for the rest of my life. I would love to repeat this project year after year, even after I graduate, until hopefully one day this project is no longer needed. I know that I will definitely try.

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TEACHING NATURAL BIRTH CONTROL METHODS TO CAMBODIAN WOMEN

Julie Brunzman, McMaster Scholar

After becoming a Defiance College student I became intrigued with the McMaster School of Advancing Humanity and its goal to improve human conditions. I became most interested in Cambodia through conversations with returning scholar Jennifer Creighton who was partnered with the Cambodian Women's Crisis Center (CWCC) where she helped teach natural birth control methods. The CWCC had requested that this project be continued, and I thought this would be a perfect project for me because it would allow me to practice problem solving, interviewing and coping skills that I have learned in my social work classes here at Defiance College. In reflection this project also allowed me to become more culturally sensitive to help others in ways that work best for their particular situation rather than the way things work for the majority.

LITERATURE REVIEW

The US Department of State (2010) stated that 50% of Cambodia's population is the age of 20 or younger, with the majority of the population growing up in a disadvantaged situation. Studies have shown that the women and adolescent girls of Cambodia are not getting information or access to methods of family planning. Knibbs & Sophal (1997) explain that adolescents of Cambodia have many unmet needs like lack of sexual education and lack of knowledge on birth spacing. Because most policy makers, community members, teachers and parents fail to confront their teens about issues of sexuality and reproductive health, these teens get information from their peers which might be false (Ampronsuwanna, Tarr, & Then, 2000, p.i).

According to Gorman, Dorina, & Kheng (1999), the schools in Cambodia teach a biology class that explains plant and animal reproduction but does not focus on human reproduction. Talking about issues of the reproductive system can be embarrassing, so young girls typically try to answer their own questions. Chive Chattana, a teen from Cambodia, stated that the Cambodian schools do have a section in their textbooks that talk about reproductive health but she believes that the teachers are too shy or embarrassed to talk about those issues to the class (personal communication, February 1, 2010).

With over 80% of women at the reproductive age having a desire for family planning, Cambodia has one of the highest levels of unmet needs for family planning (Huff-Rouselle & Pickering, 2001). The NCRHP Baseline Survey

Report (2000) found that the women who engaged in the survey had fertility preferences and were knowledgeable about contraceptive methods but did not use them. The women lacked knowledge on issues like where to obtain birth spacing methods or advice on how to use them, and when women become most fertile during a menstrual cycle. Kuling (1988) explained that some Cambodian women interviewed did not realize that pregnancy could occur each month. And while Cambodian women and men understand contraceptive methods like condoms, the pill and DPV, only 1-4% use these methods (Ampronsuwanna, Tarr & Then, 2000).

The Institute of Reproductive Health (2009) explained two methods of natural birth control, The Standard Day's Method (SDM) and the Two Day Method (TDM). The SDM is a method based on women's menstrual cycle that lasts from 26 to 32 days, emphasizing which days in the cycle women "are not fertile and can have unprotected intercourse," and which days women "must avoid sex or use a barrier method" to avoid pregnancy. With correct use of the Standard Day's Method there is 95% effectiveness and 88% effectiveness with typical use (Institute of Reproductive Health [IRH], 2009). The SDM uses the cycle bead necklace as a visual tool to help a woman better understand her menstruation cycle, including which days she is most fertile. With this string of color-coded beads that track the rules of the SDM, a rubber ring is moved day to day so that the woman will be able to identify if she is possibly fertile by the color of the bead the rubber ring is on (IRH, 2009).



According to the Institute of Reproductive Health (2009), the TwoDay Method consists of women noticing cervical secretions as a way of identifying their fertility. On the day when a woman notices secretions and the day following, she is fertile and should avoid sexual intercourse if she does not want to get pregnant. A woman who wants to avoid getting pregnant should wait for “two consecutive dry days” until proceeding in sexual intercourse (IRH, 2009). This method is useful for women who do not have regular menstrual cycles, which is common in Cambodia due to poor nutrition.

PROJECT DESIGN

IRH training material on the Standard Day’s Method and the Two Day Method was collected and translated to supply to the women at the shelters. I was able to use the same translations and materials from Jennifer Creighton’s project because of their success in the previous years. We decided that we would allow the women at the shelter to make the cycle bead necklaces themselves as a hands-on learning activity. I planned to teach them the SDM while they were making the necklaces and then quiz them to see if they understood.

PROJECT DELIVERY

We visited three different CWCC shelters while in Cambodia, Phnom Penh, Battambang and Siem Reip. At each of the trainings the women were introduced to the topic of natural birth control methods. All of the women understood the topic and were very interested in the fact that they can track their menstrual cycle to prevent or plan a pregnancy. First we assembled the cycle bead necklace and then I gave them the instructions that explained each step of the SDM. Once the necklace was complete I quizzed the women and with the direct loud answers they gave I knew that they understood. Many of the women were concerned that the SDM would not work for them because their menstrual cycle was not regular. This was when I explained the Two Day Method. My colleague Becca Zebrowski, who gave training on medicinal herbs in Cambodia, also shared herbs the women could prepare to help regulate their cycle. The women found combining this information to be very useful.

Each training session was different based on the age and number of women in attendance. For example, at the first training in Phnom Penh it seemed that some of the older women felt that they could not benefit or that it was too late to learn about the natural birth control methods because they had already left their husbands because of domestic violence. I reinforced that even if the women did not plan on being with men they could still use the SDM and the cycle bead necklace as a tool of empowerment to understand their bodies. The women at Battambang and Siem Reip were a little younger

than the women at Phnom Penh, so they seemed more surprised about the information compared to the older women. It was obvious from facial expressions that the younger women had not learned anything about their reproductive system so at the shelters in Battambang and Siem Reip the training session was a little more detailed. After teaching the TDM the younger women did giggle about the unpleasant details. All of the women at each shelter seemed to really appreciate the information that was given. They had many questions and even asked me to have extra cycle bead kits to pass on to other women that they knew.

REFLECTION

The research I conducted was fairly accurate to what I saw in Cambodia. Many of the women did not understand that they could control when they could or could not get pregnant, and I could tell that they were surprised to hear this information through the questions they were asking after the training. While visiting the schools I did notice posters of the female reproductive system with labeling in Khmer. I did not get a chance to ask anyone about this but I would guess that Cambodian schools are starting to teach about human reproduction.

My goal of allowing women to understand the methods of natural birth control was completed. If I had any concerns it would be that the training should be focused on girls who have not yet started relationships so that they are aware of their bodies before they involve a man in their lives. Most of the women at the shelter are there because of domestic violence, and the women at the Phnom Penh shelter stated that their husbands would not listen to them if they tried to tell them that they could not partake in sexual intercourse because they could get pregnant. It is also important for the men to be aware of the natural birth control methods.

Throughout my time in Cambodia I realized the importance of understanding an individual's culture and lifestyle before just going directly in to help. While many people believe their way is the only way of doing something, it is critical to first understand the individual and how they adapt to things and then teach them in the best way they can learn. While in Cambodia we encountered many situations where we had to change the way we would otherwise have done something either because of a lack of resources or because of a need to be sensitive to Cambodian culture and religion. Learning this flexibility and the need to first understand how a person can learn best and then adapt my approach will be important as a social worker.

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SAFETY FIRST: TEACHING FIRST AID AND CPR IN CAMBODIA

Amanda Johnson, McMaster Scholar

Because I have always been interested in learning about other cultures and helping people in need, the McMaster School for Advancing Humanity seemed like a perfect fit for me. As a sophomore double majoring in psychology and social work, I felt that I could contribute to the Cambodia learning community by creating a project that would use my American Red Cross certification in first aid and CPR to teach the women and staff in the Cambodian Women's Crisis Centers. During my research, I found that access to medical care, especially during emergencies, was very hard for Cambodians to obtain and thought that by teaching basic first aid and CPR, I could greatly impact other people's lives.

LITERATURE REVIEW

In April 1975, the Khmer Rouge took control over Cambodia. Before the genocide, there were about 530 medical professionals ranging from doctors to dental hygienists. By the end of the Khmer Rouge's reign, between one and two million people were killed and only about 32 trained medical professionals remained. Out of these 32, only two of these professionals were surgeons and twenty-six fled the country when the borders opened. All medical and surgical education had to be completely rebuilt because the university system had been completely destroyed (Santini, 2002).

Cambodians lack access to adequate health care even for minor injuries. Basic first aid knowledge can reduce the costs of future health care and can even save lives. According to the World Health Organization (2006), about two percent of Cambodia's population under the age of five dies each year from injuries that could have been prevented by basic first aid knowledge. In Cambodia, the most common injuries are caused by traffic accidents and burns, both of which can be greatly assisted with first aid.

Most of Cambodia's assistance comes from outside countries. According to Dugger (2006), about two-thirds of public spending on health care comes from international nonprofit organizations, organizations which have also constructed hundreds of hospitals and clinics. Even with this amount of assistance, Cambodia's health care system is still not where it needs to be. According to Van Zant (2004), most Cambodians feel better seeking medical advice from drug sellers, herbal healers, and freelance government employees. Cambodians spend about thirty-three dollars per person to treat injuries and sickness from untrained healers or drug sellers compared to only



paying two dollars a person from government run facilities (Van Zant, 2004). Health care in Cambodia is in a state of rebuilding so any knowledge about first aid would be helpful.

One organization helping Cambodia is the Cambodian Red Cross. The Cambodian Red Cross helps cities and villages in need after natural disasters. One of their main projects deals with the land mines in Cambodia, and they do offer first aid classes for commercial institutions. The Cambodian Red Cross is a relatively new organization that has many different projects, but teaching first aid is not a top priority. Basic first aid knowledge is not something that most Cambodians possess, especially in the farming villages surrounding major cities.

My McMaster project aims to teach first aid techniques including cardiopulmonary resuscitation (CPR), treatments for heat exhaustion, burns, sprains, and broken bones, what to do if someone is having a stroke or heart attack, and how to treat victims of trauma. My decisions were made based on research showing that these are common areas of need in Cambodia. For instance, according to the Office of International Surgery (2005), there are about two thousand burn deaths and about twenty thousand burn injuries annually in Cambodia. Furthermore, traffic accidents in Cambodia kill about 4.8 people every day (IRIN, 2008). Given Cambodia's climate I also decided that training in heat exhaustion would be beneficial.

Burn prevention training is greatly needed in Cambodia. According to Hsiao, Tsai, Uk, Jo, Gomez, Goolgly, and Beveridge (2007), two thirds of burns that occur in Cambodia happen to children under the age of ten. When the children were asked what they would do if their clothing caught on fire, only 7% knew to roll on the ground to extinguish the fire (Hsiao et al., 2007). When asked what to do after they were burned only 13% of children mentioned using water, and when asked to name three ways to prevent a burn from happening 37% could not name one method (Hsiao et al., 2007). 83% of burns in Cambodia occur at home (Hsiao et al, 2007).

Teaching first aid is beneficial not only to adults but also to children. According to a study which aimed at teaching children between the ages of six and seven, Bollig, Wahl, and Svendsen (2009) found that when children who were instructed in first aid could check responsiveness, establish the recovery position, open airways, and call for help. The children in this study were able to learn the information and retain it for at least six months with improved abilities. Also, Bollig, Wahl, and Svendsen discovered that using an interactive teaching method such as a puppet helped the children better retain the first aid knowledge.

For my project I also took into consideration how Cambodians learn as I prepared to teach first aid and CPR. According to Nguyen, Cambodians mostly learn from memorization. When teaching first aid, it is important to demonstrate skills and let the students actually try the skills they are learning. According to Frost, one way to teach children first aid is by using role-play and also by allowing the children to practice their first aid skills on each other.

PROJECT DESCRIPTION

My project was focused on teaching first aid and CPR to the women and staff of the Cambodian Women's Crisis center and to compile a translated manual to leave at each crisis center. I researched many articles on first aid and CPR practices to ensure that I had the most up-to-date information. I also researched some herbal remedies and at home remedies I had heard of to ensure that I would be able to adequately answer any questions posed to me. After my research, I began to fundraise for first aid kits and inflatable CPR models to leave at each crisis center to ensure that the staff could teach this important lifesaving skill to others after my presentation. For the last part of my project I collaborated with fellow McMaster Scholar Becca Zebrowski who had found through her research herbal remedies for basic first aid that would be easy for the women and staff members to learn and use. Given Cambodia's problems with affordable healthcare, Becca's research and

project worked well with my own to provide options for the Cambodians we worked with.

ON THE GROUND

While in Cambodia, I held training sessions on first aid and CPR. I split the training sessions into two sections. In the first section I covered what was in the first aid kits I was leaving at the crisis center and also a few of the most important sections in my manual. Topics covered included burns, minor wounds, severe wounds, wounds with an embedded object, nose bleeds, splinting, and conscious choking for adults, children, and infants. Next, I had Becca talk briefly about some herbal ways to care for wounds. After the first section, we took a short break and then began the next section of my training session. During this session we covered rescue breathing, cardiopulmonary resuscitation (CPR), and unconscious choking for adults, children, and infants. After the section of CPR I explained how to care for the inflatable CPR models and showed them how to replace parts and sanitize the model.

REFLECTION

Traveling to Cambodia was an eye-opening experience both professionally and personally. After the initial culture shock of being in a foreign country so different from the United States, I was able to see how small acts of kindness affect people who are in dire need. In my project in particular, I was able to see how teaching basic information on first aid and CPR gave people confidence to take care of themselves and also to know when they do need to get outside assistance from a local clinic or hospital. This trip has inspired me to help others in any way I can because I have seen how small acts can greatly affect people's lives and self-confidence.

After I completed my research on current conditions of the health care system in Cambodia, I was expecting to go into small communities in Cambodia and not see any clinics, hospitals, or pharmacies. I also expected that the people I would be teaching first aid and CPR to would be uncomfortable around me and not really listen to the information I wanted to share with them. When I was actually in Cambodia I saw many pharmacies, clinics, and local hospitals. On one block in Phnom Penh I saw four pharmacies and two clinics. We also visited many local hospitals. The staff members and clients at the CWCC were very interested and grateful for me coming in and talking about basic first aid and CPR and also for leaving a translated manual. One thing that I did not learn from my literature review was that when a person has to stay at a hospital in Cambodia the family has to take care of him or her, cooking meals, caring for the person's cleanliness,

and washing laundry. Hospital patients who do not have anyone to take care of them have to rely on good Samaritans for assistance.

One thing we did in Cambodia really touched me on a personal and professional level. While in a rural Cambodian village, our group of scholars and professors helped Sophie Stagg, the director of the Southeast Asian Children's Mercy Fund, distribute forty-pound bags of rice, fish sauce, and soy sauce. This act of kindness did not cost much in either time or money but it meant a great deal to the people who received the food. Hearing tales of people who had not eaten in over three days and others who just lost family members and had no way to make any money or buy food for themselves or their children was disheartening. These people needed a way to feed their families and this simple act could really change their lives. By not having to buy food for maybe two weeks, these families may be able to save what little money they have or are able to make which they could use to sell things at the market or buy some farm animals to continue either making money or having something for food. The people who received the food were deeply touched and I could see the hope on their faces. This small act that took maybe thirty minutes could have really made a difference in their lives.

My McMaster project in Cambodia will impact my future both personally and professionally. Personally, my experience of Cambodian culture has given me a special understanding for people who are visiting or living in a country and culture different from their own. Being in a foreign country is both fascinating and challenging, an experience that will stay with me my entire life. Professionally, I will implement my knowledge about Cambodians and other Asian cultures into my psychology and social work practice which will greatly assist me in helping people from other cultures.

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TEACHING NONVIOLENT GAMES TO CHILDREN AT THE CAMBODIAN WOMEN'S CRISIS CENTER

Tiffani Rose, McMaster Scholar

I am a social work major with a minor in psychology who knew when I applied to Defiance College that I wanted to be a McMaster Scholar and travel to another country. Cambodia interested me in particular both because it was a country with which I was not previously familiar, and because there seemed to be a lot of opportunities for different majors including me.

LITERATURE REVIEW

The purpose of my project was to train the staff and clients at the Cambodian Women's Crisis Center (CWCC) on what nonviolent games are and how to play these games so the children at the shelter would have an alternative to potentially violent play or behavior.

The CWCC acknowledges that victims of domestic violence face issues such as lack of employable skills, poverty, the possibility of homelessness, and shame. The victims of domestic violence have few options because of lack of social programs, and children who stay at the shelter do not have resources like the mothers do, aside from child care, to address any issues they may have (Cambodian Women's Crisis Center, 2006). Children who have encountered more than one type of abuse have high risks of antisocial behaviors, suicidal behaviors, depressive disorders, using multiple substances, and other destructive behaviors (Hazen, Connelly, Roesch, Hough, & Landsverk, 2009, p. 363).

Children are more likely to develop a plethora of negative psychological effects when domestic violence is present in the home. Boys who witnessed their fathers abuse their mothers, are 1000% more likely to abuse their future spouses (Hornor, 2005, pp. 207-208). Children who have witnessed domestic violence demonstrate aggressive behavior, sleep problems, decreased social competencies, rage, guilt, anxiety, depression, and learning problems (Hornor, 2005, p. 208). Research evidence shows that playing games with children who are from homes where domestic violence was present teaches self-discipline, leadership-followership skills, problem solving, cooperation, socialized competition, socioflexibility, concentration, and emotional control (Swank, 2008, p. 156).



CONSTRUCTING THE PROJECT

Originally my project was too narrowly focused on just playing nonviolent games, and I was unsure about how to speak with the clients about why I came from America to play games with their children. Then I added training—a new element—to my project. I also decided to train the staff and clients about what nonviolent games are, why they are important, and then review general childhood social development, emphasizing that nonviolent games can help to develop important social skills at specific ages.

My project focused on teaching positive social skills and behaviors by playing nonviolent games with the children that focused on self-discipline, leadership-followership skills, problem solving, cooperation, socialized competition, socioflexibility, concentration, and emotional control in order to help develop positive social skills instead of continuing the cycle of violence. After I researched nonviolent games, I adjusted them to fit multiple age groups. I also created booklets with instructions and pictures of the games to leave at the three shelters, and I prepared materials in order to educate the staff and clients at the shelters about social skill development and nonviolent games.

In Cambodia, I spent two days on my project at each shelter. The first day was used for playing the nonviolent games with the children, while the

second day was set aside for training the staff and clients about nonviolent games and social skills. While I was playing games with the children, fellow McMaster scholars would take notes about which games interested the children and which games did not. I also used McMaster scholars to assist me in the training sessions with staff and clients by demonstrating the games.

REFLECTION

I applied to Cambodia not knowing where it was located or anything about the people, culture, or history. I am so thankful I was given this once in a lifetime opportunity and had mixed feelings about returning home because I did not want my great experience to end but I still missed my family and friends. I was also a little afraid to return home. I was afraid to eat American food again, afraid to forget what I saw or experienced in Cambodia, and I was afraid to come back to America with a different perspective. I felt slightly out of place for a few weeks after returning, having learned so much about myself in less than a month that I could not adjust very well or even explain to anyone what happened.

I learned so much about my area of interest, social work. I learned that people are generally affected by violence in the same manner, but opportunities for assistance are not the same. I came back home to hear people complaining about issues like health care and knew that most people I met in Cambodia do not even have the choice to have any form of health care. I also learned so much about myself. I met some people in a very rural village that made me cry, not because I pitied them but because I envied them. They may not have owned a pair of shoes or more than one shirt, and they worry daily about starvation, but they were the happiest and most gracious people I have ever met. That single experience humbled me so much that I think about it daily.

Traveling to Cambodia as a McMaster Scholar will have great benefits on my professional and personal life. I now feel more driven in my field because I have seen how violence affects a community and how people can persevere. In my personal life, I have a new outlook on life. I am spoiled simply because I am an American, but I am also deprived because I never attempted to have the great sense of community and love for each other that Cambodians seem to have. I never thought I would learn so much from traveling to a country I knew nothing about.

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A SURVEY OF HERBAL MEDICINE IN CAMBODIA

Rebecca Zebrowski, McMaster Scholar

The Cambodian population continues to struggle as it works to rebuild a devastated post-Khmer Rouge infrastructure. Though healthcare has improved, many Cambodians still lack access to basic medical services. The majority of clinics are located in urban areas, making them nearly impossible to reach for the over 75% of Cambodia's population represented by rural residents (Khut, 2009). Most of these clinics tend to be largely ill equipped, understaffed, under-funded, and over-crowded. Many healthcare professionals also lack advanced training or access to updated medical information and research. Prescriptions remain without standards or regulations, and they are often given without meeting proper diagnostic criteria for their use (Dondorp et al., 2004). Supplies, especially for those in poorer areas, are also devastatingly limited and many Buddhist Cambodians tend to desire a more holistic approach to treatment than what these clinics can offer with their resources.

Given this lack of reliable and fully adequate available healthcare, many Cambodians have begun to consider other options for medical treatment. According to some researchers, as much as three fourths of the population may prefer self-treatment as their primary approach to healthcare (Khut, 2009). In light of these circumstances, it became relevant to continue my research begun in 2008 under the Traditional Medicine project. With herbal remedies as the main focus, this project was designed not only to expand upon information gathered during that initiative, but also to share this research with various community partners in Cambodia, particularly the Cambodian Women's Crisis Center (CWCC).

METHODOLOGY

Initial information for this project was gathered from various sources during the 2008-2009 Cambodia McMaster initiative. An analysis of texts produced by the Cambodian Ministry of Health revealed a vast number of potentially medicinal herbs in the region, but failed to provide adequate evidence as to the safety and efficacy of the indications listed. Basic research regarding various indigenous plants was conducted, and a personal field guide to facilitate ground research was formulated. This guide was used in Cambodia to identify local herbs and help interviewees elaborate on the information they could offer about such plants. The data gathered during this initiative was then used as a catalyst for further research about local herbs which could potentially be beneficial in addressing community partners' needs.

The Cambodian Women's Crisis Center specifically expressed a desire for this research due to lack of treatment options for the common health issues their clients experienced. Thyroid disorders, menstrual cycle regulation, and STI symptom treatment were of particular interest to the CWCC; therefore, they were especially considered while gathering information for this project. Research was focused around the herbs catalogued in May of 2009 near the Phnom Penh and Siem Reap regions. Sixty-four plants were noted as having been readily available for medicinal use, but after investigation into the safety and efficacy of these plants, only twenty were chosen for presentation to community partners. A booklet was formed including these herbs and the most recent findings regarding their potential uses and indications. An accompanying workshop was also drafted to help facilitate an understanding of the research backing some of the herbal remedies found in the booklet.

Table 1 below illustrates a survey of the potentially safe uses that peer-reviewed literature currently offers for the herbs selected in this project.

Herb	Common Name	Potential Uses
<i>Allium Cepa</i>	Onion	Treat bacterial infection (Lirio, 1998) and fungal infections (Satya, 2005); also acts as a vermifuge (Passalacqua, 2006).
<i>Aloe Vera</i>	Aloe	Treats skin disorders and soothes dermal irritation (Balch, 2002), speeds burn healing; can be used as a topical anti-inflammatory agent (Steenkamp, 2007).
<i>Annona Squamosa</i>	Custard apple	Kills lice and other parasitic infections (Xiang, 2010); works as an oral anti-inflammatory gargle (Sharma, 2010).
<i>Caesalpinia Pulcherrima</i>	Pride of Barbados	Works as a topical anti-inflammatory (Rao, 2005) and helps prevent infections in wounds (Sudhakar, 2006).
<i>Capsicum</i>	Red pepper	Helps alleviate digestive disorders and peptic ulcers (Blumenthal et al, 2003); treats cardio-vascular disease (Willard, 2004) and pain due to arthritis or nerve damage (Roybal et al, 2002).
<i>Coco Nucifera</i>	Coconut	Oil helps reduce high cholesterol levels (Nevin, 2004); acts as an antibacterial (Alanis, 2005) and anti-fungal agent (Wang, 2005).
<i>Garcinia Mangostana</i>	Mangosteen	May help regulate menstruation (Balunas, 2007); works as an antiviral, antifungal, and antibacterial agent (Nakatini, 2005); may help treat topical ulcers, open wounds (Pedraza-Chaverri, 2008) and digestive discomfort (Nakatini, 2005).
<i>Allium Sativum</i>	Garlic	Treats cardiovascular disease (Blumenthal et al, 2003), digestive disorders and dermal infections; acts as a vermifuge (Afzal, 2000), antibacterial (Lirio, 1998), and antiviral (Satya, 2005).
<i>Ipomoea Aquatica</i>	Rabbit leaf/ water spinach	May alleviate diabetes and hepatic disorders (Prasad, 2008); treats urinary disorders (Mamun, 2003), and stomach ulcers (Biological Information Infrastructure, 2006).

<i>Ixora Coccinea</i>	Ixora	Helps heal topical wounds (Saifuddin, 2006); may alleviate STD symptoms and inflammatory skin disorders (Ratnasooriya, 2005).
<i>Kaempferia Galangal, Alpinia galangal</i>	Ginger	Helps ease digestive disorders (Matsuda, 2003), nausea and pregnancy discomfort (Ali, 2007), and arthritis (Riditid, 2008); facilitates menstrual regulation (Roybal & Skowronski, 2002), treats ringworm infection (Phongpaichit, 2005); has anti-bacterial properties (Rao, 2010).
<i>Lagerstroemia Speciosa</i>	Banaba, Crape Myrtle	May help to treat diabetes (Amornnat, 2009) and kidney infection (Klein, 2007).
<i>Porphyra</i>	Kelp/ seaweed	Helps treat hypothyroidism (Teas et al, 2007) and urinary disorders (Dang, 2004); may also help with menstrual regulation (Skibola, 2005).
<i>Moringa Oliefera</i>	Drumstick	May ease STD symptoms (Anwar, 2007), skin disorders (Nawaz, 2009), urinary disorders and gastric ulcer (Anwar, 2007); may help treat menstrual irregularity (Balch, 2002).
<i>Tamarindus Indica</i>	Tamarind	Works as an antibacterial agent (Yagoub, 2008), may treat digestive disorders and inflammation (Havinga et al, 2009); eases skin disorders (Al-Fatimi et al, 2007); potentially useful as an anti-venom for viper bite (Ushanadini et al, 2008).
<i>Samansea Saman merr</i>	Rain tree	May be a useful antibacterial for topical application (Raghavendra et al, 2008).
<i>Syzygium Jambos linn</i>	Jambos/ Rose apple	May speed healing of topical wounds (Djipa, 2000) and fight fungal infection (Kuiate, 2007).
<i>Occimum Basilicum/ sanctum</i>	Basil	Acts as an anti-inflammatory agent (Mueller et al, 2010); may treat atherosclerosis (Prakash, 2005), and parasitic infection (Nebedum, 2009); may ease menstrual cramps (Franca et al, 2008).
<i>Nelumbo Nucifera</i>	Sacred Lotus	May alleviate fevers (El Sohly, 2008) and symptoms associated with viral infection (Mukherjee, 2010).

Informal workshops presenting this information were conducted at three CWCC locations. Impromptu discussions also took place with partners who became interested in the project during our visit. The herbs that had been selected were familiar plants for most Cambodians, but herbal treatment carried a rather superstitious as well as spiritual connotation. Therefore, a great deal of emphasis was made on the tangible nature of scientific study with regards to herbal medicine and the plants selected for research. Partners were often surprised at the proven uses for these common plants. Question and answer sessions ran quite long, and many times workshops were interrupted by an interested participant who wanted to share a story or ask something and could not wait to join in. This was encouraged however, as I attempted to share what I knew of the plants in Khmer and work with the knowledge offered to me by our participants.

REFLECTION

In leading my workshops, I learned that there is something very powerful within the process of learning about oneself. While most people are privy to a wealth of information about their history and traditions, Cambodians are forced to piece together what they can from that which has been virtually wiped from the pages of history by the Khmer Rouge. I began to fully experience this first-hand while talking to the women at the CWCC. Cambodian herbal medicine was something with which every one of these women could identify, but none of these participants could explain why they believed certain things about herbs. In being given information about traditional herbal remedies, these community partners were given a key to unlock part of something sacred and important within their heritage. Not only can our partners apply this knowledge in clarifying their pasts, but they can also use this research to move forward, confident that they have the most up-to-date research available with regards to their local herbs. My community partners expressed such gratitude for my willingness to research their traditions and share my results, but I was overcome with my own sense of gratitude for their willingness to accept what I had to share, and to share so much of themselves with me.

The McMaster School promotes service learning and responsible citizenship. This means that as a student of the McMaster School, I must learn to fully participate in the world in the most beneficial way possible. My participation



in the world, however, does not rest on my ability to lecture Cambodian women or to give them pamphlets about what I researched thousands of miles away. The best way I have learned to participate in a global family is to humble myself, realizing that I do not now, nor will I ever, know everything; I need others as much as they need me. I had access to a wealth of publications about herbs, but I did not have knowledge of the language, I did not have experience with every plant, nor did I know the spiritual significance of each herbal remedy. In these aspects, however, my community partners were phenomenally wealthy. In coming together as a community, we were able to share as equals – both of us empowered by what we had to offer and humbled by what we knew we needed. I truly believe that it is in interactions like these that we begin to see real beneficial change. My work in Cambodia has taught me that it is no one's job to save the world. Even if someone has been blessed with a college education or monetary wealth – it is simply impossible to step into another's life and attempt to both understand and end their suffering all at once. This world is a community, and all our blessings are unique. While some of us can offer money or expertise, some have only to offer their stories and warmth of friendship. What we must remember, however, is that none of these gifts is any less important than the other. It is only when we can truly begin to appreciate not only what the rich can give, but also what even the poorest of the poor can offer this world, that we will truly see humanity advance. We are all in need of each other.

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