

approved informed consent form which described the research and secured confidentiality. Informed consent forms for participants can be found in Appendix A. A timeline of all methodology and tasks undertaken can be found in Appendix B.

### *Literature Review*

An analysis of published literature was undertaken in order to evaluate previous studies and works of those who have studied campus gardens, strategies for involvement of students, and a focus on service and garden based learning courses. The purpose of the literature review was to study the impacts of on-campus gardens and how these gardens could be integrated into higher education coursework. When looking at on-campus gardens it is important to focus on the significance of their presence, while also focusing on the benefits, sustainability, and environmental education aspects these campus gardens provide campus communities. The review also looked at the strong support system campus gardens need in order to be sustained over long periods of time. Furthermore, the research explored different forms of curricular learning while focusing on service and garden based learning coursework. Lastly, the literature focused on general barriers and benefits to student involvement on campuses in order to better understand how gardens can maintain success and gain better integration into a campus community. The literature review aided in the research design and methods chosen for the research. References used for the literature review can be found in Appendix F.

### *Interviews with Key Informants*

Interviews were held with 5 key informants, who were members of IWU faculty and staff, in order to gain further insight into the curricular, faculty, and staff perspectives of the IWU Peace Garden. Key informants offered specific insight into their experience with the IWU Peace Garden, and were asked about different curricular aspects of the garden and strategies they believe can be adapted by the garden in order to gain more student involvement. They were also asked about possible curricular strategies and how they could possibly be adapted into IWU's campus community and curricular learning. The purpose of having key informant interviews for this topic was to gain a 'deeper' understanding of the specific topic, rather than what can be found on questionnaires. Limitations to interviewing these members of IWU faculty and staff include their relationship with sustainability topics within IWU's curriculum and their pre-existing relationship with the IWU Peace Garden. Full question guides for these informants can be found in Appendix C.

Jim Simeone, IWU Professor of Political Science, has been the faculty advisor for the IWU Peace Garden since its groundbreaking. He was interviewed to provide insights into the creation and sustainability of the garden structure, and methods for further student and faculty involvement. He was asked for his insights into better methods for volunteering, administrative support, and ways the garden could gain more curricular advances.

Deborah Halperin, IWU Director of the Action Research Center, has been the coordinator of the Weir Fellowship program that was a great asset to the groundbreaking of the Peace Garden. Deborah was interviewed to give insights into the action research and community engagement aspects the garden could work towards. She was asked for her insights into successes and challenges with curricular and campus community support that will aid in determining the future of the garden.

Leah Nillas, IWU Associate Professor of Educational Studies, has volunteered at the Peace Garden on few occasions. She was interviewed for her insight into the education aspects

of the Peace Garden and what methods could be adapted for possible course structure and local community outreach. She is currently working on organizing a science and mathematics based summer camp for young students that will have the Peace Garden as a venue for academic outlets.

Linda Kunce, IWU Associate Professor of Psychology, has encouraged students to use the Peace Garden as a venue for research projects and volunteering. She has given the research a psychological perspective and was interviewed to seek advice for gaining curricular involvement from a variety of different departments.

Matthew Damschroder, IWU Assistant Dean of Students for Campus Life, was interviewed for his expertise in student affairs and ideas for future student, faculty, and staff involvement.

### *Interviews with Students*

Interviews with eight current IWU students were conducted on IWU's campus in order to further evaluate general knowledge regarding the IWU Peace Garden, faculty and staff support, and attitudes towards the implementation of a service and garden-based learning course. Students were interviewed because they provide direct answers on their incentives for general volunteering, and they provide key insights into the barriers and benefits of involvement. A limitation to the student interviews is that students were not selected randomly, rather through convenience, and they had a personal relationship with the researcher. Full question guides for these informants can be found in Appendix D.

A focus group of ten current IWU students was conducted in IWU's State Farm Hall Room 103 on March 3, 2015. The purpose of the focus group was to further evaluate general attitudes and perspectives of students and their relationship with the IWU Peace Garden. Ten students, 7 females and 3 males, participated in the focus group and were provided with pizza as compensation for their time. All participants signed the informed consent form. The focus group allowed for group-think discussion towards strategies the garden could adapt to gain future involvement. It went further than individual interviews because it provided a broader range of students who were not heavily involved in the Peace Garden and have varying majors. Participants were recruited by word of mouth and through personal relationships with focus group leader. Recruitment of participants is a limitation to the research, because students had a personal relationship with the facilitator and had a personal interest in the subject matter. The focus group was audio recorded using the same method as in the individual interviews and lasted approximately forty-five minutes. The full question guide for the focus group can be found in Appendix E.

### *Investigations of IWU Peer and Aspirant Institutions*

A peer institution has similar characteristics to IWU that are selected from student, financial, faculty, and general categories. An aspirant school has characteristics that IWU endeavors to emulate. IWU's 12 Peer and Aspirant Institutions are: Augustana College, Carleton College, College of Wooster, Denison University, DePauw University, Franklin & Marshall, Kenyon College, Knox College, Lawrence University, Macalester College, Rhodes College, and St. Olaf College. The purpose of investigating IWU's peer and aspirant institution was to explore the sustainable management of campus gardens in comparison to the IWU

Peace Garden's management. Additionally, an investigation was done in hopes to find examples of campus gardens and sustainability incorporated into an institution's curriculum.

## Research Findings

This section will report on information and data collected in the literature review, key informant interviews, student interviews, and observations. This section will focus on factors that influence student, faculty, and staff involvement at the IWU Peace Garden, and strategies found to improve involvement.

### Findings: Literature Review

A review of the literature showed that on-campus gardens are a growing trend throughout colleges and universities across the globe. Campus gardens need a strong support system in order to be sustained over long periods of time. A crucial area of preservation for gardens can be seen through their sustainability once integrated into higher education curriculum. Service-based and garden-based learning offer unique perspectives into educational systems that provide hands-on experiences while serving local communities. Likewise, a general understanding of barriers and benefits to student involvement is crucial to understanding how gardens can maintain success. Overall, the literature review studied and found that different aspects of on-campus gardens and campus communities have a connection with different forms of curricular learning

### Findings: Interviews with Key Informants

#### *Factors that Influence Involvement*

The idea for creating a campus garden on IWU's campus came from student interest of sustainability issues and a need for sustainable agriculture. IWU's ARC took on the idea of a campus garden as a strong possibility for IWU's campus. Carl Tiechman, IWU's Director of Government and Community Relations, began the pursuit of a suitable location for a garden. In 2011, IWU ARC's Elizabeth Weir Fellows, Danny Kenny '13 and Ryan Dyar '14, who are students that work on projects that have been developed using action research strategies and have a meaningful impact on the community, along with Alex Monzon '13, began to plan the garden and gain campus and community sponsorship. Through focus groups, surveys, and conferences calling on the IWU community for action, the IWU Peace Garden was created (Simeone, 2015). The stated goals of the garden are to exemplify sustainable goals through practice, educate the campus and local community on sustainable food production, give students experience in making connections outside of the classroom, and to provide a place for students to participate in a respectful connection with nature (Illinois Wesleyan University Peace Garden, 2011). When asked about successes of the Peace Garden IWU's Assistant Dean of Students for Campus Life, Matthew Damschroder said that the Peace Garden is the embodiment of IWU's mission. He described the student-run garden management as showcasing how powerful and influential IWU students can be. With her work as the Director of the Action Research Center, Deborah Halperin, was impressed by the garden's ability to stay in operation despite knowing what could happen in the future. Through working with budgets and constant changes in student leadership, Halperin was excited that the Peace Garden has survived and succeeded despite its challenges. Additionally, Jim Simeone, Professor of Political Science and the faculty advisor for the IWU Peace Garden, was proud of the garden's ability to

spread awareness about sustainability issues and be a platform for food issues and intellectual and experiential learning. Simeone is delighted that the IWU Peace Garden is committed to answering the need for fresh food in the local community and that it has a crucial relationship with the Environmental Studies Program, which has provided numerous student volunteers and student interns for the garden.

With all of the successes the garden has achieved since its groundbreaking, all five key informants who are members of IWU faculty and staff, agreed that there is a need for more involvement at the IWU Peace Garden. Deborah Halperin expressed that location determines a majority of involvement at the garden. She disclosed that in order to gain more student involvement, the garden needs to be on-campus and on IWU owned property. Halperin added that another major influence on involvement is a person's time limitations and their interest in the act of gardening. Halperin communicated that there is a need for the garden workers to help those involved find enjoyment in a task they may have no passion or desire to be involved in. Halperin stated that different majors can contribute a great deal to the garden, but most of the time they have no knowledge that their skills are needed. In addition to Halperin's opinion, Jim Simeone recognized a need to ensure that all Environmental Studies students visit the garden and actively contribute to its success at least once within their four years of undergraduate at IWU.

Leah Nillas, Associate Professor of Educational Studies, became involved with the IWU Peace Garden because she enjoys both the community and independent aspects of gardening. Both Nillas and Linda Kunce, Associate Professor of Psychology, reported that communication and outreach are major factors influencing involvement at the garden for students, faculty, and staff. Kunce says that there is a need for more clarity with volunteering, and that a more casual volunteering schedule may be more beneficial for involvement at the garden. Kunce used an example of every second Saturday as a volunteer day at the garden. Halperin agrees that there needs to be more volunteer programs, but similarly a better rewards system for volunteering. Halperin used examples where hours at the garden would allow volunteers a free shirt or dinner, and give titles to volunteers with certain hours. This would allow volunteers to know the amount they volunteer, and let them use it for professional and personal reasons. When asked about advice for management of a program attempting to increase student involvement, Nillas used her past experience working with Habitat for Humanity to explain the success that comes along with working towards a common goal and an identity, while not differentiating between members of the campus community. She expressed the necessity of allowing students to contribute their strengths in a variety of ways. She also advised that the IWU Peace Garden needs to be relevant to activities and projects of IWU students so that there will be more of an incentive to become involved. Damschroder mentioned having the Peace Garden create more partnerships and collaborate with IWU RSOs, Greek Life, and Sodexo, while capitalizing on its successes and spreading those to the IWU community. Kunce, Simeone, Damschroder, and Nillas all agree that the Peace Garden should be used in "non-orgs" in the future. "Non-orgs" are casual meetings that call on faculty to attend and learn about research that has been done by faculty, staff, and students. They agree that it could be used as an outlet to gain more involvement, and a tool for outreach by word of mouth to students and the IWU community. Additionally, Nillas expressed that spreading the experience by word of mouth would encourage others to gain a similar good experience.

Another important factor for the overall well-being of the garden is dependent on the sustainability of the garden structure. Presently, Simeone plays a large role in the sustainability of the garden and he can be seen as an active contributor to the garden's success. Deborah Halperin saw the need for a more sustaining system that did not rely on Simeone's efforts.

Simeone recommended that there could possibly be the implementation of a sustainability coordinator at IWU that could take over the management of the garden and other sustainable programs on campus. The garden used to have paid work-study positions on a semester basis, which provided an additional incentive for involvement, however now there is no longer administrative funding for these positions. Ideally a coordinator of this type could work with students to manage the garden, similar to what was done in the past, and it could continue a sustained system for the future maintenance of the garden. Matthew Damschroder did commend the Peace Garden for its sustainable management saying that it was better than most groups. In regards to a coordinator, Simeone did state that university funding is limited and there is likely no availability for such an office or department. Damschroder agreed that the university has no resources for this type of coordinator, and that it is one need among many.

#### *Service and Garden Based Learning Course*

When asked about IWU's curricular support of the Peace Garden, the overall consensus from the key informants interviewed was that there is a need for more support for the IWU Peace Garden within IWU's curriculum. Nillas declared that the Peace Garden needs to be used as an instructional and learning venue for students of all levels. When asked about the possibility of a garden and service based learning course where the Peace Garden would be used as an educational tool for community service and engagement, all key informants believed it would be a good idea. Simeone agreed that it would fit within the goals of IWU's mission. He thinks the class would be a great tool for teaching students about sustainability in a more practical and experiential way. Kunce thought it would be a good idea, but she did advise that there would need to be a faculty member interested in spear-heading the course and it would need to find an academic home within IWU's curriculum. Halperin adds that faculty members "can be protective of their syllabus and they would need to be willing to sacrifice and change their syllabus for community engagement." Halperin did recommend assessing a system that ensures fairness for grading and civic engagement. All key informants concurred that a course of this type should require specific hours of community engagement and volunteering. Nillas recommended that it should be tied to an existing program on campus, like ARC or another department like Environmental Studies, in order for it to maintain long-term success. She also recommended that the course have a link with research opportunities which could be used by a student in a professional manner. Currently, Simeone has developed a May Term course, called Sustainable Agriculture, where the garden would be used as venue for soil testing and studying the minerals in produce grown organically compared to produce grown through conventional agriculture. A May Term course refers to IWU's 4-4-1 system, in which students enroll in classes that last approximately three weeks during the month of May and allows students to immerse themselves in one topic. By the end of the May Term a student completes the equivalent of a single course during one semester. Simeone recommended that a service and garden based learning course could be incorporated into an ARC seminar course and focus on the food movement in Bloomington-Normal, Illinois. He knew of many local organizations that could use the aid of students for projects and research related to sustainability and food. Nillas and Halperin both believed that this type of course could be a May term course and possibly be a special topics course. Furthermore, they recommend that the course be incorporated into general education requirement, which is intended to develop students as individuals rather than trained specialists.

## Findings: Student Interviews and Focus Group

### *Factors that Influence Involvement*

A focus group was conducted with ten current IWU students who have an interest in the selected subject matter. Additionally, interviews were conducted with eight current IWU students.

Student interviews found a range of factors that influence involvement at the IWU Peace Garden. Overall, a trend among the students interviewed was that the Peace Garden is supported by students. Only two of the eight students surveyed had been involved with the Peace Garden, both became involved through volunteering and attending an event at the garden. The other six students provided numerous factors as to why they had yet to become involved. A common factor that influenced their involvement or lack of involvement was a lack of knowledge as to how to get involved and who to communicate with. Also, students were generally uninformed as to what the Peace Garden is and what it does for the campus and local community. Additionally, the location of the garden, a student's major, time constraints, faculty involvement, communication/outreach, and rewards systems were other factors mentioned by students as influencing their involvement.

Participants of the focus group had common trends in regards to their knowledge of the garden and their individual involvement. Out of the ten participants, seven had visited and volunteered at the Peace Garden. They volunteered or visited because of a personal relationship with someone managing the garden, personal interests, or course requirements. The other three have heard about the Peace Garden, but were not knowledgeable of who to contact or how to become involved. In regards to student involvement, participants generally agreed that student involvement can always be improved, and a major factor influencing involvement comes from communication and outreach from the Peace Garden management. The group confirmed that a major barrier to involvement was a lack of information on who to contact and how to get involved. The selection bias is a limitation to the research, since responses are based off of previous knowledge and involvement. Participants were selected through word of mouth recruitment and because of their levels of involvement with the Peace Garden and selected major.

The focus group discussed another barrier to involvement as being a lack of knowledge among students as to the location of the garden. They recommended better signage along the walk to its exact location north of Francis Street between Fell Ave and Prospect Ave in Normal, IL, just behind IWU's practice soccer and football fields. When asked about personal experience with gaining student involvement, most participants indicated that an incentives and rewards program gave their experience a meaning and gave them encouragement to continue volunteering. Participants used samples of attaining free items after volunteering a certain amount of hours, and using volunteer hours to gain merit and achieve requirements in service organizations.

When asked about faculty and staff support of the Peace Garden, there was lack of knowledge that volunteering at the Peace Garden was encouraged to students and faculty from other programs besides the Environmental Studies Program. Some students agreed that their professors have never discussed the Peace Garden in their classes, and that not all Environmental Studies professors discuss it. There was encouragement from the group towards possible extra credit in their classes for volunteering at the garden. One student did