Engaged Scholarship: Undergraduate Participant Experiences in an International Community-based Research Setting

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Introduction

The intent of this study was to utilize a formative course evaluation, building on the body of work related to engaged scholarship as part of post-secondary undergraduate education experience. This perspective offers an alternative to the traditional, disciplined-based emphasis which privileges mastery of basic knowledge over opportunities for experiential-type learning and research (Robertson & Bond, 2005). Data sources for the evaluation included survey and qualitative data collected during a formative evaluation process of the summer 2009 study abroad component and extended research opportunity in an international education setting offered for undergraduate students. In general, findings demonstrated that participants in this international education setting viewed this learning experience as simultaneously challenging, meaningful, and influential with regard to current and future aspirations. A primary objective of this paper is to offer a model of assessment highlighting participant perspectives of cross-cultural learning experiences, viewed through the lens of engaged scholarship. This study included an examination of civic identity and social responsibility to consider learning and action as part of undergraduate education.

The case upon which the study was conducted represents experiential-type learning in community settings which expand the scope for inquiry pertaining to internationalization of higher education, development of sustainable and purposeful community engagement, and cross-cultural teaching and research. The major focus of the study was to determine the learning outcomes, process, and pedagogy of international exchange related to: personal, intellectual, and social growth and development; knowledge, skills, and experience for international collaborative research; understanding
of and appreciation for diversity and empowerment to work across contexts and settings; and the construction of civic identity through community engagement. An important component of the study emphasized the ways in which international and interdisciplinary learning is situated within the larger higher education and global learning context and the extent to which this type of coursework reflects growth and change in knowledge, skills, and action. Thus, an evaluation was conducted, focusing on two components of a larger international education collaborative, through the use of surveys, interviews, and analysis of reflective course assignments.

International Teaching and Learning Contexts in Higher Education

*Southern Africa Virginia Networks and Associations (SAVANA)*

The SAVANA consortium arranges various modalities of collaborative research, education and outreach activities for undergraduate students, including distance-learning, summer study abroad courses, a January term intensive preparatory courses, and internal field research opportunities. Emphasis is placed on experiential learning, with students from the US and Africa jointly involved in interdisciplinary learning through more non-traditional means. As a result, contextual learning may occur through intentional or serendipitous encounters, within communities or workplaces, through shared travel and living experiences of US and African students, or from local experts and villagers.

A fundamental component of the academic program is the month-long study abroad course entitled *People, Culture, and the Environment of Southern Africa* (PCESA). This course was developed as an intensive introduction to the complexity of coupled human-natural systems of southern Africa. The course takes approximately
fifteen U.S. and five regional southern African students through urban and rural settings in South Africa and Mozambique. The course is comprised of formal lectures, site-visits, reflective exercises, and cultural encounters with community members in their everyday social and work environments. The PCESA course is grounded in the involvement of southern African lecturers and students in the course as full-time participants. By living and traveling with the African students, US university-based undergraduate students are provided with an intensive continuous learning experience beyond what is possible in formal educational settings. Accordingly, the PCESA course as part of the SAVANA network continues to cultivate cross-disciplinary interactions, resulting in a growing international intellectual community.

An intersession January-term course entitled *Ethics, Protocols, and Practices of International Research* (Jterm) has been developed at UVA to recruit for PCESA and to prepare students seeking international research experiences. As part of this course, colleagues share expectations about international scientific or developmental engagement and mentor students through the development of interdisciplinary project proposals. Emphasis is placed on the ethics and protocols of engaging communities in rural and urban international settings.

Both courses are offered as interdisciplinary teaching and learning experiences, including environmental science, anthropology, education, and engineering. The evaluation which constitutes the primary data source for this study focuses on the participants who enrolled in the 2009 PCESA study abroad course. A small sample of
students from that cohort also participated in Jterm 2009 (n=5) and IRES (n=2; description below).

**International Research Experience for Students (IRES)**

The International Research Experience for Students (IRES) is modeled on the National Science Foundation (NSF) Research Experience for Undergraduates (REU) and is funded through the NSF. Within the SAVANA consortium, IRES provides multidimensional research opportunities for US undergraduate students who work in teams supported by graduate student and faculty mentors. IRES participation in 2009 was included in the formative evaluation being conducted on the PCESA component of SAVANA.

Following the 2009 summer study abroad experience, two of the US undergraduate students, one female student from Southern Illinois University (SIU) and one male student from the University of Virginia (UVa) joined one SIU graduate student, one UVa graduate student and faculty from each institution to participate in year three at an IRES site in Mozambique. In this case, the IRES research plan had been modified each of the years that the project had been funded. The site for year three was a timber concession where the SIU faculty had spent several years on a sustainable growth model for panga panga trees.

The undergraduate students were mentored prior to travel by the PI and co-PI (SIU and UVa faculty); in-region prior to the field project by the PI; and in the field by co-PIs and the US graduate students. In this way, the project not only provided an international research experience for undergraduates, but the opportunity for U.S.
graduate students to develop mentoring skills which are beneficial to their professional
development. US students, from both UVa and SIU, were prepared stateside for their
international research experience through the following means: 1) participation in the
Ethics, Protocols and Practices of International Research January-term class; 2) close
mentorship during the subsequent spring semester which focused on the development of
individual research proposals, research methodologies, and analytical techniques; 3)
consistent dialogue with southern Africa-based in-region partners in preparation for field
experience; and 4) participation in the PCESA study abroad program.

The IRES experience at the Catapu timber concession in Mozambique was
intended to provide a multidimensional research experience for undergraduate students.
The focus for IRES 2009 was on field research methods, including interfacing with
various measurement systems; growth analysis; and environmental impacts on growth.
In addition to the scientific aspects of this IRES context, there was a significant emphasis
on community engagement. The evaluation at this site included interviews and field
observations undertaken at various points during the project. The undergraduate student
research activities centered on: cataloguing timber locations with GPS; modifying and
constructing aluminum tree bands for measurement; and documenting daily research
activities in writing and photographs.

University Context

The goals and effects of experiential-type teaching and learning models such as
SAVANA/IRES must be understood within the larger framework of institutional
mission. This section provides an overview of the institutional context for one of the
A foundational partner institution within the SAVANA consortium (UVa). First and foremost is the appointment of Virginia 2020: Agenda for the Third Century, a University commission which focuses on developing four critical areas that will answer the challenges of the 21st century: the fine and performing arts, international activities, public service and outreach, and science and technology. In particular, public service and outreach and international activities were strongly emphasized as inherent in the University’s social mission as a public institution. In return, the commission will recommend strategies so that the UVa will fulfill its “unique obligation to discover knowledge and to transfer it to the communities they serve” (Office of the President, University of Virginia 1999).

In terms of engaged scholarship, the Commission has established the development of academic service as a priority within the public service and outreach area. Academic service here is defined as “the application of scholarly knowledge and professional expertise to the health, economic, educational, civic, and environmental needs of the public”. Since UVa is a nationally ranked research university, it follows that the research its students and faculty conduct must be disseminated to the wider community in order to achieve its full value (2020 Commission on Public Service and Outreach 2001).

A major initiative that tackles this concept of academic service was launched this past spring in 2009. Known as Jefferson Public Citizens (JPC), this academic public service program integrates students’ academic and service experiences during their time at UVa. Students are given the opportunity to form research teams with students and
faculty from different disciplines, and must present a proposal that addresses a documented community need or social problem (Jefferson Public Citizens Student Handbook, Fall 2009). This interdisciplinary focus aims to inspire students to become engaged citizens and scholarly thinkers by allowing students to ground their academic studies in a practical context.

Similar initiatives include other grant programs such as the Community-Based Undergraduate Research Grant and the Academic Community Engagement faculty grants that allow students and faculty to integrate public service into the major curriculum (see Office of University Community Partnerships 2010). The overall purpose of these programs is to encourage students to collaborate with faculty and members outside the UVa community to inspire change in a particular area. Combined with the University’s goal in increasing international activities, these opportunities allow students to think globally when proposing projects.

UVa, therefore, also aims to integrate international activities into the academic curriculum in order to cultivate a global perspective. UVa has set an ambitious goal where at least 80% of its student body will participate in some form of study abroad program by 2020 (International Activities Commission Report, Fall 2009). With the above grant programs and opportunities for research, it is optimistic that the student body will meet the University’s goal. It should also be noted that many of these programs have costs that are comparable to the cost of attendance at UVa for an in-state student. Thus Virginia residents can transport their financial aid as well as apply for additional research funding or scholarships to travel abroad (International Studies Office, 2010). Similarly,
out-of-state students may actually see that a program abroad will be cheaper than a year at UVa. There have also been tremendous increases in the financial aid available for shorter terms abroad, such as during the winter or summer breaks (Student Financial Services, Financial Aid, 2009). As a result, all students should reasonably expect that they can have the same opportunities to engage in meaningful research and travel wherever they desire.

Research Questions

Set within the framework of the contexts described above, the study upon which this paper is based focused on the following research questions:

1. How do SAVANA/IRES function within the internationalization of higher education and as sites for civic engagement?

2. In what ways does the SAVANA/IRES model work to influence engaged scholarship and community engagement in international & cross cultural research?

3. How does participation in interdisciplinary international education experiences affect student learning outcomes?

Literature Review

Internationalization of Higher Education

Global realities shape the current drive to internationalize, prompting post-secondary institutions to “understand their relationship with the rest of the world and to integrate this activity into core activities and values” (Ruther, 2002, p. 1). While there are many ways in which this internationalization operates on a global scale, this review of the literature focuses on post-secondary institutions in the United States and how they can
engage in transformation, including the academy, faculty, and students. To that end, the study that Ruther undertakes in *Barely There, Powerfully Present: Thirty Years of U.S. Policy on International Higher Education* (2002) describes how land-grant institutions and later the American Research University has always had an international perspective due to intense competition pressures. This competitive emphasis has led others to argue for the necessity to “seek to explore the gaps and silences in current pedagogy and practices, and to address the ambiguities, tensions, unevennesses, and contradictions in internationalization” (Ninnes & Hellstein, 2005, p. 4).

Additionally, changes in global boundaries and alliances have shifted the internationalization of higher education from a Western perspective. While much of this literature focuses on the ways in which the shift has contributed to the development of a knowledge economy (Olssen & Peters, 2005; Peters, 2002; Foray & Lundvall, 1996), the literature related to an emphasis on global citizenship and cross-cultural awareness proves to be more relevant for this study and will be discussed in the following section. Representative in this literature are the ways in which institutions and constituents residing in and around them are mutually shaping one another. This relationship fosters activities aimed at addressing concerns related to social responsibility with the intention of contributing to a global public good (Kezar et al, 2005; Neave, 2000; Ninnes & Hellstein, 2005).

Pedagogy within International Education Settings

Education for the 21st century is increasingly focused on expanding notions of teaching and learning. This section of the review of literature will focus on pedagogies
that offer multiple perspectives on service learning, experiential learning, and research in undergraduate education, respectively. Three important trends characterize internationalization of higher education: intensified interest in international and global matters (isolation not an option); increasing interest in student learning; and the growing trend of ‘new majority students’ (Olson, Green, & Hill, 2005). While study abroad and cultural exchange programs have been a part of higher education for many years, they have not been well utilized by a broad, representative population of undergraduates. Many study abroad programs in higher education are tied to funding and curricular goals which still do not prioritize such opportunities as part of a typical undergraduate experience (deWit, 2002; Olson et al, 2005). Current literature on engaged scholarship addresses the scope of these concerns, extending into experiential learning and study abroad as opportunities for undergraduate inquiry-based learning and the development of research skills.

*Service learning, experiential learning, and research*

The history of American higher education is steeped in a culture of service and citizenship, which current literature claims has been lost to market forces over the past several decades (Ehrlich, 2000; Kezar et al, 2005). Hans de Wit frames commentary from others in claiming that higher education has lost sight of a particular mission, stating “knowledge as understanding is the province of the university, and as of now, knowledge has outrun understanding by far” (de Wit, 2002, p. 3, quoting Muller, 1995). Service and experiential learning in particular have been cited consistently as preferred methods in higher education for improving possibilities for understanding (Annette, 2002;
Sunderland, 2002). Even more recently, there is a growing conversation within the literature which advocates for meaningful undergraduate research opportunities as a means of engaging students (Barnett, 2005; Taraban & Blanton, 2008).

Current literature reveals that campuses are beginning to look differently at the ways in which they offer civic engagement and service/experiential learning opportunities to their students (McIlrath & Mac Labhrainn, 2007). A focus on experiential learning is beginning to find some traction, with an intent to cultivate “bridge builders and world-spanners…who can transcend the boundaries of the campus and the community” (McIlrath & MacLabrainn, 2007, p. xix). As part of that effort, Campus Compact is one of the best known multi-university groups to make a comprehensive effort to transform the culture of higher education institutions with a renewed civic mission encompassing internationalization (Campus Compact, 2006; McIlrath & Mac Labhrainn, 2007). As evidenced in the claim from a Campus Compact report which states that “institutions of higher education have at their core a civic mission that calls on faculty, students, and administrators to apply their skills, resources, and talents to address important issues affecting communities, the nation, and the world”, Campus Compact is emblematic of the ways in which higher education is reevaluating its mission to the public, both local and global (Campus Compact, 2006). This effort is tied into the ways in which higher education can respond to internationalization, experiential learning, and cross-cultural engagement opportunities intended to shape both the scholarship and the citizenship of its students, and the communities with which they are affiliated.
Internationalization of higher education is also shaping the way that research projects are being conducted, primarily in terms of developing more collaborative, multi-nation efforts. In a book on organizational change in higher education, Trowler (2008) grounds changes in higher education in socio-cultural theory. This theoretical lens promotes a component of the change that could take place from his perspective as being ‘research for change’, a paradigm mirroring engaged scholarship. The research for change model is also gaining traction in international settings where the ‘researcher-as-practitioner’ approach linked to higher education study abroad opportunities begins to contribute to a culture of inter-connectedness (Trowler, 2008).

While literature grounded in empirical studies on research related to internationalization of education is sparse, McGinn’s edited volume outlines the process of the Six Nation Education Research Project which was developed and implemented through a collaborative process (2004). One of the interesting elements of this text is in the context McGinn provides in parsing ‘forms of cooperation’, which he describes as aid or assistance; exchange; and collaboration. While the former two have characterized research approaches from an American university standpoint, the collaborative model based on a set of joint efforts is showing some promise in the international research domain as the most powerful for producing new knowledge.

McGinn also discusses the importance of “shared understanding” in conducting international collaborative work. This type of understanding goes beyond the language barriers that one might expect. The Six Nation Project was not simply focused on conducting research. Rather, it also also aimed to contribute to evidence-based practice in
collaborative research in higher education. McGinn points out several obstacles to shared understanding, one of which is quite telling about the culture of higher education institutions. This has to do with institutional restraints on collaboration which he describes as linked to co-authorship and the faculty-review process (p. 201). Promotion linked to publication is cited by McGinn as a major deterrent to collaborative research projects (2004).

*Cultural and Global Competence*

In his forward to *The SAGE Handbook of Intercultural Competence* (2009), Derek Bok asserts that

> globalization has created a more urgent need than ever before for Americans to develop intercultural understanding and an ability to live and work productively and harmoniously with people having very different values, backgrounds, and habits…nowhere is this need felt more keenly than in our educational institutions (pp. ix-x).

This assertion frames the ways in which internationalization of higher education has influenced emphasis on cultural and global competencies, and begun to shape both institutional rhetoric and programming. Within this discourse, the constructs of cultural, global competence, and intercultural competence are explored with the goal of formulating an operational construct for the proposed study.

*Cultural Competence*

Much of the literature related to cultural competence is grounded in health care and social services discourse (Betancourt, Green, Carrillo & Ananeh-Firempong, 2003; Campinha-Bacote, 2002; Vonk, 2001). This body of literature frames cultural
competence within the realms of health disparities and cross cultural communication. Consequently, this paradigm tends to reflect a more outcomes-oriented concern with the acquisition of cultural competence on the part of health care providers and social workers.

Another prominent perspective in the literature related to cultural competence is within multicultural education discourse. This strand tends to focus on teacher and counselor education with a particular emphasis on white educators becoming trained into an awareness of cultural difference between them and students of color (Banks, 2006; McAllister & Irvine, 2002; Ladson-Billings, 1995; King & Ladson-Billings, 1990). Class differences between teachers and service providers are also taken into consideration within this domain (Heath, 1983; Lareau, 2003). While this multi-cultural education perspective contributes meaningfully to dialogues on race and contextualized encounters, it still continues to operate within a unidirectional framework with regard to the development of cultural competence.

The process through which these fields have parsed and constructed cultural competence sets the stage for the shaping of constructs which transcend disciplinary boundaries and provide more holistic and inclusive possibilities for exchange and transformation. In addition, globalization has expanded the conversation, compelling an emerging strand of literature on competencies related to difference and awareness. This is further explored in the following section.
Global and Intercultural Competence

Globalization and the internationalization of higher education have prompted post-secondary institutions in particular to broaden the construct of cultural competence to encompass global awareness. Within this body of literature, much of the discourse related to global competence remains centered on language capacity and exposure to different cultures (Olson & Kroeger, 2001). Although the construct of global competence tends to emphasize skills and experiences which are more extrinsic in nature, the emphasis on global competence itself has provoked initiatives within higher education which focus on assessing student outcomes within an international education framework (Deardorff, 2006).

Intercultural competence is easily conflated with global competence. However, closer examination reveals that they are framed within particular disciplines which set them slightly apart. In general, the literature on global competence is situated more prominently within the social sciences and education literature (Noddings, 2005; Reimers, 2008). In contrast, inter-cultural competence emerges from economics and business model discourse (Gundling, 2003; Rosen, Digh, Singer & Phillips, 2000). These discipline-bound perspectives highlight the need for clearly defined attributes which usefully differentiate the constructs of global and intercultural competence such that related understandings and assessments are appropriately measured and understood.
Civic Identity and Engagement

Flanagan (2006) comments on the role of institutions in shaping the civic aspirations of young people as they make the transition to adulthood, positing that

the social incorporation of younger generations into the body politic and the development of habits that sustain the system are rooted in young people’s experiences of membership in the institutions of their communities and the exercise of rights and fulfillment of responsibilities in those institutions...[and] that the evolving values and world views of youth are a fruitful arena for understanding the kinds of people they are becoming and the kind of polity they will create as younger generations replace their elders in society (p. 2).

Citizenship and co-citizenship (Gee, 2000, 114; Kroes, 2000) are linked to the compartmentalization of people and spaces (Smith, 1999). The nation state and the boundaries surrounding what and who ‘makes’ a citizen are major contributors to ideas on the legitimacy of ‘certain kinds of people’, and weighs heavily in identity development across contexts. Similar to Paolo Freire’s conscientização, a conceptual alternative for citizenship and identity encourages a shift from the 'ethics of the market’ to an ethic of shared fate and critical awareness (Freire, 2004). It is from this perspective that civic learning and development of civic identity are linked to transformative learning in an international education setting.

Civic Learning

Literature on civic learning still tends to focus more on knowledge, skills, and abilities related to citizenship than it does on the more intrinsic civic attributes of connection and contribution (Torney-Purta, Lehmann, Oswald, & Schulz, 2001). For undergraduate students in particular, there is an emerging body of literature which
establishes a mandate for the academy to return to a focus on graduating citizens (Ahier, Beck & Moore, 2003; Colby, Ehrlich, Beaumont & Stephens, 2003). This strand of literature includes a discussion of learning experiences related to civic knowledge and habits. Also, it begins to extend the conversation to civic learning activities that embrace internalization of beliefs and values which reformulate ideas about self and others (Holland, Lachicotte, Skinner & Cain, 1998; Kroes, 2000).

*Civic Identity*

Globalization is shaping the development of identity in significant ways and opening up possibilities for understanding selves and others (Croucher, 2004; Gee, 2000). As a result, the literature on identity development in general and civic identity more specifically can significantly contribute to the discourse on outcomes for undergraduate students in international education settings.

One recent conceptualizations of development of civic identity centered on young people is offered by Flanagan as civic hope (2003). Civic hope is:

engendered when trust is built between those with whom we are familiar and with ‘humanity’ in general. Opportunities for building civic hope comes from nurturing the belief that others are fair and trustworthy through interactions with people who represent a broad range of others (p. 165).

Civic hope, therefore, is a different way to conceptualize civic engagement. Positioned as a mechanism for social responsibility, civic hope engenders in young people a link between “one’s own interests and the common good and emphasizes the democratic ideals of equality, social justice and concern for others” (p. 170).
Rubin (2007) conducted a qualitative study which highlights a few key shortcomings in the current literature on civic identity development. She observes that understandings of civic self are not static and have been assessed from a predominately white, middle class perspective. Rubin begins by pointing out that civic education research is largely concerned with civic knowledge and civic engagement as defined by political and community-based *activities*. Through her qualitative study, she offers an alternative approach to the construction of civic identity, arguing that “students’ daily experiences and social positions inform their understanding of civics in powerful ways, and that particular school settings further shape this understanding, creating complex and varied contexts for students’ developing civic identities” (p. 451). Ultimately, Rubin suggests that young people coming from diverse contexts assign different meanings to the experiences that contribute to civic identity development. She developed a typology of civic identities matrix comprising four themes relating to “the approaches students in the study took to understanding and presenting their identities as citizens” (p. 469). This study represents a multi-dimensional effort in identifying the pathways and complexities of civic identity development for emerging adults.

There is a growing body of literature that focuses on the value of qualitative research methods in research related to the development of civic identity, and doing so with the knowledge that research studies to date have tended to reflect a significant cultural bias, based primarily on categories of race, ethnicity, and socioeconomic status (e.g., Andolina, Jenkins, Keeter, & Zukin, 2002; Ginwright & Cammarota, 2007). These current and ongoing efforts represent possibilities for still underutilized yet authentic inquiries aimed at identifying and supporting the ways in which civic identity develops.
for older adolescents and young adults grounded in a proactive, asset-based, culturally responsive perspective.

Engaged Scholarship

One dimension of the ways in which the discussion on undergraduate learning is taking shape can be found in the current literature on engaged scholarship (e.g. Campus Compact, 2007), which addresses the scope of concerns, extending into experiential learning and study abroad as opportunities for the development of undergraduate inquiry-based learning and research skills. This perspective offers an alternative to the traditional, disciplined-based emphasis which privileges mastery of basic knowledge (e.g. completion of coursework) over opportunities for experiential-type learning for undergraduates to participate in coursework and research (Robertson & Bond, 2005). Within this context, a reconsideration of the value and recognition of diverse epistemologies and “holistic frameworks” is also taken in to account (Steinberg, 2002).

Framing the Study

Theoretical Framework

Our analysis is grounded in constructivist and feminist theories, two theoretical lenses useful to the study of the overarching construct of interdependence. In general, the constructivist framework for this work emerges from the perspective that “it is a theory of learning or meaning making, [in] that individuals create their own new understandings on the basis of an interaction between what they already know and believe and ideas and knowledge with which they come into contact” (Richardson, 2003, p. 1623). Grounded in Deweyan education philosophy and the work of Jane Addams, the ‘liberatory praxis’
which facilitates an appreciation for interdependence operationalizes a model for reflection, participation, and action (Tan & Whalen-Bridge, 2008). This approach to a participatory way of life fosters the sense of connection which interdependence requires. Feminist thought from a Deweyan foundation makes the case for coexistence in the ways of being in society, recognizing the merits of interdependence, proximity, imagination, and reflection (e.g., Greene, 1995; Noddings, 2002). Tan & Whalen-Bridge (eds.) devote three chapters to some aspect of the transformative power of storytelling in shaping democratic thought and practice, principally as a mode of understanding others and the contexts within which we are more and less certain (2008). The coursework which provided the data pool for this analysis comprises a context for storytelling as exchange which elevates what is typically regarded as informal practice to a theoretical lens for analysis. Social justice and participatory paradigms as a research approach are also utilized within this work (Fine & Weis, 2004).

*C Constructivist Theory*

Constructivist theory is not only relevant to the contexts for teaching and learning which characterize this study, but also to the research approach of the proposed study itself. Constructivist theory pushes past knowledge production towards the activity of knowledge creation (Phillips, 1995; Dewey, 1938). While literature on constructivist learning theory still tends to emphasize learning which takes place for and within the individual, there is growing awareness of the shared experience for learning and teaching within the constructivist theoretical model (Richardson, 2003; Prawat & Floden, 1994). In addition, the holistic nature of constructivism wraps around multiple sites and sources
for learning and meaning-making. Constructivist learning theory advocates for a general move from a transmission model of teaching and learning to an emphasis on students as active participants in their own learning, learning which tends to stem from more experiential encounters. From a research perspective, constructivism serves as a meaningful dimension for an interpretivist endeavor in which meaning-making is fluid and dynamic. Thus, this theory is applied to both the experiences of the study participants as well as the approach of the researchers.

Participatory Paradigm

Building upon these theoretical frameworks, the participatory paradigm is closely linked to Pablo Freire's (1970) concept of conscientization (Barabtarlo & Zedansky & Poschner, 1998). As such, all participants in the research design must collectively produce knowledge with critical reflection on reality (Barabtarlo et al, 1998). This reality, in turn, is socially constructed with different dimensions of human agency, similar to Blumer's conception of an interpretative process (Meltzer, 1977). This means that both the researcher and the subject must educate and learn from each other. A participatory approach, therefore, is a purposeful and on-going process for all parties involved. In this case, the PI participated in the coursework along with the undergraduate participants during which time meaning and understanding were iteratively co-constructed. Thus process extended into the analysis itself.

There are four primary characteristics of the participatory model: the sociohistorical nature of individual action; the role of the individual; the nature of education; and the role of action in relation to theory (Barabtarlo et al, 1998). The most
important characteristic for the purposes of this study involves the nature of education, where education must seek out the subjects' prior experiences and knowledge as a starting point for further practice and development. The development of the educational program must also involve conditions of *horizontality*, where participating members are equal, and *full participation*, where members can take part in all aspects of receiving, transmitting, and producing knowledge (ibid). Finally, if the desired outcome is to produce positive transformation in the participants, then productive social action and critical reflection on reality are required (ibid).

**Methods and Methodology**

**Overview**

While the literature on transformation of higher education in terms of global learning, civic learning, and approaches in research continues to grow, (e.g., McIlrath & MacLabhraínn, 2007; Ninnes & Hellstein, 2005) there remains a notable lack of evidence related to learning outcomes as articulated by the participants. Substantive, rigorous evaluation is necessary in order to assess the impact of these experiences on student learning and overall personal and professional aspirations.

Both SAVANA and IRES are designed as frameworks with the goals of facilitating research, education and exchange activities related to the people, culture, and the environment of southern Africa. Situated within the context of the internationalization of higher education, these international exchange efforts include multi-directional, experiential learning. The formative evaluation upon which this paper is based utilized a survey instrument and qualitative data collection methods in order to better understand
the ways in which the SAVANA/IRES approach impacts the learning experience and development of civic identity of participants. The courses offered as part of the SAVANA/IRES model are collaboratively taught by faculty in environmental science, education, and anthropology, grounded in a service learning, project-based approach. The foundation courses for SAVANA/IRES offer a strong community engagement component which is implemented across diverse settings. In addition to the project-based approach, the course experience includes international student participation which facilitates meaningful and sustained cross-cultural exchange. The SAVANA/IRES model served as a unique opportunity for exploration in that it is a multi-dimensional, interdisciplinary effort which includes in its mission a high degree of scaffolding and opportunities for reflection.

Data Source

The primary participants for this evaluative study are the undergraduate students enrolled in the summer term 2009 EDLF5500/EVSC461/ANTH461: People, Environment, and Culture of South Africa (n=17) who traveled to South Africa and Mozambique for four weeks. Of this participant cohort, five were international students from institutions in South Africa, Mozambique, and Botswana. The analysis was conducted using data from pre & post-travel surveys, interviews (recorded in June 2009 during travel and six months following), participant observations conducted during the summer study abroad, and reflection paper assignments, collected from each of the undergraduate summer study abroad participants. A small sample of these had participated in Jterm 2009; two of the PCESA 2009 comprised the IRES cohort.
Researcher as Instrument

There are a few key ways in which the researcher as instrument and positionality of the researcher are particularly meaningful to this study. In qualitative research, the researcher is both an instrument for data collection as well as having a typically more participatory relationship with the participants (Guba & Lincoln, 1989). Likewise, as with any qualitative research endeavor, it is difficult for to remain an impartial observer or researcher (Lather, 1991). Further, feminist theory guides both the theory and the practice of this study. Therefore, this endeavor acknowledges that “a researcher conducts research with, through, and in the company of others” (Neumann & Peterson, p. 1).

The positionality of the two primary researchers, as graduate and undergraduate partners, reflects participatory engagement, research for action, and the intersection of personal experience and political interests. The PI is a graduate student with an enduring interest in education for change, participatory approaches, and the complexities of community-university partnerships. Between and among each of these interests, historic power differentials, the uses and misuses of voice, and the consideration of agency guide the PIs research agenda. The undergraduate research partner has focused much of her undergraduate work and research on access to higher education for low-income populations. Combined, the PI and undergraduate research partner are committed to work which integrates research, practice, and contribution. Each contributing faculty member has worked in community-based research settings, primarily in the US and Africa, for over two decades. Collectively, their work advocates research for change, amplifying community voice, and rights-based approaches in education.
Establishing Reliability for the Study

Survey Method

A survey is a cost- and time-efficient strategy to measure students' self-perceptions about their learning experiences. According to Fink (2003), researchers can design a survey to study objectives and predicted outcomes as guided by the literature review and the specific goals and objectives of a program. While the survey questions provided a cross-section of student opinions at a moment in time, the survey design can be replicated to measure dynamic changes in self-perceptions over a period of time (Babbie, 1990). Furthermore, with a replicable survey design, the researcher can administer the instrument across other samples of students to verify generalizations derived from the data (ibid).

The format of a survey allows researchers to study correlational relationships between variables (Babbie, 1990) and allows for increased reliability by measuring each variable with multiple items. Specifically, researchers can design a survey that measures different aspects of students' attitudes: intensity, centrality, and committed action (Schuman, 1996). These distinctions are important because they can provide researchers with a reliable and complete understanding of the strength of students' attitudes, how important an issue is to them, and if they have acted according to their beliefs. The pre- and post-surveys were designed with these distinctions in mind. Both surveys asked the students to rate the intensity of their beliefs on a variety of items aimed to measure the students' prior knowledge and beliefs before and after the study abroad trip. The surveys then had a mix of open-ended questions to gauge the centrality of students' beliefs and if these beliefs are reflected in overt, specific behaviors to measure the students' committed
In triangulating the data in this manner, the survey has high internal reliability to measure students' self-perceptions consistently.

The pre- and post- surveys also followed a four-point scale in order to avoid providing a neutral option. The literature states that students are likely to pick a neutral option consistently when they do not wish to take the time to think of their true opinion on the subject matter (Schuman, 1996). However, if a neutral option is not explicitly provided, the researchers risked the chance that the students are more likely to provide an opinion on a subject they are unfamiliar with to avoid admitting ignorance (ibid).

The development of the pre- and post-travel survey instruments focused primarily on course-related constructs, goals, and objectives, while also incorporating aspects of existing surveys such as the Beliefs, Events, and Values Inventory (BEVI). The BEVI scale in particular contributed to the intent to measure outcomes for this cohort related to participation in international education. While BEVI focuses on ‘equintegration theory’, the same model for assessment was determined to be applicable to an emphasis on engaged scholarship. In addition, the pre survey instrument was piloted with spring 2009 cohort of students enrolled in an international field research course. The pilot resulted in substantive changes to the item design and organization. A copy of the surveys used can be found in the appendix.

**Learning Outcomes**

The following learning outcomes were developed by UVa and University of Venda (South Africa) faculty and graduate students, specific to PCESA (syllabus attached) and aligned within the larger SAVANA consortium framework, including
partner institution guidelines. These outcomes provided a baseline for the process of the formative evaluation, related to construction of the survey instrument as well as to the initial qualitative coding process.

1. Demonstrate competencies related to cross cultural collaboration skills.

2. Identify multiple sources for useful knowledge and modes for developing socially responsible projects and research.

3. Demonstrate awareness of the value of and skills required for effective community engagement.

4. Demonstrate awareness of the scope of interdependence and interconnectedness on a global, multidimensional scale.

5. Demonstrate awareness of the role of reciprocity and capacity enhancement for community-based international projects and research.

6. Demonstrate awareness of the multiple contexts available for identifying issues and accessing sources of information.

7. Demonstrate awareness of and willingness to approach issues from an interdisciplinary perspective.

8. Identify real world, reflexive approaches grounded in experiential learning.


Qualitative Coding for Themes

There are many approaches for coding qualitative data. For this evaluative research project, the coding process was shaped by the constructs as predetermined by course-specific learning outcomes. Thus, similar to the survey, the interviews, paper prompts, and observation protocols were designed with specific learning outcomes as determined by the literature and goals of the course. In that way, the major themes for the qualitative data analysis are suggested via the instruments and methods utilized in the
research. It is the participant perspectives, however, which brought these constructs to life, providing a dynamic source for convergence and divergence in meaning-making.

Validity for the qualitative analysis is demonstrated through the multiple data sources, allowing for thick description. Reliability is addressed primarily through the ways in which participants are asked to describe the same experience in various ways. As for construct validity, this qualitative endeavor does not claim to be assuring meaning, but interpreting meaning. Trustworthiness as developed by Miles & Huberman (1994) provided the framework for validity and reliability in this qualitative research.

Findings

Overview

Data analysis for this study began in July 2009 and was concluded for the formal evaluation in March of 2010. As predicted in relation to the presurvey responses, the findings demonstrate the greatest change to have occurred on items related to confidence in knowledge about the people, culture, and environment of southern Africa and on understandings of cultural competence and global interdependence. Data analysis from the interviews and the qualitative participant observations resulted in the development of Dissonance, Engagement and Transformation as categories of influence. In depth interpretation and analysis ensued with preliminary findings that suggest:

1. Perceived value for students enrolling in the study abroad course 2009 shifted from more extrinsically located (e.g., need for course credit; desire to travel to Africa) to intrinsically valued (e.g., appreciation for collaboration with international students; shifts in thinking about people living in poverty).

2. Students have transformed their views with respect to production of knowledge and the ways in which they consider culture(s) different from their own. These shifts extended to participant perspectives on alternatives for
conducting research, and engaging with community where projects and research are taking place.

3. Virtually all of the participants articulated an increased appreciation for education which extends beyond the lecture hall and which incorporates an interdisciplinary approach.

Quantitatively, outcomes were measured on attributes such as a change in understanding over time relative to cultural competence, global interdependence, and the merits of conducting collaborative research. Qualitatively, interviews and field observations were conducted during travel in southern Africa, along with post-travel interviews conducted six months after travel. Two major domains were measured through the pre and post surveys: the evaluation of the course from an organizational standpoint and change over time expressed by the participants.

The following sections will provide an overview of the findings, beginning with the survey data. The qualitative analysis focused on examples within the major thematic domains which were identified as a result of the analytic process.

Survey Data

As mentioned above, the survey instruments were constructed as a means to evaluate learning outcomes, derived from the goals of the course and the instructors. Since this study predominantly used a qualitative analysis framework, the quantitative survey data was used simply to triangulate the qualitative data to evaluate course-specific outcomes. The course goals thus provided the researchers with three broad themes in which to construct survey questions and its subsequent matched-pairs analysis: 1) cultural competence; 2) knowledge and skills; 3) student experience. It follows then that the
analysis presented below has low external validity, but high internal validity. In addition, post survey responses from the southern African students were inconsistent, so complete survey results are based only on the US student responses (n=12).

Since a primary focus of the survey instruments was to evaluate the course from an organizational standpoint, a descriptive analysis was conducted to capture students' beliefs on this measure. During the post-survey period, for example, students were asked whether the course materials and assignments were beneficial in preparing them for their experience abroad. Out of 11 responses on the post-survey, 9% (n=1) of students strongly agreed, while 82% (n=9) of students agreed and only 9% (n=1) of students disagreed. Thus, a majority of students agreed that the materials and assignments prepared them well for their study abroad experience. When asked whether the students found the study abroad course meeting their expectations, all 11 students agreed.

Next, we compared pre and post means, using a paired samples T-test where p<.05 demonstrates statistical significance. These figures are seen in Table 1.1 in the Appendix.

The results of the statistical analysis revealed significance on various items distributed among two of the three broad themes: knowledge and skills and student experience. For questions that measured the participants' beliefs about the importance of engaged and international education in the general undergraduate student experience, one matched pair had a statistically significant change, and another pair had a slightly significant change: students' prior belief about the exposure to international issues as important to undergraduate learning and the students' belief about whether the course
materials and assignments were helpful to prepare the students for the experience abroad (p = 0.005); and the extent to which students believed that it was important for college students to engage in hands-on research before and after their trip (p = 0.082). Finally, students showed the most statistically significant change within the domain of knowledge and skills. A summary of the significant changes are listed in Table 1.2 in the Appendix.

Survey Analysis Discussion

While there was little to no statistically significant change in academic and professional goals from a quantitative standpoint, qualitative triangulation revealed meaningful shifts in participant thinking about these goals. While the majority of participants agreed/strongly agreed on the scaled questions from the post survey that this international education experience had influenced their academic and professional goals, they also overwhelmingly disagreed (agree/disagree scale) that the course experience had changed their academic and professional goals. Qualitative responses on the survey related to these two measures indicate that the highest level of influence occurred in relation to awareness of community perspectives.

Although there were few items that showed statistically significant changes according to the paired samples analysis, this can be explained by the fact that the majority of respondents had already agreed or strongly agreed with the items presented in the pre-survey. As mentioned above, there was a slight significant change between students' initial comfort in different situations and their later perceived level of prior cross-cultural encounters as helpful to prepare them for study abroad. Within the student experience theme, most students had already strongly agreed that it is important for
college students to engage in interdisciplinary learning and to engage in international education/study abroad, and thus exhibited no significant change. There was significant change, however, in students' belief that exposure to international issues is important to undergraduate learning and their belief that the course materials and assignments was helpful. There was also a slightly significant positive change in students' conviction that hands-on research is important for college students. Nevertheless, the most substantial changes took place within students' knowledge and skills related to southern Africa and research skills, indicating that for the most part, the course was successful in building upon students' prior knowledge and skill sets.

Qualitative Data

This section will provide an overview of the PCESA/IRES (as the case profile for the larger SAVANA consortium) interpretive findings. While the smaller IRES cohort did share an expanded research experience, the overall goals in each context for international education and research emphasis were essentially the same. That is, the emphasis was on the development of competencies and the importance of community engagement.

In general, findings indicated that the students deconstructed and reimagined myths and perceptions about Africa, poverty, basic human rights, and community capacity. Consequently, the students gained a deeper understanding of the notions of cultural competence, global interdependence, and community engagement. In addition, it appeared that students successfully internalized the importance of skills related to planning and implementing international, cross-cultural projects and research. During
qualitative coding of the data, three major themes emerged that offered multidimensional opportunities for scaffolding experience with voice. These domains have been identified as dissonance, engagement, and transformation, which will be discussed further in the paper. While for organizational purposes these themes are offered separately, they are viewed by the researchers as dynamic, fluid, and co-constructed.

The interpretive analysis was conducted on the qualitative portions of the surveys, on both sets of interviews and on the reflection papers that were written by the US students as course assignments. The following narrative of the qualitative analysis is based on representative responses from these data sources.

Dissonance

The theme of dissonance was interpreted via the articulations of experiences and ideas which challenged a previously held frame of reference. For this cohort, many of these centered on perceptions of Africa, but also on the sources of knowledge and contexts for learning. The primary data sources for this dimension were the pre travel papers, for which students were asked to identify their “baggage” (i.e. their assumptions and expectations about Africa); and the post travel paper for which the students were asked to integrate major themes from the course with ideas about access and resources. The following excerpts were selected as interpretive findings related to dissonance.

With regard to cultural influences on perceptions of Africa, one student writes that, “I’d probably tell you that it seems like a pretty terrifying travel destination. The news and media portray Africa as a continent ruled by poverty, war, genocide, and disease. There seem to exist no images of humanity, but instead images of the destruction of humanity; if CNN and Fox News were my only resources for images associated with Africa, it would seem Africa had become the launching pad for the Apocalypse.”
This perspective is articulated in a different way by another student who felt she could not divulge full details to her family about travel to Africa, sharing in her predeparture paper that: “In a few days I will be off to England—or at least that is what my grandparents think. The several heart attacks that would surely follow the news of their granddaughter traveling to Africa convinced my parents to only mention the destination of my layover.”

This baggage, accordingly, shaped students’ expectations as they anticipated culture shock upon arrival. Regardless of this baggage, however, most students looked forward to the trip as a means to gain understanding by direct observation, in order to challenge their current beliefs and values. As one student says, “My investigation into the comparison of my Western culture and that of more traditional southern Africa will lead me to question the infallibility of my own culture and to seek to realize the hidden brilliance and merit of others.”

**Engagement**

The theme of engagement was interpreted through encounters. The PCESA course provides multiple opportunities for exchange, with a focus on local community engagement. However, the theme of engagement also emerged in relation to student participant interactions with one another as well as in regard to their own learning. Through exposure to southern African cultures and lifestyles, the students appeared to recognize the value of community engagement in understanding and addressing critical issues.

In a post-travel paper response, one student reflected that, “I realize that the most effective mode of help is collaborative problem-solving within communities. Effective community involvement does not involve the abrasive introduction of outside ideas, but instead is created by working with the people of a community to improve the present situation. Africa cannot be ‘saved’ by imposing aid, but instead by encouraging the creation of access.”

Engagement was interpreted through relationship development between the student participants as well. For example, the Mozambican student shared that, “I was afraid [the students from the US] would treat me poorly but my status has been raised. My ideas [about the other students] have changed. We are all persons.”

Furthermore, students also appreciated how empowered individuals can provide cohesiveness to a community. Aspects of this view of agency were revealed in many
ways throughout the student responses. One notable example is in the comparison one student provides between a relatively privileged school setting and a rural one that at first appears less so: “On the surface [in comparison] this school seemed impoverished…it wasn’t until the schoolteachers came forward and welcomed us to the school that we realized we were in the presence of another empowered group…it possessed resources that were equally valuable because they, while limited, benefited the entire community and empowered many people.”

Transformation

The theme of transformation encompasses the multiple dimensions of participant expressions of change. Change occurred in terms of shifts in perception and in the realization of opportunities for learning.

Following a day of excavation and hominid education, one student aptly describes a particularly eloquent transformational experience which captures awareness transcending time: “Once again, I found myself frustrated in trying to discover the significance…I tore away at a meaty cow bone with my own pitifully constructed tool. Learning to do these things, however, furthered my appreciation for the accomplishments of the first modern humans. Hacking away at the cow bone somehow made me feel closer to the land that surrounded me.”

From multiple vantage points, the students were able to reimagine the humanity in life circumstances very different from their own. As one of many examples, a student shares that “It is amazing how resilient people are in comparison to my ideal life…when we were in Alex [a settlement area on the outskirts of Johannesburg] I felt a great sense of community…I did not expect people to be happy living in a slum.”

Further, student thinking was transformed with regard to community capacity in southern Africa. During an interview, one student admits surprise that “through all of those things, people live fine…we found symbols of ability to cope, like art on the doors in Alex.” He goes on to process that, from an engineering perspective, “There is a lot of lost ingenuity in the developed world. [We] witnessed ingenuity in common people; everyone finds ways to use twine, sticks; to do something representative of capability.”

During a first interview, approximately 3 weeks into travel, one student simultaneously describes the greatest challenge and point of discovery to her: “[This experience is] changing the way that I am used to learning…sitting at lectures focuses on what you need to know…this lets you interpret, take it in on your own…it involves open ended thinking and the ability to draw your own conclusions.”
Qualitative Analysis Discussion

Denzin asserts that “[i]n the social sciences there is only interpretation. Nothing speaks for itself”, going on to explain the *art of interpretation* as an effort to “translate what has been learned into a body of textual work that communicates these understandings to readers” (2005, p. 500). The researchers on this study understand their interpretive process in just this way---that it is a *translation* of the language and perspectives of others; that it is a particular way of telling a story, rather than a claim of being *the* story. From the position of the art of interpretation, the inquiry in this study related to engaged scholarship, civic identity, and social responsibility provided meaningful spaces for the consideration of perspectives on these constructs. Each of these is briefly discussed in the following sections.

*Engaged Scholarship*

Engaged scholarship incorporates multiple aspects of active, reciprocal teaching and learning. This evaluative and interpretive analysis, centered on components within the SAVANA/IRES model, offers the opportunity to consider pedagogical opportunities, particularly in international settings. There are a multitude of examples throughout the participant perspectives which speak to an appreciation for learning outside the classroom and the autonomy to arrive at one’s own conclusions. Engagement, in fact, is the thread which ties this coursework, undergraduate research experience, and the approach of this study together. In terms of assessment, the reflective opportunities that were offered and demonstrated during every phase of this endeavor provide a model for a better understanding of outcomes related to engagement.
Civic Identity

In an article focused on education for global citizenship, Lutterman-Aguilar & Gingerich argue that, although study abroad itself “does not lead to the development of global citizenship… it can do so when it is designed with that goal in mind, putting into practice the principles of experiential education” (2002, p. 43). Within teaching and learning environments such as PCESA and IRES, there are multidimensional opportunities for the exploration of citizenship and connection.

The focus on engagement in this study prompts the consideration of this type of coursework as influential on the development of civic identity, understood through the dimensions of connection, participation, and citizenship. Where civic identity includes aspects of connection, agency, action, and participation, this study provides fertile ground for a more targeted focus on the ways in which young adults transform these learning experiences into internalized views of themselves and others as citizens. The emphasis on cultural and global competencies within the SAVANA consortium coursework and activities further expands the opportunities for identity development in an international education setting. Just as part of this comparatively small scale, students took an active role in creating, maintaining, and contributing to community within this context.

Social Responsibility

Investing in strengthening social capital and diversity as well as collective exposure to different world settings and realities remains key to breaking the walls around students in their learning, leading to the achievement of what Marullo and Edwards (2009) describe as the politicization process for students engaged in service
learning programs and university-community partnerships. The experience of that type of recognition alone is an act of social justice. International exchanges of this kind provide opportunities for recognition which offer the potential to reconfigure assumptions and to formulate perspectives which are grounded in experience.

Another critical consideration within the realm of social responsibility is identified in the valuing epistemologies on every level. Woven within the SAVANA/IRES participant experiences is a thread which speaks to the realities of the persistent privileging of particular kinds and sources of knowledge. This extends to the paternalistic views of the “developed” over the “developing”, as well as to the ways in which the ‘North/South’ scholarship space is negotiated. While this study does not claim to have resolved those issues, there is evidence emerging from participant perspectives that this experience has cultivated awareness and a sense of purpose around these concerns.

The SAVANA/IRES experiences reported earlier in this paper provide ample evidence on how a global student community of scholars engaged in experiential learning can be constructed through joint grassroots community-based activities and continuous interaction. Another key tenet of social justice in international education is the need for mutuality and reciprocity with the local community. Undergraduate participants in international education settings such as SAVANA/IRES experience firsthand the possibility of the limitations of their own knowledge and worldview; at the same time, the community-based emphasis provides a catalyst for better understanding the often negative impacts of unidirectional decision-making. As a dimension of social
responsibility, scholarship and agency are considered from multiple, co-participatory views.

Limitations

This study focused an evaluative lens on particular components of the SAVANA consortium-related coursework and research projects; therefore, the resulting analysis at this stage does not claim generalizability or transferability. As stated in the introduction, this particular approach to evaluation grounded in participant perspective joins similar efforts in laying the groundwork for meaningful, rigorous methods intended to better understanding experiential learning in international education settings. To that end, this study provides a springboard for further analysis aimed at expanding on the related constructs, measurements, and perspectives.

This study also brings to light the limitations of constructs. For example, even with the literature review, the consideration of relevant extant instruments, and a survey pilot, it is clear that not all participants understood the constructs in the same way. In addition, enrollment in these types of courses is overwhelmingly voluntary, raising concerns of selection and bias. Further, course evaluations of this scope are not feasible as a general rule on a regular basis. Therefore, recommendations for assessment present a challenge when considering scale and purpose. However, while studies of this kind may not be entirely feasible from an institutional assessment perspective, aspects of these methods and methodological mission can be incorporated to enhance the meaning and purpose of these evaluative efforts. What we believe has emerged as most valuable and usable in the consideration of pedagogy, practice and assessment with like teaching and
learning contexts is an emphasis on reflection. That aspect will be explored with more depth in future research related to this study.

This study scratched the surface of the articulated goals as set forth within the framework of the research questions. The study has provided a rich data source for future exploration of the related constructs and perspectives.

Significance and Future Direction

The internationalization of higher education has prompted an imperative for post-secondary institutions to produce globally competent citizens. However, “a considerable gap exists between the rhetoric of global and international education and the reality of institutional activities and outcomes” (Olson et al, 2005, p. 1). This study of SAVANA/IRES components joins the effort to address this gap as part of a 21st century vision for post-secondary education. Analysis and links to literature within this framework contribute to the measurement and understanding of outcomes related to social responsibility, political efficacy, civic participation, science- and research-related careers, and civic/service learning and action. This study reflects a growing awareness of the complexity of contexts and the potential for cognitive dissonance to inspire participant and institutional transformation grounded in engaged and reflective experiences.

SAVANA/IRES incorporates both informal and formal learning opportunities which aim to cultivate relationships that transcend historic boundaries of citizenship, connection, and academic partnerships. In doing so, this international exchange encourages contemporary repertoires within and beyond post-secondary education which
prompt a reconfiguration in ways of knowing and modes of inquiry related to access and expertise. Student perspectives from this study shed some light on the ways which this may be taking place. Efforts of this kind also contribute to the literature in higher education which advocates for interdisciplinary learning and bridging the gap between research and practice (e.g., Conrad & Gunter, 2000). Studies on post-secondary education experiences such as SAVANA/IRES provide the analysis necessary to inform the pedagogical goals and programming in higher education that aim to develop global competence as part of an engaged scholarship approach.
References


Appendix

I. Correlation coefficients and significance values for matched pairs (Table 1.1)

<table>
<thead>
<tr>
<th>Paired Questions</th>
<th>r</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre Q4A:</strong> I have had cross-cultural encounters</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q1A:</strong> My prior cross-cultural encounters were helpful in preparing me for this study abroad experience</td>
<td>0.507</td>
<td>0.092</td>
</tr>
<tr>
<td><strong>Pre Q4B:</strong> I feel comfortable in situations different than those with which I am most familiar</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q1A:</strong> My prior cross-cultural encounters were helpful in preparing me for this study abroad experience</td>
<td>0.205</td>
<td>0.523</td>
</tr>
<tr>
<td><strong>Pre 4C:</strong> I am confident in my knowledge of southern African people, culture, and the environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q2A:</strong> I am more knowledgeable about southern African people, culture, and environment</td>
<td>-0.049</td>
<td>0.880</td>
</tr>
<tr>
<td><strong>Pre Q4D:</strong> I am confident in my ability to conduct cross-cultural/international research</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q2B:</strong> I am better prepared to conduct cross-cultural research.</td>
<td>0.309</td>
<td>0.329</td>
</tr>
<tr>
<td><strong>Pre Q4D:</strong> I am confident in my ability to conduct cross-cultural/international research</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q2C:</strong> I have more confidence in my ability to collaborate on research projects with community members in different settings.</td>
<td>0.309</td>
<td>0.329</td>
</tr>
<tr>
<td><strong>Pre Q4D:</strong> I am confident in my ability to conduct cross-cultural/international research</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q6:</strong> As a result of this course, my understanding of community engagement has changed</td>
<td>0.120</td>
<td>0.711</td>
</tr>
<tr>
<td><strong>Pre Q4E:</strong> It is important to me that I increase my cultural competence.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q4:</strong> As a result of this course, my understanding of what it means to be culturally competent has changed.</td>
<td>-0.194</td>
<td>0.568</td>
</tr>
<tr>
<td><strong>Pre Q4F:</strong> It is important to me to collaborate on research projects.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q2D:</strong> I have more confidence in my ability to collaborate on research projects with community members in different settings.</td>
<td>-0.161</td>
<td>0.617</td>
</tr>
<tr>
<td><strong>Pre Q4G:</strong> It is important for me to learn about issues through different disciplinary lenses.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q2G:</strong> I believe it is important for college students to engage in interdisciplinary learning.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Pre Q4H:</strong> This international education experience is important to my academic goals.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q2E:</strong> This international education experience influenced my academic goals.</td>
<td>-0.149</td>
<td>0.644</td>
</tr>
<tr>
<td><strong>Pre Q4H:</strong> This international education experience is important to my academic goals.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q7:</strong> As a result of this course, my academic goals have changed.</td>
<td>-0.293</td>
<td>0.356</td>
</tr>
<tr>
<td><strong>Pre Q4I:</strong> This international education experience is important to my professional goals.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q2F:</strong> This international education experience influenced my professional goals.</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td><strong>Pre Q4I:</strong> This international education experience is important to my professional goals.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q8:</strong> As a result of this course, my professional goals have changed.</td>
<td>-0.577</td>
<td>0.049*</td>
</tr>
<tr>
<td><strong>Pre Q5A:</strong> Exposure to international issues is an important part of undergraduate learning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q1B:</strong> The materials and assignments were helpful in preparing me for this study abroad experience.</td>
<td>-0.522</td>
<td>0.082*</td>
</tr>
<tr>
<td><strong>Pre Q5B:</strong> It is important for college students to engage in interdisciplinary learning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q2G:</strong> I believe it is important for college students to engage in interdisciplinary learning.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Pre Q5C:</strong> It is important for college students to engage in hands-on research.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q2H:</strong> I believe it is important for college students to engage in hands-on research.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Pre Q5D:</strong> It is important for college students to engage in international education/study abroad.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Q21:</strong> I believe it is important for college students to have international/study abroad experiences.</td>
<td>0.258</td>
<td>0.418</td>
</tr>
</tbody>
</table>
## II. Summary of Significant Changes (Table 1.2)

<table>
<thead>
<tr>
<th>Question Type</th>
<th>Paired Questions</th>
<th>p-value</th>
</tr>
</thead>
</table>
| Cultural Competence | **Pre Q4B:** I feel comfortable in situations different than those with which I am most familiar.  
**Post Q1A:** My prior cross-cultural encounters were helpful to prepare me for this study abroad experience | p = 0.096 |
| Student Experience  | **Pre Q5A:** Exposure to international issues is an important part of undergraduate learning  
**Post Q1B:** The materials and assignments were helpful in preparing me for this study abroad experience | p = 0.005 |
| Student Experience  | **Pre Q5C:** It is important for college students to engage in hands-on research  
**Post Q2H:** I believe it is important for college students to engage in hands-on research | p = 0.082 |
| Knowledge & Skills  | **Pre Q4C:** I am confident in my knowledge of southern African people, culture, and the environment.  
**Post Q2A:** I am more knowledgeable about southern African people, culture, and the environment | p = 0.000 |
| Knowledge & Skills  | **Pre Q4D:** I am confident in my ability to conduct cross-cultural/international research  
**Post Q2B:** I am better prepared to conduct cross-cultural research  
**Post Q2C:** I have more confidence in my ability to collaborate on research projects with community members in different settings  
**Post Q6:** As a result of this course, my understanding of community engagement has changed | p = 0.000 |
| Knowledge & Skills  | **Pre Q4G:** It is important for me to learn about issues through different disciplinary lenses  
**Post Q2G:** I believe it is important for college students to engage in interdisciplinary learning. | p = 0.096 |
| Knowledge & Skills  | **Pre Q4I:** This international education experience is important to my professional goals  
**Post Q2F:** This international education experience influenced my professional goals | p = 0.082 |
III. Pre- and Post- Survey Instruments

EDLF5500/EVSC461/ANTH461: People, Culture and Environment of South Africa

Study Abroad 2009 Survey (pre-travel)

Thank you for taking the time to fill out this survey. Your participation in this study is very important to us. We are hoping to use this information to better understand outcomes for participants in an international learning context. All responses are confidential; the cover sheet with identifiers will be kept separate from the survey and your survey will be assigned a code. Your participation in this study is in no way associated with your standing as a student.

Code: _______

| Name__________________________________________________________ |
| Institutional Affiliation_______________________________________ |
| Major/Area of interest_________________________________________ |
| Year in School_________ Age_______ Gender F M                   |
| Race/Ethnicity________________________________________________ |
| Native Language________________________________________________ |
| Additional languages spoken/understood_________________________ |
| Are you willing to participate in a follow-up interview? Yes___ Maybe___ No___ |
| Contact information: Email______________________________________ |
| Phone_________________________________________________________ |
Did you participate in the January term course, *Ethics, Protocol, and Practices of International Research*?  Yes_____  No_____  

Do you plan to carry out a Research project from January term during this trip?  

Yes_____  No_____  

If so, please describe:  

Why were you interested in taking this study abroad course?  

What do you hope to learn from participation in this study abroad course?  

If you are planning to stay on in southern Africa upon course completion, please describe what you will be doing?  

Have you ever participated in a Service Learning or Community Engagement project?  

Yes___  No___  

If so, please describe your overall impressions of the experience(s):  

What are the two major things you learned from the experience(s)?  

How could the experience(s) have been improved?
Please answer the following questions based on your prior life or education experience:

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) I have had cross cultural encounters.</td>
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<td>b) I feel comfortable in situations different than those with which I am most familiar.</td>
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<tr>
<td>c) I am confident in my knowledge of southern African people, culture, and the environment.</td>
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<tr>
<td>d) I am confident in my ability to conduct cross cultural/international research.</td>
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<tr>
<td>e) It is important to me that I increase my cultural competence.</td>
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<tr>
<td>f) It is important to me to collaborate on research projects.</td>
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<tr>
<td>g) It is important for me to learn about issues through different disciplinary lenses.</td>
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<tr>
<td>h) This international education experience is important to my academic goals.</td>
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<tr>
<td>i) This international education experience is important to my professional goals.</td>
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</tbody>
</table>

In general:

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Exposure international issues is an important part of undergrad learning</td>
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<tr>
<td>b) It is important for college students to engage in interdisciplinary learning.</td>
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<tr>
<td>c) It is important for college students to engage in hands-on research.</td>
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<tr>
<td>d) It is important for college students to engage in international education/study abroad.</td>
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</tbody>
</table>
I would describe cultural competence as…

I would describe global interdependence as…

I would describe community engagement as…
EDLF5500/EVSC461/ANTH461: People, Culture and Environment of South Africa

Study Abroad 2009 Survey (post travel)

Thank you for taking the time to fill out this follow-up survey regarding your international education experience. We appreciate your continued participation in this study. As a reminder, all responses are confidential; the cover sheet with identifiers will be kept separate from the survey and the follow-up survey will be linked to your previously assigned code. Your participation in this study is in no way associated with your standing as a student.

Name______________________________________________________________

Contact information:

Email______________________________________________________________

Phone______________________________________________________________

Are you willing to participate in a follow-up interview?

Yes____  Maybe____  No___
<table>
<thead>
<tr>
<th>1. In general:</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) My prior cross cultural encounters were helpful in preparing me for this study abroad experience.</td>
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<tr>
<td>b) The materials and assignments were helpful in preparing me for this study abroad experience.</td>
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</table>

<table>
<thead>
<tr>
<th>2. As a result of this study abroad course:</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) I am more knowledgeable about southern African people, culture, and environment.</td>
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<tr>
<td>b) I am better prepared to conduct cross cultural research.</td>
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<tr>
<td>c) I have more confidence in my ability to collaborate on research projects with community members in different settings.</td>
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<tr>
<td>d) I have more confidence in my ability to collaborate on research projects with my peers.</td>
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<tr>
<td>e) This international education experience influenced my academic goals.</td>
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<tr>
<td>f) This international education experience influenced my professional goals.</td>
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<tr>
<td>g) I believe it is important for college students to engage in interdisciplinary learning.</td>
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</tr>
<tr>
<td>h) I believe it is important for college students to engage in hands-on research.</td>
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</tr>
<tr>
<td>i) I believe it is important for college students to have international/study abroad experiences.</td>
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</tr>
</tbody>
</table>
3. This study abroad course met my expectations.
   Agree___ Disagree____

   Please explain:

4. As a result of this course, my understanding of what it means to be culturally competent has changed:
   Agree___ Disagree____

   Please explain:

5. As a result of this course, my understanding of global interdependence has changed:
   Agree___ Disagree____

   Please explain:

6. As a result of this course, my understanding of community engagement has changed:
   Agree___ Disagree____

   Please explain:

7. As a result of this course, my academic goals have changed:
Agree___ Disagree___

Please explain:

8. As a result of this course, my professional goals have changed:

Agree___ Disagree___

Please explain:

Please describe the most valuable aspect of this study abroad experience for you:

What would you change?