TITLE
Assessing the effectiveness of community service learning and discovery learning to promote intercultural competencies in students who study abroad and students who do not study abroad

KEY WORDS
Intercultural competencies; community service learning; discovery learning; study abroad

ABSTRACT
Scholars realize that immersion in different cultures while studying abroad does not necessarily lead to intercultural learning and competencies. This may also imply that study abroad in itself, is not necessary for intercultural learning. If, as hypothesized, intercultural learning in study abroad programs is facilitated by practice and reflection, and being put outside of one’s comfort zone to interact and engage with other cultures, can the same methods be used at home campus to promote intercultural learning? The purpose of this study is to assess how well University of Alberta study abroad programs are promoting intercultural learning, using quantitative and qualitative mixed methods. The findings will further be used to incorporate community service learning and discovery learning into home campus courses, as an educational intervention, to promote intercultural learning.
PROJECT RESEARCH DESCRIPTION

Innovation

Academic, business, and political leaders agree there is a greater need for globally literate citizens (Fisher 2008; University of Alberta Dare to Discover, Dare to Deliver). A commonly used term in the literature to refer to global citizenry, is intercultural competence, which we define as the knowledge, attitudes, skills and behaviours, which enable effective and appropriate interaction with people from other cultures (Perry and Southwell 2011).

International study has long been considered one of the best ways to produce global citizens and intercultural competence, and there has been rapid growth in study abroad programs worldwide (Anderson et.al. 2006; Ogden 2010). However, scholars and practitioners are increasingly questioning the long-held assumption that participation in study abroad in itself leads to intercultural learning (Harvey 2013). Research shows that students not only need to have authentic intercultural experiences in the host culture, but they also need help processing and making meaning of those experiences if they are to benefit fully from the learning opportunity. Just having immersion opportunities and leaving students to their own devices is no longer appropriate, if it ever was (Harvey 2013). And it follows, that maybe intercultural learning can be accomplished on campus without travelling abroad, if the same support in processing and making meaning of intercultural experiences is provided.

Even when students choose to study abroad, it is increasingly difficult for immersion in new cultures when students are able to remain connected to their home culture more than ever before (Email, blogs, Skype), and spend most of their time with their fellow students, or connect with the local expat culture, instead of interacting with the host culture (Harvey 2013). Scholars realize that tension and disequilibrium are necessary components of the learning abroad process (Adler, 1975; J. Engle & Engle, 2002; Savicki 2008a). Research indicates that it is important for students to be challenged and to engage with local communities to enhance their education abroad experience, but also have time to reflect (Harvey 2013).

The University of Alberta, Southern African Field School (SAFS) incorporates discovery learning and community service learning into science curriculum and study abroad, with the goal to ultimately train global citizens and promote intercultural competency. The development of intercultural competence overlaps two broader trends in higher education: a growing emphasis in higher education on learner-centered practices (Kuh et al. 2005; Tagg, 2003; Vande Berg, 2007b), and the assessment movement (how do we properly measure success and learning outcomes?) (Bolen, 2007; Vande Berg, 2007b). SAFS has integrated the Certificate of Community Service Learning and the Certificate of Intercultural Learning, which includes pre-departure workshops, multiple opportunities to interact with local people in three different countries, and assignments to reflect through the program. How well is SAFS meeting the objective of promoting intercultural learning? What types or activities and tools are effective in promoting intercultural learning while studying abroad or not studying abroad (discovery learning, community service learning)? Can some of these tools and activities be incorporated into home campus courses to promote intercultural learning?

In the following quote from Ogden (2007), I have removed the words, abroad and international, in order to highlight that the goals of study abroad are universal and should be incorporated into all education at home or away:
“If education _____ is about helping students to learn new ways of thinking and to become more complex, interculturally competent individuals, it is not desirable for students to remain comfortably situated on the veranda. Education _____ programs should make it impossible for students to avoid direct and meaningful contact with ______ culture, to learn with and from them, to explore new values, assumptions and beliefs. As ______ educators, we should not be satisfied with simply exposing students to different experiences. Rather we should be satisfied only when our students are engaged and motivated to pursue experiences that lead to transformative personal growth” (Ogden 2007)

The fields of intercultural studies and intercultural education have grown as a response to these imperatives, with most research revolving around the following questions. Firstly, what are the attributes and skills that make a person successful in intercultural interactions and how can they be conceptualized? Secondly, how can they be developed or learned? Thirdly, how can they be measured? (Perry and Southwell 2011).

Evaluation and Methods

Many studies lack rigour making it difficult to confidently assess the effectiveness of intercultural competence (Mendenhall et al. 2004; Perry and Southwell 2011). Carefully designed studies, both qualitative and quantitative, are needed to further our understanding of the ways in which adult learners can develop intercultural skills, attitudes and knowledge. The following objectives incorporate a number of recommendations for future research by Perry and Southwell (2011).

Objective 1: To improve our understanding of how intercultural competence can be assessed (see Phase 1 – Gantt Chart):

The research team will evaluate some commonly used quantitative and qualitative assessment tools (Mendenhall et al. 2004; Perry and Southwell 2011), including having the team and participating instructors be assessed by the various tools. This will give an in-depth understanding of the methods for comparison, but also enable the research team and instructors to assess and improve on their intercultural competencies.

The research design will include pre and post assessments of students, for example before and after study abroad programs, using quantitative and qualitative mixed methods, similar to past studies (Pedersen 2010; Anderson and Lawton 2011; Perry and Southwell 2011). A mixed methods methodology will allow us to explore assumptions on the acquisition of intercultural competencies, compare existing assessment tools and resources and research, and acquire a deeper understanding and appreciation as to what constitutes intercultural competency.

There are a number of quantitative assessment tools which measure intercultural competence. One common assessment tool is the Intercultural Development Inventory (IDI; www.idiinventory.com); a 50-item questionnaire available online that can be completed in 15–20 minutes. A wide range of organizations and educational institutions use the IDI, and a number of studies have published results from pre and post testing (Perry and Southwell 2011; Hammer 2012). Other tools include Global Perspective Inventory (Braskamp et al. 2014; Anderson and Lawton 2011), as well as the Intercultural Effectiveness Scale (IES), Global Competencies Inventory (GCI; www.kozaigroup.com), and Globesmart (http://www.aperianglobal.com), which are being used by the University of Alberta International.
Research also suggests that qualitative methods such as observations, interviews and portfolios may assess intercultural competence more deeply, authentically and perhaps accurately (Byram 1997; Ingulsrud et al. 2002; Jacobson, Sleicher, and Burke 1999; Mendenhall et al. 2004). SAFS have a number of written reflection assignments as part of the community service learning. Written reflection will serve as a source of qualitative data, for example where participants are asked to describe how they would respond to a hypothetical intercultural situation. Data analysis methods include narrative analysis and the use of coding responses. This analysis can also be conducted pre- and post (Perry and Southwell 2011).

**Objective 2:** To collect empirical data assessing the ability of different approaches to develop intercultural competence in study abroad (see Phase 2 – Gantt Chart)

Table 1 is a list of the different study abroad groups to be assessed and the projected number of participants for the study. Based on the literature, the independent variables expected to affect the increase of intercultural competency are: intercultural training, duration of study abroad and location of study abroad.

<table>
<thead>
<tr>
<th>Student Groups (2016-2018; see GANTT Chart)</th>
<th># participants</th>
<th>Intercultural training</th>
<th>Duration</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAFS Semester (5 semesters * 15 students)</td>
<td>75</td>
<td>Yes</td>
<td>12 wks</td>
<td>Africa</td>
</tr>
<tr>
<td>Cortona Semester (4 semesters * 15 students)</td>
<td>60</td>
<td>No</td>
<td>12 wks</td>
<td>Europe</td>
</tr>
<tr>
<td>Cortona Spring Module (2 modules * 15 students)</td>
<td>30</td>
<td>No</td>
<td>4 wks</td>
<td>Europe</td>
</tr>
<tr>
<td>Ghana Spring Module (2 modules * 15 students)</td>
<td>30</td>
<td>Yes</td>
<td>4 wks</td>
<td>Africa</td>
</tr>
<tr>
<td>ALL OUT volunteers - Semester</td>
<td>30</td>
<td>No</td>
<td>12 wks</td>
<td>Africa</td>
</tr>
<tr>
<td>ALL OUT volunteers - Semester</td>
<td>30</td>
<td>No</td>
<td>4 wks</td>
<td>Africa</td>
</tr>
</tbody>
</table>

Total = 235

The dependent variable of the study is the potential increase in intercultural competency, measured by pre-tests (before study abroad) and post-tests (after study abroad). It is expected the level of intercultural competency will be similar in all groups for the pre-test. We predict that: a) intercultural training will lead to an increase in intercultural competency (SAFS, Ghana), b) the duration of study abroad will lead to an increase in intercultural competency (semester versus module), and c) locations that are less similar to home culture (Africa versus Europe) will lead to greater intercultural competency.

**Objective 3:** To explore types of learning that develop intercultural competencies, and understand what works best, for whom and under what conditions, and why (see Phase 3 – Gantt Chart)

This initial research is significant in that it will inform a process that supports long-term research goals to develop instructional *interventions,* to enhance intercultural learning on campus. The analysis of Objective 1 and 2, will allow the team to explore which types of intercultural learning works best, for whom, under what conditions, and why. The goal is explore ways to embed types of learning with students in International House (IH) and students completing the Certificate in International Learning (CIL). The team will also look at ways to embed types of intercultural learning into courses on campus, for example integrate community service learning projects, similar to SAFS, where students work with different cultural groups in Edmonton (e.g. Aboriginal groups, newcomers).
Objective 4: To implement strategies identified from Objective 3, and collect and analyze empirical data assessing the development of intercultural competency among university students on campus (see Phase 4 – Gantt Chart).

The methods of assessment and experimental design will be the same as Objective 1 and 2. The projected groups are: 1) students completing the Certificate of International Learning (n=30), students in International House (n=30) and four classes which include CSL (n=60) (Note: Total sample size for all students is 235 + 120 = 355).

Collaboration
As PI, Randal Arsenault (Director of the Southern African Field School, University of Alberta) will lead the team and project. Core Research Team, helping with experimental design, analysis and dissemination of data, are:

- Carla Peck, Associate Director (Curriculum), Centre for Teaching and Learning and Associate Professor, Faculty of Education, University of Alberta
- Colleen Kawalilak, Associate Professor, Werklund School of Education and Associate Dean International, University of Calgary (Leading the: Internationalization Task Force on Cross-cultural Competencies – Framework/strategy development for the University of Calgary).
- Kari Rasmussen, Director of Teaching and Learning, Faculty of Science, University of Alberta
- Zhi Jones, Associate Director, Education Abroad, University of Alberta International

Other co-researchers helping with data analysis are:

  - Mark Gierl, Canada Research Chair in Educational Measurement, Faculty of Education
- Jérôme St-Amand, Campus St Jean and quantitative and qualitative data analysis relating to assessing learning

University Partner Support:

- University of Alberta International (UAi):
  - Doug Weir, Executive Director, Student Programs and Services
  - Nancy Hannemann, Director, Global Education
  - Zhi Jones, Associate Director, Education Abroad
- Centre for Teaching and Learning (CTL)
  - Carla Peck, Associate Director (Curriculum), Associate Professor, Faculty of Education
- Community Service Learning, Faculty of Arts
  - Jan Selman, Academic Director, Community Service Learning, Faculty of Arts

Sustainability/Impact on Students
The assessments will be shared with students, which is to their direct benefit. For example, the IDI provides outputs which help students look at ways to improve their intercultural learning. Similarly, reflection journals and other CSL components, are designed to enhance the overall educational and experiential goals for the student. Therefore the students are actively involved in all aspects of this research and drive their own intercultural training and assessments.

We anticipate the participating instructors and researchers will also benefit from this project as well. All Instructors and researchers will complete intercultural assessments to
improve their intercultural learning. This research will provide a platform for Instructors to assess their own intercultural learning, and discuss ways to improve intercultural learning in their classes.

This research is aligned with the University of Alberta, Dare to Discover and Dare to Deliver. The results have the potential to inform and impact future university goals, current and future study abroad programs, campus activities to develop intercultural competency, as well as be of interest to any instructor wishing to incorporate intercultural learning into their courses. This research may also impact other universities in Canada. For example co-researcher Colleen Kawalilak is currently heading the University of Calgary’s Internationalization Task Force on Cross-Cultural Competencies.

This TLEF project is also the start of long-term research and proposals to SSHRC. One of the main goals will be to continue and expand on Objective 3/4 and the development, implementation and assessment of instructional interventions to increase intercultural competency (in university, schools and for business). Future research will also include the assessment of other variables which may affect intercultural learning, such as age, sex, degree type, travel experience, and participation/enthusiasm, as well as following the students in this study to assess intercultural competency at 6 months after and 3-5 years after their study abroad experiences.

**Dissemination**

We are proposing both internal and external dissemination activities, throughout the project and final reports and manuscripts. Throughout the project, the assessments (e.g. IDI, GCI and IES) will provide: 1) participating students information on their intercultural learning, and 2) participating instructors information on their intercultural learning. Administrators will also receive reports with aggregate information on intercultural learning trends in study abroad programs and on campus courses. Results will also be shared with campus wide committees and groups who are active in promoting intercultural learning, such as Community Service Learning and University of Alberta International and Go Abroad.

Additionally, we will be holding workshops for study abroad faculty and campus instructors interested in incorporating CSL and intercultural learning into their classes. These workshops will be organized with project partners, University of Alberta International, Centre for Teaching and Learning, and Community Service Learning, and include facilitating instructors to adopt learning outcomes and practice towards student intercultural learning.

Externally the results of this research will be presented in conferences, such as Canadian Bureau of International Education, STLHE: Society for Teaching and Learning in Higher Education and New Perspectives in Science Education. We will also be sending manuscripts to journals targeting intercultural learning or study abroad, such as International Journal of Intercultural Relations, Frontiers: Interdisciplinary Journal of Study Abroad, and Intercultural Education, as well as journals targeted at higher education, Canadian Journal of Higher Education and International Journal of Higher Education.

**References**


