OFFICE OF INSTITUTIONAL ASSESSMENT

Purdue University

Meta-Analysis: Outcomes of 2016-17 Winter and Spring-Break Departmental Study Abroad Programs

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Purpose & Scope of Analysis

The objective of this analysis is to evaluate the intercultural learning effectiveness of faculty-led (aka "departmental") study abroad programs which took place during Winter Break 2016 or Spring Break 2017, and to examine the impact of intercultural pedagogy training for a cohort of program leaders, as exemplified in student outcomes. In short, we seek to answer the research questions:

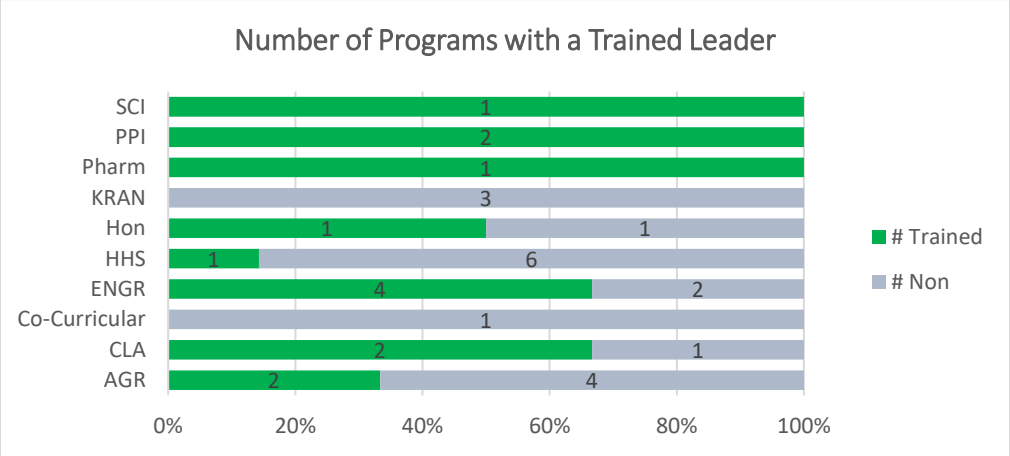
1. To what extent do Purdue spring break programs enhance students' intercultural effectiveness?
2. Does intercultural pedagogy training enable program leaders to more successfully mentor students' mastery of intercultural skills?

Leaders' Proposed Intercultural Learning Goals

Purdue has adopted the AAC&U Intercultural Competence rubric as a valid method of assessing cross-cultural learning. The original defined four levels, from minimal to mastery; the Purdue version drops the first AAC&U level in favor of a three-level rubric (beginner, intermediate, effective). Many STSA leaders turn in study abroad proposals which confidently state that their program will allow participants to reach the intermediate (Purdue version) or level three (AAC&U) stage of competence on multiple knowledge, skill or attitude elements of the rubric. As we shall see, this goal is an ambitious one.

Descriptive Statistics

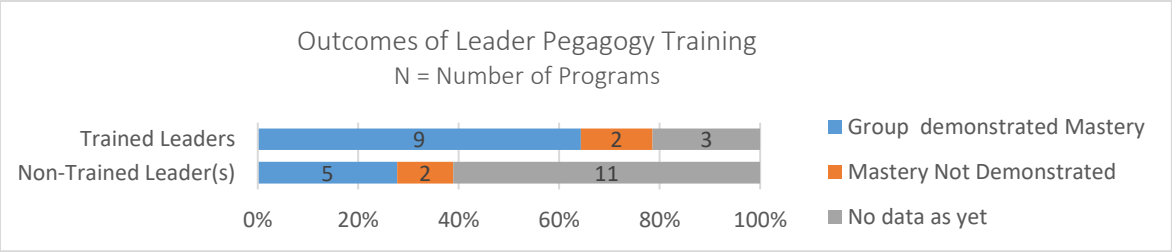
This analysis encompasses 32 faculty-led programs, in which 655 Purdue students participated. Fourteen out of the 32 programs, or 44% of the total, included at least one leader who had participated in a Purdue-provided intercultural pedagogy training program (11 of them following the "IPG" curriculum in 2016-17 and 3 of them having completed the "ICLTP" curriculum in 2015-16).



Methods of Data Capture

Four of the 32 programs (12.5%) used a survey instrument, in the standard pre/post mode, to assess students' intercultural learning; of these, two used the IDI, one used the MGUDS and the BEVI, and one leader designed her own survey. Fourteen of the programs (44 %) used reflective exercises (written or oral), journaling, blogging or a final paper to document students' intercultural learning. *An additional 14 program leaders have so far returned no data or reports from their spring break program;* surprisingly, all but one of these leaders had planned to use a survey instrument to collect pre/post data.

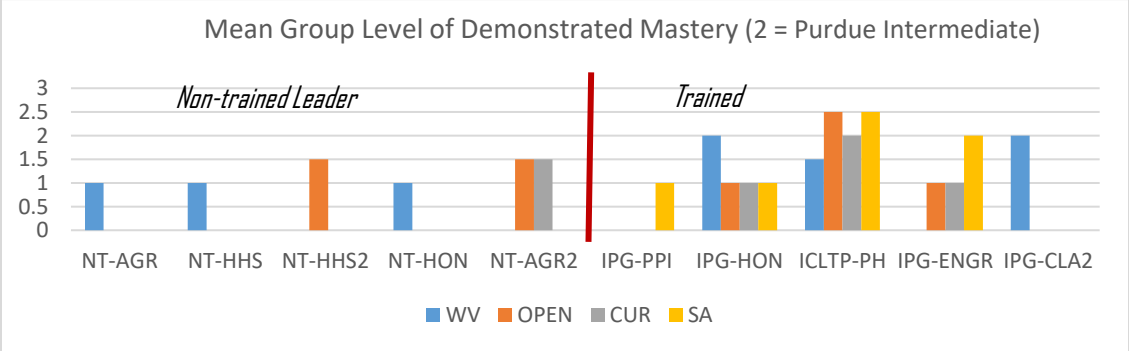
Executive Summary of Outcomes



- 43%: Total Programs in Which Majority of Students Demonstrated Mastery[1]
- 29%: Programs in Which Group Demonstrated Mastery if leader un-trained
- 62%: Programs in Which Group Demonstrated Mastery if leader is trained
- Degree of Mastery Demonstrated (Qualitative Data): Usually ***Beginner*** Level (AACU Level Two)
- Degree of Mastery Demonstrated (Quantitative Data): Variable (see Appendix A)
- For most leaders, there was marginal alignment between proposed & demonstrated outcomes.

Additional findings:

- *Quantitative data (4 programs)*
  - A spring break program which includes intercultural mentoring can produce a group mean gain equal to the best semester-long programs (**11 IDI points**).
  - However, IPG training in and of itself does not guarantee IDI gains among students.
  - MGUDS data thus far captured shows students making slight gains in curiosity & empathy, but zero gain in openness[2] (leader was IPG-trained).
- *Qualitative data (14 programs)*
  - Most leaders struggle with getting students to ***reflect*** rather than report).
  - Some leaders have observed that students' oral reflections and behavior repeatedly indicate greater intercultural effectiveness than their reflective writings.
  - STSA can in some cases produce better domestic-international friendship-building (aka "integration") than multiple semesters on campus.
  - In general, trained leaders appear to induce students to display mastery at a higher level of intercultural effectiveness, and on more rubric elements (see chart below).



[1] For this analysis, programs which did not submit data are counted in "mastery not demonstrated" category.
[2] Lack of change in openness (aka Comfort with Difference) is consistent with other study abroad research using the MGUDS.

Qualitative Data: What is "Demonstrating Mastery?"

In accordance with pedagogical best-practice, the bulk of Purdue's faculty-led programs use reflective work to stimulate greater learning from study abroad, as well as to assess student learning. This presents something of a challenge for the program evaluator, however, in two ways:

1. Qualitative analysis techniques are typically not used in a pre/post methodology, thus making it difficult to ascertain whether a particular student *learned* a given skill or possessed that skill upon entry to the program[3].
2. As assessment-trained Purdue program leaders are now beginning to note, it is not uncommon for a student to orally express (or to perform at) a higher level of intercultural competence in a given learning situation than he or she chooses to blog about or express in a final written form.

For all of these reasons, this meta-analysis has found it necessary to focus on ***demonstration of mastery*** rather than ***evidence of learning***. In other words, in 2017 spring break programs which used qualitative assessment, this report has defined ***an effective program as one in which at least 50% of the participants demonstrated mastery to a beginner level[4] of competence or above*** on at least one element of the Purdue version of the Intercultural Competence rubric.

Best Practices: Making Reflection *Matter*

A) Assigning the Intercultural Development Plan

As noted above, this year we have confirmed that a spring break program led by trained program leaders **can produce a group mean gain of *11 IDI points –*** *as much as a best-practice semester program*. In the program in question 75% of the 20 stem students experienced significant forward growth, with three students gaining 30 or more IDI points. Also, the AAC&U rubric was used to define elements of intercultural competence (specifically self-awareness, curiosity & openness) to the students in ways which identified said skills as important to becoming a creative STEM professional.

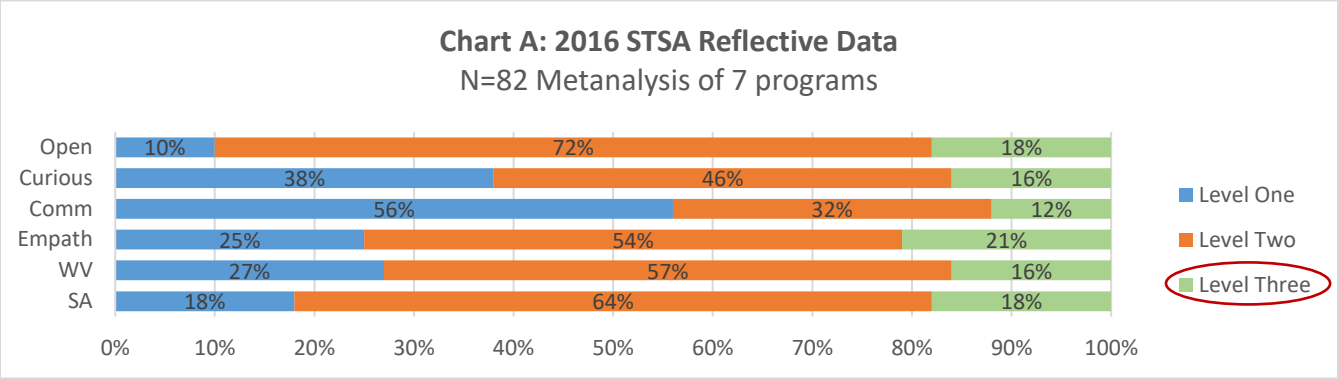
B) Focusing on Effective Non-Verbal Communication

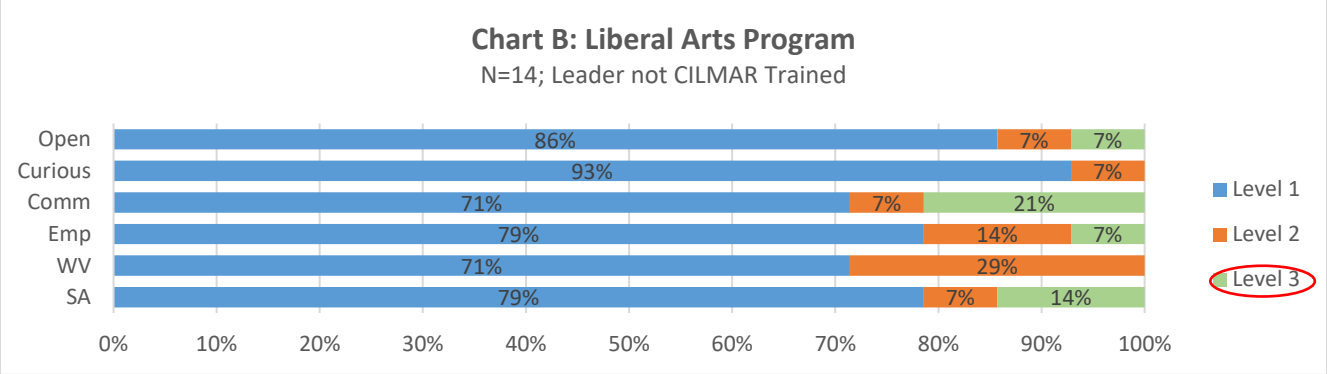
In a meta-analysis of qualitative data from several 2016 short-term programs (see Chart A, next page), it was found that many written reflections produced by Purdue students do not indicate mastery beyond the beginner level of the Purdue Intercultural Rubric (Level Two on original rubric). In some cases, however, a behavioral analysis of students' experiences on these same programs suggested that some students were *performing* intercultural effectiveness at a higher level than they chose to write about.

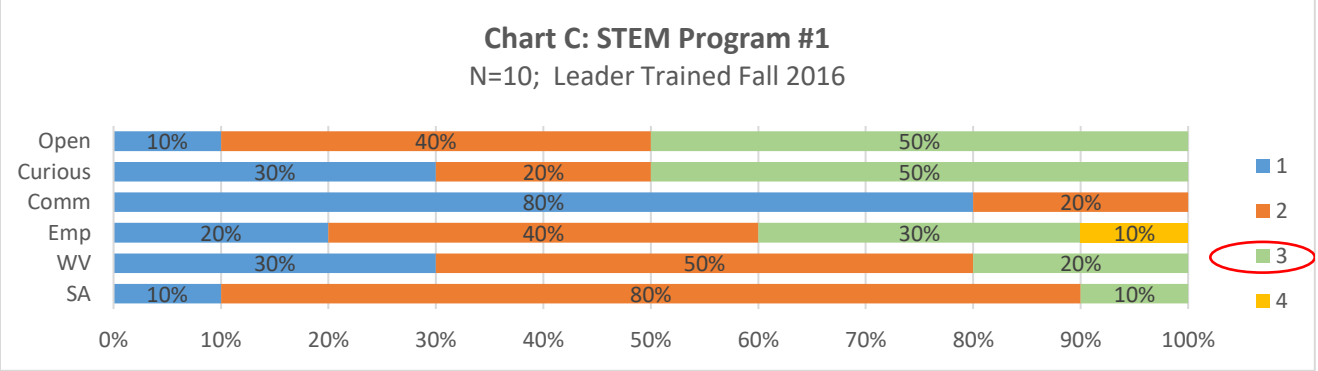
Chart B (next page), from a 2017 program, shows a typical qualitative data-capture result when students are given insufficient guidance as to how to write blogs, journals or final reflection essays. Charts C & D, however, give an indication of higher levels of demonstrated mastery when the instructor helps the student understand the importance of effective written communication (a rubric skill) to learning, disciplinary skills acquisition and/or career success.

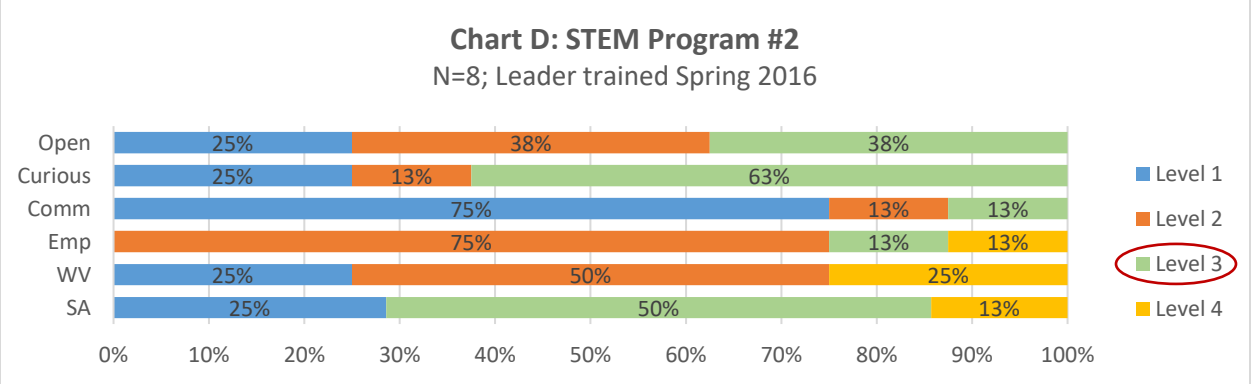
[3] Some qualitative analysis approaches can illuminate whether the student believes s/he learned as a result of a learning intervention; but most Purdue leaders are not yet practicing nuanced enough qualitative data collection to produce this.
[4] The researcher notes again that most Purdue leaders aspire to create a program that will increase students' IC skills to an **intermediate** level on more than one rubric element. Unfortunately, students' reflective essays, by and large, do not yet demonstrate this level of mastery. (This may indicate a problem in how Purdue teaches—or doesn't teach--reflective writing.)

Comparison of Reflection Quality, Using 4-level AAC&U Rubric Version
(Target for short programs is AACU Level 3)







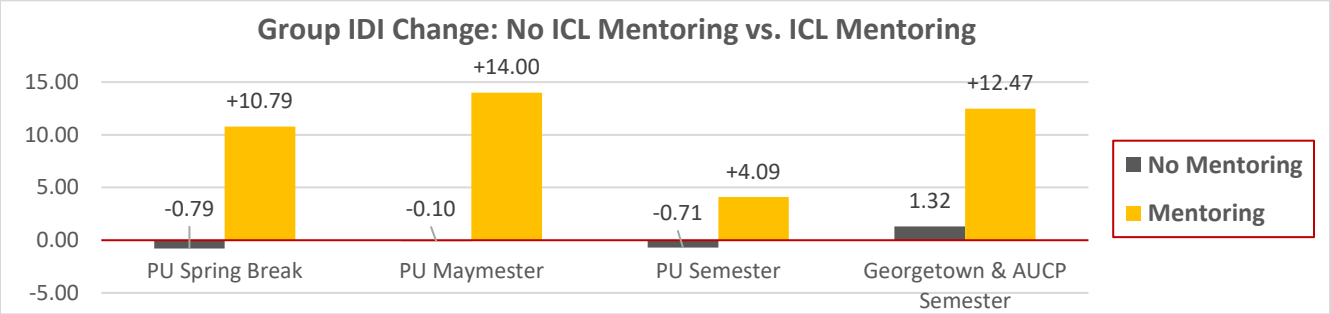


Promising Reflection Practices

1. **SAID Process with iterative practice**: In an engineering program in Australia, the leaders framed reflection as a critical report-writing skill for consulting field engineers, and coached students in using the 4-step SAID process (which closely mirrors the Thiagi Debrief questions). Students had multiple oral debriefs during the week & each recorded a final oral reflection. Thus, a majority of students demonstrated mastery in both self-awareness and empathy to AAC&U Level Three.
2. **Pre/Post Reflection with intervening feedback** (results chart C): Similarly, on an Agriculture program in Cuba, the program leader highlighted thoughtful field-reporting as a professional tool. This leader administered the same set of reflection questions to the students at the beginning and end of the week-long program, giving them feedback and practice at writing more thoughtful final essays. In this case, in the final assignment, the majority of students demonstrated mastery of openness and curiosity to AAC&U level three; in addition—unusual thus far in Purdue STSA contexts—90% expressed self-awareness to AAC&U level two or above.
3. **DEAL Question Protocol & Rubric** (results chart D): The Describe-Evaluate-Analyze Learning critical reflection protocol, which asks participants to *evaluate* how an experience they have just *described* connects to their field of study and then *analyze* personal learning which has arisen as a result of having had this experience, was used for the final reflective assignment. Also the DEAL grading rubric was used by an outside clinical health professional to grade & provide feedback on the students' final project. The majority of students demonstrated mastery to AAC&U level three in curiosity and self-awareness. In addition, 100% of students demonstrated full or partial mastery of empathy; unusual thus far in Purdue STSA contexts.

Quantitative Data: Intercultural Competence & Program Length

Learning outcomes results as measured by the IDI (see chart) **suggest that the mentor-apprentice nature of many Purdue faculty-led programs can produce better intercultural competence results than a semester-long exchange program** at a non-US university**.**



In addition to the above, qualitative data indicate that short-term Purdue programs can create:

- a stronger sense of belongingness among incoming minority first-year students,
- a sense that a faculty member "cares about my learning," and
- better opportunities for international-domestic student friend-building than multiple semesters of on-campus interactions.

Conclusion & Recommendations

In the 2015-2016 cycle of reviewing data from (a smaller sampling of) Purdue faculty-led programs, the results indicated that the most frequent learner outcomes of Purdue short-term study abroad were (1) a stronger motivation to internationalize one's future and (2) a more deeply-felt understanding of the global career possibilities of one's major; often combined with (3) a sense of inadequacy about one's existing level of cross-cultural abilities. These are not insignificant results, although they fall short of attaining the stated goals of many program leaders and of the Core Curriculum embedded outcomes.

This year's analyses indicate that an intentionally excellent spring-break study abroad can (a) produce as high an IDI gain as the best semester-abroad programs, and (b) increase student's mastery to at least an intermediate level of the Purdue version of the Intercultural Competence VALUE rubric, on two or more competency elements. In addition, it appears that short-term study abroad can in some cases produce better domestic-international 'integration' (friendship-building) than multiple semesters on campus.

For 2017-2018, therefore, the following recommendations seem appropriate:

1. That CILMAR supports at least 10% of spring program leaders in incorporating individualized IDI development plans into the course curriculum.
2. That all program leaders intending to use reflective assessment be ***very*** strongly encouraged to use one of the three reflection best-practices cited above; with a target of 50% compliance.
3. That CILMAR provides both more logistical support to program leaders for using validated pre/post surveys.
4. That Purdue attempt to become more intentional about STSA as a way of better building friendships, trust and **teamwork skills** between differing cultural groups of students.

Resources for Better Reflective Practice:

- Thiagi Debrief Method: http://tamarathorpe.com/wp-content/uploads/2013/12/Thiagi-Debrief-Method.pdf
- Synopis of Debriefing Models: http://tamarathorpe.com/wp-content/uploads/2013/12/Thiagi-Debrief-Method.pdf
- DEAL Critical Reflection Model and Rubric: https://curricularengagement.com/handouts/