Assessing Reflective Pedagogy among Leaders of Purdue 2019 Short-Term Study Abroad

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ABSTRACT

In this report, which serves as a meta-analysis of one year's short-term study abroad outcomes at a public land-grant university, qualitative methods were used to analyze authentic artifacts of study abroad leaders' professional practice. A corpus of ninety-one leader reports, received at the conclusion of a spring break or summer study abroad program, forms our data set, which was deductively analyzed in conjunction with a four-stage model of experiential learning. Among these leaders, approximately one-third had recently received training in reflective intercultural pedagogies, one-third had received training in a previous year and one-third had not yet participated in the training. Results confirm last year's findings, which, looking exclusively at student outcomes, suggested that leader training supports more effective teaching and learning.

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INTRODUCTION

Purdue University cares deeply about preparing its students for success in a complex and globalized future. Evidence of this may be found, for example, in the current undergraduate core curriculum, approved by the Faculty Senate in 2012, which requires the embedding of intercultural competence (as well as global systems thinking) into all undergraduate degrees. It is also indicated in part by the fact that, annually, over 150 Purdue short-term “departmental” study abroad programs are offered across the university—voluntarily led by faculty and/or staff who are eager to introduce students to new perspectives on their majors and their future careers. Accordingly, since 2014, the Dean of International Programs has built a substantive support system to help program leaders implement best practices in intercultural competence development as they design and execute their departmental study abroad programs. This support begins with a simple worksheet to encourage the implementation of backwards design principles into programs right from the ideation phase, includes a regularly offered and incentivized faculty development training program, and culminates in an annual meta-analysis of leaders’ post-program outcome reports to support continuous improvement both individually and collectively.

Assessment Scaffolding for Departmental Programs & Leaders

In order to gain approval to conduct a Purdue departmental program, each leader’s program proposal must include at least one defined learning objective that corresponds with the Faculty Senate-approved AAC&U Intercultural Knowledge and Competence rubric. In setting that learning objective, the leader must also state a desired proficiency level, a percentage of students who will attain that level of proficiency, and the method of assessment by which attainment of that group outcome will be determined. After the program attains sufficient enrollment to be viable, each leader is required to meet with an intercultural learning specialist, who offers suggestions and feedback on how to operationalize the program's intercultural learning objective(s) without compromising uptake of the instructor's desired discipline-specific learning content. For about 30 to 50 program leaders every Fall semester since 2016, this 'instructional design' consultation has occurred as part of a 10-hour, incentivized, faculty & staff professional development 'training program' on intercultural pedagogies[1] provided by CILMAR, Purdue's Center for Intercultural Learning, Mentorship, Assessment and Research. Non-participants in the training program in any given year get a stand-alone individual consultation with an intercultural specialist instead (including those who are "alumni" of previous years' training programs). Finally, each returned program leader is required to submit a post-program assessment report within two weeks of that program's final assignment deadline.

Descriptive Statistics

During the academic year 2018-2019, Purdue intercultural specialists supported and tracked 112 viable departmental programs that took place during the Spring Break or Summer of 2019. The office of Institutional Data Analysis + Assessment received 91 post-program assessment reports, amounting to a survey response rate of 81.25%. Of these leaders (some of whom had conducted two or even three departmental programs in the year under review), 22 had completed the most recent iteration of the intercultural pedagogy training, 29 had completed the training in an earlier year, and 24 had not yet participated in the training. All of the programs were credit bearing, and the following Purdue Colleges were represented: Agriculture, Education, Engineering, Health & Human Sciences, Honors College, Liberal Arts, Pharmacy,

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[1] The training program has now reached over 200 Purdue faculty and staff.

Purdue Polytechnic Institute, Science and Veterinary Medicine. Approximately 59% of these departmental programs offered credit in a STEM discipline, as is typical for Purdue.

Methodology

Analytic Framework

Framework analysis is a rigorous, iterative, and deductive method for making sense of qualitative data, which has been widely used in applied social science contexts since at least the 1980's (Ritchie & Spencer, 1994). The purpose of CILMAR's intercultural pedagogy training is to better equip program leaders to create opportunities for recognizing and improving students' intercultural learning. It is, in essence, an experiential learning immersion for study abroad leaders in designing effective experiential learning. Therefore, it seemed appropriate to use the four-stage model itself as the analytic framework for understanding leaders' practice. The image to the right (Batista & Corney, 2007) presents various scholar's conceptualizations of experiential learning. The training defines stages three and four of this model as our standard for exemplary reflective pedagogy practice.

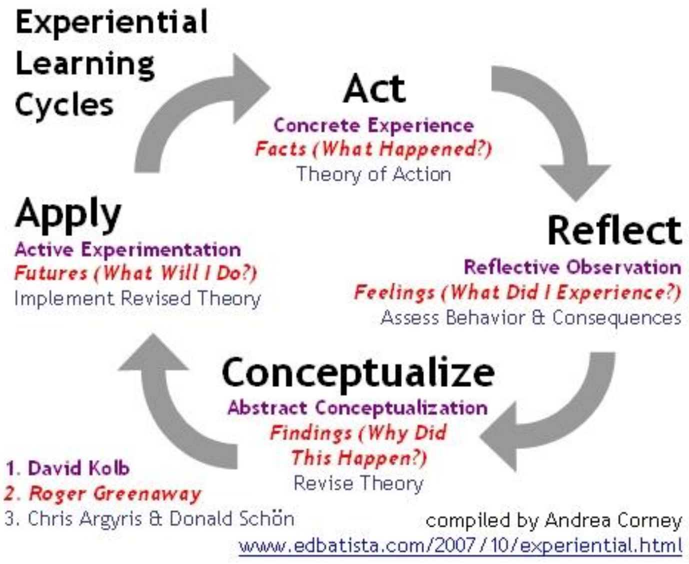
Experiential Learning Cycles
Act
Concrete Experience
Facts (What Happened?)
Theory of Action
Reflect
Reflective Observation
Feelings (What Did I Experience?)
Assess Behavior & Consequences
Conceptualize
Abstract Conceptualization
Findings (Why Did This Happen?)
Revise Theory
Apply
Active Experimentation
Futures (What Will I Do?)
Implement Revised Theory
1. David Kolb
2. Roger Greenaway
3. Chris Argyris & Donald Schön
compiled by Andrea Corney
www.edbatista.com/2007/10/experiential.html

Figure 1: Four-stage Cycle of Experiential Learning

Data Collection Instrument

The annual Purdue short-term study abroad assessment report is gathered via a short Qualtrics survey that asks each program leader to analyze the learning outcome results for their particular study abroad group and to do the following:

- briefly identify their program, their pre-determined intercultural outcome objective(s), and any new activities intended to scaffold it;
- report whether their group attained the goal; and
- reflect in open-text format on their students' intercultural learning and how, based on the evidence gathered, they might improve that learning in future program iterations.

In other words, the instrument is intended to gather institutional assessment information while also (a) guiding the program leader towards more reflective pedagogy practice and (b) facilitating future scholarship about teaching and learning. Toward that end, there are three short essay questions, which prompt the leader to reflect on concrete experience by looking critically at student learning outcome data, formulating a hypothesis based on that reflection, and articulating one possible way to improve students' learning outcomes in the future. A fourth, final short essay question asks the program leader if there is "…anything else you would like to tell us about mentoring students through an intercultural learning experience."

Method of Analysis

At the close of the data collection period, results were downloaded from Qualtrics into an Excel spreadsheet. First, each instructor's report was categorized as to whether and during which time period the instructor had participated in Purdue's intercultural pedagogy training program. Next, each stage of the cycle was assigned a numerical code in the following sequence: (1) Concrete Experience, (2) Reflective Observation, (3) Abstract Conceptualization, and (4) Active Experimentation. Then, using the iterative framework analysis method, each response by a given leader to one of the open-ended questions was coded for alignment to this framework. In some cases, an answer to one reflection question aligned with more than one experiential stage. Coding in these cases listed each of the stage numbers to be found within that one answer. Finally, a tally of results was generated to help determine what percentage of each cohort of faculty (trained recently, trained in a prior year or untrained) had exhibited an ability to improve students' intercultural learning. We defined this as the ability to form a data-driven hypothesis about their students' learning (stage 3; abstract conceptualization) and the ability to form an action plan to improve the learning (stage 4; active experimentation). In other words, we assumed that leaders whose reflections demonstrated only concrete reporting and/or reflective observation were demonstrating a lack of capacity to be effective mentors of intercultural competence[2]. The table on the next page shows an exemplar response aligning with each specific phase of the four-stage experiential learning cycle, with the phrase or sentence that earned that particular coding highlighted in yellow.

Experiential Stage	**Exemplar**
1. Concrete Experience (Recitation of Assignments &/or Events)	Students wrote a final report on their experience in {country name}. They also gave a PowerPoint presentation.
2. Reflective Observation (Meaning-Making about Observed Learning)	We saw some sophisticated grappling with some real cultural differences they were experiencing and accepting in positive ways, and taking critical stances in their own cultural beliefs.
3. Abstract Conceptualization (Data-Informed Hypothesis about Learning)	The data suggests that there was significant growth in awareness that there are differences (across cultures). I am finding that the capstone project puts a lot of pressure on completing the projects and the intercultural conversation is dominated by the expediency of getting the project done.
4. Active Experimentation (Defining a Possible Improvement to Learning)	When they are writing these reflections, they are thinking about the new job that they are going to start[3] the following day/week. I want to change the approach to have a discussion session with the whole team and see if I can get better reflection.

Figure 2: Table of Exemplars of Coded Data

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[2] It might instead indicate lack of enthusiasm for assessing intercultural learning, but whatever the reason, such disengagement is still not a demonstration of mastery of the pedagogy practices under investigation.

[3] The first sentence of this reflection earned a coding of (3), since it is a hypothesis about the students' learning process. The highlighted portion is a good example of content meriting a coding of (4).

Findings

The three research questions we sought to answer in this inquiry were:

1. To what degree were Purdue 2019 departmental program leaders able to formulate a data-informed hypothesis (experiential stage three) about their students' intercultural learning?
2. To what degree were program leaders able to generate a data-informed and specific improvement (stage four) that they thought might yield better intercultural learning?
3. Is there a difference between trained and untrained program leaders in terms of the likelihood of reflective pedagogy being 'on display' in their required program reports, as evidenced by hypothesis formulation and identification of a way to improve learning?

The bar chart below displays the results of this inquiry into the reflective pedagogy ability of Purdue study abroad leaders of programs taking place in 2019.

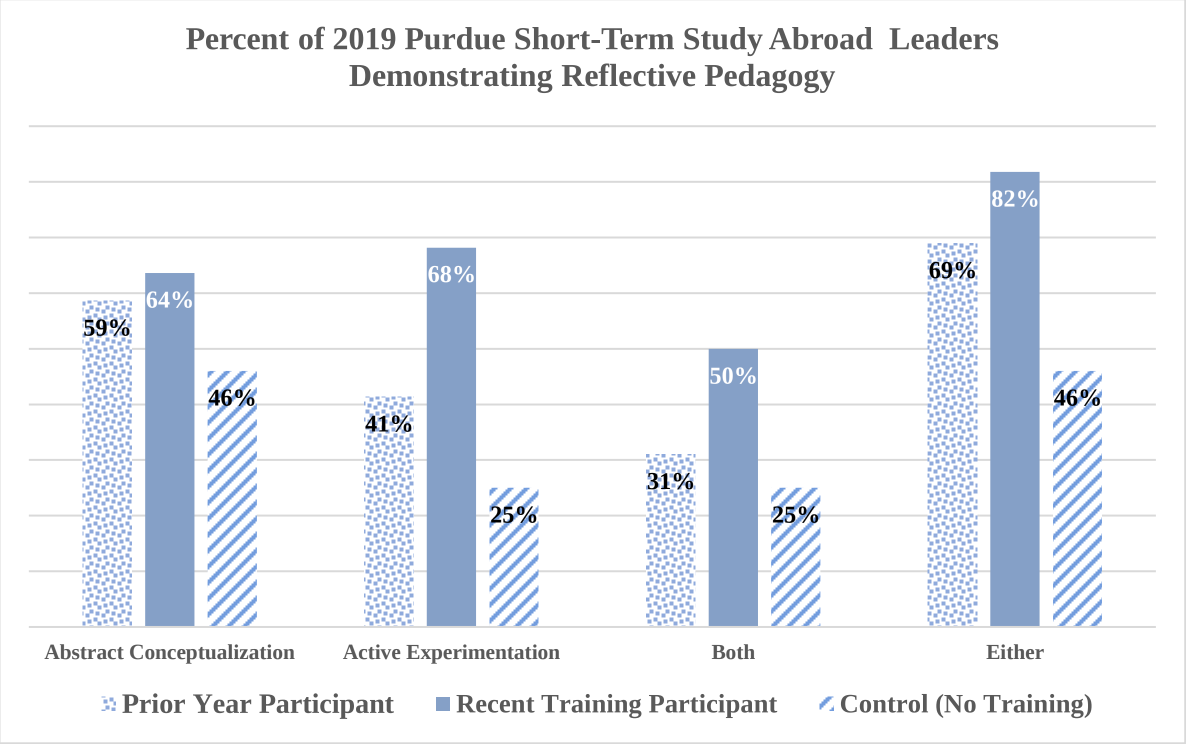

Figure 3: Reflective Pedagogy Analysis Chart

Discussion of Findings

In this data set obtained from 2019 programs, as shown above, trained leaders (particularly those whose training was more recent) were more likely to articulate a hypothesis about students' intercultural learning and much more likely to suggest a possible improvement that might generate better intercultural learning in future program iterations. We had anticipated that faculty who had been through a recent or past iteration of the training would be more likely to do both of these things. It was, therefore, a bit disappointing, as data were being coded, to discover that quite a few of them jumped straight to active experimentation (stage four) from reflective observation (stage two), without articulating a hypothesis that they had drawn from the data. If the hypothesis formulation took place within their minds or in collegial conversations with a co-leader, that did not make it into our data (sadly). It is probably worth noting, however, that we were looking quite specifically for hypotheses that grew out of the leader's data summary. In other words, the data coding criterion for hypothesis formulation was quite strict—possibly a little too much so—given that this year's survey instrument did not specifically ask for a "hypothesis" about learning, but merely requested interpretation of the data.

On another note, looking at those who had not yet undergone the training, it is encouraging to see that nearly half of the leaders in the control group were able to formulate a data-informed hypothesis about students' learning, even if they do not yet have the resources (time, confidence, collegial sounding-boards, etc.) to formulate speculations about improving their learning. It is, however, disappointing that leaders who went through the intercultural pedagogy training in prior years were not as engaged in active experimentation as the most recent cohort. It seems plausible from the data that at least some of this difference arises from leader burnout[4]. Some of this difference may also be related to 2019 improvements in the leader-training curriculum.

Conclusion

This analysis indicates that Purdue program leaders who have received training in pedagogies to support intercultural learning are, in general, more likely to think productively and specifically about what works and why. This finding triangulates with the previous year's meta-analysis of short-term program outcomes, which found that students were more likely to make gains in intercultural competence if their short-term study abroad program leader had been through CILMAR's training (Yngve, 2018). In addition, this analysis suggests that it might be helpful to provide regularized additional support for leaders whose training occurred a year ago or more, such as "refresher" workshops or advanced intercultural pedagogy training.

References

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Ritchie, J., & Spencer, L. (1994). Qualitative data analysis for applied policy research. In Bryman, A. and Burgess, R.G. (Eds.) *Analyzing qualitative data*, (pp. 173-194). Routledge.

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[4] More than one experienced leader offered a comment such as "I won't be leading a study abroad program again next year" or "I'm happy with what I'm doing now" rather than suggesting a possible improvement.