Assessing Experiential Global Learning:

A Work in Progress – Phase I

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Abstract

In 2019 the University of Connecticut (UConn) launched an assessment initiative to gather data-based evidence on the impact Experiential Global Learning (EGL) activities have on participating students. The plan focuses on both proximal and distal impacts of participation in EGL programing on students. The plan called for the development and administration of an Intercultural Competency Scale to a sample of students who have not participated in EGL, as a comparison group, and to all EGL participants in a pre- and post-test format. The UConn Intercultural Competency Scale (UCICS) is in beta testing and is designed to collect student demographics and responses to subscales focusing on Knowledge, Attitudes/Values and Behaviors/skills related to cultural competencies related to the UConn General Education Requirements.

Key Words: Intercultural Competencies; Study Abroad; Experiential Global Learning.

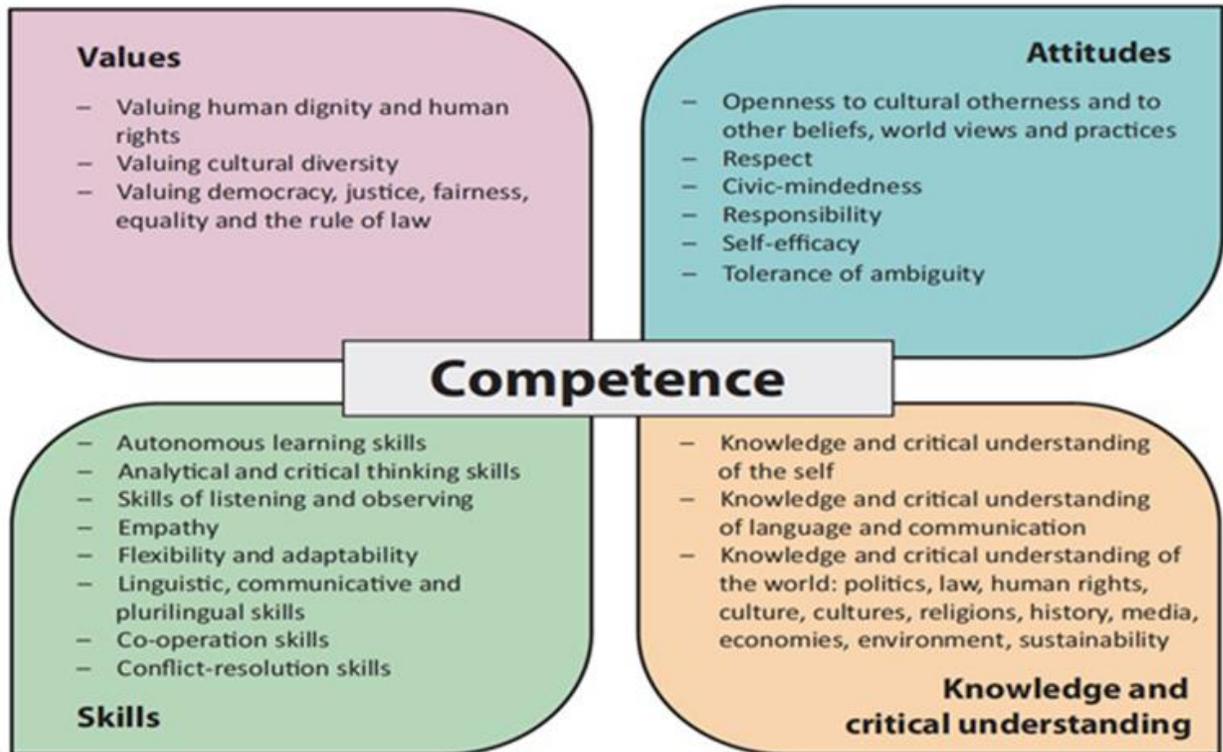## Learner Outcomes Achieved Through Open Discussions/Exchanges

1. The necessity of having an assessment plan to guide your actions.

2. Participant recruitment issues and suggestions for both the comparison and treatment groups: Carrots and Sticks.

3. Tips for training and maintaining qualitative coders.

4. The value of campus-wide by-in for obtaining data.

5. The value of alignment between assessment and institutional goals.

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Figure 1.

Reference Framework of Competencies for Democratic Culture (Council of Europe, 2016).

Values

- Valuing human dignity and human rights
- Valuing cultural diversity
- Valuing democracy, justice, fairness, equality and the rule of law

Attitudes

- Openness to cultural otherness and to other beliefs, world views and practices
- Respect
- Civic-mindedness
- Responsibility
- Self-efficacy
- Tolerance of ambiguity

Competence

- Autonomous learning skills
- Analytical and critical thinking skills
- Skills of listening and observing
- Empathy
- Flexibility and adaptability
- Linguistic, communicative and plurilingual skills
- Co-operation skills
- Conflict-resolution skills

Skills

- Knowledge and critical understanding of the self
- Knowledge and critical understanding of language and communication
- Knowledge and critical understanding of the world: politics, law, human rights, culture, cultures, religions, history, media, economies, environment, sustainability

Knowledge and critical understanding

Sample Items from The UConn Intercultural Competency Scale (UCICS).

Part 1: Includes IRB Consent, Contact Information and Demographics

Section 1 Short-answer Responses

Take your time to read and respond to the following prompts. There is no correct or incorrect response:

16. What are the top three characteristics of a person with intercultural competence? And briefly state why you selected these three.

Characteristic 1 (1) _____

Why Characteristic 1? (2) _____

Characteristic 2 (3) _____

Why Characteristic 2? (4) _____

Characteristic 3 (5) _____

Why Characteristic 3? (6) _____

17. On a scale from 1 (Very Low) to 10 (Very High), rate yourself on each of these three characteristics.

	Very Low (1) to Very High (10)								
	1	2	3	4	5	6	7	8	9
Characteristic 1	○	○	○	○	○	○	○	○	○
Characteristic 2	○	○	○	○	○	○	○	○	○
Characteristic 3	○	○	○	○	○	○	○	○	○

18. <u>Rate the importance</u> of each of the three characteristics to your future workforce plans (Low, Medium, or High) and describe why.

	Importance to your future workforce plans		
	Low (1)	Medium (2)	High (3)
Characteristic 1.	○	○	○
Characteristic 2.	○	○	○
Characteristic 3.	○	○	○

19. Rate the importance of each of the three characteristics to your future workforce plans (**L**ow, **M**edium, or **H**igh = **L, M or H**) and <u>describe why</u>.

Characteristic 1. Rating **L**   **M**   **H**

WHY _____

Characteristic 2. Rating **L**   **M**   **H**

WHY _____

Characteristic 3. Rating **L**   **M**   **H**

WHY _____

Section 2: Experiential Global Learning Scale

Instructions: Read each statement and select the response that best describes your capabilities. Select the answer that BEST describes you as **You Are Right Now**. Use a 5-point Likert Scale response ranging from *Strongly Disagree (1)* to *Strongly Agree (5)*, for each of the statements in this section. Circle your response.

20. I am conscious of my knowledge of cultures when interacting with people of different cultural backgrounds.

1	2	3	4	5
(SD)	(D)	(N)	(A)	(SA)

21. I build my knowledge of cultures and learn as I interact with people from cultures unfamiliar to me.

1	2	3	4	5
(SD)	(D)	(N)	(A)	(SA)

22. I am aware of my cultural knowledge as I apply it to my cross-cultural interactions.

1	2	3	4	5
(SD)	(D)	(N)	(A)	(SA)

23. I know the economic systems of at least one other culture.

1	2	3	4	5
(SD)	(D)	(N)	(A)	(SA)

Instructions: Imagine that the figure below is a diagram of You. The center circle (6) is made up of qualities or characteristics that are very central to your sense of who you are as a person. The next circle (5 or 4) is made up of qualities that are quite central to your sense of self, and the next circle (3 or 2) is made up of qualities that are somewhat important to your sense of self. Qualities that are not part of your sense of identity belong furthest from the center (1).

Using the 6-point Likert Scale ranging from "1: Not central to the sense of self" to "6: Very central to the sense of self", respond to the statements below.
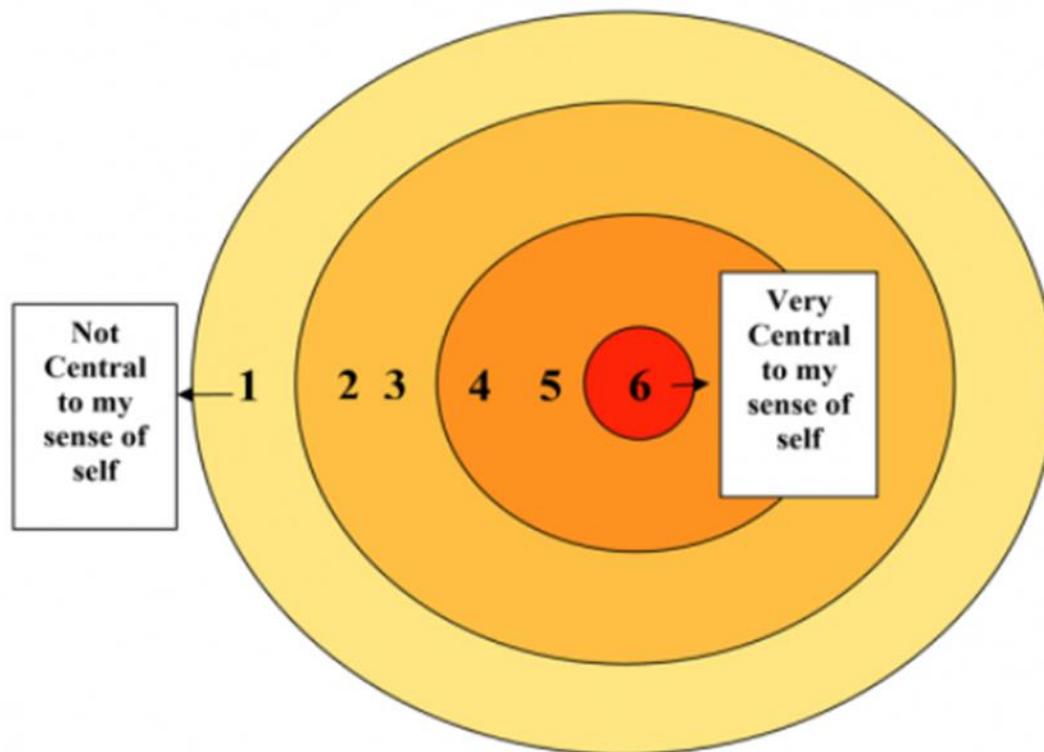
Important Note:

If a quality seems good or desirable to you but is not an important part of who you are now, you should answer "Not Central to my sense of self" (1). If the quality is important part of you and

Central to your sense of self AND who you are now, you should respond (6) Very Central to my sense of self.

55. How central to your sense of who you are, is each of the following characteristics or qualities using the 6-point scale?

	1: Not Central to my sense of self	2	3	4	5	6: Very Central to my sense of self
Being fair and unbiased to all kinds of people. (1)	☐	☐	☐	☐	☐	☐
Being caring and concerned about all kinds of people. (2)	☐	☐	☐	☐	☐	☐

Section 3: Scenarios

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

Scenario A:

56. You and a fellow student are visiting another country to attend a conference with a local expert. There was a problem booking the hotel, but you are able to stay with your host's family for a night. They are very hospitable and let you know they practice a custom of a group prayer before eating a meal. They ask that you and your classmate participate as part of the evening meal. Your classmate is uncomfortable and would prefer not to participate in the custom before the meal.

	Strongly Disagree (1)	Somewhat Disagree (2)	Undecided (3)	Somewhat Agree (4)	Strongly Agree (5)
People can accept other people whose traditions are very different. (1)	☐	☐	☐	☐	☐
Some other cultures have what appear to be odd customs. (2)	☐	☐	☐	☐	☐
Some customs are important to understand, even if they challenge my own perceptions and beliefs. (3)	☐	☐	☐	☐	☐
There is value in experiencing the customs of other cultures. (4)	☐	☐	☐	☐	☐

Assessment Plan

Assessment Schedule	Fall 2023	Spring 2024	Fall 2024	Spring 2025	Fall 2025	Spring 2026	Fall 2026	Spring 2027	Fall 2027	Spring 2028	Fall 2028	Spring 2029
EGL Group												
Freshmen	X1	X2		X2		X2		X2			$X3_{FR}$ Follow-up Post Grad	
Sophomores	X1	X2		X2		X2			$X3_{SP}$ Follow-up Post Grad			
Juniors	X1	X2		X2			$X3_{JR}$ Follow-up Post Grad					
Seniors	X1	X2			$X3_{SR}$ Follow-up Post Grad							

NOTES

X1 = Pre-Test Full Battery Demographics + Academics + UConn Intercultural Competency Scale

X2 = Post -Test (X1 minus the demographics)

X3 = Online focus group of experiences related to workforce position

Summary Review of Research of Literature

Using Instruments to Measure Intercultural Competence.

Summarized by Dylan Boczar 2020

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Study	Summary	Variables/Instruments	Sample & Duration	Analyses & Findings
Measuring intercultural sensitivity: The intercultural development inventory Mitchell R. Hammer, Milton J. Bennett, Richard Wiseman 2003 **https://doi.org/ 10.1016/S0147-1767(03)00032-4**	Using Bennett's (1986, 1993b) developmental model of intercultural sensitivity (DMIS), constructed a scale to measure orientations towards cultural differences, or "intercultural competence." DMIS orientations: - Ethnocentric: Denial, Defense, Minimalization. - Acceptance, Adaptation, Integration. Three models explored via confirmatory factor analysis, including the final version combining Denial with Defense, combining Acceptance and Adaptation, and including the alternative of Defense; Reversal.	<u>**Intercultural Development Inventory**</u> (IDI) - 50-item (+ 10 demographic) survey with five dimensions: - Denial/Defense (DD) - Reversal (R) - Minimization (M) - Acceptance/Adaptation (AA) - Encapsulated Marginality (EM) <u>Worldmindedness (Sampson & Smith, 1957)</u> A 6-item version <u>Social Anxiety scale (Stephen & Stephen 1985).</u> Modified Intercultural Anxiety version, focused on feeling when interacting with people of other cultures. <u>Marlowe–Crown social desirability scale (Strahan & Gerbasi, 1972)</u> Short form (10-item).	<u>591</u> Not primarily from college student pop. 35% male, 65% female. Ages range: high teens-60+. 32% never lived in another culture. 25% attended /graduated HS, 36% college grad, 23% MA, 7% Ph.D. 87% primarily lived formative years in North America. Ethnicity: Many responses of "American Citizen" Duration: N/A	5-factor model validated by confirmatory factor analyses, reliability analyses, and construct validity tests. Better fit over 7-factor or 2-factor. Significant differences by gender only on DD (male higher). No significant differences found by age, education, or social desirability. DD, AA, and EM all significantly correlated with Worldmindedness and intercultural anxiety as predicted: <u>Worldmindedness</u>: DD-, AA+, EM+. <u>Inturcultural anxiety:</u> DD+, AA-, EM+. No significant differences by social desirability.
Assessing Language Acquisition and Intercultural Sensitivity Development in Relation to Study Abroad Program Design	American University Center of Provence: AUCP Duration: one semester or one academic year. High French competence. Program: Required language use (in class and out); on-site with local professors; advanced language study -	<u>Intercultural Development Inventory</u> (IDI) (see above) Measure of cross-cultural competence. IDI taken first and last week of semester <u>Test d'Evaluation de Français</u>	<u>187</u> across 6 semesters No demographic info. Duration: semester	18% of students showed decrease of IDI 52% showed 30%-100% in achievable progress attained in IDI **Note**: Upon reading fully, the analyses done in this article are structured around % achievable progress attained. While not necessarily an issue in itself, the authors then compare these percentages as if they were variables in their own right, while *not* comparing the

Study	Summary	Variables/Instruments	Sample & Duration	Analyses & Findings
Lilli Engle and John Engle 2004 https://frontiersjournal.org/past-volumes/vol-x/	current social issues, literature, art history, etc.; intensive, mandatory, for-credit courses on crosscultural communication; required community engagement on multiple levels (community service, language exchange, extracurriculars); Individual integration home stay.	French language testing implement.		scores themselves. Long with the lack of any control group, the numerical results of this study are difficult to ground. Subjectively identified seven "defining" components of intercultural experience: - Program duration. - Pre-departure target language proficiency. - The language of instruction abroad - The academic context abroad (whether students take classes with other U.S. students; with host country students; with other, non-U.S. international students; or with a mixture of international, host, and U.S. -students). - Where students are housed (with other U.S. students, with host country students, with international students, or with a host family). - Whether they participate in guided/structured experiential activities abroad. - The frequency with which resident faculty or staff provide "guided reflection on student experience" (Engle & Engle, 2003, p. 8).

Study	Summary	Variables/Instruments	Sample & Duration	Analyses & Findings
The Georgetown Consortium Project: Interventions for Student Learning Abroad 2009 Vande Berg, Michael; Connor-Linton, Jeffrey; Paige, R. Michael	Large-scale, multi-year study 61 study abroad (SA) programs: "short-term without home institution faculty, short-term with home faculty, direct enrollment programs, hybrid programs, island programs, etc." Pre- and post-tests Compares various aspects of study abroad programs with regard to language-learning and cross-cultural competence.	<u>Simulated Oral Proficiency Interview</u> (SOPI) Audio-led booklet recorded exercise, recorded performance is graded by trained rater using oral proficiency guidelines developed by the American Council on the Teaching of Foreign Languages (ACTFL, 1999). <u>Intercultural Development Inventory</u> (IDI) (see above) Measure of cross-cultural competence. Measured "More Commonly Taught Languages" (MCTLs: French, German, and Spanish) and "Less Commonly Taught Languages" (LCTLs: Arabic, Chinese, Japanese, and Russian). Program Duration Language of Content Course (English vs target language) Class Composition (Inclusion of other US students, US and other international student, or entirely host country). Frequency of meeting with/Meeting an "intercultural mentor" during program	1,297 1,159 study abroad 968 learning/learning in other language 138 control for both (from Georgetown, Uni of Minnesota-Twin Cities, & Dickinson College) Duration: Length of program	**Note**: *Very* small control (especially when stratified by language), but very few analyses use a control. Oral Proficiency (SOPI): – Increased significantly more for SA participants than for controls. – Plateauing controls did not advance, while SA participants equally benefitted regardless of prior language study. – No relationship found by sex, academic major, previous experience living abroad. – Development and starting scores greater for MCTL than for LCTL. – Pre-departure orientations with cultural component resulted in small but significantly higher development and reported general satisfaction. Cross-Cultural Competence (IDI): – Increased significantly more for SA participants than for controls. – **Increased significantly for females, but *not* for males.** – Majors in humanities/social sciences and foreign languages improved more than others. – Prior language study is associated with higher *post*- IDI (but not with -*pre*- IDI), i.e. greater improvement. – 13–18 week programs showed the greatest improvement in IDI. – Taking courses taught in target language improved gains in IDI.

Study	Summary	Variables/Instruments	Sample & Duration	Analyses & Findings
		Perception of cultural similarity/dissimilarity (very dissimilar, dissimilar, somewhat dissimilar, similar, very similar) Student Housing (with other US students, with other international student, or with host families) Time spent with other US nationals		− **SA participants in classes composed partly of US or other international students improved more than those in classes of entirely host country (who made almost no advances).** − Students who identified meeting with an intercultural "mentor" often or very often showed greatest gains. − **Perceived cultural similarity of "dissimilar" or "somewhat dissimilar" showed significant improvement; "very dissimilar," "similar," and "very similar" did not show significant improvement.** − Students housing with other US students showed the most gains. − Time spent with other US nationals was negatively correlated with IDI gains. Duration: various (13–18 week programs showed the greatest improvement in IDI).
Predictors of Study Abroad Intent, Participation, and College Outcomes 2015 Jiali Luo & David Jamieson-Drake	Study of UCLA students to find predictive factors for study abroad participation, as well as college development outcomes. The study matches three cohorts of entrance and exit surveys for UCLA. Regresses entrance survey information with intent to participate in study abroad, intent to study abroad with	Freshman CIRP Survey Student Attributes (CIRP) Human Capital (CIRP) - SAT score - Self concept (art and math ability) - Advanced degree aspiration Financial Capital (CIRP) Social Capital (CIRP) - Activity involvement in high school Cultural Capital (CIRP)	3584 Study abroad duration unspecified (<u>study abroad</u> was classified as either "participated" or "did not participate")	Note: UCLA is clearly different than UConn in many ways, but this study seemed to touch on quite a few of the same issues we want to look at. Intent to Study Abroad - Men less than women - Asian-American less than Caucasian - Natural Sciences and engineering less than humanities - Time spent socializing with friends in high school + - Artistic ability +

Study	Summary	Variables/Instruments	Sample & Duration	Analyses & Findings
	participation in study abroad, and participation in study abroad with college activities and development.	- Parental education Intent to Study Abroad Life Goals - (various) College Expectation - (various) Senior Survey Participation in Study Abroad Participation in College Activities Intellectual Development Leadership Skills Understanding Moral and Ethical Issues Science Literacy Communication Skills Overall Grade Overall Satisfaction		- Expectations to improve understanding of other countries and cultures + - Expectations to join fraternity/sorority + - Expectations to participate in student groups + - Mathematical ability – - helping to promote racial and cultural understanding – Participation in Study Abroad - Positive correlation with intent, while controlling for gender, race, ethnicity, parental income/education, and cohort effect - For students with <u>strong intent</u>, negatively correlated with off-campus study in the US and involvement in a music, theater, or student government group - For students with <u>weak intent</u>, negatively correlated with parental income, involvement in a political club, and involvement in sports club - Positively correlated with understanding moral and ethical issues, communication skills, overall grade, and overall satisfaction.

Study	Summary	Variables/Instruments	Sample & Duration	Analyses & Findings
Effect of Short-Term Study Abroad Programs on Students' Cultural Adaptability 2012 Susan C. Mapp	Assessed pre-post tests of cross-cultural adaptability for students going on short-term study abroad programs. Study abroad trips during summer break: - 2-week trip to Thailand (22 students, five social work majors, led by a social work professor). - 2-week trip to Ireland (25 students, five social work majors, led by a social work professor). - Two 2-week service learning trips to Vietnam (24 students total, 10 social work majors total, led by a social work professor). - 9-day trip to Costa Rica (9 students, no social work majors, led by a political science professor). - 9-day trip to Ecuador (7 students, one social work major, led by a political science professor).	Cross-Cultural Adaptability Inventory (Kelley & Meyers, 1995) (CCAI) 50-item Linkert scale - Emotional Resilience (ER) - Flexibility/Openness (FO) - Perceptual Acuity (PA) - Personal Autonomy (PO) Pre-test Question - # of countries student had previously visited - Longest amount of time previously spent in another country	87 study abroad participants from a small Pennsylvania liberal arts school. - primarily White - primarily middle-to-upper middle class - mostly students of traditional college age - two- thirds are female.	Cross-cultural Adaptability Measured difference in pre-post tests of cross-cultural adaptability Students' pretest scores began higher than average, but significantly improved on post-test for each subscale. Effect size: medium impact for Emotional Resilience and total score, small impact for other three subscales Repeated measure ANOVA used to determine significance of covariates; None of the following variables correlated with any of the CCAI subscales or total score: - Trip length - English-speaking country - # of countries student had previously visited - Longest amount of time previously spent in another country Limitations: Small sample size and limited number of programs. However, even with the small sample there was a medium effect size.

Study	Summary	Variables/Instruments	Sample & Duration	Analyses & Findings

The Impact of Study Abroad Experiences on Vocational Identity among College Students
 	
2016
 	
Julia F. Kronholz, & Debra S. Osborn
 	
https://eric.ed.gov/?id=EJ1099446
	Assessed the effect of a study abroad experience on vocational identity and career decision-making, using Cognitive Information Processing (CIP) theory (Sampson et al., 2004).
	
	Single-time survey post- study abroad (SA) experience
		<u>Electronic Survey</u>
		10 scaled items, 1 open-ended
		- Stability of goals/interest/talents before and after SA
		- Career decision-making using the constructs of Cognitive Information Processing theory (Sampson et. al, 2004).
		   o Self knowledge
		   o Options knowledge
		   o Communication
		   o Analysis
		   o Synthesis
		   o Valuing
		   o Execution
		   o Metacognition
			106 Students enrolled in study abroad from a large, public research university in the Southeast United States
			
			Overrepresentation of female participants (<u>74.5</u>% vs 55.1%)
			
			Underrepresentation of black/African-American participants (<u>4.1</u>% vs 8.6%)
			
			Duration: 16 weeks (one full semester)
				<u>Question</u>: What changes in self-reported vocational identity are attributed to the study abroad experience?
				
				Paired samples t-test determined significant changes in self-reported vocational identity following a study abroad experience.
				
				<u>Question</u>: What factors of Cognitive Information Processing theory are most predictive of career decision-making following a study abroad experience?
				
				Linear multiple regression found the model explained 51% of the variance in self-reported career decision-making ability.
				
				Self-knowledge, analysis, and metacognitions items all significantly positively predicted variance in self-reported career decision-making ability.

Study Abroad and the Boomerang Effect: The End is Only the Beginning 2013 Richard J. Rexeisen	Assesses the hypothesized "Boomerang Effect," anticipating that increases in cross-cultural awareness after study abroad will decline or revert some time after returning. Study abroad participants given pre- IDI (4 months before departure), post- IDI, and delayed IDI (4 months after return).	<u>Intercultural Development Inventory</u> (IDI) (see above) Measure of cross-cultural competence. - <u>Pre-</u>, <u>post-</u>, and <u>follow-up</u>.	139 from a medium-sized private Midwestern University Duration: Semester-long programs	IDI increased significantly between pre- and post-. IDI significantly declined between post- and follow-up. No significant difference between pre- and follow-up. Support for the "Boomerang Effect" increases in cross-cultural awareness after study abroad reverted to pre-levels 4 months after returning. Note: This was for a specific, English-speaking program in London.

Study	Summary	Variables/Instruments	Sample & Duration	Analyses & Findings
	Semester-long program in London, England			Findings showed that the Reversal IDI scale accounted for majority of the Boomerang Effect.
Toward a Comprehensive Framework of Study Abroad Intentions and Behaviors 2010 Lakshmi Goel, Pieter de Jong & Oliver Schnusenberg https://doi.org/10.1080/08975930.2010.526011	Formulates and tests a theoretical framework for predicting intention to study abroad. Uses Theory of Planned Behavior and trait theory to create model. Survey in introductory business course. Predicted intent to study abroad using: - Personality factors - Behavioral beliefs and attitudes - Normative beliefs and subjective norms - Control beliefs and perceived behavioral control. 	<u>Big Five Inventory</u> (BFI) scale (John, Donahue, & Kentle, 1991; John, Naumann, & Soto, 2008) - personality Perception of benefit to future career – behavioral beliefs Perception of family support – subjective beliefs Importance of faculty member's experience – control beliefs Intention to study abroad	113 Business majors from regional university in Florida	*H1-H3: behavioral, subjective, and control beliefs will all be positively associated with intent to study abroad* *H4: Conscientiousness will be positively associated with behavioral, subjective, and control beliefs.* *H5: Openness will be positively associated with behavioral beliefs.* *H6: Extraversion will be positively associated with behavioral and control beliefs* Used structural equation modelling to create and assess model; Good model fit, predicting 25% of variance in study abroad intention. Within model, only one significant path of variance: Extraversion positively predicted behavioral belief, which positively predicted intention to study abroad.
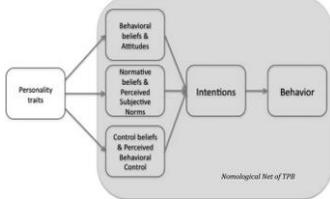
Study	Summary	Variables/Instruments	Sample & Duration	Analyses & Findings
Education Abroad And The Making Of Global Citizens: Assessing Learning Outcomes Of Course-Embedded, Faculty-Led International Programming 2010 Anthony C. Ogden https://eric.ed.gov/?id=EJ891449	Investigates "embedded education" study abroad (faculty-led travel experiences within residentially-taught courses): 1) Extent participation in "embedded education" study abroad mediates change in global citizenship. 2) Extent participation in "embedded education" study abroad affect academic development (self-concept and self-efficacy). Uses a quasi-experimental design with nonequivalent control group (courses with embedded component vs matched courses). 11 embedded and match course pairs Pre-test and post-test Penn State U students	<u>Demographic</u> - Age, gender, race - First-generation status - Class standing - Financial need index (using FAFSA) - Residency (in/out of state) - Prior study abroad experience <u>Academic</u> - Major discipline - Field of study - GPA (prior, during, after) (*international coursework* not *facilitated through Penn State was* not *counted for GPA*) <u>Program</u> - Type (semester, embedded, summer, academic year) - Provider (Penn State, IES, etc) - Destination/Region <u>Global Citizenship</u> (Custom scale) - Social Responsibility - Global Competence - Global Civic Engagement	8415 study abroad 2814 in courses involving embedded education abroad 227 students in semester-long courses involving embedded education abroad, with 418 students in matched courses at Penn State	Students in the embedded courses had significantly higher pre-test and post-test mean scores for both global citizenship and academic development than match courses. However, student's global citizenship in embedded courses **did not significantly increase** from pre- to post-test. The global civic engagement dimension *did* significantly increase for embedded students, but did for match courses as well. It seems that selection bias accounts for the difference in global citizenship scores. Similar to global citizenship, academic development scores for pre- and post-tests were higher for those in the embedded courses than match courses. Neither group showed significant increases in academic development. This again suggests a selection bias.
The GLOSSARI Project: Initial Findings from a System-Wide Research Initiative on Study Abroad Learning Outcomes	Phase I of a six-phase, multi-year University System of Georgia project. Results from post-experience surveys assessing international learning outcomes. Participants attended sixteen different USG institutions.	<u>Survey Test</u> assessing international learning outcomes: (a) knowledge of strategies and skills for functioning in other cultures, (b) knowledge of intercultural interaction techniques, (c) global interdependence, (d) knowledge of comparative civics, and (e) knowledge of world geography - Functional Knowledge	500 255 study abroad 245 comparison (convenience sample)	Significantly less males and minorities in study abroad group Study abroad sample performed significantly better than comparison on: - Functional Knowledge - Knowledge of World Geography - Knowledge of Cultural Relativism - Knowledge of Global Interdependence

Study	Summary	Variables/Instruments	Sample & Duration	Analyses & Findings
2004 Sutton, Richard C.; & Rubin, Donald L.		- Knowledge of Global Interdependence - Knowledge of Cultural Relativism - Verbal Acumen - Knowledge of World Geography - Interpersonal Accommodation - Cultural Sensitivity Student Academic Information (GPA, major)		These differences remained significant when controlling for GPA (suggesting that differences were not pre-existing). Performed same analyses w/in major for "education," "business," "journalism," and "social sciences other than international relations." ANOVA and post-hocs by major: - Education majors scored significantly lower than the other three majors on knowledge of global interdependence. - Business majors scored significantly lower than the other three majors on knowledge of cultural relativism.

Factors for Each Section of the UCICS

Table 1. Variance Accounted for by each Factor in Sections 1-3 of the UCICS.

Section 1:
- Factor 1.1 explains 12% of the variance.
- Factor 1.2 explains 11% of the variance.
- Factor 1.3 explains 11% of the variance.
- Factor 1.4 explains 8% of the variance.

Section 2:
- Factor 2.1 explains 19% of the variance.
- Factor 2.2 explains 18% of the variance.
- Factor 2.3 explains 17% of the variance.
- Factor 2.4 explains 6% of the variance.

Section 3:
- Factor 3.1 explains 13% of the variance.
- Factor 3.2 explains 12% of the variance.
- Factor 3.3 explains 10% of the variance.
- Factor 3.4 explains 3% of the variance.

UCICS Factor Descriptions

Section 1

Factor 1.1: Global Awareness and Political Engagement

It represents participants' knowledge and interest in international issues, politics, government, and global citizenship. Individuals who prioritize these items demonstrate a high level of global awareness, engagement, and a desire to participate in discussions and activities related to international affairs.

Factor 1.2: Interests in Cultural Learning and Exploration

This factor highlights participants' enjoyment of learning about different cultures, international current events, and history. It reflects a curiosity and interest in exploring diverse cultural contexts and understanding global perspectives.

Factor 1.3: Cultural Knowledge and Adaptability

This factor focuses on participants' awareness of their own cultural knowledge and their ability to apply it during cross-cultural interactions. It also encompasses their comfort level in unfamiliar cultural settings and their adaptability to different social and shopping conditions.

Factor 1.4: Non-Verbal Communication in Cross-Cultural Interactions

This factor emphasizes participants' use of non-verbal behaviors, such as non-verbal cues, tone, inflections, facial expressions, and appropriate listening skills during cross-cultural interactions. Individuals who prioritize these items demonstrate an understanding of the importance of non-verbal communication in navigating cultural differences.

Factor 2.1: Global Awareness and Engagement

These items primarily focus on being politically engaged, aware of government decisions and policies at various levels (national and international), and concerned about global issues such as justice, human rights, and global trade. Participants who prioritize these aspects may demonstrate a strong sense of global citizenship and a proactive stance towards societal and political matters.

Factor 2.2: Environmental and Resource Concerns

This factor reflects participants' concerns about global environmental challenges such as climate change, food security, water resources, and energy availability. Those who attribute importance to these items are likely to prioritize sustainability, ecological awareness, and resource management on a global scale.

Factor 2.3: Interpersonal Relations and Community Involvement

This factor revolves around participants' values related to fairness, caring, honesty, supportiveness, kindness, listening to others' perspectives, and being respectful to all kinds of people. It also encompasses involvement in the local community. Individuals who rank high on these items are likely to emphasize interpersonal relationships, empathy, and community engagement.

Factor 2.4: Justice and Social Causes

This factor focuses on concerns about justice, human rights, and global challenges related to justice and social causes. Participants who prioritize these items may have a strong sense of advocacy for equality, fairness, and social justice.

Factor 3.1: Open-Mindedness and Cultural Discussion
It represents participants' attitudes towards engaging in serious discussions, being aware of their own knowledge and attitudes, willingness to learn, effective communication, and interest in learning the history behind cultural practices. Individuals who prioritize these items demonstrate open-mindedness, a curiosity to explore different cultural perspectives, and a desire to engage in meaningful discussions.

Factor 3.2: Acceptance of Cultural Differences and Respect
This factor reflects participants' attitudes towards accepting other people's traditions, recognizing the value in understanding customs that challenge one's own perceptions and beliefs, appreciating the benefits of cultural diversity, and respecting cultural values. Those who rank high on these items exhibit a high degree of cultural acceptance and a willingness to embrace diverse perspectives.

Factor 3.3: Cultural Background and Perception
This factor emphasizes the importance of cultural beliefs and backgrounds in shaping individuals' evaluations of others' behavior, their perceptions of different cultures, and the influence of cultural perspectives on topics such as marriage and family. Individuals who prioritize these items recognize the impact of cultural context on individuals' viewpoints and actions.

Factor 3.4: Perception of Cultural Practices
This factor focuses on individuals' perceptions of cultural practices, acknowledging the existence of customs that may appear odd and recognizing the similarities among people worldwide. Individuals who prioritize these items may have a better understanding of cultural practices, with an awareness of both differences and shared human experiences.

Coding Frame for the Open-ended Responses to the UCICS

(Adapted from Odag et al., 2016)

Dimension 1: Attitudes		
Subcategory	**Definition**	**Note**
1.1. **Openness**	• Openness to experience. • Comfortable with new, unknown surroundings and unfamiliar ideas/values (also new culture, traditions, etc.). • Generally speaking, one who feels at ease in the unknown or new environments. • If words such as embracing, being open or flexible, etc. are used, then this category is applicable.	
1.2. **Curiosity and Discovery**	• The interest and desire for investigation and learning; particularly the desire to learn about other cultures, norms, and social systems.	
1.3. **Respect**	• Valuing and appreciating other cultures and cultural differences. • Includes respect for cultural diversity, behavioral and/or value differences.	• Respect is different from Tolerance (1.4), as respect involves valuing and holding cultural diversity in high regard/esteem, while tolerance refers to one's impartiality and fairness for all cultures and doesn't imply a level of subordination or deference to another culture/view/etc.
1.4. **Tolerance/Acceptance**	• A permissive, fair, and accommodating attitude. • Rooted in the impartiality and the abhorrence of prejudice or racism that is directed toward all people, cultures, opinions, behaviors, religions, nationalities, etc. that differ from one's own. • Includes tolerating and/or accepting others, avoiding prejudice.	• For an explanation of category differences from Respect, see Respect (1.3).
1.5. **Attitudes Miscellaneous**	• Anything not falling into one of the previous categories.	

Dimension 2: Knowledge & Comprehension		
Subcategory	**Definition**	**Note**
2.1. **Understanding Worldviews of Others**	• The ability to understand individuals from a cultural background other than your own. • The knowledge or understanding of the way that others perceive/make sense of the world. This includes understanding differences in	• This category refers to the ability to understand the views of individuals, and thus is separate from Intercultural Awareness (2.4) which refers to the generalized knowledge, understanding, or awareness of other cultures. It is

	patterns of thinking that involves cultural values, opinions, views, points, etc.	possible to understand the role and place of culture in society and still remain ignorant of different patterns of thinking of the individual.
2.2. **Understanding Behaviors/Actions of Others**	• The understanding of unfamiliar behaviors through the knowledge that there are cultural differences in behaviors, and the understanding that actions/tasks are not carried out or expressed the same across all cultures.	
2.3. **Cultural Self-Awareness**	• Being aware of one's own cultures/values and what they represent. • Being aware of how culture has influenced different aspects of themselves, such as their values and behaviors.	
2.4. **Intercultural Awareness/ Understanding Others Culture**	• The understanding and/or awareness of other cultures. • The understanding of and assent to the reality that other cultures (and values) exist, including understanding that differences exist. • Being aware of cultural differences among individuals of different cultures/countries.	• A distinction must be established between Intercultural Awareness and Culture Detection Skills (3A.3). Intercultural Awareness is not a skill, but the knowledge of other cultures' presence and role in the world. One may be aware of other cultures but still be unable to detect cultural differences in practice. (See 3A.3: Culture Detection Skills). • Additionally, Intercultural Awareness is separate from Understanding Worldviews of Others (2.1). (See 2.1 Understanding Worldviews of Others for details).
2.5. **Culture-Specific Information**	• Specific knowledge that pertains to a particular culture, such as language, traditions, customs, religions, and general knowledge of a country.	
2.6. **Knowledge & Comprehension Miscellaneous**	• Anything not falling into one of the previous categories.	

Dimension 3A: Intrapersonal Skills

Subcategory	Definition	Note
3A.1. **Problem Solving/ Critical Thinking Skills**	• The ability to use problem-solving skills (creativity, logic, and methodological thinking) to overcome/solve any conflicts/problems that may arise in intercultural interaction. • The ability to think critically, assess problems, analyze situations and relationships, and find solutions. • Specific skills that are employed to draw accurate conclusions and to make sense of	

	situations and relationships, including analyzing, synthesizing, interpreting, relating and evaluating information.	
3A.2. **Judgment Inhibition Skills**	• The ability to avoid making automatic or sweeping judgments (based on stereotypes, cultural biases, or ignorance) about the characteristics of a certain individual, group, or culture.	• Judgment Inhibition is separate from Tolerance/Acceptance (1.4) as Judgment Inhibition refers to the specific cognitive skill in which one purposefully circumvents the involuntary tendency to make automatic assumptions before the pertinent information is gathered. One may possess a tolerant mindset and still allow judgmental heuristics to influence one's thought process (without malicious intent).
3A.3. **Culture Detection Skills**	• Having the skill/ability to recognize and identify cultural differences; not only in theory but also in real-world settings.	• Culture Detection is separate from Intercultural Awareness (2.4) because Culture Detection is the *actual skill of being able* to detect differences in the culture, whereas Intercultural Awareness is *the knowledge of* the differences/culture. One can be aware of the presence of other cultures and still fail to recognize cultural nuances *in practice*.
3A.4. **Coping Skills**	• A psychological skill that aids one in dealing with diverse and unpleasant emotions like xenophobia, frustration, and anger that are triggered by unknown cultural settings. • To accept/control a difficult emotional situation by minimizing stress. • The ability to "cope with environments" as environments do not yield or change and must be accepted and managed through emotional modifications. • This category can be applied when the context surrounding the use of the word, "cope" can be interpreted to mean that there is an element of stress or negative emotion that one feels.	• Coping is not a suitable category in an instance where it cannot be inferred to be an emotional/psychological skill, and it is a non-emotional/non-skill context. • When "cope" is used as "deal," as in "coping with people," see Successful Communication/Behavior/Interaction (4B.1). • When "cope" is used as "adapt" as in "coping with culture", see General Adaptability/Adjustment (4A.1).
3A.5. **Intrapersonal Skills Miscellaneous**	• Anything not falling into one of the previous categories.	

Dimension 3B: Interpersonal Skills		
Subcategory	**Definition**	**Note**
3B.1. **Listening Skills**	• In an interpersonal exchange, the ability to pay attention to and comprehend the speaker and the speaker's (verbal) message.	
3B.2. **Observation Skills**	• In an interpersonal exchange, the ability to accurately observe the speaker and through	

	this observation, gain relevant *nonverbal* and *implicit* information.	
3B.3. **Interactive Learning Skills**	• The ability to learn from one's interactive experiences with members of other cultures. • The skill to retain relevant information from intercultural exchanges and grow through repeated experiences. Learning through doing.	
3B.4. **Interpersonal Skills Miscellaneous**	• Anything not falling into one of the previous categories.	

Dimension 4A: Internal Outcomes		
Subcategory	**Definition**	**Note**
4A.1. **General Adaptability/ Adjustment**	• Adaptability to a new cultural environment, flexibility/adaptability of oneself to fit into a new culture or environment. • When "coping" with culture is used as a synonym for adapting, this category applies.	• While a part of adaptability is using appropriate communication/behavior styles, General Adaptability only applies if this specification is not mentioned; otherwise, it applies to Communicative/ Behavioral Adaptability (4A.3).
4A.2. **Empathy**	• Cross-cultural empathy: The capacity to understand and feel the emotions of others, and relate to their feelings, regardless of cultural similarity/dissimilarity.	
4A.3. **Communicative/ Behavioral Adaptability**	• Selecting and using appropriate communication styles and behaviors depending on the context. • Being flexible in using communication styles and behaviors appropriate for the context.	• For further explanation, see General Adaptability/Adjustment (4A.1)
4A.4. **Ethnorelative view**	• The view that culture is relative, and there are no universal "good" or "bad" labels. • The ability to **not** hold one's own culture as the standard upon which all other cultures are compared to. • The capability to perceive behaviors, values, actions, and worldviews as *culturally dependent* instead of universal.	• While Ethnorelativism is a process and as such it requires previous categories as prerequisites for its realization, ethnorelativism is separate because it represents the absolute freedom from imposing one's own cultural rules on others. This category will apply only to responses that address the aspects mentioned in the definitions for this category.
4A.5. **Perspective Shifting**	• The ability to shift the worldview and perspective and look at the world, cultural values, perceptions, ways of processing data, methods of communication, culturally appropriate behavior, etc. *through the eyes of another culture*. • The ability to shift the mindset and look at the world from a different cultural point of view based on completely different assumptions and norms.	

| 4A.6.
Internal Outcomes
Miscellaneous | • Anything not falling into one of the previous categories. | |

Dimension 4B: External Outcomes

Subcategory	Definition	Note
4B.1. **Successful** **Communication/Behavior/** **Interaction**	• The ability to interact successfully with people from other cultures. • The ability to achieve one's goals to some degree through effective communication and appropriate behaviors in an intercultural context.	
4B.2. **Integration and Harmony**	• When an individual is able to be a part of, live in, and be functional in a society of a different culture. • Being able to integrate yourself in an intercultural setting. • The ability to live and work productively and harmoniously with people having different values, backgrounds, and habits. • To be able to get on well with other people who are foreign to you.	
4B.3. **Offense Prevention**	• The avoidance of offending a member of another culture through effective use of *sensitivity to other people's customs and* • *behavior*.	
4B.4. **Collaboration/Cooperation**	• An outcome of intercultural competence that involves members of diverse cultures engaging in successful cooperation and collaboration efforts; "working as a team" to produce academic or employment-related output, to exchange ideas and network, and to learn from each other.	
4B.5. **External Outcomes** **Miscellaneous**	• Anything not falling into one of the previous categories.	