

December 2021

## Developing cultural intelligence: Experiential interactions in an international internship program

Lisa Lambert Snodgrass  
*Purdue University, lsnodgra@purdue.edu*

Margaret Hass  
*Purdue University, hassm@purdue.edu*

Mehdi Ghahremani  
*Purdue University, mghahrem@purdue.edu*

Follow this and additional works at: <https://scholarcommons.usf.edu/jger>

 Part of the [Higher Education Commons](#), and the [International and Comparative Education Commons](#)

This Refereed Article is brought to you for free and open access by the M3 Center at the University of South Florida Sarasota-Manatee at Scholar Commons. It has been accepted for inclusion in *Journal of Global Education and Research* by an authorized editor of Scholar Commons. For more information, please contact [scholarcommons@usf.edu](mailto:scholarcommons@usf.edu).

---

### Recommended Citation

Lambert Snodgrass, L., Hass, M., & Ghahremani, M. (2021). Developing cultural intelligence: Experiential interactions in an international internship program. *Journal of Global Education and Research*, 5(2), 165-174. <https://www.doi.org/10.5038/2577-509X.5.2.1078>

### Corresponding Author

Lisa Lambert Snodgrass, 100 N. University Street, 5140 Beering Hall, West Lafayette, In 47907

### Revisions

Submission date: Apr. 2, 2019; 1st Revision: Feb. 3, 2020; 2nd Revision: Apr. 6, 2020; 3rd Revision: Nov. 23, 2020; 4th Revision: Mar. 1, 2021; Acceptance: Mar. 1, 2021

# Developing Cultural Intelligence: Experiential Interactions in an International Internship Program

Lisa Lambert Snodgrass<sup>1</sup>, Margaret Hass<sup>2</sup>, and Mehdi Ghahremani<sup>3</sup>

The College of Education  
Purdue University, United States

<sup>1</sup>lsnodgra@purdue.edu

<sup>2</sup>hassm@purdue.edu

<sup>3</sup>mghahrem@purdue.edu

## Abstract

In recent years, the demand for more culturally competent candidates has risen as employers seek workers highly adaptable to the global marketplace. Study abroad internship programs offer a rich training ground for college students to gain valuable international and intercultural career experience. This study examined the effects of experiential program design on the cultural intelligence of participants in an international internship program. College students from a large Midwestern university were enrolled in an international internship program in Amsterdam, Netherlands; Lima, Peru; or Seoul, South Korea. The program design incorporated principles of Kolb's Experiential Learning Theory (ELT) to increase student reflection on their experience and engage them in the ELT cycle. Participants were scored on the Cultural Intelligence Scale (CQS) before and after the internship, and pre-test and post-test scores were compared and analyzed. Findings indicated significant growth in participants' cultural intelligence. The intentional incorporation of experiential learning principles in the design and implementation of internship abroad programs has clear potential to increase participant' intercultural competence and develop their skills for the 21<sup>st</sup> century workplace.

**Keywords:** cultural competence, experiential learning, program design, study abroad, cultural intelligence scale

## Introduction

Today, more than ever before, one hears on the news, from employers, and from academia that tomorrow's workers must be equipped with the skills and knowledge to achieve career success in a global society. A survey conducted by the Collegiate Employment Research Institute (2008) found that international experience helped distinguish job candidates in more than 45% of employers. Hart Research Associates (2015) found that 96% of employer respondents considered intercultural experiences very important in their hiring practices. Specifically, employers noted that those candidates with international and/or intercultural experiences had increased cultural understanding, were more adaptable to change, and demonstrated enhanced worldviews. Employers seek candidates with these specific intercultural skills and are challenging today's educational leaders in secondary institutions, colleges, and universities to prepare graduates who can compete as intercultural citizens.

At first glance, it may seem as if colleges and universities have embraced their role in preparing graduates for careers in a global society. Many universities have established bold mission statements indicating commitment to producing globally minded graduates. Accordingly, student participation in study abroad has continued to increase since 2008, with more than 325,000 students, nearly 10% of U.S. graduates, going abroad in 2015-2016 (NAFSA, 2018). Moreover, the American Council on Education (2008) surveyed approximately 1,500 U.S. undergraduate students and found that 55% planned to include a study abroad experience in their education. Of those students, 37% noted interest in gaining internship or career experience as part of the study abroad experience. These data, along with colleges and universities reporting higher numbers of students applying for study abroad experiences, suggest that students are responding to employers' calls to become more internationally and culturally competent.

Looking deeper, however, tells a different story. Research has found that, despite their symbolic commitment to internationalization, universities have shown little strategic effort, planning, or commitment to international preparation (Punteney, 2012). Likewise, Koen et al. (2012) asserted that because universities do little to assist in the transition from school to work, graduates often struggle in developing the skills employers seek most. Consequently, candidates for international assignments, as well as U.S. domestic positions with international interactions, frequently lack adaptability and cultural competence skills.

International internship programs offer a rich training ground for college students to gain valuable international and intercultural experiences that may help close the gap between employers and academia. However, these experiences must be done with intentionality and purpose. It is important to note that the simple act of traveling abroad does not necessarily make participants culturally competent (Snodgrass, 2017; Vande Berg et al., 2012). In fact, as Kauffmann et al. (1992) reported, study abroad participants often refrain from actively engaging or immersing themselves in the life and culture of the host country and its peoples. Previous research has found that many factors affect potential intercultural growth, including personal factors of the students, characteristics of host culture (Stephenson, 2002), and length of stay (Dwyer, 2004). Moreover, some research suggests that study abroad can even lead to more polarized views of other cultures if not designed and implemented intentionally (Bennett, 2008; Vande Berg et al., 2012). This means that simply increasing the number of slots for study abroad participants is not sufficient.

Using the principles of experiential learning offers potential for study abroad educators to enable deeper experiences for their participants. Experiential learning, an educational philosophy developed by Dewey and further articulated by David Kolb's ELT, emphasizes intentionality in program design and implementation to ensure participants engage actively in the learning experience (Dewey, 1938; Kolb, 1984). Dewey and Kolb maintained that simply living an experience does not guarantee growth or learning; rather, it is necessary to actively transform experience into meaning. This assertion applies to study abroad as well. However, as Katula and Threnhauser (1999) noted, there is a common misconception that study abroad is inherently enriching; this flawed premise has often prevented research from critically examining whether study abroad programs are, in fact, more conducive to learning than simple travel, and determining the conditions by which experience abroad actually leads to experiential learning. This problem is magnified for internships abroad, given that they have garnered even less attention from researchers.

This study sought to fill that gap by applying the principles of Kolb's ELT to an international internship program in three different countries and testing the program's design effects on intercultural competence via the CQS. The field of cultural intelligence (CQ) is relatively new, with limited research involving internship abroad programming. Accordingly, the CQS is the only psychometrically validated and reliable measurement of cultural intelligence. The CQS is a 20 item, Likert-type scale instrument with four subscales: motivational CQ, cognitive CQ, metacognitive CQ, and behavioral CQ. Motivational CQ is described as the drive or the setting into action the cognitive and metacognitive ability to devise a strategy to navigate cultural difference (Earley & Ang, 2003). Cognitive CQ is defined as a base level of knowledge of cultural norms and values that are developed through education and experiences (Ang & Van Dyne, 2008), while metacognitive CQ requires participants to be aware of differences in cultural norms and beliefs and challenges them to create strategies to cope with the differences (Earley & Ang, 2003). Behavioral CQ has been defined by Earley and Ang (2003) as the ability to put those strategies into action and interact effectively in a wide range of cultural environments.

The overarching research question was, *are there significant differences among the Korea, Netherlands, and Peru program participants with respect to pre- and post-program cultural intelligence scores following the internship abroad program as measured by the CQS?*

### **Theoretical Framework: Experiential Learning Theory and the Internship Experience**

Drawing from the works of Dewey (1938), Lewin (1948), and Piaget and Inhelder (1947), Kolb's ELT served as the theoretical framework for this study. Experiential learning is defined by Kolb as "the process whereby knowledge is created through the transformation of experiences. Knowledge results from the combination of grasping and transforming experience" (Kolb, 1984, p. 194). Introducing the concept of learning spaces and the importance of the transactions between individuals and the situation or environment, Kolb (1984) defined these learning transactions as including "needs, goals, unconscious influences, memories, beliefs, events of a political, economic, and social nature, and anything else that might have direct effect on behavior" (p. 199). It is through an individual's interactions or *transactions* with learning that knowledge of self and others is gained. Kolb's model is shown as a cycle moving from concrete experience to reflective observation to abstract conceptualization and, finally, to active experimentation. Kolb (1984) explained that, as a person moves through the cycle, he/she engages each part of the cycle by living an experience, reflecting on the experience, thinking and learning about the experience, and then actively experimenting in a similar or new situation.

As a compliment to the ELT, this study also incorporated a Live-Learn-Work model developed during a previously conducted pilot study on international experiential curriculum design (Snodgrass, 2015). For the *Living* component, participants were intentionally immersed in a traditional neighborhood with a strong residential and community identity where they engaged with local residents and businesses in order to live daily life. For the *Learning* aspect, a learning community was fostered through attendance in an academic class at the local university with fellow participants. Finally, for the *Work* component, students were assigned internship placement of no less than 80 hours which was matched to the participants' majors and/or fields of interest (Snodgrass, 2015).

Using this model as a guide and connecting it to an international experiential internship curriculum design, the experience reflected the following process: (a) interns experienced the concrete

interactions of the international workplace and the community for a continuous period of time, (b) interns reflected on those interactions as they applied it to their past experiences and knowledge, working to connect the past to their current experience, (c) the interns then proceeded to make judgments and reach conclusions about how to conceptualize new experiences with the help of past experiences to inform future interactions, and, finally, (d) the interns engaged in new situations that enabled them to act upon new knowledge and experience. Through the cycle of engaging in an international internship experience, individuals learned from their experience and developed cultural competence to act in future intercultural situations. All of these stages must be carefully and intentionally facilitated to ensure the cycle of learning and reflection is completed (Kolb, 1984).

Kolb's (1984) model should not be used uncritically, however. Since the height of Kolb's prominence, several studies, reviewed and summarized by Seaman (2008), have posed important methodological, epistemological, and sociocultural challenges to Kolb's experiential learning cycle. Most relevant to this study is perhaps the critique of the model's *stepwise* organization, which assumes that each stage in the cycle is both discrete from and dependent on the previous one. This foundation not only neglects what some, like Quay (2003), term the *holistic* nature of experiential learning, but also assumes that *direct experience* precedes understanding and thus can be separated from meaning making. In practice, this is not the case. Experience itself is mediated by our cultural attitudes and expectations and learning rarely proceeds clearly and neatly in a sequence of stages. Seaman (2008), citing the 1997 Cole et al. and the 2003 Engeström et al. studies (as cited in Seaman, 2008), notes that, "research in 'social practice' traditions shows how people learn *in* experience, not *from* or *after* it" (p.12). Moreover, the emphasis on conscious reflection as the *key* to experiential learning is itself a culturally mediated product of Western values that prioritize rationality, independence, and abstract knowledge.

These critiques do not imply that Kolb's (1984) theory should be abandoned completely. Rather, they should be used to further contextualize and reconceptualize experiential learning. Schenck et al. (2015), for example, have sought to evolve Kolb by creating a model, namely Co-Constructed Developmental Teaching Theory, that retains the strengths of experiential learning while taking into account advances in neuroscience; this theory seeks to produce a model for teaching rather than learning. Likewise, in this study, we used Kolb's experiential learning theory to shape the curriculum of the internship abroad program, rather than to explain the learning of the students. Given the challenges to Kolb's ELT *cycle*, we cannot assume that the experience of the internship abroad produces a simple sequence of learning stages that unfold one after the other. However, the four aspects Kolb names (concrete experience, reflective observation, abstract conceptualization, and active experimentation) are useful when conceived as ways of learning that can be intentionally integrated into the internship experience to increase cultural competence.

## Methods

This study sought to determine the effects of international internship curricular experiential interactions on the cultural intelligence of program participants in three different locations. The research used a survey approach, with a pre-test-post-test design that employed the (CQS). Pre-test-post-test designs are widely used in behavioral and educational research to investigate effects of an intervention (Dimitrov & Rumrill, 2003; Dugard & Todman, 1995). However, there are potential threats to validity to this type of study design which include history, maturation, and testing (Johnsen & Christensen, 2012). *History* refers to some other event occurring at the same time that could be the cause of the change in scores. *Maturation* denotes the length of time between the pre- and post-tests,

where the participants have grown older which might account for any change in their scores. *Testing* suggests that since the post-test is the same test as the pre-test, the questions might be familiar to the participants, and the change in the post-test scores could be due to a practice effect. Although random assignment to the treatment and control group is one of the strategies to address these concerns, in some cases, including this study, it is not a practical or an ethical method (Knapp, 2016).

This study was quasi-experimental as students self-selected to enroll in the internship abroad programs, thus producing a convenience sample for this study. This pre-test-post-test quasi-experimental research design was supported by Carlson and Widaman (1988) who agreed it was not possible to utilize random assignment for study abroad programs; therefore, a pre-test-post-test quasi-experimental design was found to be an acceptable alternative. It is important to note, however, that the internal validity may be threatened due to bias from the non-random selection (Campbell et al., 1963). Internal validity refers to the idea of causal interpretability and establishing trustworthy evidence of cause-effect relationship between variables (Johnsen & Christensen, 2012). In this study, we examined the relationship between participation in an international internship program and differences in the cultural intelligence of participants from the pre-test to the post-test. Random assignment of participants is an easy way to make sure that groups are equated on all extraneous variables. Non-random assignment may decrease the ability to infer causation as it may potentially increase the third-variable problem—a confounding variable (Carlson & Widaman, 1988). To address the non-random threat to the internal validity, we controlled for some independent variables including gender, residency, and previous travel abroad experience (Templer et al., 2006; Khodadady & Gharari, 2011).

### ***Sample and Programs***

The sample included participants enrolled in internship abroad programs in Seoul, Korea,  $n = 13$ , Amsterdam, Netherlands,  $n = 12$ , and Lima, Peru,  $n = 6$ . While each of the programs is unique in country of destination and program length, the three programs incorporated the Live-Learn-Work model design. The Seoul, Korea program, led by a faculty member with extensive experiential learning and study abroad experience, conducted two weeks of pre-departure academic courses at the home university that included two content-specific courses, *Korean Popular Culture* and *Glocal: Society, Food, and Culture*. The participants then spent four weeks in Seoul, Korea completing 80-120 hours of internship experience in a multinational corporation, participated in community-oriented cultural activities in their local residential neighborhoods, and met twice weekly for continued academic content-specific learning. The Amsterdam, Netherlands program was a seven week in-host country experience led by a faculty member with expertise in Dutch culture and in facilitation of experiential learning. Participants earned academic credits by attending an *International Business Issues* content-specific course and completing an internship of 120-180 hours. Planned local cultural interactions and weekly debriefings were conducted through partnership with a network of local professionals. The Lima, Peru program was an eight-week program that combined pre-departure content-specific curricula with an in-host country internship and coursework. The faculty advisor was unable to attend the abroad experience with the students, sending instead graduate student leaders, with little to no experience in experiential learning or intercultural education, who then implemented the program in-country while being supervised off-site by a faculty member. Courses included *Latin American Culture* and *Spanish language*, levels 101 through 402. Once in the host country, the Peru participants interned for six weeks, completing 120-160 hours of workplace practicum, and engaged in planned cultural activities.

Each of the programs incorporated ELT into the curriculum through the Live-Learn-Work model. Participants lived in local neighborhoods and participated in local life; they took two academic courses related to their specific programs, and they participated in an internship with a local business. To ensure maximum engagement with the local culture, the program leaders built in activities and opportunities for the participants to experience praxis. Originated by Freire (1974), praxis has a central goal of employing both action and reflection to transform the learning experience. With this goal in mind, faculty leaders incorporated multiple reflective opportunities for participants to debrief, discuss, and develop meaning from the varied cultural immersion activities and internship experiences. Reflections, conducted both in written and verbal forms, were a vital component of the programs mission to intentionally strengthen participants' abilities to articulate their experiences.

The total sample for the three programs was 31 internship abroad participants. Of the 31 participants, 13 (42%) were female and 18 (58%) were male; 58% were U.S. citizens while 42% held citizenship in a country other than the United States. When asked about previous travel abroad experiences, 67.7% had some form of previous experience traveling beyond their home country; while for 32.3% of students, this was their first experience outside the United States. The participants represented six schools or colleges within the institution.

### ***Instrument***

This study utilized the 20 items Likert-type CQS self-assessment survey developed by Ang and Van Dyne (2008). The CQS subscales have the following internal consistency reliability estimates: metacognitive CQ ( $\alpha = .77$ ), cognitive CQ ( $\alpha = .84$ ), motivational CQ ( $\alpha = .77$ ), and behavioral CQ ( $\alpha = .84$ ) (Van Dyne et al., 2008). In this study, the CQS was administered as both a pre-test and post-test to participants.

Despite established psychometrics for the instrument, several researchers remain critical of the concept of CQ. For instance, Blasco et al. (2012) critically discussed three assumptions underlying the concept of cultural intelligence, suggesting that CQ should be considered as a hypothesis, rather than a well-proven construct. They suggested that researchers need to concentrate on documenting empirical examples and developing methodologies that can help assess, revise, and refine this concept. Likewise, in a systematic review of CQ literature, Ott and Michailova (2018) concluded that there is a need for additional and more detailed theoretical understanding of the CQ construct. Further, Cognitive CQ is similar to the traditional concept of intelligence. Thus, along the lines of critiques of IQ, there are some concerns regarding CQ measurements. For example, Bückner et al. (2016) raised concerns about cross-cultural psychometric properties of this scale, and cross-cultural validity and reliability of the underlying constructs.

### ***Data Collection***

With IRB approval, data collection was managed via email and using online methods. The CQS self-assessment was posted on an electronic online system using Qualtrics. The CQS pre-test was completed by participants two weeks prior to their respective program's departure. One week after completion of the program, program participants were emailed a reminder of the CQS post-test and completion dates. The pre-test and post-test data were analyzed two weeks after the Qualtrics surveys were completed.

## Data Analysis

The data was quantitatively analyzed. For the CQS self-assessment survey data, SPSS 23 software was used to provide correlational and descriptive statistics including percentages, means, and standard deviations. After examining the means and interval data for normality and equality of variance using QQ Plots and histograms, the data were found to be normally distributed (Gall et al., 2007).

A paired *t*-test was performed on the CQS pre-test and post-test data for each participant program group, the independent variables. A 95% confidence interval with a  $p < .05$  level was set as the standard for analysis. Descriptive statistics reporting the means, standard deviations, and standard error of the independent variables of gender, residency (U.S. domestic or international student status), and previous travel abroad experiences were used and examined. As recommended by Gall et al., (2007), a paired *t*-test was performed across all groups and on each program's pre-test and post-test group means in order to determine if there were significant differences between the pre-test and post-test data.

## Results

As shown in Table 1, a paired-sample *t*-test analyses of all participants ( $n = 31$ ) revealed statistically significant differences between individual's pre-test and post-test scores on the CQS survey. The results provide evidence that comparing individuals' pre-test scores of CQS survey ( $M = 5.38$ ,  $SD = .66$ ), and post-test scores ( $M = 5.79$ ,  $SD = .60$ ), involvement in the study abroad internship program has a statistically significant effect (increase) on the participants' CQS scores, ( $t(30) = -4.23$ ,  $p < .001$ ,  $d = .65$ ), across all program groups. The Cohen's  $d = .65$  indicates a moderate to strong effect size of significance.

**Table 1.** Paired-Sample *T*-Test Statistics for all Participants ( $n = 31$ )

| Test      | Paired Sample Statistics |      |      |        | Paired-Samples T-test Statistics |      |      |        |       |                  |        |             |
|-----------|--------------------------|------|------|--------|----------------------------------|------|------|--------|-------|------------------|--------|-------------|
|           | Mean                     | SD   | SEM  |        | Mean                             | SD   | SEM  | 95% CI |       | <i>t</i>         | Sig.   | Effect Size |
|           |                          |      |      |        |                                  |      |      | Lower  | Upper | ( <i>df</i> =30) |        | <i>d</i>    |
| Pre-test  | 5.382                    | .660 | .119 |        |                                  |      |      |        |       |                  |        |             |
| Post-test | 5.789                    | .599 | .108 | Paired | -.406                            | .535 | .096 | -.603  | -.210 | -4.23            | <.0001 | 0.65        |

Examination of the overall program pre-test and post-test CQS scores for the Seoul, Korea program ( $n = 13$ ) began with the assumption that the design of the experiential curriculum coupled with the experience level of the program leader would positively affect the cultural intelligence of program participants, and the data analysis supported this assumption. The paired samples *t*-test,  $t(12) = -2.44$ ,  $p = .031$ , revealed a mean score difference between the pre-test and post-test scores of  $-.307$  with a standard deviation of  $.454$ . The data indicated a significant increase in the post-test scores ( $M = 5.90$ ,  $SD = .621$ ) of program participants from their pre-test scores ( $M = 5.60$ ,  $SD = .628$ ). Examination of the paired *t*-test results suggested that program participants had significant positive gains in their cultural intelligence after participating in the experiential curricular interventions of the program. The Cohen effect size value ( $d = .49$ ) suggested a moderate practical significance.

The same assumption of the effect on cultural intelligence was made for the Amsterdam, Netherlands program as well. Using a paired *t*-test to analyze the data, a significant difference was found in cultural intelligence between the pre-test and post-test scores ( $n = 12$ ). The paired samples *t*-test,  $t(11) = -3.76$ ,  $p = .003$ , revealed a mean score difference between the pre-test and post-test scores of  $-.554$  with a standard deviation of  $.510$ . The data indicated a significant increase in the post-test scores ( $M$

= 5.67,  $SD = .633$ ) of program participants from their pre-test scores ( $M = 5.12$ ,  $SD = .704$ ). Examination of the paired  $t$ -test results suggested that the Netherlands program participants were significantly different in their cultural intelligence after participating in the curricular interventions of the program. A very strong practical significance was expressed by Cohen's effect size ( $d = .87$ ).

The data were also analyzed for the Lima, Peru program, the third program in the study. A paired samples  $t$ -test,  $t(5) = -1.058$ ,  $p = .338$ , revealed a mean score difference between the pre-test and post-test scores of  $-.325$  with a standard deviation of  $.752$ . The data indicated a non-significant yet positive increase in the post-test scores ( $M = 5.75$ ,  $SD = .524$ ) of program participants from their pre-test scores ( $M = 5.43$ ,  $SD = .534$ ). Examination of the paired  $t$ -test results suggested that the program participants were not statistically significantly different in their cultural intelligence after participating in the curricular interventions of the program; however, this finding may be a result of the small sample size. A moderate to strong practical significance was represented in Cohen's effect size ( $d = -.62$ ).

## **Discussion**

According to the data collected, while all three programs had positive gains in cultural intelligence, two of the three internship abroad programs resulted in statistically significant differences in the cultural intelligence of participants from the pre-test to the post-test administration. Both the Korea and Netherlands program participants had statistically significant mean gains while the Peru program results did not produce a significant mean gain.

When considering the findings with respect to theories of experiential learning, we can conclude that differences in curriculum design and implementation had effects on the findings. For the Korea and Netherlands programs, the faculty program leaders had extensive experience leading experiential study abroad programming; therefore, experiential learning was intentionally integrated into each program element. While there were experiential learning elements present in the overall Peru program, the program was led by two first time graduate assistants with periodic faculty leadership. The graduate assistants not only had relatively little experience with implementing experiential pedagogy, but also less experience and familiarity with the host culture itself. This lack of experience, along with the low number of program participants, likely influenced the outcomes of the Peru program. This result indicates the necessity of having trained and experienced leaders who can implement an experiential curriculum effectively; effective gains in cultural intelligence require intentionality in implementation as well as in program design. This intentionality of implementation, evident in the Korea and the Netherlands programs, was a vital factor in the statistically significant gains in cultural intelligence of the program participants.

## **Recommendations**

Given the results of this study, we offer a series of recommendations to expand scientific knowledge of intercultural development and ensure effective implementation of experiential learning curriculum in the internship experience. First, we recommend that faculty and program leaders receive encouragement and resources to design and implement international experiential learning programs that increase opportunities to engage in praxis. Doing so builds meaning and creates transformational experiences that increase cultural intelligence. As many faculty and program leaders have little experience with this pedagogy, however, we also contend that further research is needed on current

best practices for preparing faculty and staff for leadership roles in experiential learning design and study abroad programming. Secondly, there is a need for more in-depth research on cultural intelligence, particularly in its four dimensions and their interrelations. The four dimensions measured by the CQS subscales (motivational, cognitive, metacognitive, and behavioral CQ) are all necessary to complete the ELT learning cycle in intercultural situations, so it is vital to examine how program design can develop each of these aspects and encourage them to work together. This is especially crucial if we want to know how to go beyond strengthening students' theoretical knowledge (cognitive understanding) of other cultures to produce change in attitudes and behaviors. With progress in these directions and more intentionality in program design as a whole, international internship programs will develop greater intercultural competence in students and thus be more beneficial for their participants as they meet the challenges of the 21st century global workplace.

## References

- American Council on Education. (2008). *College-bound students' interests in study abroad and other international learning activities*. American Council on Education. <http://www.acenet.edu/news-room/Documents/2008-Student-Poll.pdf>
- Ang, S., & Van Dyne, L. (2008). Conceptualization of cultural intelligence: Definition, distinctiveness, and nomological network. In S. Ang, & L. Van Dyne (Eds), *Handbook of cultural intelligence: Theory, measurement, and applications* (pp. 3-15). Taylor & Francis.
- Bennett, J. M. (2008). On becoming a global soul: A path to engagement during study abroad. In V. Savicki (Ed.), *Developing intercultural competence and transformation: Theory, research, and application in international education* (pp. 13-31). Stylus.
- Blasco, M., Feldt, L. E., & Jakobsen, M. (2012). If only cultural chameleons could fly too: A critical discussion of the concept of cultural intelligence. *International Journal of Cross-Cultural Management*, 12(2), 229-245.
- Bücker, J., Furrer, O., & Weem, T. P. (2016). Robustness and cross-cultural equivalence of the cultural intelligence scale (CQS). *Journal of Global Mobility: The Home of Expatriate Management Research*, 4(3), 300–325.
- Campbell, D. T., Stanley, J. C., & Gage, N. L. (1963). *Experimental and quasi experimental designs for research*. Houghton Mifflin.
- Carlson, J. S., & Widaman, K. F. (1988). The effects of study abroad during college on attitudes toward other cultures. *International Journal of Intercultural Relations*, 12(1), 1-17.
- Collegiate Employment Research Institute. (2008). *Recruitment trends, 2008-2009* (ED12842). ERIC. <https://files.eric.ed.gov/fulltext/EDS12842.pdf>
- Dewey, J. (1938). *Experience and education*. Simon and Schuster.
- Dimitrov, D. M., & Rumrill, P. D. (2003). Pretest-posttest designs and measurement of change. *Work*, 20(2), 159-165.
- Dugard, P., & Todman, J. (1995). Analysis of pre-test-post-test control group designs in educational research. *Educational Psychology*, 15(2), 181-198.
- Dwyer, M. M. (2004). More is better: The impact of study abroad program duration. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 10, 151–164.
- Earley, P. C., & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures*. Stanford University.
- Freire, P. (1974). *Education for critical consciousness*. Continuum.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction* (8th ed.). Pearson.
- Hart Research Associates. (2015). *Falling short? College learning and career success*. Hart Research Associates. <https://www.aacu.org/sites/default/files/files/LEAP/2015employerstudentsurvey.pdf>
- Johnsen, B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Sage.
- Katula R. A., & Threnhauser, E. (1999). Experiential education in the undergraduate curriculum. *Communication Education*, 48(3), 238-255.
- Kauffmann, N., Martin J., Weaver, H., & Weaver, J. (1992). *Students abroad: Strangers at home*. Intercultural.
- Khodadady, E., & Ghahari, S. D. (2011). Validation of the Persian cultural intelligence scale and exploring its relationship with gender, education, travelling abroad and place of living. *Global Journal of Human-Social Science Research*, 11(7), 64-75.
- Knapp, T. R. (2016). Why is the one-group pretest–posttest design still used? *Clinical Nursing Research*, 25, 467–472.

- Koen, J., Klehe, U. C., & Van Vianen, A. (2012). Training career adaptability to facilitate a successful school-to-work transition. *Journal of Vocational Behavior*, 8(3), 395-408.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
- Lewin, B. D. (1948). The nature of reality, the meaning of nothing, with an addendum on concentration. *The Psychoanalytic Quarterly*, 17(4), 524-526.
- NAFSA. (2018). *Trends in U.S. study abroad*. NAFSA: Association of International Educators. [https://www.nafsa.org/Policy\\_and\\_Advocacy/Policy\\_Resources/Policy\\_Trends\\_and\\_Data/Trends\\_in\\_U\\_S\\_Study\\_Abroad/](https://www.nafsa.org/Policy_and_Advocacy/Policy_Resources/Policy_Trends_and_Data/Trends_in_U_S_Study_Abroad/)
- Ott, D. L., & Michailova, S. (2018). Cultural intelligence: A review and new research avenues. *International Journal of Management Reviews*, 20(1), 99-119.
- Piaget, J., & Inhelder, B. (1947). Diagnosis of mental operations and theory of the intelligence. *American Journal of Mental Deficiency*, 51(3), 401-406.
- Punteney, K. (2012). International careers: The gap between student interest and knowledge. *Journal of Studies in International Education*, 16(4), 390-407.
- Quay, J. (2003). Experience and participation: Relating theories of learning. *Journal of Experiential Education*, 26(2), 105-112.
- Schenck, J., & Cruickshank, J. (2015). Evolving Kolb: Experiential education in the age of neuroscience. *Journal of Experiential Education*, 38(1), 73-95.
- Seaman, J. (2008). Experience, reflect, critique: The end of the “Learning Cycles” era. *Journal of Experiential Education*, 31(1), 3-18.
- Snodgrass, L. (2015, May 24-39). *Living-learning-working learning cycle’s impact on intercultural sensitivity* [Conference presentation]. NAFSA Annual Conference, Boston, MA, United States.
- Snodgrass, L. (2017). *The effects of internship abroad curricular experiential interactions on the cultural intelligence of participants* [Doctoral dissertation, Purdue University]. Purdue e-Pubs. <https://docs.lib.purdue.edu/dissertations/AAI10268203/>
- Stephenson, S. (2002). Beyond the lapiths and the centaurs: Cross-cultural “deepening” through study abroad. In W. Grünzweig, & N. Rinehart (Eds.), *Rockin’ in Red Square: Critical approaches to international education in the age of cyberculture*, (pp. 85–104). Lit.
- Templer, K. J., Tay, C., & Chandrasekar, N. A. (2006). Motivational cultural intelligence, realistic job preview, realistic living conditions preview, and cross-cultural adjustment. *Group & Organization Management*, 31(1), 154-173.
- Van Dyne, L., Ang, S., & Koh, C. (2008). Development and validation of the CQS: The cultural intelligence scale. In S. Ang, & L. Van Dyne (Eds.). *Handbook of cultural intelligence: Theory, measurement, and applications* (pp. 16–38). Sharpe.
- Vande Berg, M., Paige, R., & Lou, K. (2012). *Student learning abroad what our students are learning, what they’re not, and what we can do about it*. Stylus.