Examining the efficacy of reflection via eportfolios for learning and assessment in study abroad

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EXAMINING THE EFFICACY OF
REFLECTION VIA EPORTFOLIOS
FOR LEARNING AND ASSESSMENT
IN STUDY ABROAD

by

Kristyn Muller

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Abstract

In recent decades, it has become increasingly important for higher education institutions to intentionally promote and assess student learning. In this dissertation, the author sought to examine the efficacy of using reflection via ePortfolios to enhance and assess student learning, specifically intercultural competence, in study abroad programs. ePortfolios are promoted as a pedagogical tool that can be used to help students engage in reflective practices, and prior research, although limited, has shown ePortfolio use to be positively associated with learning gains. As assessment of study abroad learning outcomes becomes more necessary, additional research is needed to determine which methods are effective. In this study, Mezirow's (1991) transformative learning theory was used as a framework to explain why students who engage in reflection via ePortfolios could transform their perspectives and develop higher levels of intercultural competence.

The study used a mixed-methods design, which included quantitative data collected with a pre-post survey as well as qualitative data gathered through participants' reflective responses. Both types of data were used together to address the research questions using correlational, experimental, and reliability analyses. Unfortunately, the sample size was not large enough to draw conclusions from the experimental component of the study.

The findings indicated that students do indeed have the opportunity to enhance their intercultural competence while studying abroad, and certain experiences are associated with greater learning gains. The quantitative data and reflective response content both suggested that study abroad can encourage the development of intercultural competence. However, the use of these data collection methods may not be reliable for assessment purposes. When using a pre-post survey, students may start with high levels of perceived intercultural competence (on the
pre-survey) and not have enough room on the survey scales to demonstrate growth (on the post-survey). When using reflective responses, students may not know how to articulate their learning growth effectively and/or different raters may not have the same interpretations of specific responses or rubric categories. Although this study did not provide evidence to support the use of reflection via ePortfolios for learning and assessment, it cannot conclude that this practice is ineffective either.

Future research is needed to further examine the reasons for these results. Changes to the methods, such as using a different pre-post survey, providing students with training on how to reflect, making reflection a requirement of the study abroad program, or providing additional training to raters, could produce different outcomes. Despite the limitations of this study, study abroad professionals can use the findings to encourage students to engage in particular experiences that may positively impact their attainment of intercultural competence and to consider the effectiveness of certain assessment practices.
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Chapter 1: Introduction

In recent years, U.S. higher education institutions have increasingly been encouraged to show that their students gain skills and competencies during college. This call for accountability has led to new student learning and assessment initiatives across campuses, and a national dialogue about what practices are most effective. Several "high-impact practices” have been identified (e.g., Kuh, 2008) that integrate learning across the curriculum and co-curriculum and correspond with higher rates of student engagement and retention. Some scholars argue that one of these practices is the use of electronic portfolios (ePortfolios), which encourage students to reflect on and make meaning of their learning experiences (i.e. Hubert, Pickavance, & Hyberger, 2015). An ePortfolio can be used in a variety of curricular and co-curricular contexts. This study will focus on the efficacy of reflection via ePortfolios within study abroad programs, which are also considered a high-impact practice (Kuh, 2008). Although study abroad is a well-established feature of higher education in the United States, it is becoming more important for educators to produce evidence of the value of these programs (Ogden, 2015). Thus, this study built on current needs in the ePortfolio and study abroad fields to examine the potential of using written reflection via ePortfolios to enhance and assess student learning in study abroad programs.

An ePortfolio is a digital technology used to compile a person’s work to demonstrate and highlight their abilities. When used in higher education as a pedagogical tool within a course, program, or co-curricular experience, an ePortfolio often contains artifacts, or samples of student work, and evidence of reflective thinking. Depending on the context, artifacts may be comprised of written work, photographs, artwork, or videos. Researchers claim that ePortfolios are

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1 Although the term "study abroad" is more commonly used, the term "education abroad" is now preferred because it is more inclusive of the different types of outbound educational experiences in which students participate (i.e. study abroad, research abroad, intern abroad, teach abroad, and service-learning abroad) (Ogden, 2015). However, this dissertation will use the term "study abroad" because the programs included in the study are curricular-focused.
beneficial for enhancing as well as assessing student learning, and promote deeper learning and student success (Eynon, Gambino, & Török, 2014). ePortfolios are becoming increasingly popular within higher education; in a 2011 study of undergraduate students, about 7% of students reported using ePortfolios (Smith & Caruso, 2010), and in the 2013 version of the study, the portion of students using ePortfolios grew to 54% (Dahlstrom, Walker, & Dziuban, 2013). For international education in particular, a 2013 survey of 190 higher education institutions revealed that 18% were using ePortfolios to assess learning outcomes (Deardorff, 2015).

In 2015-16, over 325,000 U.S. students studied abroad for academic credit, which is about a 4% increase from the previous year (IIE, 2017). Living and learning abroad is expected to enhance students' intercultural awareness and sensitivity, disciplinary knowledge, foreign language proficiency, and communication skills (Twombly, Salisbury, Tumanut, & Klute, 2012). However, the claims frequently put forth by colleges and universities about the benefits of their study abroad programs are often assumptions that still need to be tested. There are many gaps and limitations within the current body of empirical research (Ogden, 2015), and assessment of study abroad programs at individual institutions is not well established (Cooper & Niu, 2010). Programmatic assessments that do exist are usually focused on evaluating satisfaction rather than measuring student learning. In today's accountability-driven environment, international education researchers, administrators, and faculty are looking for better ways to demonstrate the value of study abroad. Recently, some institutions are attempting to use reflection via ePortfolios to directly assess student learning outcomes (Deardorff, 2011).

This dissertation built upon current research to gain a better understanding of the extent to which reflection via ePortfolios can enhance student learning and be an appropriate approach to assessment in a study abroad context. Although there are several potential learning outcomes
for study abroad programs, this study evaluated intercultural competence as the primary outcome because it aligned with the goals articulated by the study abroad office at the initial participating institution and is emphasized as an outcome in study abroad assessment literature (i.e. Ogden, 2015). The study used the Global Perspectives Inventory™ for a pre- and post-survey design to measure the self-reported intercultural competence gains of students who completed a semester-long study abroad exchange program. By also using an experimental design, the study attempted to compare the outcomes of ePortfolio users and non-ePortfolio users to explore any differences in student learning gains. Additionally, the study evaluated the effectiveness of using written reflection as an assessment tool by conducting reliability and validity tests as well as comparing the level of intercultural competence displayed in students' reflective responses with their quantitative survey scores. The findings from this study contribute to the bodies of research in the ePortfolio and study abroad fields, which, are currently both limited.

The remainder of this chapter introduces the ePortfolio and study abroad literature to demonstrate why this study was necessary. It explains how this study was designed to address some of the limitations within the existing research, and then provide an overview of the study. It also describes the theoretical framework guiding the study, outlines definitions of key terms, states the research questions, and summarizes the methodology. Lastly, the chapter emphasizes the significance of the study.

**Reflection via ePortfolio**

Portfolios, paper or electronic, are essentially a collection of a person’s work that is compiled to showcase their abilities. Paper portfolios in higher education date back to the mid-1980s, when they emerged as an assessment tool for writing programs. In the early 1990s, electronic versions became possible with advancements in technology, and ePortfolios using
websites, CD-ROMs, and DVDs began (Lombardi, 2008). The use of digital platforms to create ePortfolios allows individuals to include multimedia artifacts, such as videos and pictures, and also allows them to personalize the format and overall presentation of the portfolio. Over the last few decades, numerous commercial companies began providing ePortfolio platforms to colleges and universities (i.e. LiveText, Taskstream, Chalk & Wire, Digication, Blackboard, etc.). The current dissertation study utilized the LiveText Via™ platform.\(^2\)

The two primary reasons institutions choose to implement ePortfolios are to improve student learning and enhance the assessment of student learning (Lee, 2007). ePortfolios can be used in a wide variety of contexts, curricular and co-curricular, and for different types of students, undergraduate and graduate. They can also be used for faculty as a tool for professional development. ePortfolios are versatile and can be viewed as a process or a product or both. From the process perspective, ePortfolios have the capacity to store evidence of a student’s work over time and/or provide a space for a student’s personal reflection. As a product, ePortfolios can showcase a student’s best work to others and/or provide artifacts needed for assessment.

When ePortfolios are used as a pedagogical tool, they have the potential to enhance a classroom or co-curricular experience. Dalton (2007) describes how an ePortfolio encourages meaningful learning in the following quote:

> When students build an ePortfolio, they engage in both a constructive and integrative process in which they not only document what and how they are learning but, more important, are motivated to make sense of what they are learning. This process of internalizing and synthesizing learning is critical to fostering a deeper self-understanding and integration of knowledge. (p. 101)

\(^2\) As of January 2018, LiveText merged with Taskstream and TK20 to form a new company called Watermark.
As described above, and in most of the ePortfolio literature, the process of constructing an ePortfolio is intended to be transformational for students. Faculty and staff can use the structure of an ePortfolio to encourage students to actively participate in their learning. ePortfolio advocates describe the ePortfolio process in four stages: collect, select, reflect, and connect. They explain that students must *collect* evidence of their learning from coursework and other experiences, intentionally *select* the items to share within their ePortfolio, deliberately *reflect* on their work, and *connect* their evidence, reflection, and new perspectives. Through these steps, the ePortfolio process is intended to help students improve the way they think about their own learning.

ePortfolio proponents claim that ePortfolios have the potential to help students make connections between their classroom learning and out-of-classroom experiences as well as intentionally reflect on their learning process and overall achievements. Student ePortfolio users have reported that “ePortfolios have helped [them] to make connections between ideas” and “be more aware of [their] growth and development as a learner” (Eynon et al., 2014). The integrative and reflective nature of ePortfolios is one of the primary reasons why ePortfolios are promoted as a transformative teaching and learning practice in higher education (Bass, 2014). Existing empirical research suggests that there is a relationship between ePortfolio use and students' reflective thinking abilities (Abu Awwad, Nofal, & Salti, 2013; Jenson, 2011; Scott, 2010) as well as other concepts that require reflective thinking skills such as integrative learning (McGuinness, 2015; Peet et al., 2011), self-regulated learning (Alexiou & Paraskeva, 2010), meta-cognition (Wozniak & Zagal, 2013), and transfer of learning (Simatele, 2015). The prevalence of positive assertions about ePortfolios has grown along with increased ePortfolio

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3 The “collect, select, reflect, and connect” mantra appears frequently in the ePortfolio field. See for example, Parkes, Dredger, & Hicks, 2013.
usage in recent years. In a 2012 survey of 243 faculty and staff members from 97 institutions, 28% of respondents indicated that 90-100% of their students are using ePortfolios, compared to 15% of respondents in the prior year (Brown, Chen, & Gordon, 2012). Yet, despite the growing body of research about ePortfolios and the popularity of ePortfolios, more research is needed to confirm that ePortfolios actually facilitate enhanced student learning (Watson, 2014 in Rhodes et al., 2014). This study attempted to address this question by exploring whether students who use an ePortfolio for reflection during their student abroad experience demonstrated greater learning growth than students who did not use an ePortfolio.

Furthermore, ePortfolios are being used as a tool for student, course, department, program, and institution level assessment. At colleges and universities within the United States, the use of ePortfolios for assessment increased from less than ten percent in 2009 to over forty percent in 2013 (Kuh & Ikenberry, 2009; Kuh, Jankowski, Ikenberry, & Kinzie, 2014). There are many different ways that ePortfolios can be used for assessment. At the student level, ePortfolios can be used to track individual progress within a course or experience and provide timely feedback to students about their struggles and/or successes. At the department, program, or institution levels, a rubric aligned with learning objectives can be used to rate content, whether it be specific items or artifacts within an ePortfolio or the entire ePortfolio. By using a rubric, the qualitative data provided by an ePortfolio can be converted to quantitative data, which can be more easily included in assessment reports, tracked longitudinally, and/or used for comparisons between groups. This study evaluated the efficacy of using reflection via ePortfolios for assessment of a student learning outcome, specifically intercultural competence.
Study Abroad

Study abroad programs can be traced back to the late nineteenth century when professors conducted educational tours of Europe for female students. In the 1920s, academically focused "junior year" abroad programs developed and became popular. The term "study abroad" emerged in the late 1950s when institutions started allowing sophomore students to also travel abroad, and the term became common in the 1980s (Bowman, 1987). Student enrollment in study abroad programs in the U.S. has risen steadily over the past two decades; the number of participating students increased from less than 100,000 in 1996-97 to more than 300,000 in 2013-14 (Ogden, 2015). The most recent data indicates that one in ten undergraduate students in the U.S. studies abroad before graduating (IIE, 2017). Technically, these data points refer to education abroad programs, not strictly study abroad programs. As study abroad evolved, many different types of programs developed; in addition to the traditional academic study abroad programs, in which a student travels abroad and takes courses at a partnering institution, there are also programs in which a student travels abroad to teach English, complete an internship, or participate in community service/volunteer work. Education abroad programs can also occur in different lengths; some are as short as two weeks, while others take an entire year. In the U.S., more students currently participate in short-term programs (63%), than they do mid-length (35%) or long-term programs (3%) (IIE, 2017).

According to Hoffa and DePaul (2010), there are four primary purposes or rationales for study abroad programs: to enrich the academic experience, to provide an opportunity for students to challenge their cultural viewpoints, to obtain skills beneficial for the global workforce, and to contribute to personal development. From an institutional perspective, study abroad programs

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4 See footnote #1
5 Based on data from 2015-16
can help a facilitate "internationalization," which has become a featured goal at many colleges and universities. From a national point of view, study abroad can also foster peace-making and understanding, promote economic competitiveness, and potentially enhance national security (Twombly et al., 2012). Empirical research on the outcomes of study abroad programs covers many topics including global awareness, identity development, open-mindedness, and intellectual development. More recent research also examines the impact of student characteristics and differences between program type and length. This study was not intended to broadly explore study abroad outcomes, but instead, it utilized study abroad as a context to examine the effectiveness of using reflection via ePortfolios to enhance learning and assessment.

**Assessment of Study Abroad**

Throughout a study abroad program, much of a student's overall learning occurs outside of the classroom. Students may have experiences or encounter challenges during any phase of their travel that can influence their perspectives and their acquisition of competencies, knowledge, and skills. Grades from courses taken abroad do not demonstrate everything that a student has learned. Thus, it is important for study abroad professionals to be able to document and assess students' holistic learning. Assessment of study abroad programs commonly involves pre- and post- tests and satisfaction surveys (Deardorff, 2011). More recently, however, institutions are beginning to explore direct methods of assessment and intentionally incorporate assessment of student learning outcomes into their programs. Direct assessment may include reflection papers, observations, capstone projects, and ePortfolios (Deardorff, 2011). ePortfolios are unique because they can contain different types of artifacts such as reflection statements, samples of coursework, photos, and videos to capture different aspects of a student's experience. In 2004, a Federal Innovation for Post-Secondary Education (FIPSE) grant was awarded to six
institutions to partake in a three-year project, titled "Lessons Learned in Assessing International Learning" (FIPSE Database, n.d.). The project team evaluated assessment instruments and decided to implement a mixed-method ePortfolio and survey design to measure international learning on campus (Dietrich & Olson, 2010). While the project was not limited to study abroad programs, students were encouraged to include artifacts from their study abroad experiences if they went abroad. The students at one participating institution were asked to include at least five artifacts in their ePortfolios, which were assessed using a rubric developed by the project team (Cooper & Niu, 2010). Unfortunately, the project faced many challenges, and success varied at the different institutions (Dietrich & Olson, 2010). However, the attempt highlights faculty and administrators’ interest in using ePortfolios as an assessment mechanism. Additional research is needed to determine whether or not ePortfolios are effective for assessment purposes, which is one question that this study intended to address.

**Overview of Dissertation Study**

This dissertation study was designed to examine the effectiveness of using reflection via ePortfolios to enhance and assess students' learning growth from a study abroad program. In this context, student learning was defined as students' intercultural competence gains. Variations of intercultural competence, including intercultural sensitivity, global awareness, and worldview, are common learning objectives for study abroad programs (Ogden, 2015). Deardorff (2004) explains that intercultural competence does not have one universally agreed upon definition. However, in her study of international education administrators, the top-rated definition based on survey responses was Byram's (1997) version, which states, "Knowledge of others; knowledge of self; skills to interpret and relate; skills to discover and/or to interact; valuing others’ values,

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6 Although ePortfolios could be used to assess other objectives, such as foreign language skills or communication skills, intercultural competence was chosen for this study because it aligns with the study abroad goals of the participating institution.
beliefs, and behaviors; and relativizing one’s self. Linguistic competence plays a key role."

Another definition, by Bennett (2008), describes intercultural knowledge and competence as "a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts." This particular definition was used by the Association of American Colleges and Universities (AAC&U) to guide the development of their Intercultural Knowledge and Competence VALUE rubric, which was used as part of the methodology for this study.

Mezirow's transformative learning theory was used as a framework for this study. The theory describes the process of transforming one's perspectives through active learning. Mezirow (1997) explains:

We transform our frames of reference through critical reflection on the assumptions upon which our interpretations, beliefs, and habits of mind or points of view are based. We can become critically reflective of the assumptions we or others make when we learn to solve problems instrumentally or when we are involved in communicative learning. (p. 7)

Reflection is an integral component to transformation, and based on this theory, educators should provide students with ample opportunities to reflect. In this study, the participants were prompted to engage in written reflection. Further, according to transformative learning theory, perspective transformation is often the result of a major life crisis or transition, which prompts an individual to engage in new meaning making. Study abroad is often a challenging experience that requires adjustment, and can be an ideal opportunity for transformation (i.e. Root & Ngampornchai, 2012). With this framework in mind, one would expect study abroad to impact students’ intercultural competence, and that students who are more reflective would be more likely to transform their perspectives.
This dissertation served dual purposes by making contributions to both the ePortfolio and study abroad fields. ePortfolio proponents claim that the reflective nature of ePortfolios can enhance student learning, but the research is limited and difficult to generalize. In a sample of 118 peer-reviewed articles about ePortfolios published between 1996 and 2012, only 15% represented empirical studies of ePortfolio outcomes (Bryant & Chittum, 2013). Although there have been additional studies published in the last few years, the research contains a variety of methodological limitations. One of the key issues is that most of the studies only analyze a single case and/or include a small sample (i.e. Abu Awwad et al., 2013; Alexiou & Paraskeva, 2010).

Since ePortfolios can be facilitated for a variety of purposes and in a variety of contexts, these studies may not fully capture a broad understanding of how ePortfolios impact student outcomes. Therefore, although the results have been positive, the strength and generalizability of the conclusions is questionable. This study used an experimental design in an attempt to isolate the ePortfolio itself as the learning intervention in order to mitigate the influence of extraneous variables on the findings. Furthermore, study abroad professionals are seeking new ways to effectively assess students learning outcomes, and ePortfolios are being explored as an option, but little empirical research exists to test this practice. This study specifically examined the efficacy of using reflection via ePortfolios to measure the intercultural competence gains of students who studied abroad.

Glossary of Key Terms

Assessment – Schuh, Upcraft, and associates (2001) defined “assessment” as any effort to gather, analyze, and interpret evidence which describes institutional, departmental, divisional, or agency effectiveness” (p. 21). For the purposes of this dissertation proposal, the term “assessment” refers to any efforts to objectively gather evidence to measure student learning either during a learning
experience (formative) or at the conclusion of a learning experience (summative) in order to improve student learning by making improvements to the experience.

**Education Abroad** – A broad term to include college or university sponsored programs in which students travel abroad for coursework, teaching experiences, internships, and/or community service/volunteer work.

**ePortfolio** – A digital platform/technology used to compile a person’s work to demonstrate and highlight their abilities. When used in higher education as a pedagogical tool within a course, program, or co-curricular experience, an ePortfolio often contains artifacts, or samples of student work, and evidence of reflection. Depending on the context, artifacts and reflection may be comprised of written work, photographs, artwork, or videos.

**Intercultural Competence** – "The ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills, and attitudes” (Deardorff, 2004, p. 171).

**Reflection** – The act of intentionally reviewing one’s thoughts, beliefs, attitudes, or actions in light of new knowledge in order to modify future thoughts, beliefs, attitudes, or actions.

**Rubric** – A document that states the expectations of a particular outcome by listing the criteria and describing levels of quality or achievement

**Study Abroad Direct-Enrollment Program** – Traveling abroad through a college or university sponsored program to obtain academic credit for completing coursework at a partnering institution.

**Transformative Learning Theory** – The process of transforming one's perspectives through critical reflection.
Research Questions

This study was designed to examine the use of reflection via ePortfolios to enhance and assess student learning growth in study abroad programs. The first primary research question explored the notion that students can increase their intercultural competence as a result of studying abroad. More specifically, the sub-research questions sought to determine what experiences may impact students' attainment of intercultural competence and whether or not an ePortfolio helps to enhance students' attainment.

1. Do students increase their intercultural competence while studying abroad for one semester?
   a. Do certain pre-study abroad activities and/or study abroad experiences and environments impact students’ intercultural competence more than others?
   b. Does using an ePortfolio while studying abroad enhance students’ intercultural competence?

The second primary research question evaluated the idea of using reflective responses to assess intercultural competence with the AAC&U VALUE rubric. Reliability and validity were considered and students' rubric ratings were compared with their quantitative intercultural competence survey scores. The study also asked students for their perspectives about reflection.

2. Can reflective responses be used to effectively assess students' attainment of intercultural competence?
   a. How reliable is the AAC&U Intercultural Knowledge and Competence VALUE rubric when used to rate students' reflective responses?
   b. Do students' reflective response ratings align with their survey scores?
   c. Do students find value in completing reflective responses?
Methodology

The study used a mixed-methods design, with correlational and experimental components. It was initially conducted at a large public research institution in the northeast United States, but then expanded to include students from three other public colleges in the same geographic region. From each participating campus, the sample included home-campus students who were enrolled in home-campus sponsored study abroad programs, home-campus students who were enrolled in study abroad programs at other partnering institutions, and other students who were enrolled in the participating campuses’ sponsored study abroad programs. The potential participants had to be enrolled in a semester-length, academic-focused, direct enrollment, non-faculty led, study abroad program. The locations of the study aboard programs did not matter because only a few students went to each location, so in order to have enough students in the study, it was not possible to group them based on location. However, students traveling abroad for other types of education abroad programs, such as internships, service-learning, and teaching, were not included in the sample to make sure that participants, despite being in different locations, had a similar type of experience. Altogether, there were about 81 students who began participation in the study. Half of the students (41) were randomly selected to utilize the ePortfolio platform, and the other half (40) were asked to use an alternative method for responding to the reflective prompts.

The ePortfolio platform, LiveText Via™, served as the intervention for the experimental group. Students were able to log into the platform to respond to reflective prompts, upload artifacts (i.e. course assignments, photos, videos), customize the design, and share with others, if they desired. For the study, students were only required to respond to the reflective prompts, which were assigned eight times throughout the semester. However, the additional features of the
platform could be used to enhance students' responses if they chose to use them. Students received instructions on how to utilize the ePortfolio technology and were provided with a few examples of ePortfolios.

The control group was given the same reflective prompts as the ePortfolio group, but they did not have access to the ePortfolio platform. Instead, they were asked to submit their responses through an electronic Google Form. They did not have the option to upload artifacts, review their prior submissions, or easily share their work with others, which were features of the ePortfolio platform.

All participants were also asked to complete the Global Perspectives Inventory (GPI™), a pre- and post-survey, to quantitatively measure their intercultural competence gains. The pre-survey was conducted one to three weeks prior to departure and the post-survey was conducted within one to three weeks of program completion. The results were paired to calculate an estimate of each students' intercultural competence gains. The surveys also include demographic questions (i.e. gender, race/ethnicity, age, class year, etc.) and other items related to the students' personal characteristics and experiences (i.e. GPA, prior travel, co-curricular involvement, faculty interactions, etc.) prior to and during study abroad. Many of these individual items were combined into composite variables to analyze what types of experiences impacted students' intercultural competence. The post-survey also asked students to indicate the degree to which they found the reflective prompts useful.

The AAC&U Intercultural Knowledge and Competence VALUE rubric was used to measure students' reflective response content. The author and three other individuals rated all of the participants' individual reflective responses in order to convert the qualitative response data
into quantitative data. The method was tested using two types of inter-rater reliability measures and by comparing the rubric ratings with the participants' survey scores.

**Delimitations and Limitations.** The study only pertained to students who participated in semester-length, academic-focused, direct enrollment, non-faculty led, study abroad programs. There are other types of education abroad programs that may have different impacts on intercultural competence gains and/or the effectiveness of using reflection via ePortfolios as an assessment mechanism. However, it would have been difficult for this study to account for all types of programs, so it is noted as a delimitation.

The study was also not designed to obtain a generalizable understanding of how study abroad influences intercultural competence. Instead, it was intended to explore a specific study abroad assessment method using intercultural competence as the learning objective. Therefore, for certain aspects of this study, a relatively small sample size was acceptable. On the other hand, there were several other limitations such as response bias, the use of self-reported data, and incomplete data due to declining participation. Students in the study had already self-selected to go on study abroad trips, so they may have characteristics which differ from the general student population. In addition, those who chose to participate in the study may have different motivations and goals than those who did not choose to participate. The use of a self-report instrument to measure intercultural competence gains could be considered a limitation because students may not accurately perceive their level of competence or may provide socially desirable responses. Lastly, incomplete data due to declining participation rates throughout the study was a major limitation. Participants were asked to complete the pre- and post- surveys as well as reflective prompts during the course of the semester. Although the study offered incentives in exchange for participation, getting enough participants to complete a sufficient portion of the
study remained a challenge. It is also important to keep in mind that the quantitative and qualitative data collected in this study was dependent upon the outcome being measured, reflective prompts asked, and length and nature of the study abroad programs, so the findings of this study should not be generalized to contexts beyond the parameters of the study.

**Significance of Study**

This study is significant for two reasons. First, while ePortfolio practices are becoming more popular in higher education, and within the study abroad context, the lack empirical research about the effectiveness of using ePortfolios makes it difficult to validate the claims made about the benefits of ePortfolios. Although this study was not able to determine the impact of using ePortfolios, it demonstrated the difficulty of obtaining empirical evidence to support the use of ePortfolios. Second, there is pressure from higher education stakeholders to improve teaching and learning practices and assessment methods in higher education, which is now influencing study abroad programs as well, and reflection via ePortfolios is viewed as a tool that can facilitate improvements in both those areas. There is not currently a firm understanding of whether or not reflection via ePortfolios can be used to effectively enhance learning and assessment in study abroad programs, and this study was designed to address that problem.

While the existing research about ePortfolios has advanced the ePortfolio field and allowed scholars to make scientific claims regarding the benefits of ePortfolios, the strength and breadth of the existing studies is limited. More specifically, many of the claims are based on studies that used a relatively small sample within a context-specific example (i.e. Abu Awwad et al., 2013; Alexiou & Paraskeva, 2010; Jenson, 2011). Thus, it is difficult to determine the degree to which the ePortfolio itself had an impact on student outcomes, rather than other pedagogical practices tied to the way an instructor facilitated the use of an ePortfolio, and it is difficult to say
that the findings would hold true in other contexts. This study attempted to address this concern by using an experimental design in which the ePortfolio itself was the distinct learning intervention. Unfortunately, due to the small sample size, this study was not able to obtain valid conclusions.

Research on assessment of reflection via ePortfolios is convoluted by the fact that content within an ePortfolio might mislead assessment findings. If the purpose of the assessment is to determine the extent to which a student gained a competency or skill, responses to prompts within an ePortfolio might provide disingenuous evidence of that competency because of the way the assignment was designed or facilitated. Two decades ago, Herman and Winters (1994) pointed out that assessing work within an ePortfolio could be biased because when scaffolding is used to guide students, it inevitably makes students’ work look better than it might have looked without that support and guidance. Since the ePortfolios and reflective prompts in this study were not facilitated by an instructor, this concern is not as relevant. However, the opposite effect could occur when students are not provided with as much guidance; they could not know how to reflect effectively so they are not able to sufficiently convey their learning growth through written reflection. To test for this possibility, this study evaluated the potential accuracy of reflective response ratings by comparing it to students’ survey scores. The study also conducted measures of inter-rater reliability to evaluate the efficacy of the rubric rating mechanism itself.

Further, as the call for accountability is increasing and enrollments in study abroad programs are rising, it is now more important to test the assumptions about the benefits of study abroad programs. The study abroad field is calling for improved research methods to bolster the body of literature (Odgen, 2015) and better ways to assess learning gains of study abroad programs at individual institutions (Deardorff, 2015). The learning that can occur at every stage
of a students' study abroad experience is valuable and worth documenting, but there are currently few assessment methods used at most institutions to measure this learning. Reflection via ePortfolios is possibly a way for study abroad professionals to not only gather qualitative assessment data, but also enhance students' learning via reflective practices. This study explored this potential opportunity.

**Summary**

The first chapter provided an overview of the dissertation. The purpose of the study was to explore the effectiveness of using reflection via ePortfolios to enhance and assess students' learning in study abroad programs. The second chapter provides a more detailed examination of the ePortfolio and study abroad literature, further describes the concept of intercultural competence, and explains how Mezirow's transformative learning theory appropriately frames our understanding of the research findings. The third chapter specifically describes how the study was conducted. The fourth chapter explains the results of the study, and the fifth chapter discusses how the findings impact our overall understanding of using reflection via ePortfolio for learning and assessment in study abroad programs.
Chapter 2: Literature Review

What exactly do students learn as a result of completing a college degree program? Although it may seem obvious that students learn a great deal while in college, educators are now being asked to provide evidence of the skills and competencies that students achieve. One of the major forces behind this change was the 2006 Spelling’s Commission, which encouraged institutions to focus on outcomes based assessment and urged accrediting agencies to ensure that institutions are providing evidence of student learning (U.S. Department of Education, 2006). The emphasis on accountability stems from a concern that students are not learning enough prior to graduation and are not adequately prepared for employment. Higher education faculty and administrators have responded by finding new ways to enhance and assess student learning. Over the past decade, the use of reflection via electronic portfolios (ePortfolios) to fulfill both of these purposes has become increasingly popular, and some scholars argue that it can be a very effective practice (i.e. Hubert, Pickavance, & Hyberger, 2015). ePortfolios are intended to encourage students to reflect on and make meaning of their experiences and, at the same time, they can be used to provide evidence of learning for assessment purposes. Although ePortfolios can be used in a variety of curricular and co-curricular contexts, this study focused on the efficacy of using reflection via ePortfolios to enhance student learning and assessment in study abroad programs.

In this chapter, concepts and prior research relevant to the dissertation is discussed. The first section introduces transformative learning theory, which served as a framework to this research. The reflective nature of an ePortfolio and the challenging environment of study abroad are both align with the notion that when students make meaning of their experiences, they can engage in transformative learning. The second section describes ePortfolio use and provides a review of the existing literature pertaining to ePortfolios as a tool for improving learning and
assessment. The third section introduces the study abroad context and describes research related to study abroad outcomes, with a focus on intercultural competence, the particular outcome that was measured in this study. That section also explains the development of assessment within study abroad and the need for further research.

**Transformative Learning Theory**

Students encounter a variety of learning experiences while in college. In addition to coursework, they may engage in co-curricular activities, athletics, on-campus employment, research with faculty members, internships, study abroad programs, and more. Too often though, students do not recognize all of the skills they have gained (or are gaining) or how their experiences align with one another. It is important for faculty and administrators to create an environment that encourages students to draw connections between their experiences and make meaning of their learning (Wawrynski & Baldwin, 2014). Jack Mezirow's (1991) transformative learning theory provides an excellent framework for understanding how students can make the most of their experiences. Mezirow (1991) claims that "reflective and transformative learning" should be the ultimate goal of education (p. 117). He explains that it is important for individuals to actively and critically question their beliefs and values, rather than simply accepting the social realities they acquired over time. Reflective learning requires one to assess and reassess their assumptions. Reflection can then become transformative when assumptions are found to be invalid and new meaning is constructed. Mezirow (1991) further explains:

Reflection is not the same as introspection, when this latter term refers to simply becoming aware of the fact that we are perceiving, thinking, feeling, or acting in a certain

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7 Mezirow's theory pertains to "adult education," which he differentiates from "childhood education" based on the notion that adults, more so than children, have pre-existing beliefs, experiences, and assumptions that they must grapple with when presented with new information. While some may argue whether or not college students should be considered adults, Mezirow's theory has been used by many scholars in the context of college students (Taylor, 2007) and specifically with research pertaining to study abroad (i.e. Perry, Stoner, & Tarrant, 2012).
Much, perhaps most, of the time we think and learn nonreflectively. All reflection involves a critique. (p. 13)

Further, he differentiates between three different types of reflection: content, process, and premise. Content reflection explores what a person perceives, thinks, feels, or acts upon. Process reflection examines how a person performs their perceiving, thinking, feeling, or acting. And premise reflection questions why we perceive, think, feel, or act a certain way (Mezirow, 1991).

Reflective learning can be confirmative or transformative. When it is transformative, it can either transform meaning schemes and/or meaning perspectives. Transformation of meaning schemes occurs when a person assesses their assumptions about the content or process of something and finds their initial beliefs to be incorrect. This type of reflective learning is common. On the other hand, the transformation of meaning perspectives requires an individual to evaluate the reasons why they have a particular assumption, which they may have taken for granted their entire life. This type of reflective learning, called transformative learning, is less common. It involves a series of learning activities that start with a disorienting dilemma and end with the individuals' altered perspective being reintegrated into their life (Mezirow, 1991).

ePortfolios are intended to encourage students to purposefully reflect on their experiences, whether curricular or co-curricular. While an ePortfolio itself may not compel students to engage in reflective learning or transformative learning, it does provide a space where this type of learning can be facilitated. During a study abroad program, where students are placed in unfamiliar situations, an ePortfolio may have an even greater utility for fostering reflection. The next section elaborates on the use reflection via ePortfolios, and describes why some scholars believe ePortfolios have the potential to encourage transformative learning.
Reflection via ePortfolios

Portfolios, and ePortfolios, are not entirely new to higher education; they have been used to showcase students' work in fields such as writing, art, and architecture for decades. Lombardi (2008) explains that portfolios, as we view them today, originated in the mid-1980s when two writing program administrators were dissatisfied with the scoring method used on their program's exit exam, so they had their students submit folders of their writing samples instead of utilizing the exam. The new grading mechanism accounted for students’ writing progress, rather than merely what could they could produce in a single end product. In the mid-1990s, portfolios, and ePortfolios, expanded to other areas of the university and became a tool used to demonstrate student learning and promote student-centered instruction (Reynolds & Patton, 2014). As technology advanced, ePortfolios emerged and increased in popularity. The electronic format has many benefits; the ePortfolio can be created individually or collaboratively, the user can customize and modify their ePortfolio for multiple audiences, it can be stored online, and the user can include multimedia, such as pictures and videos, and add hyperlinks to other digital works or resources (Labissiere & Reynolds, 2004). In 2013, a study of over 100,000 U.S. undergraduate students revealed that 54% of the sample used an ePortfolio within the prior year (Dahlstrom, Walker, & Dziuban, 2013).

ePortfolios can be constructed using a variety of free or open source technology options, and numerous companies began offering commercial ePortfolio platforms (i.e. LiveText⁸, Taskstream, Chalk & Wire, Digication, Blackboard, etc.). When deciding to implement an ePortfolio, one must weigh the benefits and limitations of these different options. For instance, while one particular option is less costly, it also could be less user friendly. Also, some options have assessment capabilities built into the platform, while others do not. Although technological

⁸ As of January 2018, LiveText merged with Taskstream and TK20 to form a new company called Watermark.
features are certainly a concern when deciding to implement an ePortfolio, it is more important that ePortfolio facilitators decide on the purpose of the ePortfolio. The purpose will help an ePortfolio user decide which features are important. For example, if the purpose is to simply provide students a space for reflection and self-expression, a free platform such as Google Sites or Weebly may be sufficient. On the other hand, if the purpose is to collect data for assessment purposes, a proprietary platform such as Watermark™ might be more appropriate.

A national survey concluded that the two main reasons that institutions choose to implement ePortfolios are to enhance student learning and improve assessment (Lee, 2007). However, ePortfolios can be used in a variety of contexts, both curricular and co-curricular, and for different types of students, as well as for faculty. More specifically, ePortfolios can be used within an academic course, outside the classroom to enhance an applied learning experience (i.e. research, internship, volunteer work, study abroad, etc.), or to showcase students' overall accomplishments. ePortfolios can be used for undergraduate and graduate students, and have also been used at some institutions by faculty for their tenure/professional review process. In addition, ePortfolios can be facilitated differently depending on their purpose and whether they are viewed as a process, product, or both. ePortfolios may be used to demonstrate students' progress over a period of time, provide a space for students' personal reflection, highlight students' best work and achievements, and/or provide samples of students' work needed for assessment. Since ePortfolios are flexible, they can be used in a variety of ways, but that also means that they are not used consistently. Thus, there is not one clear agreed-upon definition of an ePortfolio. Jenson & Treuer (2014) define ePortfolio as "a tool for documenting and managing one’s own learning over a lifetime in ways that foster deep and continuous learning" (p. 55). They claim that ePortfolios should be owned and managed by the student, used to
promote reflection, and used to encourage lifelong learning. Although their definition emphasizes ePortfolios as a learning tool, it does not preclude ePortfolios from being used simultaneously for assessment. This study intended to examine the efficacy of using reflection via ePortfolios for both learning and assessment.

**ePortfolios as Transformative**

When an ePortfolio is used effectively, it has the potential to not only help students process what they learned, but encourage them to make sense of why they are learning (Dalton, 2007). These features align with Meziow's concepts of *content reflection* and *premise reflection*. While an ePortfolio itself is not going to automatically transform a student's perspectives, faculty and staff can use the structure of an ePortfolio to promote students' active learning. As described in the first chapter, ePortfolio advocates often use the phrase "collect, select, reflect, and connect" to describe the reflective process a student engages in when creating an ePortfolio. Jenson & Treuer (2014) elaborate on this concept further by describing "select" as a self-regulating behavior, which can help students become aware of their learning, and by separating "connect" into two components, *integrate* and *collaborate*. *Integrate* refers to students synthesizing their learning experiences and being able to identify how knowledge from one context can be applied to another. *Collaborate* means that students can utilize their knowledge in a community with others, and the authors note that this is the highest reflective ePortfolio skill level. The *collaborate* level seems similar to Mezirow's last stage of transformation, in which a person reintegrates their new perspective into their life.

Miller and Morgaine (2009) reviewed comments from students about their ePortfolio experience and found that students enjoyed the reflective aspects of the ePortfolio. Students said that the ePortfolio helped them draw connections between their learning experiences, build their
personal and academic identity, and plan their academic pathways. In a study of 9,542 students from 24 institutions, 70% of respondents agreed that “ePortfolios have helped [them] to make connections between ideas” and 65.6% agreed that as a result of using ePortfolios, they became "more aware of [their] growth and development as a learner” (Eynon et al., 2014). While the findings from these studies do not provide direct evidence of transformative learning, they certainly suggest that ePortfolios have the potential to foster transformative learning.

Enhancing Learning

In a survey of 68 institutions which use ePortfolios, 80% of respondents indicated that they use ePortfolios to enhance student learning (Lee, 2007). When reviewing literature pertaining to ePortfolios, it is clear that improving student learning outcomes is one of the primary reasons for implementing ePortfolios. There are several reasons why an ePortfolio can be a successful learning tool, but it is important that faculty and staff are intentional in the way they facilitate ePortfolios. Yancey (2009) explains that the structure of an ePortfolio, how information is arranged, is vital because it highlights what is valued and when students should reflect. She also claims that the audience, whether it be peers, instructors, or others, is crucial to making ePortfolios effective. Because an ePortfolio can be viewed by an external audience, it may motivate students to put in additional effort. With that said, however, Zubizarreta (2004), in his book about learning portfolios, emphasizes that reflective inquiry must be deliberately incorporated into portfolio pedagogy. He argues that oftentimes an intentional focus on reflection is missing, and he invites educators to have their students address questions such as the following:

What have I learned? Why did I learn? When have I learned? In what circumstances?

Under what conditions? How have I learned or not, and do I know what kind of learner I
am? How does what I have learned fit into a full, continual plan for learning? What difference has the learning made in my intellectual, personal, and ethical development? In what ways is what I have learned valuable to have learned at all? (Zubizarreta, 2004, p. 8)

Although faculty and staff may not ask these exact questions, reflective practice is an essential component to effectively designing an ePortfolio intended to enhance learning. Reflection gives students the opportunity to become more in tune with their learning and also encourages students to make connections between different experiences and transfer their knowledge from one context to another. But again, this may not happen spontaneously. Students may not know when it is acceptable to incorporate their co-curricular and life experiences into the academic domain, so it is important for ePortfolio facilitators to explicitly ask students to do so (Penny Light, Chen, & Ittelson, 2012).

Landis, Scott, and Kahn (2015) recently conducted a study to determine “why, how, and to what success” reflective practices were integrated into ePortfolio projects at a large institution that has developed a culture of ePortfolio use across campus in a variety of contexts (p. 109). They interviewed ePortfolios facilitators from 14 different departments, programs, and centers, and they found that few of the facilitators initially had student reflection as a goal for their ePortfolio projects. Yet, the authors discovered that within the facilitators’ first semester of ePortfolio use, most recognized the importance of reflective practices and began to emphasize reflection within the ePortfolios. Landis and colleagues (2015) also found that ePortfolio facilitators reported a wide variety of approaches used to elicit student reflection such as explanation, demonstration, and re-designing assignments. Similarly, Jenson (2011) studied the teaching methods she used to encourage reflection in ePortfolios in her first-year writing course. After teaching the course for eight years and analyzing how she implemented ePortfolios, she
determined that students wrote lengthier and more in depth reflections in their ePortfolios when she also utilized student surveys, in-class discussions, and a clear scoring rubric to encourage reflection. Jenson (2011) concludes that an ePortfolio is a great tool for developing students’ reflection skills, but faculty and staff must find ways to promote reflective practices.

Additional research supports Jenson’s (2011) findings and the notion that ePortfolios can enhance students’ reflective thinking abilities. Scott (2010) examined the effectiveness of ePortfolios for MBA students. She randomly selected 53 new full-time MBA students to serve as the experimental group, who were given access to ePortfolio accounts and trained on how to use the ePortfolio software. A group of 21 similar MBA students were used as the control group. Both groups were informed that they would be required to write an essay at the end of their capstone course at the end of their program, which would be worth 20% of their grade. The final essays from both group were rated using a four-point reflection rubric, which was developed based on Mezirow’s theory. The results indicated that students who were given access to the ePortfolio tool demonstrated higher levels of reflection in their essay. This finding held true regardless of students’ entrance exam score, gender, work status, or age. However, the strength of the relationship between ePortfolio access and reflective thinking decreased as student GPA increased. In a different study of graduate students, Hager (2012) administered pre- and post-surveys and analyzed ePortfolio content to understand students’ experiences with ePortfolios. Examining two years worth of data revealed that students were better able to articulate their growth over time, draw connections between curricular and co-curricular experiences, and engage in higher levels of critical reflection. Both studies demonstrate that ePortfolios can positively impact students' reflective thinking skills.
Other ePortfolio studies not only measure reflective thinking, but also include related constructs such as self-regulated learning, self-directed learning, self-efficacy, and integrative learning. For example, in a study of 49 fourth-year undergraduate education students in the Middle East, the group who used ePortfolios in their teacher preparation course scored higher on measures of reflective thinking and self-directed learning readiness than students who did not use ePortfolios (Abu Awwad, Nofal, & Salti, 2013). In a different study, Alexiou and Paraskeva (2010) examined the impact of ePortfolios for 41 undergraduate computer science students who voluntarily used ePortfolios. Based on a self-assessment rubric and a survey questionnaire, they found that students gained self-regulated learning skills. The same authors conducted another study using pre- and post-surveys of 48 undergraduate computer science students who voluntarily used ePortfolios, and the findings confirmed that ePortfolios were positively associated with development of students’ self-regulated learning strategies. More specifically, students’ demonstrated increases in their motivational and self-efficacy beliefs, which are part of the self-reflection phase of self-regulated learning theory (Alexiou & Paraskeva, 2013). These studies support the idea that ePortfolios can encourage students to become active learners and enhance their competencies.

Furthermore, existing research demonstrates that reflection via ePortfolios can encourage integrative learning, which can be defined as “a mindset in which individuals seek to explicitly connect, evaluate, and synthesize learning from curricular, co-curricular, and personal experiences, in ways that enable them to apply their knowledge, skills, and values in new, complex settings in their personal, professional, and academic lives and over time” (McGuinness, 2015, p. 221). Peet and colleagues (2011) studied this concept with a sample of 620 students who created an ePortfolio within 14 different curricular and co-curricular contexts.
The students completed surveys to measure their integrative learning behaviors before and after engaging with the ePortfolio, and the results indicated that students made significant gains in their integrative learning abilities. The study also noted that these gains occurred regardless of students' academic major, race/ethnicity, gender, year in school, or the learning context in which they completed the ePortfolio. McGuinness (2015) expanded upon Peet and colleagues' (2011) research by refining the survey, examining a larger sample, and adding a longitudinal component. He surveyed 1,539 students from various curricular and co-curricular programs/courses, and in addition to the pre- and post- survey, he conducted a follow up survey two years after the students' ePortfolio experience. The surveys asked students to rate their agreement with 37 indicators of integrative learning. Using a 3-level hierarchical linear growth model, the results demonstrated a causal relationship between ePortfolios and growth on all aspects of integrative learning. Also, most of the gains persisted two years later. These two studies provide evidence that the reflective nature of ePortfolios can enhance students' ability to make connections and transfer knowledge across different contexts.

As ePortfolios have become more popular in higher education, so have positive assertions about the value of ePortfolios. Although empirical research on how ePortfolios contribute to student learning is growing, the existing body of literature is still limited. For example, within a sample of 118 peer-reviewed articles about ePortfolios, published between 1996 and 2012, only 15% of them represent empirical studies of ePortfolio outcomes. The majority of the literature was comprised of descriptive articles, empirical research pertaining to users’ feelings and opinions, and technology-focused articles (Bryant & Chittum, 2013). In addition to the peer-reviewed journal articles, there are also findings from ePortfolio research/assessment projects at individual institutions which are published in books or online as part of an ePortfolio outcomes
initiative such as the Inter/National Coalition for Electronic Portfolio Research (Yancey, 2009) and Connect to Learning (Eynon et al., 2014). Conclusions drawn from any of these studies are useful for understanding the impact ePortfolios can have, but the findings may not be generalizable. Many of the studies occurred in a particular context with a small sample. As a result, the nature of the ePortfolio experience and the techniques used by the facilitator to encourage reflective practices might impact the findings. This dissertation study examined reflection via ePortfolios within the realm of study abroad, which has not been covered much by existing empirical research. Also, the study attempted to isolate the impact of the ePortfolio itself by using an experimental design in which the control group engaged in the same reflective questions as the ePortfolio group.

**Improving Assessment**

In the same survey cited above, of 68 institutions, 70% of respondents indicated that they use ePortfolios to improve assessment (Lee, 2007). ePortfolios can be used as a tool for student, course, department, program, or institution level assessment. Over the past decade, the U.S. government began to demand more accountability from higher education institutions, which caused colleges and universities to start utilizing different types of assessment techniques. The 2006 Spelling’s Commission encouraged institutions to focus on outcomes based assessment and urged accrediting agencies to ensure that institutions are providing evidence of student learning (U.S. Department of Education, 2006). At institutions within the U.S., the use of ePortfolios as an assessment tool increased from less than ten percent in 2009 to over forty percent in 2013 (Kuh & Ikenberry, 2009; Kuh, Jankowski, Ikenberry, & Kinzie, 2014).

Goldsmith (2007) explains that an ePortfolio has three characteristics that make it useful for assessment:
(1) the ability to collect materials created for a variety of reasons over time, (2) the ability
to select from a collection and organize it, and (3) the ability to surround the work itself
with additional information and content, including introductions and reflection. (p. 33-34)

As a repository containing samples of student work, an ePortfolio can provide faculty and staff
with the evidence they need to conduct direct learning assessment. Scholars also argue that
ePortfolios provide a way for assessment to be less intrusive. Penny Light and colleagues (2011)
explain that ePortfolios offer assessment for learning, rather than assessment of learning. The
difference is that the ePortfolio process can contribute to learning, unlike an exam, for example,
which only evaluates what a student has already learned. Penny Light and colleagues (2011)
claim that “the ePortfolio is more intrinsically motivating for students since they recognize how
the folio thinking process and product are focused on their specific interests and not the
institution’s” (p. 89). Students have ownership over their ePortfolios, the ability to customize
what they share, and the opportunity to include content that highlight more than just the
academic aspects of their education. These features of an ePortfolio provide faculty and staff
with an assessment option that is more authentic than surveys and exams.

There are a variety of ways that ePortfolios can be used for assessment. At the student
level, ePortfolios can be used to track individual progress within a course or experience and
provide timely feedback to students about their struggles and/or successes. At the department,
program, or institution levels, a rubric aligned with learning objectives is often used to rate
content, whether it be specific artifacts within an ePortfolios or the ePortfolio as a holistic entity.
By using a rubric, the qualitative data provided by an ePortfolio can be converted to quantitative
data, which can be more easily included in assessment reports, tracked longitudinally, and/or
used for comparisons between groups. Rubrics are typically created to support the individual
learning objectives being assessed, but it is common for institutions to utilize or adapt the VALUE rubrics, which were created by the Association of American Colleges & Universities (AAC&U, n.d.). The VALUE rubrics were developed in 2007-2009 by teams of faculty and staff from over 100 colleges and universities. They created 16 rubrics to align with the Liberal Education and America’s Promise (LEAP) learning outcomes, which include competencies such as critical thinking, problem solving, written communication, ethical reasoning, and intercultural knowledge and competence. The rubrics cover many of the learning objectives that individual institutions, departments, programs, or courses typically want to assess.

Much of the literature on ePortfolio assessment is descriptive, pertaining to best practices, rather than empirical investigations of the efficacy of using ePortfolios for assessment. There are certainly logistical and ethical concerns that must be addressed when deciding to conduct ePortfolio assessment, so information about best practices can be useful. However, it is also necessary to know whether or not ePortfolio assessment is valid and reliable. A study conducted by Buyarski & Landis (2014) found that scoring ePortfolios with a rubric was an effective method of assessing student learning. They examined 47 ePortfolios from a first-year seminar course. In addition to scoring the ePortfolios with a rubric, words and phrases were analyzed using Bloom’s Taxonomy (Bloom et al., 1956). Their findings showed that higher rubric ratings aligned with higher levels of learning displayed in student narratives, which supports the notion that the rubric ratings are valid. On the other hand, Johnston (2004) points out several issues with portfolio assessment. He challenges the idea that it’s possible to assess portfolios consistently, even if the assessors are trained and given clear guidelines. He argues that in order to improve inter-rater reliability, the outcome must be simple to measure. Since one of the reasons for using ePortfolios is to increase the authenticity of assessment, the outcomes and subsequent assessment

9 Although the author is discussing portfolios, rather than ePortfolio, his arguments are still relevant.
metrics are generally more complex. He also brings up the question of whether portfolios are being rated holistically or individual items from the portfolio are being rated separately. He cites a study by Baume and York (2002) in which they found that agreement between raters for the overall portfolio was lower (61%) than the agreement between raters for the individual pieces (85%). This finding supports Johnston’s (2004) point that it may be too difficult to consistently score an entire portfolio. In a meta-analysis of 75 studies related to rubric use in broad educational contexts, Jonsson and Svingby (2007) found that rubrics have the potential to promote reliable scoring of assessments, but rubrics are not automatically valid and reliable. Unfortunately, the empirical research on ePortfolio assessment is limited, so conclusions are not clear. This study examined the use of reflective responses to assess the intercultural competence of students who studied abroad. The next section elaborates on this particular context and explains why more research is needed regarding study abroad assessment.

**Study Abroad**

In 2015-16, over 325,000 U.S. students studied abroad, and the data shows that almost ten percent of undergraduate students study abroad before they graduate (IIE, 2017). Over the past century, education programs have expanded and evolved. In the 1920s, it was popular for students to travel abroad in their junior year; in the 1950s, the opportunity was extended to sophomore students, and the term “study abroad” emerged (Bowman, 1987). There are now many different types of study abroad programs; for example, some are faculty-led programs in which a faculty member travels abroad with a cohort of students and facilitates the program, while others are exchange/direct enrollment programs in which a student travels independently and takes courses at a partnering institution. There are also other non-academic focused programs including internships, teaching, and volunteer work abroad, which fall under the
comprehensive term “education abroad.” All of these programs can occur in various lengths ranging from two weeks to an entire year. In the U.S., the data from 2015-16 shows that students are more inclined to participate in short-term programs (63%), than mid-length (34%) or long-term programs (3%) (IIE, 2017). There are four primary purposes for study abroad programs: to enrich the academic experience, to provide an opportunity for students to challenge their cultural viewpoints, to obtain skills beneficial for the global workforce, and to contribute to personal development (Hoffa & DePaul, 2010). This study focused on the personal development, or learning, aspect, with cultural viewpoints, or intercultural competence, as the measured outcome.

**Study Abroad as Transformative**

Study abroad is an ideal setting for transformative learning. Students are faced with new cultural experiences in an unfamiliar environment, which may challenge their previously held beliefs, values, and perspectives. Anything from navigating a public transportation system to understanding a new school system to living with a host family could become a disorienting dilemma, which is the first stage of Mezirow’s transformative learning theory (Hunter, 2008). Students who study abroad often acknowledge that they have become more receptive to other cultural perspectives and have learned a great deal about their own assumptions and attitudes (Salto, 2009). Students report that study abroad impacts their academic and personal lives, and researchers claim that study abroad programs, even those as short as one month, can be a meaningful experience for students (Chieffo & Griffiths, 2004). Perry, Stoner, and Tarrant (2012) agree that study abroad programs have the potential to be transformative, and they propose a framework that connects several learning theories, including Mezirow’s, but they call for further research to support their framework. This study made the assumption that study abroad has the potential to encourage transformative learning, and that in conjunction with
reflection via ePortfolios, students may experience greater learning gains. This study was not examining transformative learning theory itself, but rather, using the theory as a guide for understanding why students who study abroad may attain particular outcomes. The next section reviews some of the existing research related to general outcomes of study abroad programs.

**Study Abroad Outcomes**

Study abroad can influence students’ personal identity and achievement of learning objectives. Angulo (2008) found that, when compared with a matched control group of students who did not study abroad, those who did study abroad experienced changes in their personal characteristics such as extraversion, agreeableness, and openness to experience. Similarly, McGourty (2014) found that study abroad students developed greater openness and agreeableness than students who did not study abroad. In terms of academic achievement, Sutton and Rubin (2004) found that students who studied abroad scored higher on measures of knowledge about how to function in other cultures, and knowledge of global interdependence, cultural relativism, and global geography than a sample of students who did not study abroad. In order to make sure the results were not based on pre-study abroad differences, the researchers controlled for GPA, but it did not alter the conclusions. A recent study, by Statham (2015), of over 2,000 students from multiple institutions, obtained similar results. The study used a retroactive pre- and post- survey designed to measure students’ attainment of defined learning outcomes. The students reported attainment of personal growth, global awareness, geopolitical knowledge development, and cultural competence. The study also found, however, differences in the findings based on gender, ethnicity, academic level, and length of study. The author notes that this was the first national study of study abroad learning outcomes. This dissertation was not intended to broadly explore study abroad outcomes, but, instead, it used one particular outcome,
intercultural competence, to measure the efficacy of using reflection via ePortfolios to enhance student learning and assessment. Thus, the next section defines intercultural competence and discusses research that has specifically examined intercultural competence within study abroad.

**Intercultural Competence**

"Intercultural awareness, development, and sensitivity are among the most commonly acknowledged outcomes of many study abroad programs" (Sutton, Miller, & Rubin, 2007, p. 47). Since there are many different definitions of the term “intercultural competence,” Deardorff (2004) conducted a study to determine what definition faculty and administrators prefer most. The top rated definition based on survey responses was Byram's (2007), which states, "Knowledge of others; knowledge of self; skills to interpret and relate; skills to discover and/or to interact; valuing others’ values, beliefs, and behaviors; and relativizing one’s self. Linguistic competence plays a key role" (p. 128). After conducting a Delphi study with a smaller group of experts, the best definition was determined to be "the ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills, and attitudes” (p. 171). The study concluded that a more general definition of intercultural competence is preferred and that it is best to measure it with a mix of quantitative and qualitative methods.

Several empirical studies have examined the relationship between study abroad and intercultural competence. Many of them utilized survey methods, but the instruments used to measure intercultural competence vary. Forgues (2005) and Lombardi (2011) both used the Intercultural Sensitivity Scale and the Openness to Diversity Scale. Although these studies examined different samples, both found that students who studied abroad had greater gains on these scales than students who did not study abroad. Using the Cross-Cultural Adaptability
Inventory and the Intercultural Sensitivity Index, Rundstrom Williams (2005) found similar results. One of her key findings was that students who studied abroad demonstrated greater change in their intercultural communication skills than students who stayed on campus. Although these findings seem consistent, research by Salisbury, An, and Pascarella (2013) challenge the positive association between study abroad and intercultural competence gains. The researchers analyzed a sample of 1,647 students who provided data through the Wabash National Study, which utilized the Miville-Guzman Universality Diversity Scale (MGUDS), a measure of intercultural competence. They found that while study abroad did increase students’ amount of contact with diverse others, it had less of an impact on students’ appreciation of cultural differences or their comfort with difference. It seems that study abroad may influence students’ intercultural competence, but the extent of the impact may vary depending on the students’ experience and/or how intercultural competence is measured.

The Intercultural Development Inventory (IDI™) and the Global Perspectives Inventory (GPI™) are two other instruments that are commonly used to measure intercultural competence in the study abroad context. The IDI™ uses 50 Likert-scale items, in a pre- and post- survey format, to identify an individual’s level of development within the six stages of Bennett’s model of sensitivity to cultural differences. In a small study of 23 students who studied abroad in a 4-week program, researchers used the IDI™ and found that study abroad decreased students’ tendency to view other cultures as better than their own and enhanced their capacity to adapt to other cultures (Anderson, Lawton, Rexeisen, & Hubbard, 2006). On the other hand, a different study of 28 students found that there were no significant differences in the students’ IDI™ scores before and after their study abroad program. Again, these inconsistent findings could be due to differences in features of the study abroad experience. Reza (2015) examined IDI™ scores of
students who traveled to different destinations and found that certain factors, such as faculty engagement, consistent reflection, and deliberate guidance, can improve students’ intercultural competence.

The Global Perspectives Inventory (GPI™) is a pre- and post- survey instrument that measures cognitive, interpersonal, and intrapersonal domains of intercultural competence. In a study of 245 students who completed education abroad programs, students had statistically higher means on five of the six scales on their post-survey (Braskamp, Braskamp, & Merrill, 2009). A recent study, by Grigorescu (2015), also revealed positive findings for students who studied abroad. The author administered the GPI™ to 147 students who studied abroad for at least one semester and found a positive impact on students’ global awareness (cognitive domain) and global perspective (intrapersonal domain). She also interviewed a smaller sample of students whose remarks confirmed the quantitative findings. This dissertation study did not intend to obtain generalizable findings about study abroad intercultural competence outcomes, but the GPI™ was used as the quantitative measure of intercultural competence in order to answer the research questions. The GPI™ was selected because it can be used in a pre- and post- format and it has been tested for validity and reliability. Chapter 3 provides more details about the instrument.

**Study Abroad Assessment**

In addition to broad research on study abroad outcomes, it is important for individual colleges and universities to conduct assessment of their study abroad programs to ensure that they are effective. Despite the fact that study abroad programs have been growing in popularity and are viewed favorably by educators, assessment of study abroad student learning outcomes is still in its infancy (Deardorff, 2015). There are several reasons why institutions should be
enhancing study abroad assessment including institutional demands, accreditation standards, and program improvement (Gozik, 2015). If institutions are prioritizing assessment of student learning outcomes in academic and student affairs units, whether for accreditation or institutional improvement purposes or both, presumably, study abroad departments would be included in the directives or initiatives related to assessment. Thus, with the current emphasis on assessment nation-wide, it is not surprising that study abroad professionals are starting to implement new assessment techniques in order to gather evidence of student learning.

Salisbury (2015) explains that although study abroad professionals have progressed with assessment efforts over the past decade, more work is needed. He explains that in an effort to obtain evidence about intercultural learning, the Council on Student Travel’s 1965 guidebook recommended asking students to report how they believe their attitudes toward other cultures had changed. While well-intended, the question functions more as a reflection tool than an assessment mechanism. Unfortunately, at many institutions, efforts to assess study abroad learning outcomes may not look much different today. One of the main challenges is that many study abroad professionals are not trained in how to do assessment (Cooper & Niu, 2010). Traditionally, most study abroad programs just used post-program satisfaction surveys to gather data. While this is important information to collect, it does not provide evidence of student learning. When study abroad professionals began assessing learning outcomes, many utilized pre- and post- surveys such as the IDITM, GPI™, or others listed above. More recently though, professionals and faculty leading study abroad programs have started to use direct assessment methods such as student reflection papers, observations of students, photos, and ePortfolios (Deardorff, 2011).
Some institutions, such as Michigan State University (MSU), have developed and tested different types of study abroad assessment efforts over the past decade. In 2004, Ingraham and Peterson explained that MSU was utilizing pre- and post-surveys as well as student journals, focus groups, and articles written by study abroad alumni. The homegrown surveys were used to gather quantitative data about “language learning, academic performance, personal growth, intercultural awareness, and professional development” (p. 87). The other forms of assessment obtained qualitative data to supplement the survey findings. In 2010, Cooper and Niu described MSU’s ePortfolio project, which assessed both study abroad and non-study abroad students’ intercultural learning outcomes. Their project was part of a multi-institution grant project funded by the Fund for the Improvement of Postsecondary Education (FIPSE) and coordinated by the American Council on Education (ACE). The project, titled “Lessons Learned,” was designed to improve the assessment of international learning at U.S. colleges and universities. The team analyzed over thirteen different assessment instruments to demine which type would be best to use for their identified learning outcomes, and they decided to use ePortfolios with rubrics as well as a survey (Dietrich & Olson, 2010). At MSU, students were required to submit at least five artifacts, such as course papers, photographs, or personal narratives, in their ePortfolios. The students were also required to complete the Beliefs, Events, and Values Inventory (BEVI™), which quantitatively assessed students’ intercultural competence during their freshmen and senior years. When examining the effectiveness of this approach, their preliminary findings confirm that ePortfolios were valuable and helped faculty and staff understand students’ BEVI™ scores (Cooper & Niu, 2010). The current dissertation study examined a similar assessment approach, although the population was only study abroad students and the quantitative instrument was different.
**Emphasis on reflection.** ePortfolios are becoming more popular for assessment because they promote reflective practices. Deardorff (2008) explains that “participants in education abroad experiences must be aware of the learning that takes place at each point, especially during the actual time abroad, and must be given the process skills necessary to analyze their development of intercultural competence” (p. 45). Thus, reflective practices have the potential to improve student learning. In addition to ePortfolios, study abroad professionals have tested other methods such as open-ended questions on end-of-program evaluations and photo contests (Rundstrom Williams, 2009), digital storytelling (Buckner, 2015), electronic journals (Stewart, 2010), and blogs (Douthit et al., 2015). Rundstrom Williams (2009) argues that, “Encouraging students to reflect on their experiences abroad and to articulate their own outcomes, shows that students gain intercultural competence and the ability to articulate it, through specific instances and examples” (p. 304). Data from a survey of 190 higher education institutions in 2013 found that 18% were using ePortfolios to measure intercultural competence (Deardorff, 2015). It is evident that colleges and universities are interested in using ePortfolios to support student learning and assessment in the study abroad context, but further research is needed to evaluate its effectiveness.

**Summary**

This research study was designed to examine the efficacy of using reflection via ePortfolios to enhance student learning and assessment in study abroad programs. The reflective ePortfolio process and the study abroad experience both have the potential to be transformative for students, but more research is needed to confirm this assumption. Currently, ePortfolio advocates claim that ePortfolios have the potential to enhance student learning, but empirical evidence is lacking; the number of studies is small and the conclusions are limited by the
constraints of the methods (Rhodes et al., 2014). In addition, assessment of student learning in study abroad is relatively new, and different methods, including ePortfolios, and other reflective mechanism are being explored (Deardorff, 2015). This study was built upon existing research in both the ePortfolio and study abroad fields to obtain new knowledge about the effectiveness of using reflection via ePortfolios.
Chapter 3: Methodology

This study examined the effectiveness of using reflection via ePortfolios to enhance student learning and assessment in the study abroad context. Using quantitative and qualitative data, the study examined students' attainment of intercultural competence and experiences that may influence their learning. Also, reflection via ePortfolios is intended to promote greater learning gains, so by using an experimental design, this study sought to determine if students who use an ePortfolio exhibit greater intercultural competence gains than students who do not use an ePortfolio. Participants of the study were divided into two groups, the ePortfolio group and the control group. Both groups were asked to complete reflective prompts during their time abroad to facilitate transformative learning, but the control group did not have access to the ePortfolio platform. In order to measure both groups' intercultural competence gains, the participants completed a survey prior to traveling abroad and after they returned.

In addition, ePortfolio advocates claim that reflection via ePortfolios can be used by faculty and staff to assess student learning outcomes. In this study, students' reflective responses were rated using an intercultural competence rubric, and using a correlational design, the rubric ratings were compared with students' survey scores to test for alignment. Tests were also done to measure the reliability and validity of the rubric.

The current chapter describes this methodology in more detail. The first section restates the research questions and explains why the particular research methods were selected. The next sections describe the sample of participants, the instruments that were used, and the exact procedures. The last sections explore data analysis techniques, ethical considerations, and concerns about the research design.
Research Questions

The first primary research question examined the assumption that students can increase their intercultural competence as a result of studying abroad. These were the exact questions:

1. Do students increase their intercultural competence while studying abroad for one semester?
   a. Do certain pre-study abroad activities and/or study abroad experiences and environments impact students’ intercultural competence more than others?
   b. Does using an ePortfolio while studying abroad enhance students’ intercultural competence?

The second primary research question explored the notion of using reflective responses to assess intercultural competence with the AAC&U VALUE rubric. These were the exact questions:

2. Can reflective responses be used to effectively assess students' attainment of intercultural competence?
   d. How reliable is the AAC&U Intercultural Knowledge and Competence VALUE rubric when used to rate students' reflective responses?
   e. Do students' reflective response ratings align with their survey scores?
   f. Do students find value in completing reflective responses?

Research Paradigm

This research study assumed a postpositivist worldview. According to Creswell (2013), “Postpositivists hold a deterministic philosophy in which causes (probably) determine effects or outcomes. Thus, the problems studied by postpositivists reflect the need to identify and assess the causes that influence outcomes, such as found in experiments” (p. 38). Within this
perspective, one also attempts to reduce larger ideas into smaller ideas, or variables, that can be tested with research questions or hypotheses.

**Mixed-Methods.** The study used a convergent parallel mixed-methods design (Creswell, 2013) or concurrent triangulation design (Creswell, 2003); quantitative and qualitative data were collected at the same time, were both used to answer the research questions, and were used together to corroborate findings. Although the surveys occurred before and after the participants' semester abroad and the reflective responses were submitted during the semester, findings from one type of data were not used to inform the collection method of the other and both types of data were analyzed simultaneously. The study was also structured with correlational and experimental design components.

**Correlational Design.** Creswell (2013) explains that a correlational design is a non-experimental design “in which investigators use the correlational statistic to describe and measure the degree or association (or relationship) between two or more variables or sets of scores” (p. 43). In this study, bivariate correlations were conducted to answer several research questions. For question 1a, the variables being compared were students' experiences, pre-study abroad and during study abroad, and their intercultural competence scores. The pre- and post-surveys asked students to report their levels of frequency or agreement with a variety of behaviors and experiences, and these items were aggregated into several composite variables. These variables were then compared with students' intercultural competence scores. For question 2b, participants' rubric ratings were compared with their survey scores to test for alignment. Both of these methods, rubrics and surveys, are used by study abroad professionals to assess intercultural competence (Deardorff, 2015). One benefit of using a survey to measure an outcome is that it is relatively easy and quick to use, regardless of the amount of participants.
However, survey questions may not accurately measure the desired outcome(s) and a survey relies on self-reported information, which may also be inaccurate. A benefit of collecting qualitative data and using a rubric to rate it is that the qualitative data can be considered direct evidence of an outcome. However, gathering qualitative data and using a rubric to rate it requires more time and effort, from participants and raters, than conducting a survey, and the method may be less reliable. If the participants' rubric ratings do not align with their survey scores, the results may indicate that one method is not an accurate representation of students’ intercultural competence gains. The study also used a bivariate correlation to compare students' rubric ratings and their reflective response word count as a measure of assessment validity. A positive correlation between higher word count and higher ratings would imply that students who write more attain higher ratings, which is problematic for students who still attain the competency, but do not write about it as thoroughly. Further, additional correlations and comparative statistics, such as t-tests, were conducted to explore the relationships between the dependent variables and participants' demographic characteristics.

**Experimental Design.** Experimental research is intended to determine whether or not a specific treatment influences an outcome. An experimental study provides one group with the treatment (the experimental group), withholds the treatment from another (the control group), and then compares how the two groups score on the same outcome. There are different types of experimental designs such as a quasi-experiment and a single-subject experiment, but this study was a true experiment, in which the participants were randomly assigned to the treatment and control groups (Creswell, 2013). By randomly selecting participants for the experimental and control groups, each participant had an equal probability of being selected. Thus, it was less likely that the group characteristics were meaningfully different prior to the treatment (Keppel &
Wickens, 2003). In this study, participants in the experimental group were asked to use an ePortfolio platform to respond to the reflective prompts and the participants in the control group were not. The use of an ePortfolio was the treatment or independent variable (IV). Participants in both groups completed a pre- and post- survey to measure intercultural competence, which was the outcome or dependent variable (DV). The experimental and control groups were compared on their intercultural competence gains, derived from the pre- and post- survey scales. Based on general study abroad research and transformative learning theory, it was expected that both groups would experience intercultural competence gains. However, based on ePortfolio literature, it was hypothesized that the experimental group may have greater intercultural competence gains than the control group. There are few ePortfolio studies that have used an experimental design, and even fewer that were a true experiment. Scott (2010) and Abu Awwad, Nofal, & Salti (2013) are two examples of studies that did use a true experimental design. Both studies randomly assigned students to the experimental (ePortfolio) group and control group, and both found that the experimental groups scored higher on the measured outcomes. Unfortunately, for this particular research question, the results in the current dissertation study were inconclusive due to the small sample size.

Participants

The most recent data indicates that one in ten undergraduate students in the U.S. studies abroad before graduating (IIE, 2017). The current study was initially conducted using a sample of undergraduate students who were registered to go on study abroad trips through one large public research institution in the northeast United States, but then in the second semester, it was expanded to include students from three additional public colleges and universities in the same geographic region. The institutions were selected out of convenience because the study abroad
offices were willing and able to assist with recruitment. The sample included home-institution students who were enrolled in their institution's sponsored study abroad programs, home-institution students who were enrolled in study abroad programs at other partnering institutions, and other students who were enrolled in the participating institutions' study abroad programs. The participants had to be enrolled in a semester-length, academic-focused, direct enrollment, non-faculty led, study abroad program. The locations of the study aboard programs did not matter because only a few students went to each location, so in order to have enough students in the sample, it was not possible to group them based on location. However, students traveling abroad for other types of education abroad programs, such as internships, service-learning, and teaching, were not included in the sample in order to make sure that participants, despite being in different locations, had a similar type of experience. A member of the study abroad office from each participating institution identified the students who fell within these parameters and sent them a recruitment email to encourage their participation in the study (see Appendix A, which was modified slightly for the second semester). In the Fall semester, there were about 125 students who fit the criteria, and in the Spring semester, it was difficult to determine the exact number of eligible students based on the lack of details provided by some of the institutions, but it can be estimated at around 250 students. The participants' gender, race, ethnicity, class year, and ages varied based on who responded to the call for participation, but all participants had to be at least 18 years or older.

For the experimental part of the study, the appropriate sample size for the study should have been 126 participants, 63 in each group, based on an alpha of .05, statistical power of .8, and effect size of .5, (Hulley et al., 2013). It was unlikely that this study was going to have that number of participants though because the total number of students who fit the sampling criteria
was not very large. For a statistical power of .7, the study should have had 99 total participants, and for a statistical power of .6, the study should have had 78 total participants. Prior experimental research on ePortfolios had small sample sizes. For example, Scott (2010) had 30 students in the experimental group and 21 in the control group, and Abu Awwad et al. (2013) had 24 students in the experimental group and 25 in the control group. Sample size is important for experimental research because it will determine the strength of the findings (Creswell, 2013). Sample size is also essential for understanding the generalizability of survey findings, but that was not as much of a concern for this study because the pre- and post- survey was not being used to examine intercultural competence gains of the broader study abroad population.

**Instruments**

This study used several instruments to collect data. For the experimental design, students in the experimental group used the LiveText Via™ ePortfolio platform to respond to the reflective prompts and the students in the control group used Google Forms. Participants in both groups took the Global Perspectives Inventory™ as the pre- and post- study abroad survey. In addition, the AAC&U Intercultural Knowledge and Competence VALUE rubric (see Appendix B) was used to rate the participants’ ePortfolio content. This section describes why these particular instruments were used and how they collected the data needed to answer the research questions.

**LiveText Via™ E-Portfolio Platform**

Although there are numerous ePortfolio platforms available on the market, and each have some distinct features, the primary ePortfolio functions needed for this research did not differ much from one company to another. LiveText generously agreed to provide free ePortfolio accounts to the participants of this dissertation study. Students in the experimental group were

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10 As of January 2018, LiveText merged with Taskstream and TK20 to form a new company called [Watermark](https://www.watermark.com).
given login credentials to access the LiveText Via™ website, where they were able to respond to the reflective prompts assigned (see Appendix C), upload pictures and/or videos to document their experiences, and create a custom ePortfolio that they could share with friends, family, or the world (if they chose). Via™ was a new LiveText product that was designed to “better engage learners wherever and whenever learning milestones are achieved” (LiveText, 2016). When reflective prompts were assigned, the author was able to add the prompts as assignments to each students’ timeline, which is essentially a to do list. After students completed their responses, they were able to put their content in their ePortfolio, using the provided template or by creating their own. Students could keep their ePortfolio private or share it publically through the URL or their personal social media sites. Students also had the option to include more than just their reflective responses in their ePortfolios – they could have included other written content, uploads of documents, links to online material, pictures, and videos.

**Google Forms**

Students in the control group submitted their reflective prompt responses using Google Forms, which were emailed to them when the reflective prompts (see Appendix C) were assigned. A separate Google Form link was used for each reflective prompt assignment. The form asked for the participants’ name and email address, so that the data for each participant could be linked together, and then it stated the prompt(s) and provided space for the participants’ response. Once participants submitted their responses, the data was stored in a Google Sheet in the author's personal Google Drive account. Participants did not have the opportunity to review or revise their responses unless they asked the researcher to do so via email. In the beginning of the study, the author told the control group that they could request a copy of their own responses at the end of the study to document their study abroad experiences, but no participants took
advantage of that offer. Google Forms provided an electronic submission method that should have been relatively familiar to students and easy for them to complete.

**Reflective Prompts**

The reflective prompts were created based on previous literature on study abroad assessment, in consultation with the study abroad professionals at the original participating institution, and they were designed to align with the AAC&U Intercultural Knowledge and Competence VALUE rubric. Works that were especially useful included Brewer and Moore (2015) and Savicki and Price (2015). There were nine prompts total, which were administered at eight points throughout the semester - two were given in the final assignment (see Appendix C). Four of them loosely follow the “Description, Interpretation, and Evaluation” method, as described by Bennett, Bennett and Stillings (1977).

**Global Perspectives Inventory™**

There are many different instruments that measure intercultural competence, some homegrown, and others commercial. Homegrown instruments are relatively inexpensive, but they may not be tested for reliability and validity. Commercial instruments have the advantage of being tested and revised by researchers, but they also tend to be costly. For this study, it was important to identify an instrument that measures aspects of intercultural competence which are similar to the categories assessed in the AAC&U Intercultural Knowledge and Competence VALUE rubric, since results from the survey and rubric were compared with one another. The Global Perspectives Inventory (GPI™), which was initially created in 2007, fit this criterion and was selected for this study because the survey administrators kindly agreed to allow the author to administer the survey for this dissertation study at no cost.
The GPI™ was created so that people of any age, cultural group, or context can take the survey. The items used to measure intercultural competence ask about how an individual thinks, feels, and relates to others. There are six “Perspective Taking” scales that fall within three dimensions: cognitive, intrapersonal, and interpersonal. For each dimension, one scale aligns with “the theory of cultural development and the other reflects intercultural communication theory” (Braskamp, Braskamp, & Engberg, 2014, p. 4). A description of each dimension can be found in Appendix D. In order to use the GPI™ as a pre- and post-test of study abroad outcomes, students must complete the General Student Form and the Study Abroad Post Test Form. The General Student Form is the primary GPI™ instrument, and it includes questions about students’ coursework and co-curricular involvement in college. The Study Abroad Post Test Form was specifically designed to be administered after students return from their study abroad program, and in addition to measuring students’ intercultural competence, it also includes ten questions to gain more information about students’ study abroad experiences (Braskamp et al., 2014). In addition to the GPI™ Study Abroad Post Test Form, the post-survey included additional questions to ask about the participants’ experiences with the reflective prompts and ePortfolio process (see Appendix E).

Based on data from a sample of 9,773 undergraduates from 40 different colleges and universities who completed the GPI™ between 2011 and 2013, the GPI™ scales were shown to be reliable. Appendix F shows a table with the coefficient alpha reliabilities of each scale and a table with the factor loading and reliabilities of each scale. For the purposes of this study, it was important that students score differently on the pre-survey and post-survey. Research based on 470 students from a variety of study abroad programs demonstrated that students do score significantly higher on the post-survey for five of the six scales, all but Cognitive Knowing
Among students who traveled abroad in 2013-2014, the mean differences from the pre-survey to the post-survey for each scale were the following: Cognitive Knowing .10, Cognitive Knowledge .31, Intrapersonal Identity .17, Intrapersonal Affect .12, Interpersonal Interaction .14, and Interpersonal Responsibility .10 (Braskamp et al., 2014). Altogether, the findings indicate that students do gain intercultural competence skills from their study abroad programs, and the GPI™ can be used to measure this growth.

The additional GPI™ questions about students' experiences were grouped by topic and aggregated into composite variables after the data was collected. Several of the items on the pre-survey were grouped into the following four composite variables: Academic Coursework ($\alpha = .590$), Faculty Interactions ($\alpha = .732$), Relevant Co-Curricular Experience ($\alpha = .712$), and Connection to Campus ($\alpha = .871$). These scales and the individual items from which they are comprised are detailed in Appendix G. Most of the items on the post-survey were used to create the following four composite variables: Intercultural Communication ($\alpha = .646$), Host-Country Immersion ($\alpha = .802$), Positive Faculty/Staff Experiences ($\alpha = .775$), and Self-Reported Positive Outcomes ($\alpha = .849$). These are shown in Appendix H.

AAC&U Intercultural Knowledge and Competence VALUE Rubric

Participants’ reflective responses were rated using the AAC&U Intercultural Knowledge and Competence VALUE rubric (see Appendix B). The Association of American Colleges and Universities, AAC&U, developed the VALUE rubrics in 2007-2009 as part of the Liberal Education and America’s Promise (LEAP) project. Teams of faculty and staff from over 100 colleges and universities collaborated to design rubrics that aligned with 16 of the LEAP learning outcomes, which include competencies such as critical thinking, problem solving, written communication, ethical reasoning, and intercultural knowledge and competence (AAC&U, n.d.).
The rubrics cover many of the learning objectives that individual institutions, departments, programs, or courses typically want to assess.

The Intercultural Knowledge and Competence VALUE rubric was selected for this study because it has already been vetted by faculty and staff in the field and is likely to be one of the rubrics used by study abroad professionals to assess intercultural competence. The categories in the Intercultural Knowledge and Competence VALUE rubric include the following: Knowledge: Cultural Self-Awareness (KCSA), Knowledge: Knowledge of Cultural Worldview Frameworks (KCWF), Skills: Empathy (SE), Skills: Verbal and Nonverbal Communication (SVNC), Attitudes: Curiosity (AC), and Attitudes: Openness (AO). Each of these six categories contains four levels of achievement, which are explicitly described in the rubric (AAC&U, n.d.). No published studies were found that specifically evaluate the Intercultural Knowledge and Competence VALUE rubric. However, Benander et al. (2016) examined the efficacy of using five other VALUE rubrics to rate students’ ePortfolio content (Integrative Learning, Civic Engagement, Information Literacy, Written Communication, and Critical Thinking). They found that some of the competencies, particularly Civic Engagement and Information Literacy, were more assignment-specific than others. Meaning, if the assignments in the ePortfolio did not explicitly ask students to discuss those areas, it was not possible to rate them (Benander et al., 2016). With that potential obstacle in mind, the reflective prompts for this study were intentionally aligned with the Intercultural Knowledge and Competence VALUE rubric categories.

Each individual reflective response was rated by the author and three external raters. The responses were de-identified and ordered by prompt, rather than by participant, and the raters were instructed to rate each response as an individual entity. The rater instructions are shown in
Appendix I. For each reflective response, the raters were instructed to rate any rubric category that aligned with the content of the individual response. If not enough data was available to rate a particular category, the participant did not receive a rating for that category. Thus, for each reflective prompt, there could be responses that align with none, one, some, or all of the six rubric categories. In the applicable categories, the actual ratings ranged from 1 (lowest score) to 4 (highest score).

Procedures

Fall Semester

The following procedures were used to collect data for the first round of this study:

1. In late July, a member of the study abroad office sent an email to all students who fit the sampling criteria to ask for their participation (see Appendix A). Students who were interested were instructed to click on a link, which brought them to a Google Form. The Google Form provided more details about the study and served as the Informed Consent form (see Appendix J). Students who would like to participate submitted their name and email address on the form as well as their study abroad location and start date. Through this procedure, the author obtained a list of students who were willing to participate.

2. As students agreed to participate, they were randomly assigned to the experimental and control groups. In order to ensure that there were no systematic biases when assigning the groups (Creswell, 2013), the first participant was assigned to the experimental group, the second was assigned to the control group, the third was assigned to the experimental group, the fourth was assigned to the control group, and so on and so forth. That method also ensured that both groups were evenly distributed.
3. All participants were emailed to complete the pre-survey. The pre-survey was conducted one to three weeks prior to students’ study abroad departure. The variation in timing was due to differences between the start dates of various study abroad programs. The survey was conducted via email during the dates indicated in Table 1. The survey was administered through Campus Labs’ Baseline platform, and up to three reminder emails were sent.

<table>
<thead>
<tr>
<th>Start Dates</th>
<th>Pre-Survey</th>
<th>Post-Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 8 - Aug 28</td>
<td>Aug 1</td>
<td>Jan 9 (except 1 program)</td>
</tr>
<tr>
<td>Aug 29 - Sept 25</td>
<td>Aug 15</td>
<td>Jan 30</td>
</tr>
</tbody>
</table>

4. The author emailed the experimental group with detailed instructions on how to utilize LiveText Via™. For the study, students were only required to respond to the assigned reflective prompts using the ePortfolio platform. However, the additional features of the platform could be used to enhance students' responses if they chose to use them.

a. The author emailed the control group with the same reflective prompts as the ePortfolio group, but they were not given access to the ePortfolio platform. Instead, they were asked to submit their responses through Google Forms.

b. The author emailed each participant in both groups each week when the reflective prompts were assigned, and send up to two reminder emails during the period in which each reflective prompt was due. Since the reflective prompts were designed to align with different points in the semester and the study abroad programs had varied start dates, all of the participants could not be sent the same prompts at the
same time. Thus, the participants were emailed the prompts on the dates indicated in Table 2.

c. During this round of the study, all of the reflective prompt emails were sent manually. The author personalized each email and sent them from her university email address. Participation was tracked in Microsoft Excel spreadsheets so reminder emails were only sent to participants who had not yet completed the prompts in that particular week.

Table 2: Fall Reflective Prompts Timeline

<table>
<thead>
<tr>
<th>Start Dates</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8(a&amp;b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 8 - 14</td>
<td>Aug 1</td>
<td>Aug 15</td>
<td>Aug 29</td>
<td>Sept 5</td>
<td>Sept 26</td>
<td>Oct 10</td>
<td>Oct 31</td>
<td>Nov 21</td>
</tr>
<tr>
<td>Sept 5 - 11</td>
<td>Aug 29</td>
<td>Sept 12</td>
<td>Sept 26</td>
<td>Oct 3</td>
<td>Oct 24</td>
<td>Nov 7</td>
<td>Dec 5</td>
<td>Dec 12</td>
</tr>
</tbody>
</table>

5. All participants were emailed after their study abroad program ended and asked to complete the post-survey. The post-survey was conducted within one to three weeks after the program was completed. Again, the variation in timing was due to differences between the dates of various study abroad programs. The survey was conducted via email during the dates indicated in Table 1. The survey was administered through Campus Labs’ Baseline platform, and up to three reminder emails were sent.
Incentives

In order to encourage participation in all components of the study, participants were entered into raffle drawings for various prizes when the study was finished. Participants received one raffle entry per study component that was completed (for each survey they started and each reflective response they submitted - regardless of completion or quality). For example, if a participant took the pre-survey and submitted five reflective prompts, they would receive 6 raffle entries. If an individual participated in all study components, they received 10 raffle entries. LiveText graciously agreed to contribute three Amazon gift cards in increments of $50, $100, and $150 as incentived for the first round of the study. The author contributed four $25 Amazon gift cards. In addition, the study abroad office agreed to provide one raffle winner with a $250 study abroad tuition credit. The study abroad tuition credit was applied to the winner's financial aid account. If the winner had already paid their study abroad tuition and fees, the amount would be refunded to the student by the financial aid office.

To determine the raffle prize winners, participants names were entered into a separate Microsoft Excel document when the study was done – each participants’ name was listed as many times as the number of raffle entries they had accrued based on their participation. The author then used a random number generator to select the winners. The raffle prizes were selected in ascending order of monetary value (i.e. the first winner got a $25 gift card and the last winner got the $250 study abroad credit). The winners of the raffle prizes were notified via email.

Furthermore, all students who started both surveys and submitted all reflective prompts were awarded a $25 study abroad credit, which was funded by the study abroad office. At the
end of the study, the author gave the study abroad office a list of participants who should receive the credits. No research data was attached to the names on the list provided.

**Spring Semester**

The procedures for the second round of the study were very similar to the first round, but some adjustments were made to account for having multiple institutions involved and different study abroad program dates. The similarities and differences are noted below:

1. Additional institutions were recruited during the Fall semester, and in November and December, a member of the study abroad office from each participating institution sent an email to all students who fit the sampling criteria to ask for their participation. The procedures for obtaining informed consent and gathering a list of participants were the same as outlined above.
2. The procedures for randomly assigning the participants to the experimental and control groups were exactly the same.
3. The procedures for administering the pre-survey to all participants were the same, but the dates were adjusted to align with the start and end dates for the Spring study abroad programs. See Table 3 for details.

<table>
<thead>
<tr>
<th>Table 3: Spring Pre- and Post-Survey Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Dates</td>
</tr>
<tr>
<td>Jan 1 - Jan 15</td>
</tr>
<tr>
<td>Jan 1 - Jan 15</td>
</tr>
<tr>
<td>Jan 16 - Jan 30</td>
</tr>
<tr>
<td>Jan 16 - Jan 30</td>
</tr>
<tr>
<td>Jan 30 - Feb 12</td>
</tr>
</tbody>
</table>
4. The procedures for administering the reflective prompts to all participants were the same, but the dates were adjusted to align with the date ranges for the Spring study abroad programs. See Table 4 for details. During this round of the study, the reflective prompt emails were sent via MailChimp to help organize the cohorts of students and automate the personalization, but the emails contained the same content and were still sent from the author’s university email address.

<table>
<thead>
<tr>
<th>Start Dates</th>
<th>End Dates</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8(a&amp;b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 1 - Jan 15</td>
<td>Apr</td>
<td>Jan 2</td>
<td>Jan 16</td>
<td>Jan 30</td>
<td>Feb 13</td>
<td>Feb 27</td>
<td>Mar 20</td>
<td>April 3</td>
<td>Apr 17</td>
</tr>
<tr>
<td>Jan 1 - Jan 15</td>
<td>May</td>
<td>Jan 2</td>
<td>Jan 23</td>
<td>Feb 6</td>
<td>Feb 27</td>
<td>Mar 20</td>
<td>Apr 3</td>
<td>April 24</td>
<td>May 8</td>
</tr>
<tr>
<td>Jan 16 - Jan 30</td>
<td>May</td>
<td>Jan 16</td>
<td>Feb 6</td>
<td>Feb 20</td>
<td>Mar 6</td>
<td>Mar 27</td>
<td>Apr 17</td>
<td>May 8</td>
<td>May 15</td>
</tr>
<tr>
<td>Jan 16 - Jan 30</td>
<td>Jun</td>
<td>Jan 16</td>
<td>Feb 6</td>
<td>Feb 27</td>
<td>Mar 20</td>
<td>Apr 3</td>
<td>Apr 24</td>
<td>May 15</td>
<td>Jun 5</td>
</tr>
<tr>
<td>Jan 30 - Feb 12</td>
<td>May</td>
<td>Jan 30</td>
<td>Feb 20</td>
<td>Mar 6</td>
<td>Mar 27</td>
<td>Apr 10</td>
<td>Apr 24</td>
<td>May 8</td>
<td>Jun 22</td>
</tr>
<tr>
<td>Jan 30 - Feb 12</td>
<td>Jun</td>
<td>Jan 30</td>
<td>Feb 20</td>
<td>Mar 20</td>
<td>Apr 3</td>
<td>Apr 24</td>
<td>May 15</td>
<td>May 29</td>
<td>Jun 12</td>
</tr>
<tr>
<td>Feb 13 - Feb 27</td>
<td>Jun</td>
<td>Feb 13</td>
<td>Mar 6</td>
<td>Mar 20</td>
<td>Apr 10</td>
<td>May 1</td>
<td>May 15</td>
<td>June 5</td>
<td>Jun 19</td>
</tr>
</tbody>
</table>

5. The procedures for conducting the post-survey were the same, but the dates are listed in Table 3.
**Incentives**

The structure of the raffle prize incentives was the same in the second round, but the prizes were modified because it was not possible for all participating institutions to fund study abroad credits. Thus, the $250 study abroad credit was removed from the list of raffle prizes and the $25 study abroad credit for full participation was not included either. However, LiveText generously provided three Amazon gift cards in increments of $50, $100, and $150 as incentives for the second round of the study. The author contributed four $25 Amazon gift cards as well as a $200 Amazon gift card. The procedures for determining the raffle prize winners were the same as they were in the Fall semester.

**Data Analysis**

All of the data was collected by August 2017. The different types of analyses that were conducted for the surveys, reflective responses, and combined data are described in this section and summarized in a table in *Appendix K*. All of the analyses were conducted in SPSS and Microsoft Excel.

**GPI™ Pre-Post Surveys**

1. Descriptive statistics were run for demographic data collected in the pre-survey for all participants. These included frequency tables for categorical variables such as gender, race/ethnicity, and class year, and descriptive statistics, including mean, range, and standard deviation, for continuous variables such as age and cumulative GPA.

2. Each participants’ scores for the GPI™ “Perspective Taking” scales were calculated to determine pre- and post- intercultural competence scores on each of the six dimensions. Each participants' GPI™ gains scores were calculated by subtracting their pre-survey
scores from their post-survey scores. Descriptive statistics and confidence intervals were run for the pre-survey scores, post-survey scores, and survey gains scores.

3. Paired sample t-tests were conducted to test for significant differences between the pre- and post-survey scale scores for each survey dimension.

4. Independent sample t-tests were used to explore differences between the experimental and control groups as well as other groupings of participants (i.e. those who submitted reflective responses and those who did not), but, unfortunately, the group sample sizes were not large enough to make valid statistical conclusions.

5. Cronbach Alpha's were run for the pre- and post-survey experience composite variables to ensure reliability of the grouped items. Descriptive statistics were calculated for each variable as well.

6. Independent sample t-tests (for dichotomous variables) and bivariate correlations (for continuous variables) were used to determine if there were any relationships between students’ GPI™ scores and their demographics, pre-study abroad activities, and/or study abroad experience variables.

7. The additional questions on the post-survey were analyzed to determine what students thought about the value of the reflective prompts and ePortfolio method.

**Reflective Responses**

1. Participants' reflective prompts were rated using the AAC&U Intercultural Knowledge and Competence VALUE rubric by three external raters and the author. These scores were averaged across raters to determine students' rubric ratings for each of the six rubric categories for each of the reflective prompts. The ratings for the first four reflective prompts were then averaged to determine students' first half ratings for each rubric
category, and the ratings for the remaining reflective prompts were averaged to determine students' second half ratings for each rubric category. Participants' first half ratings were subtracted from their second half ratings to calculate their difference ratings, which estimated their intercultural competence growth in each rubric category. Descriptive statistics and confidence intervals were calculated for the first half, second half, and difference ratings.

2. Paired sample t-tests were used to determine whether or not there were significant differences between the first half and second half ratings for each rubric category.

3. As a measure of validity, participants' average word count per response and total word count was compared to their average rubric ratings (first half and second half) using bivariate correlations for each rubric category.

4. For each response within a given reflective prompt and rubric category, a count of ratings was calculated to show the level of alignment between raters. If all four raters gave a rating for a response for a particular category, the count was 4. If all four raters did not rate a response for a particular category, the count was also 4 because they all agreed that the item was unrelated to the category. If only one, two, or three out of the four raters gave a rating for a response for a particular category, the count was 1, 2, or 3 respectively. The total numbers of 4s was then divided by the total number of reflective responses within each prompt (which ranged from 20 to 41) to calculate the percentage of "exact agreement." The total number of 3s and 4s was also divided by the total number of reflective responses within each prompt to calculate the percentage of "approximate agreement."
5. The Intra-Class Coefficient (ICC) was used to determine the degree of correlation and agreement between the raters' rubric ratings. This particular statistic was selected to measure inter-rater reliability because there were more than two raters and the rubric categories can be considered interval data (Koo & Li, 2016). ICC estimates and their 95% confident intervals were calculated based on a mean-rating ($k = 4$), absolute-agreement, 2-way random-effects model. In other words, the ICC was measuring if the four raters assigned the same exact ratings, and the model assumed that the participants were chosen at random and it is known how each rater rated each participant (Garson, 2009). According to Cicchetti (1994), ICC kappas should be interpreted based on the following levels: less than 0.40 = poor; 0.40 to 0.59 = fair; 0.60 to 0.74 = good; 0.75 to 1.00 = excellent.

6. The content of the reflective responses was also analyzed using a case study method. Six participants were selected as representative cases based on their overall rubric difference ratings (averaged across all categories). Two were selected who had ratings below the sample mean, another two had ratings close to the sample mean, and the final two had ratings above the sample mean. For each of these pairs, one case was chosen from the experimental (ePortfolio) group and the other was chosen from the control (Google Forms) group. The content of these cases were reviewed for alignment with the rubric, and select quotes were used as examples of responses to the reflective prompts.

**Combined Data**

1. Bivariate correlations were used to examine whether or not there was a relationship between participants’ first half, second half, and/or rubric difference ratings and their GPI™ pre-survey, post-survey, and/or gains scores. Although the six rubric categories
and six GPI™ survey dimensions are not the same, there are enough similarities between them to expect some degree of alignment. The anticipated relationships between the two are displayed in Table 12 within Chapter 4.

2. Using the demographic data reported in the pre-survey, analyses were conducted to determine if any demographic differences existed for participants' rubric ratings.

3. Using the pre-study abroad activities and study abroad experience items from the surveys, bivariate correlations were used to examine any relationships between those variables and students' rubric ratings.

4. The selected participant cases, which were chosen based on their overall rubric difference ratings in relation to the sample mean ratings, were compared to their overall survey gains scores in relation to the sample mean scores.

**Ethical Considerations**

This study was approved by the University at Albany Institutional Review Board (IRB) prior to being implemented. The second round of the study was approved through IRB modification procedures and approved by the IRB at each of the participating institutions. Students who participated in the study helped to further knowledge in the ePortfolio and study abroad fields, and they may have found that their participation enhanced their study abroad experience. The risks of participating were very minimal. Participants were not required to disclose any information that they were uncomfortable with sharing. All questions on the surveys were optional, and the reflective response content submitted throughout the semester was dependent upon how the participants wanted to answer the questions. Although the survey questions and reflective prompts asked the participants to be introspective, they did not ask the participants to reveal any confidential or risky information. The reflective prompts were similar
to the types of questions that friends, family, or a course instructor might ask a student who is traveling abroad. In addition, although the students were encouraged to complete all components of the study, their participation was voluntary. Even after a student agreed to participate in the research, completed the informed consent document, or began the study, they could decide to leave the study at any time without penalty. Participants received a raffle entry for each survey they started and each reflective response they submitted.

The study intended to not only advance knowledge in the ePortfolio and study abroad fields, but to also provide the participating institutions with feedback about learning and assessment mechanisms to use with study abroad students in the future. Participants in the experimental group had the option to share their ePortfolio entries publically, but they were not required to do so. If students did not share publically, the content was kept confidential and stored in the LiveText Via™ platform. To the author's knowledge, none of the participants in the ePortfolio group created a public ePortfolio. The reflective responses from the control group were kept confidential, and after the data was extracted from Google Forms, it was saved on the author's password protected personal computer. The data from the pre- and post- surveys was

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11 Through employee education, training and risk analysis efforts, LiveText, Inc. adheres and conforms to the Family Education Rights and Privacy Act (FERPA) regulation. All user data is strictly not "publicly releasable" and therefore not available to any external parties. Additionally, within the platform any “Non-Directory” data is viewable to only Account Administrators who have been designated by the client with permissions to view this data. LiveText, Inc. fully manages and administers its entire server and network system environment – these activities are not outsourced to any external or 3rd parties. LiveText, Inc. does utilize a 3rd party (Equinix) for co-locating / hosting its PRODUCTION systems. The cabinets / cages which LiveText, Inc. leases are only accessible to authorized personnel. Equinix undergoes rigorous and regular security and IT audits (i.e. SSAE16 certification superseding the SAS70 certification).

12 Google's Privacy Policy - We work hard to protect Google and our users from unauthorized access to or unauthorized alteration, disclosure or destruction of information we hold. In particular: We encrypt many of our services using SSL; We offer you two step verification when you access your Google Account, and a Safe Browsing feature in Google Chrome; We review our information collection, storage and processing practices, including physical security measures, to guard against unauthorized access to systems; We restrict access to personal information to Google employees, contractors and agents who need to know that information in order to process it for us, and who are subject to strict contractual confidentiality obligations and may be disciplined or terminated if they fail to meet these obligations.
collected in Campus Labs' Baseline\textsuperscript{13} platform, and the author was the only user with access to the project. After both surveys were completed, the raw data files were extracted and saved on the author's password protected personal computer. The survey data will be kept for three years in accordance with Institutional Review Board (IRB) guidelines.

**Design Issues**

Although this study was carefully designed, there were several potential design issues that should be addressed because they can threaten the internal and external validity of the study.

**Threats to Internal Validity**

“Internal validity threats are experimental procedures, treatments, or experiences of the participants that threaten the researcher’s ability to draw correct inferences from the data about the population in an experiment” (Creswell, 2013, p. 205). Some of the potential issues in this study were selection bias, the use of self-reported data, and incomplete data. Selection bias is when participants in the study have particular characteristics that make them different from the broader population (Creswell, 2013). In this study, students had already self-selected to go on study abroad trips, which means they may exhibit higher intercultural competence scores from the beginning or differ from the general student population in some way. However, all participants had a similar opportunity to increase their intercultural competence, and by randomly assigning the participants to the experimental and control groups, there was less of a chance that the groups differed by pre-determined characteristics rather than the intervention. In some studies, communication between participants in the experimental and control groups can be

\textsuperscript{13} All data will be stored through Campus Labs servers and will only be accessible through a unique username and password. Campus Labs has implemented various security measures at the application, network, and physical level to ensure that data will not be compromised. At the application level, several security measures and coding standards are in place such as code to guard against common hacking techniques, rules related to strength of passwords, and staying up-to-date on all security and release updates. Protection at the network level includes features such as dual firewalls, SSL encryption and 24/7 monitoring. Campus Labs servers are housed within a Class A Data Center, compliant with TIA standards. The servers are always staffed, have three-tiered access points, and 24/7 camera surveillance.
a problem because the participants may change their behavior based on what they believe to be the desired outcomes of the study or they may feel resentful that one group is being treated differently than another (Creswell, 2013). In this study, there were only be a few participants at each study abroad location, so the chance of participants discussing the study with one another was limited.

Another concern was the use of self-reported data to measure students’ intercultural competence gains. One fear was that students might intentionally rate themselves higher in order to demonstrate what they believe are socially desirable responses. Yet, Braskamp and colleagues, (2014) reassure users that the GPI™ should not produce biased self-reported data. They explain:

In constructing the pool of items and testing them we eliminated items that persons indicated were easy to respond to in a “highly socially desirable” manner. Persons taking the GPI™ do not have reason to present themselves in a certain way since the GPI™ is not a selection instrument. However, the honesty with which a person self-reports determines the trustworthiness of GPI™ results. (p. 10)

There was also a concern that students would rate themselves higher on the pre-survey because they believed they were answering honestly, but then after they studied abroad, the survey items had a different meaning, and their new scores would not accurately represent their amount of growth. However, because Braskamp and colleagues' (2014) research does demonstrate positive change based on the pre- and post- tests, the author did not expect this potential issue to be an actual threat.

Incomplete data, or lack of full participation, was a serious risk to the validity of this research. The study asked students to complete two surveys and eight reflective prompts, which may have been perceived by students as a lot of work. If students did not complete both surveys, there was not enough data to compute scores for intercultural competence gains. Similarly, if
students did not complete enough reflective prompts, there may not have been enough data to utilize the reflective responses. Dietrich and Olson (2010) advise international educators to embed assessment processes into course or program completion requirements so that students are motivated to participate and view it as part of the learning experience. Unfortunately, it was not possible to make the components of this study a requirement for study abroad students. The author hoped that the initial recruitment email sent from the participating institutions' study abroad office would catch students’ attention and the raffle prize incentives would keep them motivated to participate. The author originally planned to get enough participants in the Fall semester, but that did not happen. Thus, in the Spring semester, she coordinated with study abroad offices at three additional institutions to help recruit more participants.

**Threats to External Validity**

“External validity threats arise when experimenters draw incorrect inferences from the sample data to other persons, other settings, and past or future situations” (Creswell, 2013, p. 206). This study is intended to provide evidence regarding the efficacy of using reflection via ePortfolios for learning and assessment in study abroad programs. The findings can be used by study abroad professionals within the context of their work, but the results are not intended to be applicable to the broader study abroad outcomes literature. Thus, readers of this dissertation should mindfully consider the parameters of the study when attempting to draw any generalizable inferences.

**Summary**

Using a mixed-methods design, this study collected data using the GPI™ pre-post survey and students' open-ended responses to reflective prompts. The survey data and reflective prompts, rated using the AAC&U Intercultural Knowledge and Competence VALUE rubric,
were both used to answer the research questions. The study also used an experimental design, which was intended to examine the efficacy of using ePortfolios. All the details of this methodology, including the sample, instruments, and procedures, were explained in this chapter. Further, the chapter described how the data was analyzed, reviewed ethical considerations, and discussed concerns with the research design. The next chapter provides the results of the study.
Chapter 4: Results

The research questions for this dissertation sought to examine the efficacy of using student reflection via ePortfolios to enhance and assess student learning in study abroad programs. The first group of research questions pertained to the achievement of intercultural competence, as the desired student learning outcome for study abroad:

1. Do students increase their intercultural competence while studying abroad for one semester?
   a. Do certain pre-study abroad activities and/or study abroad experiences and environments impact students' intercultural competence more than others?
   b. Does using an ePortfolio while studying abroad enhance students’ intercultural competence?

The first half of this chapter discusses the findings of the GPI™ survey data within the context of these research questions. The second group of research questions aimed to understand the effectiveness of using student reflection to assess intercultural competence:

2. Can reflective responses be used to effectively assess students' attainment of intercultural competence?
   g. How reliable is the AAC&U Intercultural Knowledge and Competence VALUE rubric when used to rate students' reflective responses?
   h. Do students' reflective response ratings align with their survey scores?
   i. Do students find value in completing reflective responses?

The second half of this chapter explores the data derived from the participants’ reflective responses within the context of these research questions. Quantitative and qualitative data from
both sources (survey and reflections) are used together to derive a more complete understanding of participants' study abroad outcomes and how to best assess them.

**Study Sample**

The full sample was comprised of 81 undergraduate student participants. The majority of participants identified as women (87.2%) and as White (67.9%)\(^\text{14}\), with an average age of 19.9 years old. In terms of class standing, the sample was 24.4% sophomores, 47.4% juniors, and 28.2% seniors. The participants' self-reported mean cumulative grade point average (GPA) was 3.42 and ranged from 2.60 to 3.98. The fields of study with the highest concentrations of participants in the sample were Arts & Humanities (23.1%), Social and Behavioral Sciences (16.7%), and Business or Law (14.1%). The participants also reported their parents' highest education level (for either parent); 21.7% reported a high school degree or lower, 10.3% an associate's degree, 24.4% a bachelor's degree, 6.4% some graduate school, and 37.2% a graduate degree.

Part of the research study was designed to test an experimental research question, so the sample was initially divided into experimental (ePortfolio) and control (Google Forms) groups, each of which contained 41 and 40 participants, respectively. All of these participants completed the pre-survey. Unfortunately, as illustrated below in Figure 1, the sample size decreased over the course of the study. Forty-five participants did not complete any or only one reflective prompt, so they were removed from the experimental and control groups and placed into a new third group called the “no reflection” group. Then, even fewer participants completed the post-survey, meaning that quantitative data for intercultural competence gains was not available for

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\(^{14}\) Race was collapsed into a dichotomous variable, White or Non-White, for the purposes of analysis because the same size was too small to disaggregate by specific races.
them. The final sample sizes were 8 for the experimental (ePortfolio) group, 18 for the control (Google Forms) group, and 10 for the no reflection group.

![Sample size chart]

**Figure 1:** Sample size. This figure illustrates how the initial sample sizes decreased based on participants' actual participation in different components of the study.

There were no significant differences for the pre-survey scores or GPA between the two original or three final groups, which suggests there were no pre-existing differences between the randomly assigned groups. There were also no significant differences for the pre-survey scores or GPA between participants who completed six or more reflective prompts and those who completed fewer or none, which indicated there were no pre-existing differences between the students who actively participated and those who did not. Possible reasons for declining participation in the study are explored in the limitations section within Chapter 5.

**Global Perspectives Inventory (GPI™)**

The first research question sought to understand how students can increase their intercultural competence while studying abroad. The Global Perspectives Inventory (GPI™) was used as the primary source of quantitative data to answer this question. The GPI™ is comprised of a pre-survey and post-survey designed to assess students' intercultural competence within six
dimensions: Cognitive Knowing, Cognitive Knowledge, Intrapersonal Identity, Intrapersonal Affect, Interpersonal Social Responsibility, and Interpersonal Social Interaction. A description of each dimension can be found in Appendix D. As described in Chapter 3, the GPI™ calculates a score for each dimension by aggregating a series of multiple choice five-point Likert-scale agreement items. The list of items for each dimension can be found in Appendix F. Scores were calculated for the pre-survey as well as the post-survey, and the difference between the two scores estimated students' intercultural competence gains.

Pre-Survey

Table 5 provides descriptive statistics for the pre-survey scores for each of the six GPI™ dimensions. The N differs by scale because scores were not calculated for any dimensions in which the participant did not complete all of the items used to calculate the score. The mean

<table>
<thead>
<tr>
<th>GPI Dimensions</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>95% CI Lower</th>
<th>95% CI Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Knowing</td>
<td>78</td>
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<td>0.422</td>
<td>3.848</td>
<td>4.038</td>
</tr>
<tr>
<td>Cognitive Knowledge</td>
<td>76</td>
<td>3.761</td>
<td>0.555</td>
<td>3.634</td>
<td>3.887</td>
</tr>
<tr>
<td>Intrapersonal Identity</td>
<td>78</td>
<td>3.953</td>
<td>0.492</td>
<td>3.842</td>
<td>4.064</td>
</tr>
<tr>
<td>Intrapersonal Affect</td>
<td>77</td>
<td>4.384</td>
<td>0.393</td>
<td>4.295</td>
<td>4.474</td>
</tr>
<tr>
<td>Interpersonal Social Responsibility</td>
<td>74</td>
<td>3.654</td>
<td>0.513</td>
<td>3.535</td>
<td>3.773</td>
</tr>
<tr>
<td>Interpersonal Social Interaction</td>
<td>75</td>
<td>3.460</td>
<td>0.814</td>
<td>3.273</td>
<td>3.647</td>
</tr>
</tbody>
</table>

scores ranged from 3.460 (on Interpersonal Social Interaction) to 4.384 (on Intrapersonal Affect). In other words, on the five-point Likert scale, the lowest-scored dimension represents a level of
agreement ranging from "neutral" to "agree" and the highest-scored dimension represents a level of agreement ranging from "agree" to "strongly agree." Thus, on average, students were either neutral or in agreement with most of the scale items. It is important to note that the scores tended to be on the high-end of the Likert scale on several of the pre-survey dimensions, which means there was less room for students to show growth on the post-survey.

In addition to measuring intercultural competence within the six dimensions, the surveys also asked about students' pre-study abroad curricular and co-curricular activities. As described in Chapter 3, these questions were grouped to form several composite variables (see Appendix G). On average, students took 1-2 courses (M=1.494, SD = .912) within subjects identified as potentially relevant (Academic Coursework scale). For the Faculty Interactions measure, students, on average, rated their frequency of interactions between "sometimes" and "often" (M=2.300, SD = .781). Similarly, students, on average, rated their level of participation in relevant Co-curricular Experiences between "sometimes" and "often" (M = 2.112, SD = .628). Students, on average, reported positive agreement scores (on a five-point Likert scale) for the items in the Connection to Campus measure (M = 3.788, SD = .793). Most of the students (75.6%) had not previously studied abroad, but 12.8% had already completed a short-term study abroad experience, 5.1% had completed one semester length study abroad experience, and 6.4% had completed two or more semesters abroad (see Appendix L for details).

There were no significant differences for students' pre-survey scores based on their gender, age, or class standing. However, students who identified as races other than White scored higher (M = 3.983, SD = .655) than those who identified as White (M = 3.663, SD = .482) on the Cognitive Knowledge dimension, t(74) = 2.366, p = .021. Thus, race may have an impact on one aspect of students' intercultural competence prior to studying abroad.
Bi-variate correlations tests were run to explore the relationship between participants' pre-study abroad experiences and their scores on the pre-study abroad GPI™ scales (see Appendix M) to see if there were any experiences that potentially pre-disposed students to higher levels of intercultural competence prior to studying abroad. Academic Coursework was positively correlated with Cognitive Knowledge, \( r(75) = .469, p < .01 \), Intrapersonal Affect, \( r(76) = .269, p < .05 \), Intrapersonal Social Responsibility, \( r(73) = .377, p < .01 \), and Interpersonal Social Interaction, \( r(74) = .325, p < .01 \). Thus, students who engaged in more coursework related to intercultural competence (i.e. multicultural course, foreign language, service-learning, etc.) prior to studying abroad also demonstrated higher levels of intercultural competence on four out of six of the GPI™ dimensions. The Faculty Interactions measure was positively related to Cognitive Knowledge, \( r(75) = .307, p < .01 \), and Interpersonal Social Responsibility, \( r(73) = .540, p < .01 \). This finding demonstrates that students who have more conversations with faculty members outside the classroom and/or engage in challenging discussions in the classroom have higher scores on the GPI™ scales related to their level of understanding and awareness of various cultures (Cognitive Knowledge) and their level of social interdependence (Interpersonal Social Responsibility). Similarly, students' frequency of potentially relevant Co-Curricular Experiences was positively associated with Cognitive Knowledge, \( r(75) = .450, p < .01 \), Intrapersonal Identity, \( r(77) = .289, p < .05 \), and Interpersonal Social Responsibility, \( r(73) = .530, p < .01 \). Since two of those correlations were similar to the correlations found with Faculty Interactions, it is possible that the relationships among these variables may be more indicative of the types of students who engage in those experiences than the learning gained from those experiences themselves. The Connection to Campus measure was not significantly correlated with students' pre-study abroad GPI™ scores. Interestingly, prior study abroad experience was not related to
participants' pre-study abroad GPI™ scores. Even when broken into a dichotomous variable—no prior study abroad experience versus study abroad experience—there were no significant differences between the two groups, but the sample size of the group with prior experience was very small.

**Post-Survey**

*Table 6* provides descriptive statistics for the post-survey scores for each of the six GPI™ dimensions. The N differs by scale because scores were not calculated for any dimensions in which the participant did not complete all of the questions used to calculate the score. The mean scores ranged from 3.661 (on Interpersonal Social Interaction) to 4.286 (on Intrapersonal Affect). The lowest and highest average scores on the post-survey were the same dimensions as those on the pre-survey.

<table>
<thead>
<tr>
<th>GPI Dimensions</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>95% CI Lower</th>
<th>95% CI Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Knowing</td>
<td>34</td>
<td>3.836</td>
<td>.430</td>
<td>3.686</td>
<td>3.987</td>
</tr>
<tr>
<td>Cognitive Knowledge</td>
<td>35</td>
<td>3.846</td>
<td>.621</td>
<td>3.632</td>
<td>4.059</td>
</tr>
<tr>
<td>Intrapersonal Identity</td>
<td>34</td>
<td>3.976</td>
<td>.540</td>
<td>3.787</td>
<td>4.164</td>
</tr>
<tr>
<td>Intrapersonal Affect</td>
<td>35</td>
<td>4.286</td>
<td>.481</td>
<td>4.121</td>
<td>4.451</td>
</tr>
<tr>
<td>Interpersonal Social Responsibility</td>
<td>36</td>
<td>3.661</td>
<td>.630</td>
<td>3.448</td>
<td>3.874</td>
</tr>
<tr>
<td>Interpersonal Social Interaction</td>
<td>35</td>
<td>3.764</td>
<td>.569</td>
<td>3.569</td>
<td>3.960</td>
</tr>
</tbody>
</table>

There were no significant differences for post-survey dimension scores based on gender, age, or GPA. There was, however, a correlation between participants' post-survey scores for
Cognitive Knowledge and their class standing, $r(31) = .356$, $p = .042$. This means that students who have been in college longer were more likely to report a greater deal of understanding and awareness of different cultures, but, interestingly, this relationship did not occur with the pre-survey scores. Unfortunately, the sample size was too small at this stage of the study to explore any differences by race.

The post-survey also asked students a variety of questions about their study abroad experiences. As described in Chapter 3, most of these items were grouped into composite measures (see Appendix $H$). Appendix $N$ provides the descriptive statistics for these items. On average, students rated their frequency of Intercultural Communication and Host-Country Immersion close to "often" ($M = 2.978$, $SD = .750$; $M = 2.793$, $SD = .761$) on a four-point Likert scale. Students, on average, reported moderate agreement on the items related to Positive Faculty/Staff Experiences ($M = 3.245$, $SD = .703$) and Self-Reported Positive Outcomes ($M = 3.896$, $SD = .749$), which were scored on a five-point Likert scale. When asked how often they reflected upon their experiences through writing/journaling as part of a course requirement, students, on average, reported frequencies between "rarely" an "sometimes" ($M = 1.588$, $SD = 1.351$). However, when asked how often they shared/discussed with others about their experiences abroad, students, on average, reported much greater frequency ($M = 3.286$, $SD = .860$).

Participants’ study abroad experiences were compared to participants' post-survey GPI$^\text{TM}$ scores, and several relationships were found (see Appendix $O$). Host-Country Immersion positively correlated with Cognitive Knowledge, $r(34) = .532$, $p < .01$, Intrapersonal Identity, $r(33) = .527$, $p < .01$, Intrapersonal Affect, $r(34) = .352$, $p < .05$, and Interpersonal Social Responsibility, $r(35) = .517$, $p < .01$, but Intercultural Communication only correlated with
Intrapersonal Identity, $r(33) = .534, p < .01$. Thus, students were likely to score higher on multiple post-survey scales if they felt that they immersed themselves in the country, pushed themselves out of their comfort zone, explored new habits and behaviors, and/or gathered information from their surrounding community (Host-Country Immersion). Yet, behaviors like speaking in the host country's language and interacting with individuals from the host country (Host-Country Communication) only aligned with one dimension of intercultural competence. The Positive Faculty/Staff Experience measure did not significantly correlate with the post-survey scale scores, which is not surprising because one would not assume that positive interactions with faculty and staff would directly impact students' attainment of intercultural competence. Self-Reported Positive Outcomes, on the other hand, was highly related to Cognitive Knowledge, $r(34) = .650, p = .000$, and Intrapersonal Identity, $r(33) = .646, p = .000$.

Since these are two of the more tangible dimensions, it makes sense that students who identified positive outcomes on the survey were also likely to report higher levels of these aspects of intercultural competence. Further, students who were more likely to report reflecting upon their experiences abroad as part of a course requirement scored higher on Interpersonal Social Responsibility, $r(34) = .434, p < .05$, and students who reported sharing their study abroad experiences more frequently with others scored higher on Cognitive Knowledge, $r(34) = .352, p < .05$, and Intrapersonal Identity, $r(33) = .619, p = .000$. Details are shown in Appendix O. In addition to those significant correlations, students who studied abroad in a country where English was the primary language spoken had lower scores ($M=3.455, SD=.522$) on Interpersonal Social Interaction than students who studied abroad where English was not the primary language ($M=3.924, SD=.546$), $t(32) = -2.377, p=.024$. There were no significant differences for post-
survey scores based on whether participants lived with a host family or in university housing, or whether participants completed an internship or service learning project while abroad.

**GPI™ Survey Gains**

*Table 7* provides descriptive statistics for the intercultural competence gains scores for each of the six dimensions. The mean scores ranged from .018 (on Cognitive Knowing) to .356 (on Interpersonal Social Interactions). Although students scored the lowest on Interpersonal Social Interactions on the pre- and post-surveys, they demonstrated the greatest amount of growth in this dimension. This could be due to the increased amount of opportunities students had to interact with people who are different from themselves while abroad or it could be due to the fact that they scored lower on this scale on the pre-survey and had more room to demonstrate growth on the post-survey in comparison to other scales. As noted by the confidence intervals, the range of gains scores varied widely in each dimension and overlapped quite a bit, so it is difficult to accurately rank the aspects of intercultural competence where students had the most self-reported gains.

<table>
<thead>
<tr>
<th>GPI Dimensions</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>95% CI Lower</th>
<th>95% CI Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Knowing Gains</td>
<td>32</td>
<td>.018</td>
<td>.237</td>
<td>-.067</td>
<td>.103</td>
</tr>
<tr>
<td>Cognitive Knowledge Gains</td>
<td>31</td>
<td>.161</td>
<td>.377</td>
<td>.023</td>
<td>.280</td>
</tr>
<tr>
<td>Intrapersonal Identity Gains</td>
<td>32</td>
<td>.104</td>
<td>.490</td>
<td>-.072</td>
<td>.281</td>
</tr>
<tr>
<td>Intrapersonal Affect Gains</td>
<td>33</td>
<td>.055</td>
<td>.358</td>
<td>-.073</td>
<td>.182</td>
</tr>
<tr>
<td>Interpersonal Social Responsibility Gains</td>
<td>32</td>
<td>.194</td>
<td>.335</td>
<td>.073</td>
<td>.315</td>
</tr>
<tr>
<td>Interpersonal Social Interaction Gains</td>
<td>33</td>
<td>.356</td>
<td>.704</td>
<td>.106</td>
<td>.606</td>
</tr>
</tbody>
</table>
Although the gains scores were viewed as a valid measurement of intercultural competence growth (as intended by the creators of the GPI™), a paired sample t-test was conducted to determine whether or not participants’ pre-survey and post-survey scale scores for each dimension were, on average, significantly different from each other. Only three out of the six dimension pairs resulted in statistically significant differences - Cognitive Knowledge, Interpersonal Social Responsibility, and Interpersonal Social Interaction, but not the other three dimensions (see Table 8). Therefore, it seems that the dimensions with relatively lower pre-survey scores had greater room for growth than dimensions with higher pre-survey scores, which caused a ceiling effect.

**Table 8: Paired Samples Statistics: Survey Scores**

<table>
<thead>
<tr>
<th>Pair</th>
<th>GPI Dimensions</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pre Cognitive Knowing</td>
<td>3.8571</td>
<td>32</td>
<td>.379</td>
<td>.067</td>
</tr>
<tr>
<td></td>
<td>Post Cognitive Knowing</td>
<td>3.8750</td>
<td>32</td>
<td>.410</td>
<td>.073</td>
</tr>
<tr>
<td>2</td>
<td>Pre Cognitive Knowledge</td>
<td>3.6581</td>
<td>31</td>
<td>.532</td>
<td>.096</td>
</tr>
<tr>
<td></td>
<td>Post Cognitive Knowledge</td>
<td>3.8194*</td>
<td>31</td>
<td>.635</td>
<td>.114</td>
</tr>
<tr>
<td>3</td>
<td>Pre Intrapersonal Identity</td>
<td>3.8646</td>
<td>32</td>
<td>.416</td>
<td>.073</td>
</tr>
<tr>
<td></td>
<td>Post Intrapersonal Identity</td>
<td>3.9687</td>
<td>32</td>
<td>.556</td>
<td>.098</td>
</tr>
<tr>
<td>4</td>
<td>Pre Intrapersonal Affect</td>
<td>4.2545</td>
<td>33</td>
<td>.422</td>
<td>.074</td>
</tr>
<tr>
<td></td>
<td>Post Intrapersonal Affect</td>
<td>4.3091</td>
<td>33</td>
<td>.485</td>
<td>.084</td>
</tr>
<tr>
<td>5</td>
<td>Pre Interpersonal Social Responsibility</td>
<td>3.4813</td>
<td>32</td>
<td>.542</td>
<td>.096</td>
</tr>
<tr>
<td></td>
<td>Post Interpersonal Social Responsibility</td>
<td>3.6750**</td>
<td>32</td>
<td>.642</td>
<td>.114</td>
</tr>
<tr>
<td>6</td>
<td>Pre Interpersonal Social Interaction</td>
<td>3.4167</td>
<td>33</td>
<td>.800</td>
<td>.139</td>
</tr>
<tr>
<td></td>
<td>Post Interpersonal Social Interaction</td>
<td>3.7727**</td>
<td>33</td>
<td>.584</td>
<td>.102</td>
</tr>
</tbody>
</table>
Notes: Pair 1 ($t(31) = -0.426, p=.673$); Pair 2 ($t(30) = -2.379, p=.024$); Pair 3 ($t(31) = -1.204, p=.238$); Pair 4 ($t(32) = -0.875, p=.388$); Pair 5 ($t(31) = -3.272, p=.003$); Pair 6 ($t(32) = -2.904, p=.007$)

There were no significant differences for survey gains scores based on participants’ gender, age, or academic standing. Thus, it seems that all students had a similar opportunity to enhance their intercultural competence while abroad. However, the diversity of the sample was limited, so this finding should be interpreted with caution.

There were several relationships found between the GPI\textsuperscript{TM} gains scores and students' study abroad experiences (shown in Appendix P). Host-Country Immersion positively correlated with Intrapersonal Identity, $r(31) = .460, p < .01$, Intrapersonal Affect, $r(32) = .371, p < .05$, and Interpersonal Social Responsibility, $r(31) = .507, p < .01$. Intercultural Communication only correlated with Intrapersonal Identity, $r(31) = .359, p < .05$. This finding was very similar to the post-survey correlations, with the exception of the relationship between Host-Country Immersion and Cognitive Knowledge, which was not evident with the gains scores. The Positive Faculty/Staff Experience measure was found to significantly correlate with Intrapersonal Affect, $r(32) = .426, p < .05$, and Interpersonal Social Responsibility, $r(31) = .441, p < .05$. Due to the fact that this experience measure did not correlate with the post-survey scores, but correlated with two gains scores, it is possible that students who benefited the most from these interactions started with lower pre-survey scores. Self-Reported Positive Outcomes was correlated with Cognitive Knowledge, $r(30) = .425, p < .05$, and Intrapersonal Identity, $r(31) = .591, p < .01$, which was similar to the post-survey scores, but to a lesser significance. In addition, students who were more likely to report reflecting upon their experiences abroad as part of a course requirement scored higher on Interpersonal Social Interactions, $r(31) = .426, p < .05$, and students who reported sharing their study abroad experiences more frequently with others scored...
higher on Intrapersonal Identity, $r(31) = .574, p < .01$. These two differed in their relationships to the post-survey score dimensions, so perhaps these experiences benefits students who scored lower on these pre-survey dimensions the most. There were no significant differences for survey gains scores based on whether or not English was the primary language in the country or based on the participants' housing arrangements.

Summary

Research question 1a states "Do certain pre-study abroad activities and/or study abroad experiences and environments impact students' intercultural competence more than others?". The findings in this study provide evidence to suggest that particular experiences do have an impact. Relevant academic coursework, co-curricular involvement, and interactions with faculty members prior to studying abroad positively related to students' levels of intercultural competence on several of the pre-survey dimensions. These activities may help students develop intercultural competence prior to studying abroad. Greater frequency of immersion in the host-country was related to significantly higher scores on four out of six of the post-survey dimensions and three of the gains dimensions. Greater frequency of intercultural communication was related to higher Intrapersonal Identity post-survey and gains scores. Positive experiences with faculty and staff while abroad was related to greater gains on Intrapersonal Affect and Interpersonal Social Responsibility. Further, students sharing with others about their study abroad experiences more often was correlated with higher Cognitive Knowledge post-survey scores and higher Intrapersonal Identity post-survey and gains scores. In addition, reflecting upon their experiences through writing/journaling as part of a course requirement was significantly related to higher Interpersonal Social Responsibility post-survey scores and Interpersonal Social Interaction gains. One reason that some items corresponded to post-survey
scores, but not gains scores, may be due to those dimensions scoring higher on the pre-survey, meaning there was less room for growth on the post-survey, and thus lower gains scores. Altogether though, the evidence does suggest that students have the opportunity to develop intercultural competence prior to and during the study abroad experience. Further, certain activities can influence greater attainment.

**ePortfolio Impact**

In order to answer the experimental research question, "Does using an ePortfolio while studying abroad enhance students’ intercultural competence?", the author intended to use the survey gains scores to compare intercultural competence gains between the experimental (ePortfolio) and control (Google Forms) groups. Unfortunately, due to sample size, statistically valid comparisons were not possible between the experimental and control group or those who completed reflective prompts and those who did not because the no reflection group was still limited with only 10 participants. Thus, this study was unable to determine if using an ePortfolio increased students' attainment of intercultural competence. Despite the small sample size, an independent sample t-test was conducted to compare the survey scores of students who completed six or more reflective prompts and those who completed fewer or none, regardless of modality (ePortfolio or Google Forms). However, no significant differences were found between the two groups' post-survey scores or gains scores. Therefore, this study cannot conclude that students have greater learning gains as a result of completing reflective responses. However, the sample size for these two groups was still very small, so these results should be interpreted with caution.
Reflective Prompts

The second research question sought to understand the extent to which reflective responses can be used to assess students' attainment of intercultural competence. While students were abroad, they were asked to respond to a series of reflective prompts throughout the semester. Out of all 81 participants, only 9 students completed all eight reflective prompts; 24 participants completed six or more, which represented 29.7% of the sample. The average number of reflective prompts completed was 2.63. The average word count per reflective response was 174.7 words, with a range of 53.4 to 452.5 words. The mean total word count for all responses per participant was 856.3 words, with a range of 55 to 2,512 words. For participants who submitted all eight reflective responses, the mean total word count was 1185.7 words, with a range of 428 to 2,341 words.

Reflective Response Rubric Ratings

The reflective prompt responses were each rated by the author and three external raters using the AAC&U Intercultural Knowledge and Competence VALUE rubric, which contains the following six categories: Knowledge: Cultural Self-Awareness (KCSA), Knowledge: Knowledge of Cultural Worldview Frameworks (KCWF), Skills: Empathy (SE), Skills: Verbal and Nonverbal Communication (SVNC), Attitudes: Curiosity (AC), and Attitudes: Openness (AO). Although the prompts were designed to elicit responses aligned with the rubric categories, the actual responses varied. For each reflective response, the raters were instructed to rate any rubric category that aligned with the content of the individual response. Thus, for each reflective prompt, there are responses that may align with none, one, some, or all of the six rubric categories. The actual ratings range from 1 (lowest score) to 4 (highest score). This section
describes the participants' average ratings and then provides an analysis of the reliability of the rubric.

Since the reflective prompts were issued throughout the semester, the scores for each prompt over time should, in theory, reflect growth. Therefore, rather than providing average ratings for each rubric category across all prompts, the prompts were divided into those given during the first half of the semester and those assigned during the second half. Table 9 displays the mean ratings for the first half, which range from 1.236 (on Skills: Empathy) to 1.698 (on

Table 9: Paired Samples Statistics: Rubric Ratings

<table>
<thead>
<tr>
<th>Rubric Categories</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pair 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Half KCSA</td>
<td>1.452</td>
<td>26</td>
<td>.358</td>
<td>.070</td>
</tr>
<tr>
<td>Second Half KCSA</td>
<td>2.223***</td>
<td>26</td>
<td>.466</td>
<td>.091</td>
</tr>
<tr>
<td><strong>Pair 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Half KCWF</td>
<td>1.279</td>
<td>21</td>
<td>.333</td>
<td>.073</td>
</tr>
<tr>
<td>Second Half KCWF</td>
<td>1.940***</td>
<td>21</td>
<td>.438</td>
<td>.096</td>
</tr>
<tr>
<td><strong>Pair 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Half SE</td>
<td>1.236</td>
<td>24</td>
<td>.315</td>
<td>.064</td>
</tr>
<tr>
<td>Second Half SE</td>
<td>2.077***</td>
<td>24</td>
<td>.365</td>
<td>.074</td>
</tr>
<tr>
<td><strong>Pair 4</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Half SVNC</td>
<td>1.698</td>
<td>23</td>
<td>.386</td>
<td>.081</td>
</tr>
<tr>
<td>Second Half SVNC</td>
<td>2.101**</td>
<td>23</td>
<td>.535</td>
<td>.112</td>
</tr>
<tr>
<td><strong>Pair 5</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Half AC</td>
<td>1.324</td>
<td>27</td>
<td>.235</td>
<td>.045</td>
</tr>
<tr>
<td>Second Half AC</td>
<td>1.823***</td>
<td>27</td>
<td>.383</td>
<td>.074</td>
</tr>
<tr>
<td><strong>Pair 6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Half AO</td>
<td>1.460</td>
<td>27</td>
<td>.373</td>
<td>.072</td>
</tr>
<tr>
<td>Second Half AO</td>
<td>1.958***</td>
<td>27</td>
<td>.448</td>
<td>.086</td>
</tr>
</tbody>
</table>

Notes: Pair 1: t(25) = -9.974, p=.000; Pair 2: t(20) = -5.401, p=.000; Pair 3: t(23) = -12.281, p=.000; Pair 4: t(22) = -2.883, p=.009; Pair 5: t(26) = -6.653, p=.000; Pair 6: t(26) = -6.911, p=.000
Skills: Verbal and Nonverbal Communication) on a four-point scale, as well as the mean ratings for the second half, which range from 1.823 (on Attitudes: Curiosity) to 2.223 (on Knowledge: Knowledge of Cultural Worldview Frameworks). A paired sample t-test was conducted to determine whether or not the mean first half and second half ratings for each rubric category were significantly different from each other. All of the first and second half rating pairs resulted in statistically significant differences (see Table 9), so, on average, students' reflective responses over time did demonstrate growth in each area of intercultural competence as defined by the rubric categories.

In order to calculate an indicator of intercultural competence growth from the rubric ratings, similar to the survey gains scores, the first half ratings were subtracted from the second half ratings to calculate difference ratings, which are shown in Table 10 and range from .230 (on

<table>
<thead>
<tr>
<th>Rubric Categories</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>95% CI Lower</th>
<th>95% CI Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference: Knowledge: Cultural Self-Awareness (KCSA)</td>
<td>26</td>
<td>.772</td>
<td>.395</td>
<td>.613</td>
<td>.931</td>
</tr>
<tr>
<td>Difference: Knowledge: Knowledge of Cultural Worldview Frameworks (KCWF)</td>
<td>21</td>
<td>.660</td>
<td>.560</td>
<td>.405</td>
<td>.915</td>
</tr>
<tr>
<td>Difference: Skills: Empathy (SE)</td>
<td>24</td>
<td>.230</td>
<td>.754</td>
<td>-.088</td>
<td>.549</td>
</tr>
<tr>
<td>Difference: Skills: Verbal and Nonverbal Communication (SVNC)</td>
<td>23</td>
<td>.403</td>
<td>.671</td>
<td>.113</td>
<td>.694</td>
</tr>
<tr>
<td>Difference: Attitudes: Curiosity (AO)</td>
<td>27</td>
<td>.499</td>
<td>.390</td>
<td>.345</td>
<td>.653</td>
</tr>
<tr>
<td>Difference: Attitudes: Openness (AO)</td>
<td>27</td>
<td>.498</td>
<td>.374</td>
<td>1.781</td>
<td>2.135</td>
</tr>
</tbody>
</table>
Skills: Empathy) to .772 (on Knowledge: Cultural Self-Awareness). Statistical tests were run to see if there were any differences in rubric difference ratings based on demographic characteristics. There were no correlations between difference scores and gender or academic standing. Age, however, did positively correlate with Skills: Verbal and Nonverbal Communication (SVNC), \( r(18) = .668, p=.001 \); older students were more likely to have higher difference ratings for this rubric category. Also, participants' cumulative grade point average was negatively correlated with Skills: Empathy (SE), \( r(22) = -.411, p=.046 \), which means students with lower grade point averages were more likely to have higher difference ratings on this rubric category.

One way of examining the validity of the rubric ratings was to analyze the relationships between word count and ratings. A correlation between higher word count and higher ratings would imply that students who write more attain higher ratings, which is problematic for students who still attain the competency, but do not write about it as thoroughly. Thus, correlations tests were run to see if there were any relationships between total word count and/or average word count per response and the mean rubric category ratings. Several positive correlations were found, which are displayed in Table 11, for first half ratings, and Table 12, for

### Table 11: Correlations between First Half Ratings and Word Counts

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</thead>
<tbody>
<tr>
<td>First Half Average Per Response</td>
<td>.238</td>
<td>.017</td>
<td>.448**</td>
<td>.449**</td>
<td>.148</td>
<td>.453**</td>
</tr>
<tr>
<td></td>
<td>.460**</td>
<td>.197</td>
<td>.514**</td>
<td>.364*</td>
<td>.564***</td>
<td>.537***</td>
</tr>
</tbody>
</table>

Notes: ***\(p<.000\), **\(p<.01\), *\(p<.05\); N ranges from 34 to 42.
second half ratings. Total word count and average word count per post were both correlated with several of the rubric categories. The same test was run to see if there were any correlations between total word count and/or average word count per response (across all responses - first and second half) and the difference ratings, but relationships were only found for two categories. Specifically, Knowledge: Knowledge of Cultural Worldview Frameworks (KCFW) was positively correlated with total word count, \( r(19) = .480, p = .028 \), and average word count, \( r(19) = .455, p = .038 \). On the other hand, Skills: Verbal and Nonverbal Communication (SVNC) was negatively correlated with total word count, \( r(22) = -.549, p = .007 \), and average word count, \( r(21) = -.581, p = .004 \). Further, there was not a significant relationship between difference ratings and the number of reflective prompts completed. These findings indicate that perhaps, in terms of validity, the relationships between word count and first and second half ratings are not too much of a concern. The next section will examine the reliability of using the AAC&U Intercultural Knowledge and Competence VALUE rubric for rating students' reflective responses.

**Rubric Reliability**

There are two different types of reliability measures that pertained to this research method. The first was the level of agreement between raters for the alignment of the reflective
responses with the rubric categories. In other words, to what extent did all the raters agree that a particular response was related/unrelated to the same rubric categories? The second reliability measure was the level of agreement between raters for the exact ratings given. So, if all of the raters agreed that a particular response was related to a particular rubric category, did they also rate it at the same level?

Using the counting method described in Chapter 3, levels of "exact agreement" and "approximate agreement" between raters for the alignment of the reflective responses with the rubric categories were calculated. Table 13 summarizes the range of ratings that each reflective prompt received from the raters in each rubric category. For example, for reflective prompt #1,

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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>41</td>
<td>3 to 21</td>
<td>0 to 28</td>
<td>0 to 11</td>
<td>0 to 13</td>
<td>14 to 39</td>
<td>2 to 28</td>
</tr>
<tr>
<td>2</td>
<td>37</td>
<td>5 to 35</td>
<td>0 to 13</td>
<td>1 to 27</td>
<td>34 to 36</td>
<td>1 to 35</td>
<td>7 to 35</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>0 to 24</td>
<td>0 to 14</td>
<td>0 to 25</td>
<td>24 to 28</td>
<td>0 to 27</td>
<td>0 to 23</td>
</tr>
<tr>
<td>4</td>
<td>27</td>
<td>0 to 8</td>
<td>1 to 7</td>
<td>0 to 12</td>
<td>0 to 8</td>
<td>1 to 25</td>
<td>6 to 24</td>
</tr>
<tr>
<td>5</td>
<td>24</td>
<td>14 to 22</td>
<td>11 to 21</td>
<td>9 to 20</td>
<td>0 to 6</td>
<td>0 to 21</td>
<td>0 to 21</td>
</tr>
<tr>
<td>6</td>
<td>22</td>
<td>5 to 19</td>
<td>8 to 19</td>
<td>6 to 20</td>
<td>2 to 12</td>
<td>2 to 20</td>
<td>0 to 20</td>
</tr>
<tr>
<td>7</td>
<td>21</td>
<td>2 to 18</td>
<td>5 to 20</td>
<td>2 to 19</td>
<td>0 to 4</td>
<td>0 to 21</td>
<td>2 to 18</td>
</tr>
<tr>
<td>8a</td>
<td>20</td>
<td>10 to 19</td>
<td>5 to 20</td>
<td>4 to 20</td>
<td>1 to 9</td>
<td>0 to 20</td>
<td>2 to 17</td>
</tr>
<tr>
<td>8b</td>
<td>20</td>
<td>3 to 15</td>
<td>3 to 14</td>
<td>1 to 17</td>
<td>3 to 6</td>
<td>0 to 19</td>
<td>1 to 18</td>
</tr>
</tbody>
</table>
which received 41 participant responses, and the rubric category Skills: Empathy (SE), one rater did not believe the category was applicable to any of the responses, while another rater gave 13 of the responses a rating (and the other two raters fell in between the range). Across all nine reflective prompts and six rubric categories, the average percentage of "exact agreement" was 29.1%, ranging from 0 to 91.9%. The average percentage of "approximate agreement" was 44.1%, ranging from 0 to 94.5%. The categories with the highest "approximate agreement" percentages were Skills: Verbal and Nonverbal Communication (94.5% agreement within Prompt #2, 90% agreement within Prompt #3, and 85% within Prompt #8b), and Attitudes: Curiosity (85.4% within Prompt #1). These findings show that there was a great deal of variation between which rubric categories different raters thought applied to each reflective response.

The Intra-Class Coefficient (ICC) was used to determine the level of agreement between the raters' actual rubric ratings. ICC estimates and their 95% confident intervals were calculated using SPSS based on a mean-rating (k = 4), absolute-agreement, 2-way random-effects model. ICC was first calculated across all ratings, regardless of the prompt or rubric categories, which resulted in a good level of agreement, $r_{ICC} = 0.657, p < .000$. An ICC was then calculated for each rubric category, regardless of reflective prompt category. The ICC for Knowledge: Cultural Self-Awareness (KCSA) was good, $r_{ICC} = 0.692, p < .000$, Knowledge: Knowledge of Cultural Worldview Frameworks (KCWF) was excellent, $r_{ICC} = 0.787, p < .000$, Skills: Empathy (SE) was good, $r_{ICC} = 0.622, p < .000$, Skills: Verbal and Nonverbal Communication (SVNC) was excellent, $r_{ICC} = 0.820, p < .000$, Attitudes: Curiosity (AC) was fair, $r_{ICC} = 0.441, p < .000$, and Attitudes: Openness (AO) was fair, $r_{ICC} = 0.425, p < .000$. Individual ICC analyses of each rubric category within each reflective prompt category were also conducted. The following four pairs demonstrate excellent agreement: Knowledge: Knowledge of Cultural Worldview Frameworks
(KCWF) within Prompt #5, \( r_{ICC} = .780, p < .000 \); KCWF within Prompt #6, \( r_{ICC} = .813, p < .000 \); KCWF within Prompt #8b, \( r_{ICC} = .810, p < .000 \); and Skills: Verbal and Nonverbal Communication (SVNC) within Prompt #8b, \( r_{ICC} = .805, p < .000 \). There were 13 additional pairs that had good levels of agreement, out of the 54 rubric category and prompt combinations. Table 14 provides examples of rubric category and reflective prompt pairings with excellent, good, and fair ICC coefficients, along with an example participant response for each.

Table 14: ICC Pairing Examples for Excellent, Good, and Fair Coefficients

<table>
<thead>
<tr>
<th>Level of Agreement</th>
<th>Rubric Category</th>
<th>Reflective Prompt</th>
<th>Example Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent (78.0%)</td>
<td>Knowledge: Knowledge of Cultural Worldview Frameworks (KCWF)</td>
<td>#5: Describe something you observed this week that differed from your own values, beliefs, or practices. What did you initially think about it? How did you make you feel? Why do you think this difference exists? What do you think now about it?</td>
<td>&quot;Italians like to spend long hours out at dinner. At first it was kind of annoying to get used to because we just wanted to hurry up and eat our food and then leave. I felt impatient waiting forever for the food and the check. But I learned that they do this because eating involves making connections with people and it's where you can sit and talk with a friend and enjoy your time together. They also say that if the food comes out too fast, then it wasn't fresh or prepared properly. They place a lot of value on food because it brings people together. I think I've gotten used to that idea and actually enjoy it. Being here has definitely made me more relaxed and has allowed me to take my time with things and be less stressed.&quot;</td>
</tr>
<tr>
<td>Good (69.4%)</td>
<td>Skills: Verbal and Nonverbal Communication (SVNC)</td>
<td>#3: Describe something about the nonverbal cues (i.e. body language, facial expressions, hand gestures, etc.) of other people who you interacted with this week. What was your initial reaction to the similarities/differences between</td>
<td>&quot;Body language in India couldn't be more different than in the U.S. When people greet each other sometimes it is a handshake and other times it will be folded hands or they will place a hand over their heart. It is rude to show someone the bottoms of your feet, especially if your feet touch someone else. When saying yes or no, there is a head nod that at first I wasn't sure of the answer. However, now I do all of the things listed above. It wasn't always so easy, it was an adjustment. Especially when asking</td>
</tr>
</tbody>
</table>
their nonverbal cues and yours? How did the similarities/differences make you feel? What do you think now about their nonverbal cues?

permission and there was a head nod, but I couldn't understand, I stood there awkwardly, feeling guilty. I want to understand, and sometimes I caused frustration that made me feel nervous. I think all of these methods are really interesting and often times more joyful and intimate. When I got better at them I began to feel closer to the community."

"Yesterday, I went to a traditional okonomiyaki restaurant with a friend. Instead of making the food in the kitchen, the chef made the food on our table. Although I understood the process of making okonomiyaki, I did not realize that the food would be made in this way, so both I and my friend were confused. Because my Japanese language skills are still weak, I could not really talk to the chef. Instead, I just had to sit and watch, while offering the little information I had about the creation of okonomiyaki to my friend. All in all, the experience was exciting. Now that I have seen the process of the food being made in front of me, I would be able to prepare myself for doing it again, and tell other friends how to do it (i.e. what to order, how long to wait while the food is cooking, etc.)."

The analyses in this section were conducted to answer research question 2a, which asks, "How reliable is the AAC&U Intercultural Knowledge and Competence VALUE rubric when used to rate students' reflective responses?". The results of the two reliability measures demonstrate that raters may have different interpretations of students' reflective responses and/or the rubric categories, which can cause inconsistencies across raters' use of the rubric. The findings also suggest that certain rubric categories were aligned with the reflective responses better than others. In some cases, this may mean that some reflective prompts were better at eliciting responses pertaining to certain rubric categories more consistently than others. In other

<table>
<thead>
<tr>
<th></th>
<th>Fair (59.2%)</th>
<th>Attitudes: Curiosity (AC)</th>
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</thead>
<tbody>
<tr>
<td>#6: Describe something you observed this week that you didn't initially understand. What did you initially think about it? How did it make you feel? What did you do to better understand it? How well do you think you could explain it to someone else now?</td>
<td>&quot;Yesterday, I went to a traditional okonomiyaki restaurant with a friend. Instead of making the food in the kitchen, the chef made the food on our table. Although I understood the process of making okonomiyaki, I did not realize that the food would be made in this way, so both I and my friend were confused. Because my Japanese language skills are still weak, I could not really talk to the chef. Instead, I just had to sit and watch, while offering the little information I had about the creation of okonomiyaki to my friend. All in all, the experience was exciting. Now that I have seen the process of the food being made in front of me, I would be able to prepare myself for doing it again, and tell other friends how to do it (i.e. what to order, how long to wait while the food is cooking, etc.).&quot;</td>
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cases, it may mean that it is easier for students to write about certain aspects of their intercultural competence in some rubric categories than others. Altogether, the findings raise questions about the usefulness of using the AAC&U VALUE rubric to rate students' reflective responses for the purpose of obtaining quantitative assessment data.

Alignment Between Survey Scores and Rubric Ratings

Since the rubric and the GPI™ survey both provide measures of intercultural competence, it was useful to test the extent to which the two instruments aligned to estimate the validity of using the rubric for assessment purposes. Table 15 shows the author's predictions for

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<tbody>
<tr>
<td>Cognitive Knowing</td>
<td>Cognitive Knowing</td>
<td>Cognitive Knowing</td>
<td>Cognitive Knowing</td>
<td>Cognitive Knowing</td>
<td>Cognitive Knowing</td>
</tr>
<tr>
<td>Intraperinal Identity</td>
<td>Intraperinal Affect</td>
<td>Intraperinal Affect</td>
<td>Intraperinal Affect</td>
<td>Intraperinal Affect</td>
<td>Intraperinal Affect</td>
</tr>
<tr>
<td></td>
<td>Interpersonal Social Responsibility</td>
<td>Interpersonal Social Responsibility</td>
<td>Interpersonal Social Responsibility</td>
<td>Interpersonal Social Responsibility</td>
<td>Interpersonal Social Responsibility</td>
</tr>
<tr>
<td></td>
<td>Interpersonal Social Interactions</td>
<td>Interpersonal Social Interactions</td>
<td>Interpersonal Social Interactions</td>
<td>Interpersonal Social Interactions</td>
<td>Interpersonal Social Interactions</td>
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</table>

Table 15: Predicted Alignment Between Survey and Rubric
the alignment between the six dimensions of the GPI™ survey and the six categories within the AAC&U VALUE rubric based on the provided descriptions for each dimension and category. When comparing the two instruments, all six survey dimensions and rubric categories were included in each analysis. Because the reflective prompt responses were collected throughout the semester, an overall average across categories would not be comparable to the post-survey scores. Therefore, the first half and second half ratings were compared to the pre-survey and post-survey scores, respectively, and the difference ratings were compared to the survey gains scores.

Only three of the pre-survey scale scores were correlated with first half rubric ratings; Cognitive Knowledge was positively related to Knowledge: Cultural Self-Awareness (KCSA), $r(38) = .337, p=.033$, and Attitudes: Curiosity (AC), $r(40) = .343, p=.026$. Intrapersonal Affect was positively correlated with Attitudes: Curiosity (AC), $r(41) = .375, p=.013$, and Attitudes: Openness (AO), $r(40) = .367, p=.017$. Interpersonal Social Interaction was positively related to Attitudes: Openness (AO), $r(38) = .388, p=.013$, which was the only correlation that fit the predicted alignments. There were no statistically significant correlations between the post-survey scores and the second half rubric ratings. The only relationship between the survey gains scores and rubric difference ratings was between Cognitive Knowing and Skills: Verbal and Nonverbal Communication (SVNC), $r(16) = .484, p=.042$. Although the GPI™ pre-post survey and the AAC&U Intercultural Knowledge and Competence VALUE rubric were not designed to measure the exact same aspects of intercultural competence, the survey dimensions and rubric categories were similar enough that some alignment was expected. Unfortunately, this study did not provide evidence to support most of the anticipated correlations. Assuming the survey is the true measure of intercultural competence, this finding questions the validity of the rubric.
In addition to comparing the rubric ratings with the survey dimension scores, bivariate correlations were run to explore any relationships between the rubric ratings and participants' pre-study abroad and study abroad experiences, as defined by the additional variables from the GPI™ survey. In terms of pre-study abroad activities, Academic Coursework was positively correlated with first half ratings for Attitudes: Curiosity (AO), \( r(43) = .494, p < .01 \), and Attitudes: Openness (AO), \( r(42) = .404, p < .01 \), and Connection to Campus was positively related to first half Attitudes: Openness (AO) ratings, \( r(43) = .404, p < .01 \). (see Appendix Q). As for study abroad experiences, only Self-Reported Positive Outcomes was positively correlated with any of the second half rubric ratings; specifically, it was related to Knowledge: Knowledge of Cultural Worldview Frameworks (KCFW), \( r(22) = .484, p < .05 \), and Attitudes: Openness (AO), \( r(22) = .460, p < .05 \) (see Appendix R). None of the study abroad experiences were significantly correlated with the rubric difference ratings (see Appendix S). These findings also challenge the validity of the rubric since the experiences that corresponded with higher scores on the survey did not all align with higher rubric ratings. Overall, in response to research question 2b, which asks "Do students' reflective response ratings align with their survey scores?", the evidence provided by this study is not affirmative.

**Reflective Response Content**

In addition to the survey scores and rubric ratings, students' reflective response content itself indicated that learning occurred throughout the students' time abroad. The quality of responses varied by student, but most of the students were quite thoughtful. It is worth noting that, in some cases, students reflected a great deal on learning outcomes that were unrelated to intercultural competence such as time management, self-reliance, and career-related skills. Thus, since intercultural competence was the dependent variable in this study, other learning outcomes
were not captured by the analyses conducted. In this section, six representative participant cases were selected and analyzed further. The particular examples were selected based on their rubric difference ratings averaged across all rubric categories; two were chosen who were rated below the mean, two were chosen who were rated about average, and another two were chosen who were rated above the mean. For each rating grouping, one participant was chosen from the experimental (ePortfolio) group and the other was chosen from the control (Google Forms) group. The full excepts can be viewed in Appendix T.

In reading through the six cases, it is clear that although the students received the same reflective prompts, the content and quality of their responses varied. The two students with lower ratings placed more emphasis on goals and outcomes that were unrelated to intercultural competence and/or exhibited less interest in intercultural competence, while the students with higher ratings were better able to articulate how their experiences impacted their intercultural competence growth. Table 16 provides select quotes from the six cases for four of the reflective prompts to illustrate the variety of responses. Keep in mind that the rating level indicated in the table refers to the participants' overall average rating across all prompts and rubric categories, not necessarily the ratings they received for that specific prompt. Since each prompt could have multiple ratings (one per rubric category) it would be difficult to make comparisons of the

<table>
<thead>
<tr>
<th>Reflective Prompt</th>
<th>Overall Rubric Rating</th>
<th>Select Quotes Not Necessarily the Entire Reflective Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>#2: Describe something about the spoken language of other people who you interacted with this week. What was your initial reaction to the</td>
<td>Low</td>
<td>&quot;There are certain phrases that I have picked up on that I don't hear in the US. A few examples: instead of “thank you” they say “cheers”, instead of “fries” they call them “chips”, and our “chips” in the US are “crisps” to them. The first time someone said “cheers” to me I kinda froze up and didn't know how to respond properly, but I'm getting the hang of things slowly but surely.&quot;</td>
</tr>
</tbody>
</table>
similarities/differences between their spoken language and yours? How did the similarities/differences make you feel? What do you think now about their spoken language?  

"When I met with my speaking partner (who is a Japanese student), she told me that she had difficulty understanding my Japanese because it was so formal. This was surprising to me. However, in general my Japanese skills are very lacking, and I feel inept whenever I need to converse with someone, such as when I am asking a question or buying something. This makes me want to learn more as soon as I can."

"A lot of my roommates aren't good at English so it saddens me that I can't communicate with them better. However, as the week went on I became better at slowing down and being able to communicate on some level with all different languages. I am now learning the language and speaking it as much as I can! This experience has helped me to appreciate diversity by interacting with the multitude of languages surrounding me. To realize language is such a powerful and beautiful tool and if it becomes a barrier than you must look beyond the content of the words but the body language expressing it."

"I think I'm well on my way to accomplishing what I wanted to do this semester. All of my classes have grabbed my focus and attention because they cover such different topics from the courses I usually take at my home university."

"My main goal has been to learn more Japanese. This task has been difficult, but I believe I have been learning more since I arrived. The complexity of the language itself makes the task more difficult, but my continued studying will ensure further progress."

"I pushed myself to go out to all the events, introduce myself to new people and make connections that I know will last. Being on my own has forced me to pay attention to grocery shopping, bills, laundry and everything else I never had to take full responsibility for before coming here. I am forced to stay organized so that everything will get done which has lead me to be a much more independent person. Most importantly, I had always had the motivation to travel and see all the beauty the world has to offer. Since I know I am here for only a short few months, I take every opportunity possible to travel to new places, try new things such as skydiving, scuba diving and surfing, and taking chances that I don't have while I'm home. Being social and adventurous are my two
biggest goals I hope to progress in while abroad, and it has been so helpful to achieve since I am surrounded by so many other people hoping to get the same experiences out of their stay in Australia as well."

"Last week I was at a Buddhist temple in Kyoto and I saw people lining up at a long rope with a bell at the top. I didn't know what the people were doing when they got up to the temple but I thought they must be doing some form of prayer. I asked my Japanese friend with me what they were doing and they showed me how to make an offering of 5 yen, ring the bell, clap, and bow before praying at the temple. I'm glad I know what to do now and I'll probably start doing it more often at other temples."

"In Scotland, I noticed many of the restaurants and pubs had slot machines in them. I actually got carded when trying to order a baked potato for lunch in a pub with a slot machine. Initially I thought it was very odd that they would put slot machines in regular restaurants. I asked one of the waitresses about it, and apparently casinos aren't very common in Scotland, but regular restaurants and pubs can get licenses to have slot machines. The slot machines do bring in a bit of extra income to many establishments. If someone asked about it, I would explain the licensing system to them."

"In Australia, murder of Cane Toads is encouraged amongst locals. As an Environmental Scientist and animal lover, I was angry and startled when I first say my friend take a rock to the toad's head to end its life. At first I refused him the opportunities to kill the toads when the chances were present, which he respected, however he was very adamant that they should be killed at all cost. I did some research on "why you shouldn't kill cane toads" without any results supporting my opinion. I read reports from researchers and scientists that claimed cane toads should be killed-however humanely. They are a non-native species that affect Queensland ecosystems. They are deadly animals that have caused problems in other species; their presence has created another predator that the native species have to adapt to."

"Last semester, I was burnt out from working, studying, losing my mom, and having to come to terms with graduating and finding a stable, grown-up job. Studying abroad here in Ireland was supposed to be a vacation
particular aspects of your experience have been especially meaningful and/or memorable?

before facing the real world head on and it truly has been. I never had the opportunity to travel out of the United States before this semester and getting to witness and learn about the deep histories of countries much older than the United States and meeting people from other cultures has been amazing."

"This experience has made me more comfortable in the uncomfortable. I have always been relatively independent, but I think now I am even more so. I think going to a country where I can't read any signs or labels or understand the native tongue has taught me how to easily adapt to the unknown and force me to trust my judgments. I am more comfortable with uncertainty than I was before this experience."

"Other than meeting amazing people from all different backgrounds, the one part that I found especially meaningful was my study placement in where I spent my semester working with Eritrean refugees. I always wanted an opportunity like this but it wasn't until I came to Europe, that this was possible and the magnitude of it as well. Throughout my village, the level of inter-sectoral collaboration and community participation is higher than I ever could imagine in the US. It is truly an honor to be a part of such a wonderful experience and a loving community and I'm forever grateful."

quality across different individual responses by prompt. However, by organizing the participants based on their overall ratings, Table 16 provides a snapshot of the range of participant responses. In many of the examples, it seems that students with higher ratings demonstrated greater curiosity and better articulated an understanding of the intricacies of cultural differences. They seemed to actively seek out commonalities and differences between cultures and expressed a more sophisticated appreciation for their study abroad experience.

In another effort to ascertain if there was any alignment between the participants' survey scores and rubric ratings, the two items were compared for the six participant cases in their
relation to the scores for the whole sample (in terms of low, average, and high). For those with high and average overall rubric ratings (aggregated across all rubric categories), their overall survey gains scores (aggregated across all dimensions) were also high and average, respectively. For the two participants with low overall rubric ratings examples, however, their overall rubric ratings did not align with their overall survey gains scores; one had a survey gains score that was about average, and the other had a survey gains scores that was only slightly below average.

The content of the reflective responses demonstrates meaningful student learning, but due to issues related to reliability and validity of the rubric (as described above) and the focus on intercultural competence as the desired learning outcome, it was difficult to quantitatively capture students' growth through the rubric assessment method. It seems that the rubric ratings were able to more accurately capture the intercultural competence of students who were able to clearly articulate themselves, but may have missed some of the growth for students who, for a potential variety of reasons, provided less relevant or thorough content in their responses. It is important to remember that the students who participated in this study did so on a voluntary basis, with raffle items as their only incentive, so there was no mechanism for teaching students how to properly answer the questions or ensure the quality of their responses.

Student Perspectives

The final section of this chapter explores the degree to which students enjoyed or found value in completing the reflective prompts. A few questions were added to the post-survey to quantitatively measure these feelings, and the descriptive statistics for these items are displayed in Table 17. The average scores ranged from 3.069 to 3.586, on a five-point Likert scale, which indicates that most participants selected the "Neutral" and "Agree" answer choices. Approximately 51.7% of respondents agreed or strongly agreed with the statement, "The
Table 17: Reflective Prompt Question Statistics

<table>
<thead>
<tr>
<th>Relevant Survey Items</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q43. The reflective prompts helped me understand my experiences abroad.</td>
<td>29</td>
<td>3.345</td>
<td>1.010</td>
</tr>
<tr>
<td>Q44. I enjoyed answering the reflective prompts.</td>
<td>29</td>
<td>3.552</td>
<td>.910</td>
</tr>
<tr>
<td>Q45. I had enough time to complete the reflective prompts.</td>
<td>29</td>
<td>3.586</td>
<td>.946</td>
</tr>
<tr>
<td>Q46. Responding to the reflective prompts enhanced my experience abroad.</td>
<td>29</td>
<td>3.069</td>
<td>.884</td>
</tr>
</tbody>
</table>

reflective prompts helped me understand my experiences abroad." There were also two questions that specifically asked the experimental (ePortfolio) group about their experiences using the LiveText Via™ platform. Of the nine respondents to those questions, 66.6% of students agreed that it "was easy to use" and 33.3% agreed that they "enjoyed using LiveText Via." However, these respondents are likely to be biased since they were among the smaller group who persisted through the entire research study.

Some students provided feedback about the study by responding to the open-ended question included in the post-survey and/or sending an email to the author. All of the statements are listed below:

1. "I liked the prompts that were given and they made me think more about my study abroad experience.”

2. “It helped me keep my thoughts about what I was feeling organized, and [I] realized new things as I was writing.”

3. "I like the different submissions throughout the experience as times were changing. There could've been better questions to generate insight and depth."
4. "I thought the questions were interesting and thought provoking."

5. "Some questions weren't very applicable to me because Australia was not very different from the US."

6. "Some of the questions seemed repetitive, or I wasn't sure if I answered them correctly."

7. "Perhaps make responses to past prompts available for viewing - some prompts asked for further reflection based on past responses, and I could not remember the exact answers submitted."

Based on the first four comments, it seems like some students found the reflective prompts to be valuable, but this feedback was only received from a small portion of participants. The remaining comments provide some interesting insights. The fifth comment reveals that some students who studied abroad in English speaking countries may not think that there are cultural differences, and thus reflecting upon intercultural competence, is relevant. The second part of the sixth comment shows that at least one student thought that there were correct ways to answer reflective prompts, which indicates the need for training prior to asking students to engage in reflection. The seventh comment must have been from a student in the Google Forms group because the ePortfolio group did have the ability to view their previously submitted content, so that shows that there is some value in using an ePortfolio platform.

Although the quantitative and qualitative data on students perceptions of the reflective prompts is very limited, the feedback does shed light on research question 2c, "Do students find value in completing reflective responses?". At best, students did see the value in reflecting, but the majority of students were likely apathetic. Only 36 of the original 81 participants completed any reflective prompts. Again, since participation was voluntary, it is difficult to tell why some students did or did not continue the study. In some cases, they might not have had sufficient
internet access, and in other cases, they may have been too overwhelmed with being abroad that they did not have time to complete the reflective prompts. Since this information is largely unknown, it would not be fair to equate lack of participation entirely to lack of interest. Approximately 44% of the sample still did participate, so they either had intrinsic motivation (based on their values and goals), or extrinsic motivation (based on the raffle incentives), or a combination of both.

**Summary**

Since this study contained multiple methods, the results were organized in this chapter by the type of data collected and aligned with the primary research questions. The first section reviewed the data from the GPI™ pre-post survey. The second section reported data about the reflective responses, including a summary of participants' reflective response ratings, an analysis of rubric reliability, an analysis of the alignment between the survey scores and rubric ratings, an examination of the reflective response content, and a discussion of student perspectives regarding written reflection. The following chapter will discuss the findings in relation to the broader literature on this topic, explain the limitations of this study in more detail, and provide recommendations for practice and future research.
Chapter 5: Discussion

The purpose of this dissertation was to better understand the efficacy of using reflection via ePortfolios for learning and assessment in study abroad programs. More specifically, this study, using a mixed-methods design, explored students' attainment of intercultural competence using a pre-post survey as well as responses to reflective prompts. The first set of research questions investigated the extent to which students can increase their intercultural competence while studying abroad, whether certain experiences have an impact on the development of intercultural competence, and whether the use of an ePortfolio can enhance intercultural competence. The second set of research questions examined the effectiveness of using reflective responses for assessment purposes by measuring the validity and reliability of the AAC&U VALUE rubric and comparing students’ rubric ratings with their survey scores. The previous chapter outlined the results in details, but this chapter discusses the implications and limitations of the findings and shares recommendations for practice as well as future research.

Study Abroad Learning

Prior academic research shows that study abroad can be a meaningful learning experience for students. For example, studies have demonstrated that students can become more open to experiences (Angulo, 2008), expand their global knowledge (Sutton & Rubin, 2004), and attain cultural competence (Statham, 2015). However, it has been typical for study abroad professionals to assume that these outcomes are occurring, rather than conducting assessment processes to be sure. As assessment of student learning outcomes become more prevalent in academic and non-academic areas within higher education, the expectation for assessment of study abroad outcomes is increasing as well (Ogden, 2015). Although students could attain a variety of learning outcomes, this study chose to focus on intercultural competence specifically. The first primary research question sought to determine if students do indeed increase their
intercultural competence while studying abroad. Using the GPI™ pre-post survey as well as the content of students' reflective responses, it was evident that students did gain some degree of intercultural competence, but it varied based on the specific dimensions.

**GPI™ Gains**

The GPI™ survey provided quantitative estimates of students' perceived intercultural competence gains on six dimensions: Cognitive Knowing, Cognitive Knowledge, Intrapersonal Identity, Intrapersonal Affect, Interpersonal Social Responsibility, and Interpersonal Social Interaction. Participants' exhibited varying levels of attainment for each of these dimensions, but, on average, the sample demonstrated positive mean scores for each, which showed that most students did report growth. However, when the pre- and post- scores were examined using a paired sample t-test, significantly higher post-survey scores were only found for three of the six dimensions: Cognitive Knowledge, Interpersonal Social Responsibility, and Interpersonal Social Interaction. Since those dimensions, on average, also had the lowest mean pre-survey scores, it is likely that the lack of significant differences for the remaining three dimensions was due to a ceiling effect. In other words, for the three dimensions with no significant differences, students rated themselves on the higher end of the Likert scale on the pre-survey, so they had less room to report growth on the post-survey. Thus, the findings do not necessarily indicate that students did not increase their intercultural competence in those three dimensions, but it does mean the survey instrument may not be able to adequately measure growth in those areas despite the GPI™ authors' findings in their validation study (Braskamp, Braskamp, & Merrill, 2009). Grigorescu (2015), in a study of 147 undergraduate study abroad students, noted similar results using the GPI™; statistically significant differences were found for both cognitive domains and Interpersonal Social Interaction, but not the other dimensions. Altogether, the pre-post survey
does provide evidence to suggest that, on average, students do increase their attainment of at least some aspects of intercultural competence.

**Reflective Responses**

Participants' reflective responses were rated using the AAC&U Intercultural Knowledge and Competence VALUE rubric, which contains the following categories: Knowledge: Cultural Self Awareness, Knowledge: Knowledge of Cultural Worldview Frameworks, Skills: Empathy, Skills: Verbal and Nonverbal Communication, Attitudes: Curiosity, and Attitudes: Openness. Since the reflective prompts were issued throughout the semester, the rubric ratings were broken up into first half and second half ratings based on the timing of the prompts. The difference of the two ratings provided an estimate of intercultural competence growth. Much like with the GPI™ gains scores, students exhibited varying levels of attainment in each of the rubric categories. A paired samples t-test was also conducted with the first and second half ratings and significant differences were found for all six rubric categories. Thus, despite concerns about validity and reliability, which will be discussed later in this chapter, positive increases were found for all rubric categories based on students' reflective response ratings.

The reflective response content itself, aside from the rubric ratings, provided another source of data to explore student learning outcomes. Within their responses, students did exhibit evidence of intercultural competence. See the following two example quotes:

- “I've realized things that I didn't even know I didn't know. In the back of my mind, I've always thought European cultures were cooler somehow, compared to culture in the States. But now I don't see culture as being cooler or better from another, but just different.”
• “My ability to be open to practices other than my own has been challenged during my time here, but I feel very strongly that it is an important quality to have.”

To analyze the content further, six participant cases representative of high, average, and low overall rubric ratings were selected and examined. See Appendix T for their full responses and Table 16 in Chapter 4 for select quotes. According to Mezirow (1991), there are two types of reflection: transformation of meaning schemes and transformation of meaning perspectives. The former refers to when a person assesses their assumptions about something and discovers that their initial beliefs were incorrect, which is basic reflective learning. The latter refers to when a person evaluates the reasons why they have a particular assumption and then alters their perspectives, which is called transformative learning and is less common. The cases with low and average overall ratings did not exhibit as much evidence of transformative learning compared to those with high overall ratings. The students with the low ratings provided a surface level understanding of cultural differences, but they did not seem interested in learning more deeply about these differences or allowing these differences to impact their own cultural self-awareness. When reading their reflective responses, one does not get the impression that their exposure to other cultures has transformed their intercultural competence. The students with average ratings made more comparisons to American culture and seemed to begin to develop new perspectives. Compared to the lower rated cases, these students had personal goals more clearly related to intercultural competence. They still, however, mention a lot of surface-level cultural differences, rather than delving deeper into the underlying causes for these differences. The students with higher ratings seemed to more actively and critically question their believes, values, and assumptions. Thus, the reflection completed by those students may have led to transformative learning (Mezirow, 1991).
Influential Experiences

One of the secondary research questions sought to understand whether certain pre-study abroad activities and/or study abroad experiences and environments impact students’ attainment of intercultural competence. The GPI™ pre-post survey included additional items about students’ experiences which were used to address this question. The findings indicated that Academic Coursework, Faculty Interactions, and Co-Curricular Experiences were positively correlated with several GPI™ dimensions, which indicates that some experiences may contribute to attainment of intercultural competence prior to studying abroad. The items used to calculate those composite variables can be reviewed in Appendix G. Higher education administrators may want to encourage students to participate in these activities if their institution hopes to develop all students’ intercultural competence, regardless of whether or not students have the opportunity to study abroad.

The study also found that Intercultural Communication, Host-Country Immersion, Positive Faculty/Staff Experiences, and Self-Reported Positive Outcomes positively correlated with several GPI™ dimensions. The items used to calculate those composite variables can be reviewed in Appendix H. Another finding worth noting was that students who studied abroad in a country where English was not the primary language spoken scored higher on the Interpersonal Social Interaction post-survey score than students who studied abroad in a country where English was the primary language spoken. The relationships between the GPI™ dimensions and gains scores were similar to the correlations with the post-survey scores, but not identical. The differences may be due to the ceiling effect. In other words, students appeared to benefit the most from certain study abroad experiences in the dimensions that had lower pre-survey scores (thus, more room for reported gains). Thus, it may be valuable to consider the experiences that aligned
with the post-survey scores even if they did not align with gains scores since the pre-survey scores are not a factor in the analysis of post-survey correlations.

**ePortfolio Impact**

Part of this research was designed to understand if ePortfolios add value to student learning within study abroad. ePortfolio scholars argue that student reflection is the key component of effective ePortfolio pedagogy (i.e. Dalton, 2007; Jenson 2011; Zubizarreta, 2004), but there is limited research that investigates the influence of the ePortfolio itself. In this study, the experimental (ePortfolio) and control (Google Forms) groups were both asked to complete the same reflective prompts, but the experimental group had access to the additional features provided by the ePortfolio platform. Unfortunately, the sample size was not large enough in both groups to obtain a statistically valid comparison of their survey gains scores. Since the final sample contained participants who completed most of the reflective prompts and others who completed only a few or none, a t-test between those two groups' survey scores was conducted, but no statistically significant differences were found. Although this indicates that the students who completed reflective responses did not necessarily develop higher levels of intercultural competence than others, the sample size was still very small so the finding should be interpreted with caution.

Further, one item in the post-survey asked participants to indicate how frequently they engaged in writing/journaling as part of a class requirement and another item asked how frequently they shared/discussed their study abroad experiences with others. These two experiences did correlate with certain dimensions on the post-survey and gains scores. Therefore, it is evident that the act of reflecting may contribute to greater attainment of certain aspects of
intercultural competence. However, these items do not address the efficacy of using an ePortfolio specifically nor do they provide experimental evidence to support the influence of reflection.

Summary

According to Mezirow’s (1991) transformative learning theory, when people are confronted with dissonance and they actively reflect on their assumptions and beliefs, they have an opportunity to transform their perspectives. Based on this framework and prior research on study abroad outcomes, the author expected participants in this study to demonstrate intercultural competence growth. The quantitative and qualitative findings supported this notion, and also showed that certain experiences align with greater intercultural competence gains. In addition, it was evident that students’ perceived levels of attainment can vary within the particular dimensions or aspects of intercultural competence. Unfortunately, due to the small sample size, the study was unable to determine if reflection via ePortfolios or reflection itself has an impact on students’ learning outcomes. Regardless, the findings showed that students can increase their levels of intercultural competence as a result of studying abroad for one semester.

Study Abroad Assessment

The second set of research questions pertained to the efficacy of using reflective responses to effectively assess students' attainment of intercultural competence. Study abroad professionals are under increasing pressure to produce evidence of students learning, and there is limited research on study abroad assessment methods. Pre-post surveys are sometimes used (Deardorff, 2011), but they are summative and reactive in nature; by completing surveys, students are not typically engaging in a learning opportunity (unless their scores are being shared back and reflected upon). In addition, surveys generally lack depth of insight about students' experiences. Student reflection is considered to be useful for authentic assessment when the
written content is rated using an appropriate rubric. This study used the AAC&U Intercultural Knowledge and Competence VALUE rubric to assess the participants' reflective responses. This section reviews the findings concerning the validity and reliability of this method.

**Validity**

It is important to note that the quality and quantity of students' reflective responses varied, perhaps due to their ability or willingness to articulate the experiences that influenced their attainment of intercultural competence. Some students may have more prior experience with written reflection, have a more natural ability to articulate their thoughts, or have an easier time following the directions to answer the actual prompts assigned. There was also quite a range in terms of the amount of words students wrote per response (55 to 453 words). Word count was positively correlated with most of the rubric categories for the first and second half ratings, which shows that the longer the post, the higher it tended to get rated. While this relationship is not surprising, it is problematic if students are experiencing intercultural competence growth, but are just not explaining themselves well in their reflective responses. On the other hand, it is possible that students' responses did accurately reflect their perspectives about their learning gains. As Salisbury and colleagues (2013) found, although students who study abroad may increase their interactions with diverse others, they do not necessarily develop a deeper appreciation of cultural difference. If reflective responses are going to be used for assessment, some steps can be taken to mitigate this ambiguity by providing more instruction and/or practice for reflection prior to travelling abroad. In this study, the students were not told specifically that their reflective responses were going to be used to evaluate their intercultural competence, they were not shown the rubric, and they were not required to write a minimum length per response.
These practices could potentially reduce the variations in responses unrelated to actual learning gains.

Furthermore, some students, in their reflective responses, chose to focus on other goals and objectives of study abroad that did not pertain to intercultural competence. For example, many students wrote about how their autonomy in a foreign country increased their self-reliance. Others discussed outcomes such as enhancing their time-management skills, developing adaptability, or participating in activities related to their career goals. See the following two example quotes:

- “It sounds cliché, but I think being abroad has helped me grow as a person. I've never been a fan of school, and I'm still not, but being here allowed me to decide on another major and a possible career path. The subject I chose is irrelevant to my experience. The important idea is that I gained the confidence to realize that I can and will succeed academically.”

- “Overall, I am better equipped to deal with change and the unknown since this semester has been full of the unknown. I am more adaptable to people and situations anywhere.”

In the cases where students emphasized experiences related to outcomes other than intercultural competence, they obtained lower rubric ratings because their reflective content was not relevant to the rubric categories. Therefore, study abroad professionals may want to create assessment mechanism that account for various student learning outcomes rather than just intercultural competence.

Reliability

One of the secondary research questions explored the reliability of using the AAC&U Intercultural Knowledge and Competence VALUE rubric to rate students' reflective responses.
for assessment purposes. Two types of measures were conducted to analyze the reliability of the rubric. The first examined the degree to which the author and the three additional raters assigned ratings for each prompt to the same rubric categories. Because there were nine different reflective prompts and six categories in the rubric, there were 54 prompt and rubric category combinations. When examining reliability, a percentage of "approximate agreement" was calculated for each pair, and there was a lot of variability among the results. The average percentage of "approximate agreement" was 44.1%, and ranged from 0 to 94.5%. Thus, some prompts and rubric category combinations elicited higher levels of agreement between raters than others. The rubric category that produced that highest levels of agreement for three different prompts was Skills: Verbal and Nonverbal Communication. Attitudes: Curiosity also produced a high-level agreement for one of the reflective prompts. In these instances, the rubric descriptions aligned well with the content received by the reflective prompts. For example, prompts #2 and #3 both specifically asked students to reflect on different aspects of communication, so it was easier for the raters to agree that the content should receive ratings in the Skills: Verbal and Nonverbal Communication rubric category. Although the reflective prompts were constructed to intentionally obtain responses that would align with the rubric categories, some alignment was more straightforward than others and some students answered the prompts more directly and/or fully than others. These inconsistencies made it difficult to achieve agreement between the raters. Benander and colleagues (2016) found similar results when testing the efficacy of using five other AAC&U VALUE rubrics to measure students' ePortfolio content; they discovered that some rubrics aligned with ePortfolio content better than others. While their analysis was at the rubric, rather than rubric category level, the findings are comparable. Thus, the issue of
alignment is this study is not surprising, but the only way to explore this aspect of reliability is to test the rubric with actual student content.

The second reliability test used was an Intra-Class Coefficient (ICC), which measured the level of agreement between the exact scores given by each of the raters. The ICC for all ratings, regardless of prompt or rubric categories, was good. The ICCs for each of the rubric categories, regardless of prompt varied from fair to excellent, and the ICCs for each of the 54 prompt and rubric category pairs ranged from poor to excellent. Only four pairs demonstrated excellent agreement and 13 other pairs had good levels of agreement. In some cases, high ICCs could be due to a large number of null scores rather than actual matching scores. On the other hand, low ICCs could reflect a lack of variability among the participants' ratings, the small number of participants, and/or the small numbers of raters (Koo & Li, 2016). Also, low ICCs could have been due to raters interpreting the rubric differently. Regardless, it is clear that some aspects of intercultural competence may be easier to capture reliability through students' reflective responses than others. If study abroad professionals decide to use student reflections as an assessment mechanism, they must be mindful of the potential limitations.

The success of this type of assessment method may depend on the specific circumstances involved (i.e. the reflective prompts, the rubric categories and descriptions, the rubric training, the raters' backgrounds and experience, etc.). Therefore, although the method did not prove to be very effective in this study, the results cannot be generalized to all situations in which reflective content is rating using a rubric. For example, in Doscher's (2012) study of rubrics used to evaluate global learning course outcomes, the author found high levels of inter-rater reliability. However, the rubrics in that study were specifically designed to assess the desired learning objectives and the raters participated in a formal norming session.
Alignment Between Assessment Methods

Another secondary research question aimed to examine the alignment between participants' survey scores and rubric ratings. A comparison of these two data sources served as another measure of validity. Although the GPI™ and AAC&U rubric were not designed to measure the exact same aspects of intercultural competence, the dimensions and categories were similar enough to expect some alignment (as shown in Table 15 in Chapter 4). However, the results of this study did not support the anticipated relationships. There was only one expected relationship found between pre-survey scores and first half ratings (for Interpersonal Social Interaction and Attitudes: Openness). There were no statistically significant correlations between the post-survey scores and the second half rubric ratings, and there was only one correlation between GPI™ gains scores and rubric difference ratings, but it was not one of the expected alignments. In addition, no relationships were found between the study abroad experience variables and students' rubric difference ratings, like there were with students' GPI™ gains scores. If those experiences are associated with higher survey gains, they should also relate to the rubric difference ratings. The lack of alignment between the two assessment methods calls into question the validity of one or both of the methods.

When comparing the overall scores for the six participant cases, however, there were observed similarities between the scores. The students with high overall rubric ratings also scored high overall on the survey and the students with average over rubric ratings also scored about average on the survey, but the students with low overall rubric ratings did not score correspondingly low on the survey. Perhaps students who experience a high level of intercultural competence gains are also better able to articulate their growth in their reflective responses, but students who experience average level gains are more varied in their ability to articulate their
growth. On the other hand, since the survey gains are self-reported, perhaps students perceive their levels of intercultural competence to be higher than they actually are or are reporting what they perceive to be socially desirable responses on the survey, which would skew their scores. Unfortunately, the reasons for the lack of alignment between the survey scores and rubric ratings are unclear.

**Student Perspectives**

Another variable that may influence the quality of students' written reflection is whether or not they enjoy reflecting and/or believe that it's beneficial. In this study, 51.7% of 29 respondents agreed or strongly agreed with the statement, "The reflective prompts helped me understand my experiences abroad." Some students also provided qualitative feedback about their experience, and while many of the comments were positive, some students expressed reasons why the reflective prompts were challenging for them to complete or seemed irrelevant to them. There is not enough data in this study to draw conclusions about students' perceptions of written reflection, but that may be worth examining in future research.

**Summary**

Overall, the research findings challenge the assumptions that student reflections, rated using a rubric, can be used to effectively assess students' attainment of intercultural competence. The written reflections themselves may provide evidence of student learning, but some students, for various reasons, may be able to reflect on and articulate their experiences better than others, which is problematic when relying on their response content for assessment purposes. The AAC&U rubric demonstrated higher inter-rater reliability in some categories and for some reflective prompts than others. In addition, the rubric category scores did not align well with the survey scale scores or experience variables from the survey. The findings do not suggest that
using reflections for assessment is a completely inappropriate method, but the findings point out several challenges that need to be considered by study abroad professionals and/or addressed with future research.

**Limitations**

As mentioned throughout the chapter, this dissertation had several limitations pertaining to the methodology that must be addressed. The greatest limitation was the sample size, but there were also concerns with survey bias and the rubric rating procedures.

It was very difficult to recruit enough students for this study because of the limited number of students who met the sampling criteria and because of the amount of components included in the study. Only a small portion of undergraduate students study abroad each semester; at each of the institutions participating in this study, the approximate number of eligible students ranged between 30 to 125. In typical online survey research, response rates are often low (Fan & Yan, 2010), and in this study, participants were not just asked to take one survey. They were asked to complete ten components - a pre-survey, eight reflective prompts, and a post-survey, which could have been perceived as a lot of work to do voluntarily. Therefore, it is not surprising that the sample size was only 81 in total and dwindled based on completion of the various components. Due to this issue, it was not possible to draw any experimental conclusions. It is also possible that the students who chose to participate in the study (at all - even if they only completed the pre-survey) differed in some way from the students who did not choose to participate.

Further, the sample size limited the author's ability to disaggregate the findings by demographic characteristics. The majority of the participants in this study identified as White (67.9%) and as women (87.2%). Compared to the population of students who studied abroad
from the United States in 2015-16, this skewed demographic is not uncommon; nationally, study abroad participants were approximately 72% White and 67% women (Institute of International Education, 2017). It is also not surprising to have a higher proportion of women participants since women tend to be more likely to participate in research studies (Porter & Whitcomb, 2005). The current study sample was also similar to the national population in terms of class standing; the sample was comprised of 47.4% juniors, and in 2015-16, approximately 33% of students who studied abroad from the U.S. were juniors (Institute of International Education, 2017). Although the demographics of the sample were similar to the population, the small numbers of students in each demographic group made it difficult to make statistically valid comparisons.

The use of a quantitative survey instrument to measure intercultural competence gains also had limitations. Participants' levels of each dimension were calculated based on their responses to Likert scale items. It is possible that students' self-reported scores were unintentionally higher than reality and/or intentionally skewed to align with the perceived socially desirable answer choices. Even if that was not the case, some of the survey scales were limited by a ceiling effect, whereas for certain dimensions, students scored on the higher end of the Likert scale on the pre-survey and did not have much room to demonstrate growth on the post-survey scales. Thus, the correlations with GPI™ gains scores must be interpreted with that limitation in mind.

Another limitation may have been the use of the ePortfolio itself. Although this was a main focus of the research, the use of the LiveText Via™ platform may have had an unintentionally adverse effect. Since more students in the control (Google Forms) group completed reflective responses than those in the experimental (ePortfolio) group, it seems that
using the platform may have been inconvenient for students. One of the major differences between using the ePortfolio platform versus Google Forms is that students had to log into the website. Perhaps that extra step deterred students from participating.

An additional limitation could have been the rubric rating procedures. All of the raters did receive the same instructions, but they did not have a formal training or norming session. Some research indicates that rubric training can enhance the effectiveness of using a rubric (Rezaei & Lovorn, 2010), while other research demonstrates that rater training does not always lead to greater rater agreement (Pufpaff, Clarke, & Jones, 2015). Therefore, it is unclear whether additional instruction would have increased inter-rater reliability in this study, but it is a possibility.

**Recommendations for Practice**

Despite the limitation, this research can still provide several recommendations for practice. First, if study abroad professionals are interested in enhancing and/or assessing students' attainment of intercultural competence, they should be intentional about defining the construct and considering the various dimensions or aspects that comprise it. Using the GPI™ instrument and the AAC&U VALUE rubric showed that it may be easier for students to make progress and/or demonstrate growth in certain areas of intercultural competence than others. Some of this may depend on individual students' goals or reasons for studying abroad, but the different aspects should be considered when intercultural competence is stated as a desired study abroad learning objective. Similarly, study abroad professionals should encourage and assess other types of learning outcomes that students may achieve while studying abroad. It was evident in the reflective content that not all students regarded development of intercultural competence
as their primary objective even if they were increasing their attainment as a result of their experiences.

If intercultural competence is the desired learning objective though, study abroad professionals should encourage students to engage in activities and behaviors abroad that are associated with higher levels of growth. For example, this study showed that greater frequencies of Host-Country Immersion, when students felt that they immersed themselves in the country, pushed themselves out of their comfort zone, explored new habits and behaviors, and/or gathered information from their surrounding community, was related to higher scores on several of the GPI™ dimensions. Further, higher education administrators, more broadly, can also use the results of this study to encourage behaviors that may promote greater development of intercultural competence for students that do not have the opportunity to study abroad. This study found that certain academic coursework, co-curricular experiences, and greater frequency of interaction with faculty is associated with higher levels of several GPI™ pre-survey scores. In addition to the results in this study, institutions can use other research and their own assessment findings, if they have them, to identify best practices and intentionally promote those to students.

For study abroad professionals who are interested in using reflection or reflection via ePortfolios as an assessment method, this study offers some suggestions based on the experience conducting this research. The most challenging part of this study was getting students to participate voluntarily. If study abroad professionals have the ability to make reflection a required component of their study abroad programs, the implementation may be more successful. Not only would this increase the amount of data, but it would reduce the response bias and make it possible to require pre-study abroad training on how to effectively reflect. This
recommendation aligns with Dietrich and Olson's (2010) advise to embed assessment processes into program completion requirements so students view it as part of the learning experience.

If study abroad professionals decide to use an ePortfolio platform, it may be beneficial to select a tool that does not require a login or integrates with an existing institution-specific single sign-on system (i.e. SIS, LMS, etc.). Further, if study abroad professionals choose to use a rubric to rate students' reflective content, they may want to consider designing a customized rubric, providing the raters with more thorough training, and testing the rubric with a pilot group of students. It may also be beneficial to share the rubric with students in advance so the goals of the learning objective are transparent; Jenson (2011) found that sharing her rubric with her students helped to encourage their reflection. Study abroad professionals may also want to think about using certain reflective prompts for assessment purposes and others just to promote learning. As this study found, some reflective prompts may be better suited to eliciting consistent response content from students than others. It is also possible that reflective responses can be analyzed using other qualitative methods instead of a rubric. Lastly, whether a qualitative assessment method is selected or not, a survey would probably be useful to gather information about students' demographics and experiences as they pertain to the desired learning objectives if that information is not already known because that may influence students' attainment of learning outcomes. Deardorff (2011) suggests that intercultural competence is best measured with a mix of qualitative and quantitative methods.

Suggestions for Future Research

Future research could expand upon this study by refining the research methods and/or addressing additional research questions to explore some of the reasons behind the findings. In terms of the research method, it would be very useful if researchers could find a larger study
abroad sample and work with an institution or private company willing to require the pre-post survey and reflective components. As mentioned in the previous section, it may also be useful to provide pre-study abroad training on how to reflect and to use an e-Portfolio platform that integrates with existing login credentials. In future research, the AAC&U Intercultural Knowledge and Competence VALUE rubric could be used again, but additional rater training might be useful. On the other hand, researchers could use a different rubric or create one specifically designed for their study with input from scholars in the field and/or study abroad professionals.

Future research could also address research questions that stem from this study. For instance, all the students in this study completed semester-length, direct-enrollment study abroad programs. How would the outcomes change if students completed different types or lengths of study abroad programs? Also, are there pre-existing differences between students who choose to study abroad and those who do not, and how does that impact their attainment of intercultural competence? Perhaps a comparative sample of students who do not intend to study abroad can be surveyed to see if there are any differences between the pre-survey scores of that group and the study abroad group. This research found certain pre-study abroad activities and particular study abroad experiences to relate to higher levels of intercultural competence attainment, but the data did not provide insight into the reasons why these relationships occurred; additional studies could examine this further. For example, in terms of pre-study abroad activities, the type or diversity of the college or university attended by the student may influence the results, but this was not data collected in this study. In terms of study abroad experiences, this study showed that writing/journaling as part of a course requirement and sharing/discussing with others about their experiences abroad had a positive impact on intercultural competence, but further details are
unknown. Additionally, the current methods could be expanded by including interviews or focus groups with participants after the primary components of the study are completed to learn more about their experiences abroad and their thoughts about the reflective process. There are numerous ways this study can be built upon to further our knowledge in both the ePortfolio and study abroad fields.

Summary

Within this chapter, the findings of this dissertation study were explored in more depth and related to the broader context of the ePortfolio and study abroad assessment literature. The research concluded that students can develop their intercultural competence by studying abroad for one semester, but their level of attainment may vary based on the specific aspects of the intercultural competence construct. It also seems that some pre-study abroad activities and study abroad experiences may influence students' intercultural competence. Due to the small sample size, however, the study was unable to determine if reflection via ePortfolios or reflection itself has an impact on students’ learning outcomes. The efficacy of using the AAC&U Intercultural Knowledge and Competence VALUE rubric to rate reflective responses for assessment purposes was also discussed, and several recommendations for study abroad professionals were shared. The chapter details the limitations of the research methods and also provided suggestions for future research. Altogether, it is clear that students who study abroad have the opportunity to transform their perspectives and increase their intercultural competence, but additional research is needed to determine the best ways to enhance and assess that learning.
References


Florida International University, Miami, FL.


use of electronic portfolio. *International Journal of ePortfolio, 1*(1), 49-60.


enhance student learning. Inventio 2(6).


Salisbury, M. (2015). How we got to where we are (and aren't) in assessing study abroad. In V. Savicki, & E. Brewer (Eds.), *Assessing study abroad: Theory, tools and practice*, (pp. 15-32). Stylus Publishing, LLC.


Twombly, S. B., Salisbury, M. H., Tumanut, S. D., & Klute, P. (2012). *Study Abroad in a New Global Century: Renewing the promise, refining the purpose, ASHE higher education*


Appendix A: Fall Semester Recruitment Email

Dear <<Student First Name>>,

Do you want to get more out of your study abroad experience and help improve the experiences of future study abroad students? If you answered yes to either of those questions, please consider participating in an exciting research study!

The study will require you to complete a survey prior to traveling abroad, a survey after you return, and 8 reflective assignments throughout your semester abroad. Each survey will take approximately 15-20 minutes to complete, and each reflective assignment will take approximately 15-20 minutes to complete.

**Student who participate in the research study will be entered into a raffle drawing for the following prizes:**

- (4) $25 Amazon gift cards
- (1) $50 Amazon gift card
- (1) $100 Amazon gift card
- (1) $150 Amazon gift card
- (1) $250 study abroad tuition credit

Also, **ALL students who complete the study will receive a $25 study abroad tuition credit.** *Click the link below for more details about how to become eligible to win these prizes.*

The research will advance knowledge in the study abroad field and provide UAlbany with feedback about learning and assessment mechanisms to use with study abroad students in the future. In addition, you may find that the reflective prompts enhance your study abroad experience and make it easier for you to process your learning gains.

If you wish to participate, please [click here](#) to learn more and complete the Informed Consent form. You must be 18 years or older to participate. If you have any questions, please contact Kristyn Muller at kmuller@albany.edu.

Thank you in advance for your participation!

Sincerely,

Jim Pasquill II
Director of Education Abroad

Annette Richie
Assistant Director of International Applied Learning

*Edited in the Spring semester to reflect participating campus contact information and modified incentives*
### Appendix B: AAC&U Rubric

**INTERCULTURAL KNOWLEDGE AND COMPETENCE VALUE RUBRIC**

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Capstone (4)</th>
<th>Milestone (3)</th>
<th>Milestone (2)</th>
<th>Benchmark (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge Cultural self-awareness</strong></td>
<td>Articulates insights into own cultural rules and biases (e.g. seeking complexity; aware of how her/his experiences have shaped these rules, and how to recognize and respond to cultural biases, resulting in a shift in self-description.)</td>
<td>Recognizes new perspectives about own cultural rules and biases (e.g. not looking for sameness; comfortable with the complexities that new perspectives offer.)</td>
<td>Identifies own cultural rules and biases (e.g. with a strong preference for those rules shared with own cultural group and seeks the same in others.)</td>
<td>Shows minimal awareness of own cultural rules and biases (even those shared with own cultural group(s)) (e.g. uncomfortable with identifying possible cultural differences with others.)</td>
</tr>
<tr>
<td><strong>Knowledge Knowledge of cultural worldview frameworks</strong></td>
<td>Demonstrates sophisticated understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.</td>
<td>Demonstrates adequate understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.</td>
<td>Demonstrates partial understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.</td>
<td>Demonstrates surface understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.</td>
</tr>
<tr>
<td><strong>Skills Empathy</strong></td>
<td>Interprets intercultural experience from the perspectives of own and more than one worldview and demonstrates ability to act in a supportive manner that recognizes the feelings of another cultural group.</td>
<td>Recognizes intellectual and emotional dimensions of more than one worldview and sometimes uses more than one worldview in interactions.</td>
<td>Identifies components of other cultural perspectives but responds in all situations with own worldview.</td>
<td>Views the experience of others but does so through own cultural worldview.</td>
</tr>
<tr>
<td><strong>Skills Verbal and nonverbal communication</strong></td>
<td>Articulates a complex understanding of cultural differences in verbal and nonverbal communication (e.g., demonstrates understanding of the degree to which people use physical contact while communicating in</td>
<td>Recognizes and participates in cultural differences in verbal and nonverbal communication and begins to negotiate a shared understanding based on those differences.</td>
<td>Identifies some cultural differences in verbal and nonverbal communication and is aware that misunderstandings can occur based on those differences but is still unable to negotiate a shared understanding.</td>
<td>Has a minimal level of understanding of cultural differences in verbal and nonverbal communication; is unable to negotiate a shared understanding.</td>
</tr>
</tbody>
</table>
different cultures or use direct/ indirect and explicit/ implicit meanings) and is able to skillfully negotiate a shared understanding based on those differences.

<table>
<thead>
<tr>
<th>Attitudes</th>
<th>Curiosity</th>
<th>Asks complex questions about other cultures, seeks out and articulates answers to these questions that reflect multiple cultural perspectives.</th>
<th>Asks deeper questions about other cultures and seeks out answers to these questions.</th>
<th>Asks simple or surface questions about other cultures.</th>
<th>States minimal interest in learning more about other cultures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
<td>Openness</td>
<td>Initiates and develops interactions with culturally different others. Suspends judgment in valuing her/ his interactions with culturally different others.</td>
<td>Begins to initiate and develop interactions with culturally different others. Begins to suspend judgment in valuing her/ his interactions with culturally different others.</td>
<td>Expresses openness to most, if not all, interactions with culturally different others. Has difficulty suspending any judgment in her/ his interactions with culturally different others, and is aware of own judgment and expresses a willingness to change.</td>
<td>Receptive to interacting with culturally different others. Has difficulty suspending any judgment in her/ his interactions with culturally different others, but is unaware of own judgment.</td>
</tr>
</tbody>
</table>
Appendix C: Reflective Prompts

#1: Introductory Entry
- Who are you? Why did you decide to study abroad? What are your goals for your study abroad experience?

#2: Description, Interpretation, Evaluation Method
- Describe something about the spoken language of other people who you interacted with this week. What was your initial reaction to the similarities/differences between their spoken language and yours? How did the similarities/differences make you feel? What do you think now about their spoken language?

#3: Description, Interpretation, Evaluation Method
- Describe something about the nonverbal cues (i.e. body language, facial expressions, hand gestures, etc.) of other people who you interacted with this week. What was your initial reaction to the similarities/differences between their nonverbal cues and yours? How did the similarities/differences make you feel? What do you think now about their nonverbal cues?

#4: Goals Self-Evaluation
- Are you on track to meet the goals you set forth for yourself this semester? Why or why not? What has influenced your ability to make progress toward your goals? What can you do to ensure that you make further progress?

#5: Description, Interpretation, Evaluation Method
- Describe something you observed this week that differed from your own values, beliefs, or practices. What did you initially think about it? How did you make you feel? Why do you think this difference exists? What do you think now about it?

#6: Description, Interpretation, Evaluation Method
- Describe something you observed this week that you didn’t initially understand. What did you initially think about it? How did it make you feel? What did you do to better understand it? How well do you think you could explain it to someone else now?

#7: Thoughts About Change
- How has your study abroad experience shaped you or affected you as a person? What particular aspects of your experience have been especially meaningful and/or memorable?

#8a&b: Concluding Thoughts
- How did your study abroad experience impact how you think about yourself and your relationship to others and society? What have you learned about your own cultural rules or biases?
- How would you describe your study abroad experience to a future employer or graduate school admissions office? Why does your study abroad experience make you a better candidate for a job or for graduate school admission?
Appendix D: GPI Dimensions and Scales

From Braskamp, Braskamp, & Engberg, 2014

**Cognitive domain.** Cognitive development is centered on one’s knowledge and understanding of what is true and important to know. It includes viewing knowledge and knowing with greater complexity and taking into account multiple cultural perspectives. Reliance on external authorities to have absolute truth gives way to commitment in relativism when making commitments within the context of uncertainty. The two scales are:

- **Knowing.** Degree of complexity of one’s view of the importance of cultural context in judging what is important to know and value.
- **Knowledge.** Degree of understanding and awareness of various cultures and their impact on our global society and level of proficiency in more than one language.

**Intrapersonal domain.** Intrapersonal development focuses on one becoming more aware of and integrating one’s personal values and self-identity into one’s personhood. It reflects one’s sense of self-direction and purpose in one’s life, becoming more self-aware of one’s strengths, values, and personal characteristics and sense of self, and viewing one’s development in terms of one’s self-identity. It incorporates different and often conflicting ideas about who one is living in an increasingly multicultural world. The two scales are:

- **Identity.** Level of awareness of one’s unique identity and degree of acceptance of one’s ethnic, racial, and gender dimensions of one’s identity.
- **Affect.** Level of respect for and acceptance of cultural perspectives different from one’s own and degree of emotional confidence when living in complex situations, which reflects an “emotional intelligence” that is important in one’s processing encounters with other cultures.

**Interpersonal domain.** Interpersonal development is centered on one’s willingness to interact with persons with different social norms and cultural backgrounds, acceptance of others, and being comfortable when relating to others. It includes being able to view others differently; and relating to others in terms of moving from dependency to independence to interdependence, which is considered as the most mature perspective in effectively living in a global society.

- **Social Responsibility.** Level of interdependence and social concern for others.
- **Social Interactions.** Degree of engagement with others who are different from oneself and degree of cultural sensitivity in living in pluralistic settings.
Appendix E: Additional Post-Survey Questions

Q30 During your study abroad experience, which method were you asked to use to submit your reflective prompt responses?
- LiveText Via E-Portfolio Platform (1)
- Google Forms (2)

Q31 Please indicate your level of agreement with the following statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neutral (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The reflective prompts helped me understand my experiences abroad.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I enjoyed answering the reflective prompts.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I had enough time to complete the reflective prompts.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Responding to the reflective prompts enhanced my experience abroad.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

(If selected 1 on Q30) Q32 Please indicate your level of agreement with the following statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neutral (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoyed using the e-portfolio platform.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>The e-portfolio platform was easy to use.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Creating an e-portfolio enhanced my experience abroad.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Appendix F: GPI™ Scale Reliability

From Braskamp, Braskamp, & Engberg, 2014

Table 8: Coefficient alpha reliabilities of the GPI scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Coefficient Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive—Knowing</td>
<td>.657</td>
</tr>
<tr>
<td>Cognitive-- Knowledge</td>
<td>.773</td>
</tr>
<tr>
<td>Intrapersonal-- Identity</td>
<td>.740</td>
</tr>
<tr>
<td>Intrapersonal—Affect</td>
<td>.734</td>
</tr>
<tr>
<td>Interpersonal-- Social Responsibility</td>
<td>.732</td>
</tr>
<tr>
<td>Interpersonal-- Social Interaction</td>
<td>.700</td>
</tr>
</tbody>
</table>

Table 9 Factor loadings and Reliabilities for GPI Subscales1 (N=9773)

<table>
<thead>
<tr>
<th>Item</th>
<th>Loading (Alpha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Knowing</td>
<td>.657</td>
</tr>
<tr>
<td>I rarely question what I have been taught about the world around me*</td>
<td>.728</td>
</tr>
<tr>
<td>I rely primarily on authorities to determine what is true in the world*</td>
<td>.673</td>
</tr>
<tr>
<td>Some people have a culture and others do not*</td>
<td>.567</td>
</tr>
<tr>
<td>In different settings what is right and wrong is simple to determine*</td>
<td>.551</td>
</tr>
<tr>
<td>When I notice cultural differences, my culture tends to have the better approach*</td>
<td>.532</td>
</tr>
<tr>
<td>I consider different cultural perspectives when evaluating global problems2</td>
<td>N/A</td>
</tr>
<tr>
<td>I take into account different perspectives before drawing conclusions about the world around me2</td>
<td>N/A</td>
</tr>
<tr>
<td>Cognitive Knowledge</td>
<td>.773</td>
</tr>
<tr>
<td>I understand the reasons and causes of conflict among nations of different cultures</td>
<td>.734</td>
</tr>
<tr>
<td>I understand how various cultures of this world interact socially</td>
<td>.715</td>
</tr>
<tr>
<td>I am informed of current issues that impact international relations</td>
<td>.708</td>
</tr>
<tr>
<td>I can discuss cultural differences from an informed perspective</td>
<td>.662</td>
</tr>
<tr>
<td>I know how to analyze the basic characteristics of a culture</td>
<td>.583</td>
</tr>
<tr>
<td>Intrapersonal Identity</td>
<td>.740</td>
</tr>
<tr>
<td>I am willing to defend my own views when they differ from others</td>
<td>.685</td>
</tr>
<tr>
<td>I can explain my personal values to people who are different from me</td>
<td>.659</td>
</tr>
<tr>
<td>I put my beliefs into action by standing up for my principles</td>
<td>.654</td>
</tr>
<tr>
<td>I know who I am as a person</td>
<td>.631</td>
</tr>
<tr>
<td>I have a definite purpose in my life</td>
<td>.588</td>
</tr>
<tr>
<td>I am developing a meaningful philosophy of life</td>
<td>.368</td>
</tr>
<tr>
<td>Intrapersonal Affect</td>
<td>.734</td>
</tr>
<tr>
<td>I am accepting of people with different religious and spiritual traditions</td>
<td>.705</td>
</tr>
<tr>
<td>I am open to people who strive to live lives very different from my own life style</td>
<td>.699</td>
</tr>
<tr>
<td>I enjoy when my friends from other cultures teach me about our cultural differences</td>
<td>.601</td>
</tr>
<tr>
<td>I am sensitive to those who are discriminated against</td>
<td>.568</td>
</tr>
<tr>
<td>I do not feel threatened emotionally when presented with multiple perspectives</td>
<td>.557</td>
</tr>
<tr>
<td>Interpersonal Social Responsibility</td>
<td>.732</td>
</tr>
<tr>
<td>I think of my life in terms of giving back to society</td>
<td>.751</td>
</tr>
<tr>
<td>I consciously behave in terms of making a difference</td>
<td>.640</td>
</tr>
<tr>
<td>Volunteering is not an important priority in my life*</td>
<td>.600</td>
</tr>
<tr>
<td>I put the needs of others above my own personal wants</td>
<td>.599</td>
</tr>
<tr>
<td>I work for the rights of others</td>
<td>.593</td>
</tr>
<tr>
<td>Interpersonal Social Interaction</td>
<td>.700</td>
</tr>
<tr>
<td>I frequently interact with students from a race/ethnic group different from my own</td>
<td>.836</td>
</tr>
<tr>
<td>I frequently interact with students from a different country from my own</td>
<td>.816</td>
</tr>
<tr>
<td>Most of my friends are from my own ethnic background*</td>
<td>.604</td>
</tr>
<tr>
<td>I intentionally involve people from many cultural backgrounds in my life</td>
<td>.441</td>
</tr>
</tbody>
</table>

*Item was reverse-coded for purposes of scale construction
1All items measured on a five-point Likert scale that ranged from 5 (strongly agree) to 1 (strongly disagree) unless otherwise noted. Items in inventory were factored using a principal component analysis with a Varimax rotation based on 9,773 responses to the 2012-2013 General Form of the GPI. A total of 30 items in the inventory were included in the factor analysis.
2Items were forced into factor based on conceptual underpinnings of scale and not included in the factor analysis.
Appendix G: Additional Pre-Survey Variables

**Academic Coursework** ($\alpha = .590$)
0 = 0 courses; 1 = 1 course; 2 = 2 courses; 3 = 3 courses; 4 = 4 courses; 5 = 5 or more courses

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q47.</td>
<td>Since coming to college, how many courses have you taken in the areas listed below? - Multicultural course addressing issues of race, ethnicity, gender, class, religion, or sexual orientation</td>
</tr>
<tr>
<td>Q48.</td>
<td>Since coming to college, how many courses have you taken in the areas listed below? - Foreign language course</td>
</tr>
<tr>
<td>Q49.</td>
<td>Since coming to college, how many courses have you taken in the areas listed below? - World history course</td>
</tr>
<tr>
<td>Q50.</td>
<td>Since coming to college, how many courses have you taken in the areas listed below? - Service-learning course</td>
</tr>
<tr>
<td>Q51.</td>
<td>Since coming to college, how many courses have you taken in the areas listed below? - Course focused on significant global/international issues and problems</td>
</tr>
<tr>
<td>Q52.</td>
<td>Since coming to college, how many courses have you taken in the areas listed below? - Course that includes opportunities for intensive dialogue among students with different backgrounds and beliefs</td>
</tr>
</tbody>
</table>

**Faculty Interactions** ($\alpha = .732$)
0= Never; 1= Rarely; 2= Sometimes; 3= Often; 4= Very Often

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q53.</td>
<td>Since coming to college, how often have you experienced the following with your faculty? - Discussed course topics, ideas, or concepts with a faculty member outside of class</td>
</tr>
<tr>
<td>Q54.</td>
<td>Since coming to college, how often have you experienced the following with your faculty? - Discussed your academic performance with a faculty member</td>
</tr>
<tr>
<td>Q55.</td>
<td>Since coming to college, how often have you experienced the following with your faculty? - The faculty challenge students' views and perspectives on a topic during class</td>
</tr>
<tr>
<td>Q56.</td>
<td>Since coming to college, how often have you experienced the following with your faculty? - The faculty presented issues and problems in class from different cultural perspectives.</td>
</tr>
</tbody>
</table>

**Relevant Co-Curricular Experiences** ($\alpha = .712$)
0= Never; 1= Rarely; 2= Sometimes; 3= Often; 4= Very Often

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q57.</td>
<td>Since coming to college, how often have you participated in the following? - Participated in events or activities sponsored by groups reflecting your own cultural heritage</td>
</tr>
<tr>
<td>Q58.</td>
<td>Since coming to college, how often have you participated in the following? - Participated in events or activities sponsored by groups reflecting a cultural heritage different from your own</td>
</tr>
<tr>
<td>Q59.</td>
<td>Since coming to college, how often have you participated in the following? - Participated in religion or spiritual activities</td>
</tr>
<tr>
<td>Q60.</td>
<td>Since coming to college, how often have you participated in the following? - Participated in leadership programs that stress collaboration and team work</td>
</tr>
<tr>
<td>Q61.</td>
<td>Since coming to college, how often have you participated in the following? - Participated in</td>
</tr>
</tbody>
</table>
community service activities unrelated to a course

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q62.</td>
<td>Since coming to college, how often have you participated in the following? - Attended a lecture/workshop/campus discussion on international or global issues</td>
</tr>
<tr>
<td>Q63.</td>
<td>Since coming to college, how often have you participated in the following? - Read a newspaper or news magazine (online or print)</td>
</tr>
<tr>
<td>Q64.</td>
<td>Since coming to college, how often have you participated in the following? - Watched news programs on television</td>
</tr>
<tr>
<td>Q65.</td>
<td>Since coming to college, how often have you participated in the following? - Followed an international event/crisis</td>
</tr>
<tr>
<td>Q66.</td>
<td>Since coming to college, how often have you participated in the following? - Discussed current events with other students</td>
</tr>
</tbody>
</table>

**Connection to Campus**  ($\alpha = .871$)

1= Strongly disagree; 2= Disagree; 3= Neither Agree or Disagree; 4= Agree; 5= Strongly agree

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q70.</td>
<td>Please rate your level of agreement with each statement. - I have a strong sense of affiliation with my college/university.</td>
</tr>
<tr>
<td>Q72.</td>
<td>Please rate your level of agreement with each statement. - I understand the mission of my college/university.</td>
</tr>
<tr>
<td>Q73.</td>
<td>Please rate your level of agreement with each statement. - I am both challenged and supported at my college/university.</td>
</tr>
<tr>
<td>Q74.</td>
<td>Please rate your level of agreement with each statement. - I have been encouraged to develop my strengths and talents at my college/university.</td>
</tr>
<tr>
<td>Q75.</td>
<td>Please rate your level of agreement with each statement. - I feel I am a part of a close and supportive community of colleagues and friends.</td>
</tr>
</tbody>
</table>

**Q67.** Have you ever participated in a living-learning program with a global or international theme?
1 = Yes; 0 = No

**Q68.** Have you ever lived or traveled abroad (outside the United States)?
1 = No; 2 = Yes, I lived abroad; 3 = Yes, I traveled abroad; 4 = Yes, both

**Q69.** Prior to this semester, how many semesters have you studied abroad?
0 = None; 1 = A short term experience; 2 = One; 3 = Two; 4 = More than two
**Appendix H: Additional Post-Survey Variables**

**Intercultural Communication** ($\alpha = .646$)
0 = Never; 1 = Rarely; 2 = Sometimes; 3 = Often; 4 = Very Often

<table>
<thead>
<tr>
<th>Question</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q52. During the most recent study abroad experience, how often did you participate in the following?</td>
<td>How often did you speak in the host country's language in the non-language courses?</td>
</tr>
<tr>
<td>Q53. During the most recent study abroad experience, how often did you participate in the following?</td>
<td>How often did you speak in the host country's language outside of the classroom?</td>
</tr>
<tr>
<td>Q54. During the most recent study abroad experience, how often did you participate in the following?</td>
<td>How often did you interact with individuals from the host country outside of the classroom</td>
</tr>
<tr>
<td>Q62. During the most recent study abroad experience, how often did you participate in the following?</td>
<td>How often did you interact with students from a race/ethnic group different from your own?</td>
</tr>
<tr>
<td>Q63. During the most recent study abroad experience, how often did you participate in the following?</td>
<td>How often did you interact with students from a country different from your own?</td>
</tr>
</tbody>
</table>

**Host-Country Immersion** ($\alpha = .802$)
0 = Never; 1 = Rarely; 2 = Sometimes; 3 = Often; 4 = Very Often

<table>
<thead>
<tr>
<th>Question</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q57. During the most recent study abroad experience, how often did you participate in the following?</td>
<td>How often did you feel immersed in the culture of the host country?</td>
</tr>
<tr>
<td>Q58. During the most recent study abroad experience, how often did you participate in the following?</td>
<td>How often did you intentionally push yourself out of your comfort zone?</td>
</tr>
<tr>
<td>Q59. During the most recent study abroad experience, how often did you participate in the following?</td>
<td>How often did you explore new habits and behaviors on your own while studying abroad?</td>
</tr>
<tr>
<td>Q60. During the most recent study abroad experience, how often did you participate in the following?</td>
<td>How often did your class assignments require you to gather information from your surrounding community?</td>
</tr>
</tbody>
</table>

**Positive Faculty/Staff Experiences** ($\alpha = .775$)
1 = Strongly disagree; 2 = Disagree; 3 = Neither Agree or Disagree; 4 = Agree; 5 = Strongly agree

<table>
<thead>
<tr>
<th>Question</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q64. Respond to the following statements based on the most recent study abroad experience. - I developed a strong relationship with one or more of my faculty while studying abroad.</td>
<td>- I developed a strong relationship with one or more of my faculty while studying abroad.</td>
</tr>
<tr>
<td>Q65. Respond to the following statements based on the most recent study abroad experience. - The onsite staff abroad took a genuine interest in my development as a person.</td>
<td>- The onsite staff abroad took a genuine interest in my development as a person.</td>
</tr>
<tr>
<td>Q66. Respond to the following statements based on the most recent study abroad experience. - My interactions with the faculty shaped the way I understand the host culture.</td>
<td>- My interactions with the faculty shaped the way I understand the host culture.</td>
</tr>
<tr>
<td>Q68. Respond to the following statements based on the most recent study abroad experience. - My pre-departure orientation was very useful in preparing me to fit into the host culture.</td>
<td>- My pre-departure orientation was very useful in preparing me to fit into the host culture.</td>
</tr>
<tr>
<td>Q69. Respond to the following statements based on the most recent study abroad experience. - The hand-on experiences in my study abroad classes helped me learn more effectively.</td>
<td>- The hand-on experiences in my study abroad classes helped me learn more effectively.</td>
</tr>
<tr>
<td>Q70. Respond to the following statements based on the most recent study abroad experience. - My</td>
<td>- My</td>
</tr>
</tbody>
</table>
study abroad instructors challenged me and provided the support I needed for effective learning.

**Self-Reported Positive Outcomes** \( (\alpha = .849) \)

1= Strongly disagree; 2= Disagree; 3= Neither Agree or Disagree; 4= Agree; 5= Strongly agree

<table>
<thead>
<tr>
<th>Q67. Respond to the following statements based on the most recent study abroad experience. - My study abroad experience 'changed my life.'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q71. Respond to the following statements based on the most recent study abroad experience. - My study abroad experience taught me what it means to be a globally competent person.</td>
</tr>
<tr>
<td>Q72. Respond to the following statements based on the most recent study abroad experience. - I have a better understanding of what skills and competencies are required in the global workplace.</td>
</tr>
<tr>
<td>Q73. Respond to the following statements based on the most recent study abroad experience. - My study abroad experience helped me develop communication skills that will benefit me in the workplace in the future.</td>
</tr>
<tr>
<td>Q74. Respond to the following statements based on the most recent study abroad experience. - As a result of my study abroad experience, I plan to get involved in professional and/or personal activities related to global issues.</td>
</tr>
</tbody>
</table>

Q55. During the most recent study abroad experience, how often did you participate in the following? - How often did you reflect upon your experiences abroad through writing/journaling as part of a course requirement?

0= Never; 1= Rarely; 2= Sometimes; 3= Often; 4= Very Often

Q56. During the most recent study abroad experience, how often did you participate in the following? - How often have you shared/discussed with others your experiences abroad?

0= Never; 1= Rarely; 2= Sometimes; 3= Often; 4= Very Often
Appendix I: Instructions for Rubric Raters

Instructions for Raters

Throughout each study abroad semester, participants were asked to respond to eight reflective prompts. The Excel file contains all of their responses, which are organized by reflective prompt topics - there is a sheet for each topic (8 sheets). Please rate each individual prompt using the AAC&U Intercultural Knowledge & Competence VALUE Rubric (provided in the Word document).

- After reading an individual response, determine which rubric categories, if any, the content pertains to and only rate the response for those applicable categories.
  - Some prompts will not align with any rubric categories. For those, do not include a rating - leave all the boxes blank.
  - Some prompts will align with multiple rubric categories. For those, rate all of the applicable categories.
  - Only give ratings based on what the student explicitly said. Do not make inferences based on your own feelings about the response.

- Do not try to connect prompts across the Excel sheets based on which students you think wrote them. Each response should be rated independently, regardless of their connection to other prompts, so it doesn’t matter who wrote it.

- Ratings must be a whole number (1, 2, 3, or 4) - no half points.

Rubric Information:

The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment.

Intercultural Knowledge and Competence is "a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts.” (Bennett, J. M. 2008. Transformative training: Designing programs for culture learning. In Contemporary leadership and intercultural competence: Understanding and utilizing cultural diversity to build successful organizations, ed. M. A. Moodian, 95-110. Thousand Oaks, CA: Sage.)

- Culture: All knowledge and values shared by a group.
• Cultural rules and biases: Boundaries within which an individual operates in order to feel a sense of belonging to a society or group, based on the values shared by that society or group.
• Empathy: "Empathy is the imaginary participation in another person’s experience, including emotional and intellectual dimensions, by imagining his or her perspective (not by assuming the person’s position)". Bennett, J. 1998. Transition shock: Putting culture shock in perspective. In Basic concepts of intercultural communication, ed. M. Bennett, 215-224. Yarmouth, ME: Intercultural Press.
• Intercultural experience: The experience of an interaction with an individual or groups of people whose culture is different from your own.
• Intercultural/cultural differences: The differences in rules, behaviors, communication and biases, based on cultural values that are different from one's own culture.
• Suspend judgment in valuing their interactions with culturally different others: Postpones assessment or evaluation (positive or negative) of interactions with people culturally different from one self.
• Disconnecting from the process of automatic judgment and taking time to reflect on possibly multiple meanings.
• Worldview: Worldview is the cognitive and affective lens through which people construe their experiences and make sense of the world around them.
Appendix J: Informed Consent

http://goo.gl/forms/ngFnsEpEFGQHac4c2

Study Abroad Research Study

Thank you for your interest in my dissertation research! Your participation will be extremely helpful. Please read the study details and complete the form below if you are willing to participate.

Description of Research

The research study will examine the effectiveness of using different practices to enhance and assess learning within the study abroad context.

Description of Participant Involvement

You will be asked to take a survey prior to your departure, respond to 8 reflective prompts while abroad, and complete another survey after returning from your program. Each component of the study should take about 15-20 minutes to complete. All survey questions are optional and you can decide what you would like to share in your responses to the reflective prompts.

Although you are encouraged to complete all components of the study, your participation is voluntary. Even after you agree to participate in the research, complete the informed consent document, or start participating, you may decide to leave the study at any time without penalty. I will retain and analyze the information you have provided up until the point you have left the study unless you request that your data be excluded from any analysis and/or destroyed.

You must be 18 years or older to participate.

Incentives for Participating!

By participating in this study, you will be entered into a drawing to win of the following prizes:

- (4) $25 Amazon gift cards
- (1) $50 Amazon gift card
- (1) $100 Amazon gift card
- (1) $150 Amazon gift card
- (1) $250 study abroad tuition credit

You will receive one raffle entry per study component that is completed (for each survey you start and each reflective response you submit). For example, if you take the pre-survey and submit five reflective prompts, you would receive 6 raffle entries. If you participate in all study components, you will receive 10 raffle entries.

When the study is finished, the raffle prize winners will be randomly selected. Prizes will be issued in ascending order of monetary value (i.e. the first winner will get a $25 gift card and the
last winner will get the $250 study abroad credit). The winners of the raffle will be notified via email.

In addition, ALL STUDENTS who complete the study (start both surveys and submit all reflective prompts) will be awarded a $25 study abroad credit. (The study abroad tuition credit will be applied to your University at Albany account. If you have already paid your study abroad tuition and fees, the amount will be refunded to you by Student Financial Services.)

Benefits and Risks of Participation

The research will advance knowledge in the study abroad field and provide UAlbany with feedback about learning and assessment mechanisms to use with study abroad students in the future. In addition, you may find that the reflective prompts enhance your study abroad experience and make it easier for you to process your learning gains.

The risks of participating in this study are very minimal. You are not required to disclose any information that you are uncomfortable with sharing. All questions on the surveys are optional, and the content submitted throughout the semester is dependent upon how you would like to answer the questions. Although the survey questions and reflective prompts ask you to be introspective, they do not ask you to reveal any confidential or risky information. The reflective prompts are similar to the types of questions that friends, family, or a course instructor would ask you about your experience.

Confidentiality

Your survey data and reflective responses are not anonymous because I need to be able to link together your data from different components of the study. However, your data will be kept confidential. You may have the option to publicly share your reflective responses if you choose to do so, but that is completely voluntary. Aggregate reports of findings, not including individual identifiers, will be shared with the University at Albany Study Abroad Office.

Contact Information

If you have any questions about this study, please contact the Principal Investigator:

Kristyn Muller, M.S.
kmuller@albany.edu
University at Albany

Faculty Advisor:
Mitch Leventhal, Ph.D.
mleventhal@albany.edu
University at Albany

Research at the University Albany involving human participants is carried out under the oversight of the Institutional Review Board (IRB). This research has been reviewed and
approved by the IRB. If you have any questions concerning your rights as a research subject or if you wish to report any concerns about the study, you may contact University at Albany Office of Regulatory & Research Compliance at 1-866-857-5459 or hsconcerns@albany.edu.

Informed Consent

By completing this form, I am acknowledging that I have read the information about this study and I hereby consent to participate in the study. I am also acknowledging that I am 18 years or older.

Full Name *
Date *
Email Address *
*Please provide the email address for the account you check most frequently.*
Study Abroad Location *
Study Abroad Start Date *
*(You can estimate if you are unsure.)*
<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variables</th>
<th>Instrumentation</th>
<th>Statistical Analysis</th>
</tr>
</thead>
</table>
| 1. Do students increase their intercultural competence while studying abroad for one semester? | • Intercultural Competence Scores  
• Demographics                                                                  | • GPI™ Pre-Post-Surveys  
• Reflective Prompt Responses                                                  | • Descriptive Statistics  
• Paired Samples T-Test  
• Case Analysis                                                            |
| a. Do certain pre-study abroad activities and/or study abroad experiences and environments impact students’ intercultural competence more than others? | • Intercultural Competence Scores  
• Pre-Study Abroad Activities  
• Study Abroad Experiences  
• Demographics                                                                  | • GPI™ Pre-Post-Surveys                                                  | • Bivariate Correlations  
• Independent Samples T-Test  
• Cronbach’s Alpha (for Activities/Experiences aggregate variables)            |
| b. Does using an ePortfolio while studying abroad enhance students’ intercultural competence? | • Intercultural Competence Scores  
• Pre-Study Abroad Activities  
• Study Abroad Experiences  
• Demographics                                                                  | • GPI™ Pre-Post-Surveys                                                  | • Independent Samples T-Test                                                            |
| 2. Can reflective responses be used to effectively assess students’ attainment of intercultural competence? | • Intercultural Competence Ratings  
• Reflective Response Word Count  
• Demographics                                                                  | • Reflective Prompt Responses & Rubric                                      | • Descriptive Statistics  
• Bivariate Correlations  
• Paired Samples T-Test                                                            |
| a. How reliable is the AAC&U Intercultural Competence & Knowledge VALUE rubric when used to score students’ reflective responses? | • Intercultural Competence Ratings                                        | • Reflective Prompt Responses & Rubric                                      | • Alignment Analysis  
• Intra-Class Coefficient                                                            |
| b. Do students’ reflective response ratings align with their survey scores?     | • Intercultural Competence Scores  
& Ratings  
• Pre-Study Abroad Activities  
• Study Abroad Experiences                                                     | • Reflective Prompt Responses & Rubric                                      | • Bi-Variate Correlations  
• Case Analysis                                                            |
| c. Do students find value in completing reflective responses?                  | • Student Perspectives                                                      | • GPI™ Post-Survey                                                           | • Descriptive Statistics  
• Qualitative Analysis                                                            |
### Appendix L: Pre-Study Abroad Experience Descriptive Statistics

<table>
<thead>
<tr>
<th>Pre-Study Abroad Variables</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Coursework</td>
<td>78</td>
<td>1.4940</td>
<td>.91173</td>
<td>.17</td>
<td>4.60</td>
</tr>
<tr>
<td>Faculty Interactions</td>
<td>78</td>
<td>2.3002</td>
<td>.78108</td>
<td>.25</td>
<td>4.00</td>
</tr>
<tr>
<td>Co-Curricular Experiences</td>
<td>78</td>
<td>2.1120</td>
<td>.61827</td>
<td>.70</td>
<td>3.60</td>
</tr>
<tr>
<td>Connection to Campus</td>
<td>78</td>
<td>3.7769</td>
<td>.79330</td>
<td>1.80</td>
<td>5.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prior Study Abroad Experience</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>59</td>
<td>75.6</td>
</tr>
<tr>
<td>A short term experience</td>
<td>10</td>
<td>12.8</td>
</tr>
<tr>
<td>(summer/winter term)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>4</td>
<td>5.1</td>
</tr>
<tr>
<td>Two</td>
<td>4</td>
<td>5.1</td>
</tr>
<tr>
<td>More than Two</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix M: Correlations Between Pre-Study Abroad Experiences & Pre-Survey Scores

<table>
<thead>
<tr>
<th>Pre-Study Abroad Variables</th>
<th>Pre Cognitive Knowing</th>
<th>Pre Cognitive Knowledge</th>
<th>Pre Intrapersonal Identity</th>
<th>Pre Intrapersonal Affect</th>
<th>Pre Intrapersonal Social Responsibility</th>
<th>Pre Interpersonal Social Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Coursework</td>
<td>.192</td>
<td>.469**</td>
<td>.212</td>
<td>.269*</td>
<td>.377**</td>
<td>.325**</td>
</tr>
<tr>
<td>Faculty Interactions</td>
<td>.076</td>
<td>.307**</td>
<td>.137</td>
<td>.019</td>
<td>.378**</td>
<td>.216</td>
</tr>
<tr>
<td>Co-Curricular Experiences</td>
<td>.161</td>
<td>.450**</td>
<td>.289*</td>
<td>.108</td>
<td>.540**</td>
<td>.182</td>
</tr>
<tr>
<td>Connection to Campus</td>
<td>-.028</td>
<td>.028</td>
<td>.207</td>
<td>.143</td>
<td>.144</td>
<td>.054</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).**

*Correlation is significant at the 0.05 level (2-tailed).

N = 73 to 77
### Appendix N: Post-Survey Study Abroad Experiences

<table>
<thead>
<tr>
<th>Study Abroad Experience Variables</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercultural Communication</td>
<td>35</td>
<td>2.9757</td>
<td>.74994</td>
<td>1.60</td>
<td>4.00</td>
</tr>
<tr>
<td>Host-Country Immersion</td>
<td>35</td>
<td>2.7929</td>
<td>.76091</td>
<td>1.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Positive Faculty/Staff Experiences</td>
<td>35</td>
<td>3.2448</td>
<td>.70321</td>
<td>1.83</td>
<td>5.00</td>
</tr>
<tr>
<td>Self-Reported Positive Outcomes</td>
<td>35</td>
<td>3.8957</td>
<td>.74915</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Writing/journaling as part of a course requirement</td>
<td>34</td>
<td>1.5882</td>
<td>1.35104</td>
<td>.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Shared/discussed with others your experiences abroad</td>
<td>35</td>
<td>3.2857</td>
<td>.85994</td>
<td>1.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>
### Appendix O: Correlations Between Study Abroad Experiences & Post-Survey Scale Scores

<table>
<thead>
<tr>
<th>Study Abroad Experience Variables</th>
<th>Post Cognitive Knowing</th>
<th>Post Cognitive Knowledge</th>
<th>Post Intrapersonal Identity</th>
<th>Post Intrapersonal Affect</th>
<th>Post Interpersonal Social Responsibility</th>
<th>Post Interpersonal Social Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercultural Communication</td>
<td>.036</td>
<td>.252</td>
<td>.534**</td>
<td>.249</td>
<td>.257</td>
<td>.054</td>
</tr>
<tr>
<td>Host-Country Immersion</td>
<td>.134</td>
<td>.532**</td>
<td>.527**</td>
<td>.352*</td>
<td>.517**</td>
<td>.177</td>
</tr>
<tr>
<td>Positive Faculty/Staff Experiences</td>
<td>-.162</td>
<td>.108</td>
<td>.263</td>
<td>.020</td>
<td>.207</td>
<td>.319</td>
</tr>
<tr>
<td>Self-Reported Positive Outcomes</td>
<td>.225</td>
<td>.650***</td>
<td>.646***</td>
<td>.298</td>
<td>.301</td>
<td>.071</td>
</tr>
<tr>
<td>Reflect upon your experiences abroad through writing/journaling as part of a course requirement</td>
<td>-.091</td>
<td>.227</td>
<td>.028</td>
<td>.003</td>
<td>.434*</td>
<td>.081</td>
</tr>
<tr>
<td>Shared/discussed with others your experiences abroad</td>
<td>.194</td>
<td>.352*</td>
<td>.619***</td>
<td>.290</td>
<td>.240</td>
<td>.262</td>
</tr>
</tbody>
</table>

***Correlation is significant at the .000 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).
N = 32 to 35
### Appendix P: Correlations Between Study Abroad Experiences & Gains Scores

<table>
<thead>
<tr>
<th>Study Abroad Experience Variables</th>
<th>Cognitive Knowing Gains</th>
<th>Cognitive Knowledge Gains</th>
<th>Intrapersonal Identity Gains</th>
<th>Intrapersonal Affect Gains</th>
<th>Interpersonal Social Responsibility Gains</th>
<th>Interpersonal Social Interaction Gains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercultural Communication</td>
<td>-.031</td>
<td>.257</td>
<td>.359*</td>
<td>.237</td>
<td>.211</td>
<td>.186</td>
</tr>
<tr>
<td>Host-Country Immersion</td>
<td>-.057</td>
<td>.290</td>
<td>.460**</td>
<td>.371*</td>
<td>.507**</td>
<td>.155</td>
</tr>
<tr>
<td>Positive Faculty/Staff Experiences</td>
<td>.036</td>
<td>-.095</td>
<td>.234</td>
<td>.426*</td>
<td>.441*</td>
<td>.235</td>
</tr>
<tr>
<td>Self-Reported Positive Outcomes</td>
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<td>.425*</td>
<td>.598**</td>
<td>.212</td>
<td>.141</td>
<td>-.166</td>
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<tr>
<td>Reflect upon your experiences abroad through writing/journaling as part of a course requirement</td>
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<tr>
<td>Shared/discussed with others your experiences abroad</td>
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<td>.134</td>
<td>.574**</td>
<td>.003</td>
<td>.078</td>
<td>-.164</td>
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*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).

N = 29 to 32
### Appendix Q: Correlations between Pre-Study Abroad Activities & First Half Ratings

<table>
<thead>
<tr>
<th>Pre-Study Abroad Variables</th>
<th>First Half: KCSA</th>
<th>First Half: KCWF</th>
<th>First Half: SE</th>
<th>First Half: SVNC</th>
<th>First Half: AC</th>
<th>First Half: AO</th>
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<tr>
<td>Academic Coursework</td>
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<td>.320</td>
<td>.305</td>
<td>.494**</td>
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<tr>
<td>Faculty Interactions</td>
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<td>.146</td>
<td>-.055</td>
<td>.404**</td>
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**Correlation is significant at the 0.01 level (2-tailed).**
*Correlation is significant at the 0.05 level (2-tailed).*

N = 35 to 43
### Appendix R: Correlations between Study Abroad Experiences & Second Half Ratings

<table>
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<tr>
<td>Intercultural Communication</td>
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<td>.099</td>
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*Correlation is significant at the 0.05 level (2-tailed).  
N = 19 to 22
### Appendix S: Correlations between Study Abroad Experiences & Difference Ratings

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<tbody>
<tr>
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*Correlation is significant at the 0.05 level (2-tailed). N = 16 to 22*
Appendix T: Participant Cases

Low Overall Rating #1 - ePortfolio (Word Count = 2,116)

RP #1: “My name is __ __, I am a Biochemistry and Molecular Biology combined major with an Art minor. I currently have enough credits to be a senior, so instead of graduating a semester early, I decided to study abroad. Every student I’ve gotten the chance to ask if there was an experience they wish they had taken the opportunity to have before graduating has mentioned studying abroad. Moreover, I plan to apply to Veterinary schools this coming Fall semester and I think studying abroad will set me apart from other applicants.

I knew I wanted to study abroad, but it took a bit more thought to decide specifically on Galway, Ireland. Not having to learn a new language with my already limited free time was a big deciding factor. I’m sure understanding the dialect and jargon are going to be enough of a challenge for me, even with my first language being English. My dad has relatives in counties Cork and Kerry, which is convenient to have close in case of an emergency. These are directly south of Galway. I have been told that Galway has a college town atmosphere while Dublin is more of a bustling city and the latter sounded more appealing to me. So, I applied and was accepted into an exchange program with the National University of Ireland: Galway.

My goals while in Ireland are to complete my Art minor and volunteer with local animal clinics to get experience for Vet school. Since my sophomore year, I have been working two jobs to help my parents pay bills as well as earn myself some pocket change. This has severely limited my time to volunteer or apply for internships at veterinary practices that could give me the experience I need to just be considered for a Vet program.

RP #2: Most of the people I have had one-on-one conversations with are students. There are certain phrases that I have picked up on that I don’t hear in the US. A few examples: instead of “thank you” they say “cheers”, instead of “fries” they call them “chips”, and our “chips” in the US are “crisps” to them. The first time someone said “cheers” to me I kinda froze up and didn’t know how to respond properly, but I’m getting the hang of things slowly but surely. Eventually I’ll be able to order “takeaway”, not “takeout”, and know what I’m getting.

Sitting through lectures, I noticed a few words are pronounced differently than what I am used to as well. This observation is very clear in the science classes I’ve sat for because the topics that are covered I’ve had a taste of in the US. It can take me a second to process what the professor is saying and by the time I get it the professor is already on the next slide. It’s a bit stressful but having ADD I know how to take notes well enough to learn on my own.

Most people I meet say I’m easier to understand than people from other counties in Ireland, particularly Kerry accents. I didn’t expect for people in Ireland to not understand other people in Ireland; let alone, tell me how little of an accent I have. But everyone here is a lot nicer than what I’m used to in New York. I’ve got until May to get used to the pleasantries here and it might take me all that time.

RP #3: I’ve found that people on the street use the same nonverbal cues as we do in America. For example, walking down the street most people will walk on the right side of the side walk or if they want to ask you something they’ll make eye contact and walk up to you. I think people tend to sit up straighter in Ireland but it could just be my imagination.
The only noticeable difference I’ve seen is that teachers here tend to read their lectures from pre-prepared word documents and use more hand gestures to emphasize important pieces of information, whereas American professors tend to rely on slide shows and using different pitches in their voice to emphasize the important information.

The nonverbal cues aren’t as strikingly dissimilar to what I’ve seen in America as the common vernacular is. In fact, people from different counties in Ireland have different slang and sentence structure but generally the same nonverbal cues (i.e. smiling when they say something funny, lowering their voice when they say something serious), so I can understand the context of the sentence even if I can’t decode the vocabulary.

RP #4: My goals for this semester were to take art classes to complete my Art minor and volunteer for an animal focused organization to gain valuable experience towards my ultimate goal of becoming a veterinarian. The school that I am an international student for, National University of Ireland, Galway (NUIG), does not offer art classes in the traditional sense, like drawing, photography, etc. After finding this out, I began focusing on my volunteering goal. I found an on-campus organization called ALIVE that offers students of NUIG volunteer opportunities but doesn’t have many animal focused ones close enough that I can travel there on foot.

So no, my initial goals are not getting completed but I have started creating new goals to fill the void. I have been applying to jobs and internships back home, started considering classes for next semester, started studying for final exams and working on final essays for the classes here.

However, overall I am kind of glad I did not have art classes to pile drawing homework on me and not finding a volunteer organization to take up a great deal of my time, so I can enjoy the majesty of the Green Isles. But I can’t let these road blocks make me lazy. I am still trying to find an animal focused organization to volunteer my time with but the search is not my focus, like it was when I found out there were no art classes.

RP #5: I visited Paris, France last weekend and the amount of people begging on the streets, in the metro, and on buses for money and signatures on petitions was extremely unnerving. Back home in ___, New York I have maybe seen a homeless individual once in my life an even here in Ireland there is the occasional person who will stop you when you’re walking alone and ask for “2 euro to afford the bus” but in Paris it was an enormously bigger issue. Initially, I just wanted to avoid those people because being a broke college student trying to travel before I have to pay them, I do not have the money in my budget to spare. I work two jobs back home just to avoid being one of these people.

I would like to think that if such an irrefutable problem exists for homeless individuals, refugees and other despondent groups of people, the government or some organization, like Amnesty, would be on the scene to help these people out, but considering how badly I wanted to avoid them I can understand why others aren’t inclined to help. At the end of the day, I’m glad I don’t have to beg on the streets just for some pocket change but I also don’t have plans to help those that are on the streets.

RP #6: I took a trip to Athens, Greece for the weekend with a friend who’s also from the states and studying in Ireland at NUIG. We normally don’t have a lot of time together beyond a sit down for a cup of coffee here and there, but spending an entire weekend with him made me realize how uncomfortable he is about being American. He tried putting on an Irish accent, if anyone asked where he was from he’d
say Ireland without context, he’d say simple phrases, like “thank you” and “hello”, in French. I thought it was weird because it was obvious that he was trying so hard to not be viewed as American.

It So, I asked him why he was going through so much trouble and he said “Americans aren’t seen in a very good light considering who’s running our country. It’s dangerous to be American with people as upset over what Trump says,” and I just thought that it was the most privileged thing I have ever heard someone say. Like there are refugees having to sleep in the wilderness and walk thousands of miles every day to try and find a place to call home. There’s LGBT identified individuals being sexually harassed at home, at work, and in public because there’s no laws to protect them and people view them as less than human. There’s women who are raped and forced to keep quiet by everyone around her because of the man’s social status and, on top of that, forced to keep the baby because abortion is illegal and she could be disowned. All these crimes against humanity and we’re the ones in danger of being ourselves. I was frustrated to say the least, but I kept my opinions to myself.

I think I could explain how he feels well enough, but as for why he feels so strongly that he goes to the lengths of faking another nationality, I cannot understand.

**RP #7:** Last semester, I was burnt out from working, studying, losing my mom, and having to come to terms with graduating and finding a stable, grown-up job. Studying abroad here in Ireland was supposed to be a vacation before facing the real world head on and it truly has been. I never had the opportunity to travel out of the United States before this semester and getting to witness and learn about the deep histories of countries much older than the United States and meeting people from other cultures has been amazing.

When I first took a plane to get to Ireland I suffered from intense motion sickness and threw up. Now that I have ridden on buses traveling on bumpy gravel roads and planes stuck in turbulence, my motion sickness has become manageable.

The food and food places have made a significant impact on me as well. I am going to miss Digestive Biscuits, Terry’s Chocolate Oranges, and scones but to get Taco Bell, A1 Steak Sauce, and Mac & Cheese back is a good enough replacement for me. I am also going to miss hearing live trad music in every pub. Having a bar on campus and sometimes seeing professors having a pint there has been a weird experience but the fact that it was weird shows me what a rigid system schools in the states have.

As great a time as I have had here, I am ready now to go home and work harder than I was capable of before toward graduating and getting a job that will provide me sufficient funds for a roof over my head and food on my plate.

**RP #8a:** Travelling to Ireland and other European countries has reminded me that I can handle stressful situations alone and with friends. It helped me realize how important good friends that can communicate are, but how much more important it is to know your own limits.

Not having any homework and only have one exam on topics highlighted in the syllabus in Ireland made me realize how much more strict and oppressive school is in the states. I know for some of my past courses, if I had missed a single class I would have missed a seemingly unimportant tidbit that would be a guaranteed question on an upcoming exam or not be reminded that there was a homework sheet to do that I can only get by following a specific chain of links on Blackboard.
After seeing close to 100% of white people with similar backgrounds everyday has made me even more appreciative of the diversity America and, in a smaller sense, my home university offer. It gets really boring to hear about how spending a weekend at grannies was and how they met friendly people in the pub last night.

RP #8b: I would describe my study abroad experience through the skills that I built up along the way. Leading and keeping track of others through crowded subways and airports, being able to read a map and humble enough to ask directions when the map wasn’t helping, being able to overcome language barriers without getting frustrated, just to name a few.

Not many pre-med students get to study abroad, what with the rigorous course load and excessive volunteer hour requirement. Having done so and been able to get some animal related volunteer work done will help me stand out among thousands of other applicants."

Low Overall Rating #2 - Google Forms (Word Count = 629)

RP #1: "I decided to study abroad because I felt like my life at home and at my home university was starting to stagnate. I love my friends and family very much and I already miss them but I felt like nothing new or exciting was happening for me back in the US. I wanted to come to Japan so I could look at the world from a new perspective starting over totally fresh

RP #2: One this I like about the Japanese language is the expressiveness of the people who speak it. A lot of meaning can be drawn from a speaker's expression in Japan when that isn't always the case in English. This is really helpful for a new learner of the language like myself because I get a lot of context clues about the meanings of words and phrases by the behavior of the person I'm talking to.

RP #3: In Japan I notice that people are less likely to make eye contact and nod as you pass them on the sidewalk. While in the US I walk past people and smile and say hello, this doesn't happen as often in Japan because people are more often watching the ground.

RP #4: I think I'm well on my way to accomplishing what I wanted to do this semester. All of my classes have grabbed my focus and attention because they cover such different topics from the courses I usually take at my home university. I'm very happy with my academic performance so far and haven't had any significant struggles so far. One thing I want to change is my management of my time so that I can make sure I visit all the places I want to see and do all the things I want while I'm here.

RP #5: This week I saw a person at the train station wearing a shirt that had the World War II era Japanese rising sun flag printed on it. We've discussed issues of Japanese nationalism and a culture of underestimating the atrocities committed by Japan during the Second World War, but I didn't expect to see anything like that in a major urban area. Understanding the history behind the flag, theoretically the rising sun would inspire a similar reaction to seeing the Nazi Swastika, but it doesn't have the same connotations at all, neither within Japan or outside of it.

RP #6: Last week I was at a Buddhist temple in Kyoto and I saw people lining up at a long rope with a bell at the top. I didn’t know what the people were doing when they got up to the temple but I thought they must be doing some form of prayer. I asked my Japanese friend with me what they were doing and they showed me how to make an offering of 5 yen, ring the bell, clap, and bow before praying at the temple. I'm glad I know what to do now and I'll probably start doing it more often at other temples.
RP #7: Studying abroad has made me much more self reliant and adaptable. I was able to teach myself how to navigate Japanese trains and buses which is something I was never able to do at home. Being without anyone to help me along forced me to learn and adapt on my own.

RP #8a: I've learned that pretty much all cultural norms are totally arbitrary. While social conventions most often have practical reasons for existing, they can usually be substitute with similar things. Which of these alternatives are used is determined by culture and the selection is made arbitrarily.

RP #8b: I think my improved language skills in Japanese would be very useful in the job market. I also have a more diverse sensibility and I’m more able to adapt to other people’s behavior and social cues now."

Average Overall Rating #1 - ePortfolio (Word Count = 810)
RP #1: "My name is ___ ___ and I am a senior at the University at __. I am on my third study abroad program, but this is my first time abroad for a full semester. I choose to study in Norway because I enjoy hiking and being out in nature, and Norway has such a diverse and amazing landscape. Also, I wanted to get to know and learn with and from students from other countries. Hopefully I will leave Norway, I will have a better understanding of cultures’ outside of my own, made friends with people from all over the world, and have travelled to some incredible places.

RP #2: This week, I met many people this week from all over the world. There are 870 international students, with 32 of them being Americans. I have heard lots of German, French, Spanish, and, of course, Norwegian. Luckily, everyone is fluent in English, so I can communicate with everyone! Many people choose to speak their first language, so it can be difficult to break into others’ conversations. I can’t speak anything other than English, so I am relieved when I find natural English speakers.

RP #3: Norwegians have been described as antisocial, and I do agree with this statement. Norwegians tend to not make eye contact unless they need to say something, they choose to sit as far away as possible from others on the train (going to far to have half of their body hanging off the seat), and will just stand awkwardly if someone is in their way instead of speaking up. Their nonverbal cues definitely make them come off much less friendly than Americans. They seem less approachable, which isn’t true because all of the Norwegians I’ve interacted with have been very polite and nice, but their nonverbal cues can come off as cold. Americans are definitely a lot louder and more expressive than Norwegians. I realize now that they are not trying to be rude or awkward, they are just not as outwardly social.

RP #4: My main goal was to meet other international students and become more familiar with Norway and the culture. So far I am on track to meet this goal, mostly because I am exposed to students from all over the world every day and am thrown in Norwegian life daily. To ensure I make further process, I have to keep traveling throughout Norway and Europe and keep being involved in school activities.

RP #5: This week I observed children playing outside during recess in the pouring rain. In the US, we would've had indoor playtime in that type of weather. Initially, I thought it was very strange and that the children might get hurt running around on the playground in the rain. I think Norwegians are much tougher than Americans, and they believe their children should be too. I think it actually good that the children are used to playing and being outside in the rain since it rains so much in Bergen.

RP #6: This week I traveled to Scotland to visit my friend who goes to school in Edinburgh. In Scotland, I noticed many of the restaurants and pubs had slot machines in them. I actually got carded when trying
to order a baked potato for lunch in a pub with a slot machine. Initially I thought it was very odd that they would put slot machines in regular restaurants. I asked one of the waitresses about it, and apparently casinos aren't very common in Scotland, but regular restaurants and pubs can get licenses to have slot machines. The slot machines do bring in a bit of extra income to many establishments. If someone asked about it, I would explain the licensing system to them.

RP #7: This experience has made me more comfortable in the uncomfortable. I have always been relatively independent, but I think now I am even more so. I think going to a country where I can't read any signs or labels or understand the native tongue has taught me how to easily adapt to the unknown and force me to trust my judgments. I am more comfortable with uncertainty than I was before this experience.

RP #8a: From this experience, I have learned a great deal how other (mostly European) countries live. Most of the time, I was surrounded with other International students from countries such as Germany, France, Estonia, and Austria. I think I can now adapt to other’s customs- I am less surprised by things that may seem unusual to Americans now. I also have gotten significantly better at understanding accents. I am more comfortable in the unknown now.

RP #8b: My experience makes more a more globally minded candidate. I am better equipped to understand people from other cultures. Overall, I am better equipped to deal with change and the unknown since this semester has been full of the unknown. I am more adaptable to people and situations anywhere."

Average Overall Rating #2 - Google Forms (Word Count = 776)

RP #1: "I am a senior in the University at ___, majoring in Media Study. I am studying abroad because I have always wanted to travel to Japan, and have never had the chance to do so beforehand. I hope to learn more about the Japanese language (I started my education in this area last semester), as well as Japanese culture, while meeting new people.

RP #2: When I met with my speaking partner (who is a Japanese student), she told me that she had difficulty understanding my Japanese because it was so formal. This was surprising to me. However, in general my Japanese skills are very lacking, and I feel inept whenever I need to converse with someone, such as when I am asking a question or buying something. This makes me want to learn more as soon as I can.

RP #3: Bowing is the most common form of body language in Japan. I found this easy to get used to, and almost always remember to do it in social situations (such as after buying items from a convenience store, or meeting someone new). As for facial expressions, I frequently notice people staring at me because I am a foreigner. This makes me feel somewhat alienated and uncomfortable, but there is nothing I can do about it, so I try not to let it affect me much.

RP #4: My main goal has been to learn more Japanese. This task has been difficult, but I believe I have been learning more since I arrived. The complexity of the language itself makes the task more difficult, but my continued studying will ensure further progress.

RP #5: Last week, I went to Miyajima. I noticed that the deer living on the island were eating paper maps and other garbage. I later found out that people are banned from feeding the deer, and as such, they are starving. I felt very sad upon discovering this. There are animal rights activists in Japan who protest
against this mistreatment, but the local government has done nothing about the matter. Judging by this occurrence, it seems that animal rights are viewed as unimportant by the Japanese government. I am guessing that this specific problem arose because of tourists, seeing as these deer were viewed as sacred in earlier times.

RP #6: Yesterday, I went to a traditional okonomiyaki restaurant with a friend. Instead of making the food in the kitchen, the chef made the food on our table. Although I understood the process of making okonomiyaki, I did not realize that the food would be made in this way, so both I and my friend were confused. Because my Japanese language skills are still weak, I could not really talk to the chef. Instead, I just had to sit and watch, while offering the little information I had about the creation of okonomiyaki to my friend. All in all, the experience was exciting. Now that I have seen the process of the food being made in front of me, I would be able to prepare myself for doing it again, and tell other friends how to do it (i.e. what to order, how long to wait while the food is cooking, etc.).

RP #7: Studying abroad has definitely made me a more independent person. This was the first time I had lived outside of my hometown. Although I lived by myself in the dorms at my home university, my campus was very close to my home, so I could ask my parents for help at any time. Now, I still need financial help from my parents, but I cannot simply go home when I want to, nor can I call them at any time due to the differing time zones. Additionally, even though I have many friends here who can assist me with speaking Japanese and navigating the area, I cannot rely on them constantly. Thus, self-reliance has been necessary throughout much of my stay here. These experiences of meeting new people and learning about a different culture have been the most meaningful aspects of the trip.

RP #8a: As a white person, living in Japan is the first time I have been a racial/ethnic "other." Although I did not experience anything like the discrimination felt by minorities in America, and I had already been sympathetic towards these experiences, I nevertheless have a new perspective on the issue, now that I have come closer to experiencing it.

RP #8b: I feel that my experience would make me a better candidate because it proves that I can calmly enter unfamiliar scenarios and adapt to them. Although my knowledge of the Japanese language is limited, I was still able to navigate the country and do what I wanted in it."

High Overall Rating #1 - ePortfolio (Word Count = 1,890)
RP #1:"My name is _____, a sophomore at SUNY ___. As an Environmental Science student I have always found the beauty of nature to be the most desirable aspect of our human lives. The world we live on is too beautiful to not experience, enjoy and interact with the many ecosystems and biomes that cover this planet. I will be going to Australia, the largest hotspot for biodiversity on the planet. I plan to swim with the sharks and dolphins, hold a koala but also get to know and understand the culture and way of life these people experience. I have always been curious and intrigued by the way other people live around the world. The cultural differences everyone faces are interesting not only to learn about, but also to experience. Everything in our daily lives is so minuscule in comparison to the world we live in. While studying abroad, the experiences I will have will not only hopefully open my eyes to different perspectives, problems and cultures, but also build myself as a young adult by being more independent and humble in a world of chaos.

RP #2: As an American student in the English speaking country of Australia, the language barrier has not been significant however it has caused me to face many challenges. During the application process, there were many words that were familiar to me in the United States but with a slightly different
meaning then how they are used in Australia. I found this problem to be most significant while choosing my subjects, which are also known as courses in the states. Attempting to navigate the University website was challenging as I kept selecting “course selection” which in Australia is equivalent to a degree. As I am only abroad for one semester, it was hard to find a complete list of subjects for which I could choose from to enroll in. Once the application process was complete I was ready to depart and begin my adventure. I got picked up in the airport by a representative from ___- with a very thick accent. Although I speak English, the pronunciation and usage of words was very difficult to fully understand. I live in the international housing option with people from around the world, so we often find ourselves having to describe words since it isn’t widely known among all nationalities. After about two weeks in my new country, I am able to maneuver around the campus, speak to professionals, get around on my own and be able to fully enjoy my experience without the struggles of a thick language barrier.

RP #3: People from Australian often have a much more laid-back reaction to everything. Their facial expressions, tones and hand gestures are not nearly as aggressive as people in America. People are polite, helpful and have a cheerful way of talking to others. To everyone else, I appear to have very developed facial expressions that exaggerate my emotions. Although the way I express my emotions is clearly different, the body language is quite similar. When people say hello and goodbye they wave, however there aren’t many commonly known hand gestures used among the population. Since much of Australia has very different social aspects depending on geographical location, many Southern Australians hold up the “shaka or hang-loose” sign with a hand to say “cheers”. This is more common in the south as well as by surfers in the north. Even among the late-teens early-twenties generation, there are not many hand gestures commonly done. This is much different than in America, where fads and hand signs come and go very rapidly. The nonverbal cues used by Australians are much more relaxed and welcoming compared to that of which I’m used to in the United States. Everyone seems friendlier—commonly saying hello to strangers (or “good day mate” as they say here), whereas Americans appear to be much more standoffish. Now, after reflecting on the nonverbal cues which went unnoticed for the most part at first, makes me appreciate the culture here and the way people interact.

RP #4: As a study abroad student, I am fortunate enough to take classes that will transfer back to my home university as either a pass or fail. While this is not a time to slack and not take my schoolwork seriously, it allows me to pursue other opportunities and interests during my semester abroad. While I did not set any specific goals before arriving in Australia, I had planned and hoped to be more social, organized, independent and adventurous. Coming to a new place without knowing anyone is hard enough while going to university in the United States, however without the option to call my parents at any moment in the day made me feel so alone in this new place. I pushed myself to go out to all the events, introduce myself to new people and make connections that I know will last. Being on my own has forced me to pay attention to grocery shopping, bills, laundry and everything else I never had to take full responsibility for before coming here. I am forced to stay organized so that everything will get done which has lead me to be a much more independent person. Most importantly, I had always had the motivation to travel and see all the beauty the world has to offer. Since I know I am here for only a short few months, I take every opportunity possible to travel to new places, try new things such as skydiving, scuba diving and surfing, and taking chances that I don’t have while I’m home. Being social and adventurous are my two biggest goals I hope to progress in while abroad, and it has been so helpful to achieve since I am surrounded by so many other people hoping to get the same experiences out of their stay in Australia as well. While I am only two months into the program, I still have many plans to make for upcoming vacations to other nearby countries and trips and excursions that will be memories of a lifetime.
RP #5: Australia and the United States have very similar values and beliefs from what I have noticed thus far. I am late for this response, because I really have not seen much that stood out as being different from the U.S. However, this past week I noticed the difference of religious practices has made itself apparent amongst some people in Australia. Although the primary religion is Christian, this week I met a Muslim girl in one of my study rooms. At first, I noticed the Hijab she wore, but thought nothing more of it. As we were in the "quiet" study room preparing for exams and assessments, my attention was brought to her once again as she began to pray. The sun was setting, when she got up from her seat and faced the back wall of the room. This is where she bowed her head and whispered to herself for approximately 10 minutes. At first I was annoyed since it was a quiet study room- meaning no talking or noise at all. But I did some research to understand more. In western New York, I have never met a Muslim or barely even saw one in the streets. Their customs, practices and beliefs were completely new to me. I understood that where she stood in the back of the room was facing Mecca. I've heard of this from teachers or in movies years ago, however I never understood how important the practice was to people until I saw it personally. After understanding the reasoning for her actions, I accepted the fact it was for religious reasons, which alleviated my annoyances, as well as being a new appreciation for other cultures. Now I feel like I am less quick to judge people based on their actions, since I understand there is probably a good reason for them doing it. Also, I have began to appreciate different cultures not only from this experience, but other small experiences I have encountered during my stay in Australia that I wouldn’t have been exposed to in the US.

RP #6: Although it’s not the first time I have witnessed this event, it is the experience that affected me the most relating to this topic that I witness weekly. In Australia, murder of Cane Toads is encouraged amongst locals. As an Environmental Scientist and animal lover, I was angry and startled when I first say my friend take a rock to the toad’s head to end its life. At first I refused him the opportunities to kill the toads when the chances were present, which he respected, however he was very adamant that they should be killed at all cost. I did some research on “why you shouldn’t kill cane toads” without any results supporting my opinion. I read reports from researchers and scientists that claimed cane toads should be killed- however humanely. They are a non-native species that affect Queensland ecosystems. They are deadly animals that have caused problems in other species; their presence has created another predator that the native species have to adapt to. In order to preserve the natural environment and native species, locals even participate in “cane hunts” to kill as many as possible. Upon my research, I found ways to kill the toads, which are humane and cause the least amount of pain as possible to the animal. To others, since I did sufficient research I would explain that although it is purposely killing an animal, the balance of the ecosystem should be considered to be more important, as this one cane toad living could kill 20 other animals and disrupt ecosystems. There are human ways to kill it such as putting them in the freezer so their heart rate slows and their systems shut down. Killing of cane toads may seem like a cruel act, however in the long-term it is beneficial for the native Australian species and balance of the ecosystem as a whole so long as the toads are killed in a humane way to reduce the amount of pain and suffering they experience.

RP #7: During the time of my study abroad experience thus far, I have encountered many people along their travels and journey down the east coast of Australia. In many of my own traveling, I met people from a multitude of backgrounds, cultures and beliefs. Everyone from so many backgrounds all brought together by the love of traveling and the thrill seeking life Australia has to offer. Many of the people that are driven to travel are the people who appreciate life and all it has to offer. These people have a general positive outlook on life that has affected the way I do and look at things in a more understanding, compassionate and positive perspective. As an international student at a university that
is compromised of a lot of other internationals, the interaction between other people with various backgrounds has been meaningful in a way for me to not only learn about other cultures and beliefs, but also to be understanding as general as well as involved in experiencing a magnitude of other cultures in a single journey. The friends and people I have met over these past five months have affected the way I perceive the world and the motives and interactions between us."

**No RP 8 submitted**

**High Overall Rating #2 - Google Forms (Word Count = 743)**

**RP #1:** "My name is __ ___. I'm a senior at the University of ___ that was born in ___, NY. I decided to study abroad because it was the opportunity of a lifetime and I've always been intrigued with other countries and cultures. Not only do I get to see more of the world but I get to challenge myself and go on a growing and spiritual adventure. My goals studying abroad is to better communicate and understand the world around me, become more knowledgeable in foreign relations, embargo on a hands on learning experience, meet amazing people and learn a magnitude of things, and become the best person that I can possibly be.

**RP #2:** This week I interacted with various nationalities and native languages. I'm in is the Netherlands and they usually speak English very well which made me happy as that was a huge benefit. The thing that made me the angriest about Dutch spoken language was that I'm not able to pronounce words with as much as German tongue, a difference from our countries dialect but with the same alphabet. Other languages like Spanish, German, and Italian was also hard for me to communicate with. A lot of my roommates aren't good at English so it saddens me that I can't communicate with them better. However, as the week went on I became better at slowing down and being able to communicate on some level with all different languages. I am now learning the language and speaking it as much as I can! This experience has helped me to appreciate diversity by interacting with the multitude of languages surrounding me. To realize language is such a powerful and beautiful tool and if it becomes a barrier than you must look beyond the content of the words but the body language expressing it.

**RP #3:** Over the past few weeks, body language and hand gestures were very important in order to communicate with people of various nationalities. I'm very thankful that it is a universal language within itself and found many similarities between each person. Facial expressions are great because that is how I know that someone doesn't understand me. It helps me to slow down, talk more clearly, and speak better English. Sometimes it can irritating have barriers of language but it is a learning process and it gets easier with the help of nonverbal cues.

**RP #4:** So far, I'd like to say yes. Some of my goals included traveling, being extroverted and making friends, doing well in class, becoming fit, and learning the language. I believe here, away from reality and ____, I have time for myself and less of a strict schedule. For the first time since I started college, I'm able to relax and breathe. Maybe making a schedule and motivating myself will help me ensure my current goals and some more like finding out what internships and jobs I need to secure when I come back to the United States.

**No RP 5 submitted**

**RP #6:** Today, I attended an important workshop about Eritrean refugees. It was a great presentation, lots of food and beverages, and a good connected humanitarian cause. However, it was all in Dutch. This wasn't surprisingly but this bummerd out. I felt like I couldn't experience it to its full potential and gather
all the information I would've liked. My classmate would translate it to me as much as she could. I think I got the main parts and concepts, but I wouldn't be able to pass the information on maybe better than someone Dutch.

**RP 7:** Throughout this study abroad experience, I have acquired different skills and grow more into the person that I want to be every day. Everyone hears this from a study abroad experience but it is true. Being on your own, thousands of miles away without your family and friends, makes you more independent and appreciate the smallest things in life. Other than meeting amazing people from all different backgrounds, the one part that I found especially meaningful was my study placement in where I spent my semester working with Eritrean refugees. I always wanted an opportunity like this but it wasn't until I came to Europe, that this was possible and the magnitude of it as well. Throughout my village, the level of inter-sectoral collaboration and community participation is higher than I ever could imagine in the US. It is truly an honor to be a part of such a wonderful experience and a loving community and I'm forever grateful."

*No RP 8 submitted*