

Analysis of Behaviors Documented in Reflective Journals in Study Abroad ePortfolios to Improve Pre-Departure Training

Miki Cutting

Ritsumeikan Asia Pacific University
Graduate school of Kumamoto University
cutting@apu.ac.jp

Yoshiko Goda

Kumamoto University
ygod@kumamoto-u.ac.jp

Katsuaki Suzuki

Kumamoto University
ksuzuki@kumamoto-u.ac.jp

Abstract:

In study abroad research, capturing learning evidence and using it to improve pre-departure training is in demand. Our study applied Kirkpatrick's training evaluation for study abroad and analyzed students' reflective journals documented over time for evidence of how students used a target intercultural skill taught during pre-departure training. The findings were then utilized to discuss how to improve the training. In-depth analysis of reflective journals indicated that most common contexts in which sojourners used the skill resembled our training context and signaled the importance of buddy schemes. However, it also revealed sojourners' various cultural engagements and their stages of advancement of cultural inquiry which were not covered in the training. Students' reflective journals, importantly, documented encounters with language difficulties in complex cultural inquiry with affective evidence. This raised issues that training needs to incorporate linguistic components to handle advanced cultural dialogues.

Key words: *Assessment, Education abroad, Intercultural training, Instructional design, Kirkpatrick's training evaluation*

Introduction

As students' mobility across the globe is restricted due to the pandemic, and higher education institutions have had to move to online alternatives to provide international education, the value of opportunities to *physically* studying in foreign countries has become recognized more than ever. However, merely sending students overseas does not necessarily lead to expected outcomes, therefore it is critical to provide research-based intercultural mediation to optimize the sojourn experience, such as by pre-departure training (Jackson & Oguro, 2017; Jackson, 2020a; Vande Berg et al., 2012). A recent government-let large-scale study in Japan (Kawai-juku, 2018) has also revealed the importance of pre-departure training, yet studies in pre-departure training and training effectiveness are still scarce (Cutting et al., 2020) and development of pre-departure training needs to be discussed nation-wide (Kawai-juku, 2018).

In the field of training evaluation, Kirkpatrick's model of training evaluation, which divides evaluation into 4 levels: *reaction* (Level 1), *learning* (Level 2), *behavior* (Level 3), *results* (Level 4), and formalizes the significance of each level in training, has been used as a de facto standard (Suzuki, 2015a). *Behavior* (Level 3) is "the degree to which participants apply what they learned during training when they are back on the job" (Kirkpatrick & Kirkpatrick, 2016, p.13). *Behavior* (Level 3) is "the missing link in moving from learning to results" and therefore the most critical level (p.49).

According to Suzuki (2015b), to promote *behavior* (Level 3), it is crucial to make the training context resemble real-life settings. For intercultural intervention to maximize study abroad experiences, it therefore raises the question as to how we can make our training context similar to students' affordances overseas. Jackson (2020b)

urges that in future research we first need to obtain evidence from study abroad by investigating sojourners' intercultural discourse in a systematic and in-depth way and then use such evidence for real-life scenarios in pre-departure training. Suskie (2018) also argues that evidence of student learning should be used to understand and improve their learning. Yet in the field of study abroad, institutions too often rely on pre/post surveys, standard instruments, and self-reported Likert items, that do not adequately capture students' learning and development, behavioral aspects, and learning evidence to explain outcomes (Griffith, et al. 2016; Deardorff, 2015; Cutting, 2015). Moreover, research to indicate how study abroad assessment can lead to program improvement is lacking (Salisbury 2015).

Cutting et al. (2020) used sojourners' learning evidence documented in daily reflections to evaluate *behavior* (Level 3) in study abroad. The study first identified the possibility that sojourners were not utilizing a critical intercultural skill taught during training. In the following year, the researchers redesigned the training and ensured students' attainment of that skill prior to study abroad to promote *behavior* (Level 3). During training, skill practice and evaluation through roleplays matching authentic sojourn settings were conducted several times to assure students' skill acquisition. After training, the study collected the students' daily reflections while abroad and extracted documentation of use of the skill. The study found that students' documentation of use of the skill significantly increased after this change of training and suggested the impact of training design on students' *behavior* (Level 3) in study abroad (Cutting et al. 2020).

However, the evidence in the study was not analyzed in sufficient depth to understand *how* students implemented the skill, so these findings were not available to use to improve the training. As stated above, real-life evidence in study abroad should be used for pre-departure training content and learning improvement. Analysis of sojourners' descriptions of use of the target skill in a designated country may provide critical information for pre-departure training.

The current study focuses on sojourners' ePortfolio reflections during study abroad following Cutting et al. (2020), and takes further steps to conduct in-depth analysis of sojourners' writing about how they are using the target skill, which was taught in pre-departure training, to understand their real-life situations in study abroad. Then this real-life evidence is used to discuss how pre-departure training can be improved. The present focus is therefore to create an evaluation cycle to investigate *behavior* (Level 3) of Kirkpatrick's model in-depth, and aims to use the findings to further develop the pre-departure training programs.

Research Design & Methods

Research questions

Cutting et al. (2020) evaluated *behavior* (Level 3) by collecting students' reflection records and analyzing how much students documented their use of the target skill while abroad. This study moves beyond Cutting et al. (2020) and conducts in-depth analysis of the evidence from reflection records to understand *how* students are using the skill with host nationals. Students' self-ratings about their use of the skill, conducted in the same ePortfolios, are also added to bolster results. The findings are used to discuss how to improve pre-departure training (Figure 1). The current study follows the same study abroad program, pre-departure training content, and target skill as in Cutting et al. (2020), but with different students in the following year.

Research questions are as follows:

- 1) *What do students' reflections tell us about how they use the target skill during study abroad?*
- 2) *How can evidence from their reflections improve training?*

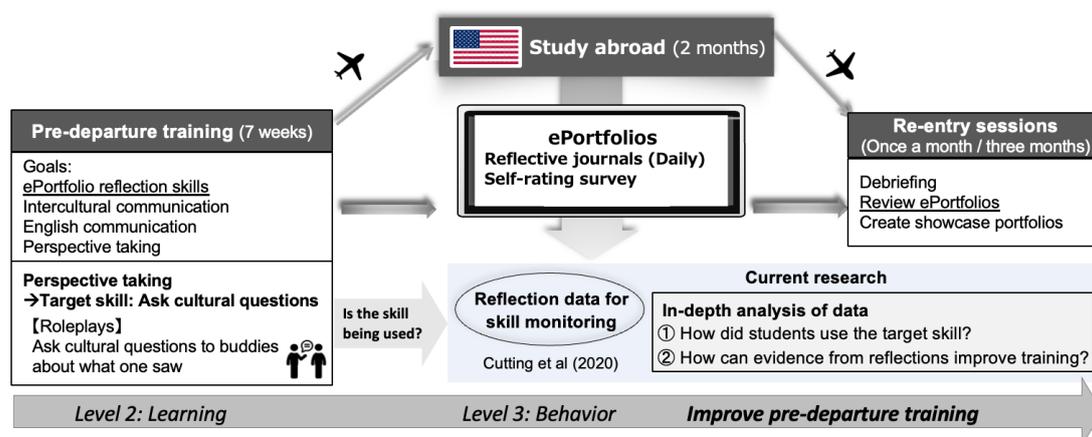


Figure 1. Research framework

Short-term study abroad and pre-departure training

This study abroad program is operated by a private university in Japan. Aiming to prepare students to work in a global society according to the university’s mission, the program dispatches a group of Japanese students, (approximately 15 to 20) to a US partner institution for 2 months for credit-bearing courses created for this program (Figure 1). For enrollment, participants need to have completed the intermediate English course offered in the institution and their English levels range from TOEFL ITP 460 to 500. The participants in this study are 15 students (4 male and 11 female, 2nd and 3rd year).

Training design: Learning goals and target skill

To optimize students’ learning during study abroad and to achieve program goals, a pre-departure training (7 weeks, 14 class hours) course was provided, with the learning goals of *Intercultural communication*, *English communication*, and *Perspective taking* refined through research in Blair & Cutting (2015) and Cutting (2015; 2016). The *Perspective taking* goal requires suspending one’s own judgement of others and seeking others’ viewpoints (Table 1) following theories and models in intercultural learning and the D.I.E. (Describe, Interpret, Evaluate) method. *Perspective taking* has several sub-goals as in Table 1 and our study focuses on skill (b): *Students can ask questions in English about cultures, such as cultural differences and surprises* by following Cutting et al. (2020). We decided to monitor this skill, since this skill is relatively observable and identifiable compared to other skill goals, such as *Suspending own judgement* and *Critical reflection of own views*.

More importantly, this skill of cultural inquiry requires other sub-goals in *Perspective taking* (Table 1). To ask cultural questions, attitude goals of *suspending own judgement* along with *curiosity and inquisitiveness* are exercised. The skill also practices the knowledge goal of the D.I.E. (*Describe, Interpret, Evaluate*) method to understand others’ perspectives and interpretations. This skill gives opportunities for students to use English and interact with others for cultural learning. According to Byram (1997, pp.98-99), asking questions to “acquire new knowledge of a culture and cultural practices” is “pivotal” in intercultural communicative competence. Since we focus on a single intercultural skill, our study is limited in scope and cannot represent the intricate phenomena of sojourners’ learning. However, outcomes in international education are complex and broad, thus it is critical to identify specific indicators and evidence in assessment (Deardorff, 2015). Our study is an attempt to focus on a specific indicator to identify and trace the evidence in complex intercultural learning.

Table 1

Target skill (b) in the goal of “Perspective Taking” (Adapted from Cutting et al., 2020)

Goal	“Perspective Taking” Students possess the knowledge, attitude, skills, and English ability to attempt to broaden their perspectives.
Attitude	<ul style="list-style-type: none"> • Suspend own judgement of others’ attitudes and behaviors. • Being curious and inquisitive to seek understanding through observation, questioning, and research.
Knowledge	<ul style="list-style-type: none"> • Students can differentiate facts, interpretation, and evaluation. (The D.I.E. method: Describe, Interpret, Evaluate).
Skills	<ul style="list-style-type: none"> (a) Students can suspend their own judgement of others’ attitudes and behaviors. (b) Students can ask questions in English about cultures, such as cultural differences and surprises. (Appropriately, not based on their own judgement). (c) Students can explain their own views to others (appropriately) to help mutual understanding. (d) Students can critically reflect and express their own views, assumption, and/or their perspective change.

Training implementation: Skill practice in roleplays

In pre-departure training, skill practice is conducted through roleplays. To make the roleplay settings authentic, we preset the situational description in the roleplay that *students ask cultural questions to their ‘buddies’ about something they ‘observed’ in the US*. This is because our study abroad program employs a buddy scheme where students in the host institution voluntarily support international students as buddies, often by showing them around the area. Thus, students have opportunities make observations when they go out with buddies. Trained TAs act as buddies and conduct roleplays (Figure 2). Students’ performance is evaluated and practice is conducted several times until their skill attainment is assured by using the TOTE model in instructional design (Cutting et al., 2020).



Figure 2. Roleplay practice in training: Asking cultural questions to a TA who is acting as a buddy

Training evaluation: Reflective journals and self-rating survey in ePortfolios

Throughout the program, ePortfolios are implemented to deepen students’ learning through self-reflection and to provide evidence for learning assessment (Cutting et al., 2020). We used ePortfolios to evaluate training effectiveness because this system can record learning reflection over time and self-ratings can be conducted, which can indicate their use of the target skill taught during pre-departure training. The employed ePortfolio is *Manaba*, a learning management system (LMS) widely used in Japanese institutions featuring the functions of reports, tests, surveys, polls, and projects. In pre-departure training, students practice writing reflections in reports. When they are abroad, they start writing daily reflections on a voluntary basis. The portfolio reflections contain the instructor’s guided reflection questions based on Kolb’s (1984) experiential learning model, such as to write *something I did, noticed, felt, or learned. Why it is important. How I will use it in my life* accompanied by goal setting. Trained peer advisors, who were program participants of the previous year, provide prompt feedback to the sojourners’ daily reflections (Cutting, et al., 2020). Self-rating about use of the target skill is done in surveys in the same ePortfolios. After study abroad, students review their reflections and create a showcase portfolio to represent their learning outcomes of study abroad.

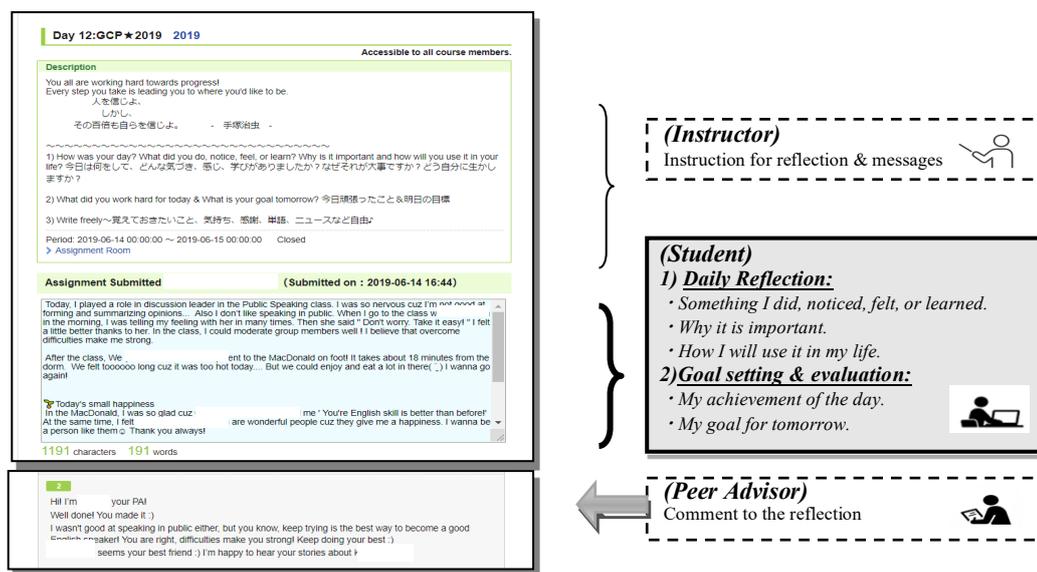


Figure 3. Reflective journals in ePortfolios used during study abroad

Research methods

As was done in Cutting et al. (2020) students' descriptions about usage of the target skill while abroad were collected from their daily reflection records. The researchers read students' reflection records thoroughly and extracted the descriptions which indicated students use or intended use of the target skill, following the deductive coding approach of Sato (2008). A researcher in the field of international education supported the first author in the selection of appropriate segments. The researchers discussed each selected segment and when agreement was reached on all the segments, it was concluded that theoretical saturation had been achieved. Prior to this research, all participants provided written and verbal consent to make use of their ePortfolio submissions.

An in-depth analysis of the selected descriptions was conducted, which identified how students used their skills in the following areas:

- Interlocutors: To whom did students ask cultural questions?
- Content of cultural questions: What are their cultural questions?
- Usage: Were they able to ask questions?

To identify the context, the researchers read the extracted descriptions along with the original data and conducted deductive coding to identify the *interlocutors* and *content of cultural questions*. Then code labels were assigned and modified throughout the coding process iteratively to represent the *interlocutors* and *content of cultural questions*. The other researcher supported this process and the coding was completed when agreement was reached across all the codes.

Next, we arranged the selected segments and their code labels in chronological order and examined if there was any tendency or developmental process in students' skill usage over time. In addition to this qualitative analysis, a self-rating survey with the question "I ask questions about cultures" was given to the students to bolster results as quantitative data. We limited our analysis of students' daily reflection records to days 1 to 19 to correlate with a self-rating survey that was completed immediately after this period. Finally, the evidence and analysis of students' portfolios was compared with pre-departure training and ways to improve pre-departure training was discussed.

Results

This study used the daily reflection data of 15 students out of 16 participants of the program who submitted both reflections and self-ratings. The total number of reflection entries of 15 students up to day 19 was 226. The average of students' portfolio submissions per day was 79%. In their reflections, 8 students out of 15 (53%) wrote about using the skill, 12 segments in total. Table 2 shows the list of 12 segments written by 8 students (Students A to H) from days 1 to 19 in chronological order. Through deductive coding, we identified 'Interlocutor'

Table 2
Students' description of using the target skill and identified real-life context

Students & Dates	Students' descriptions in reflective journals about using the skill	Identified context		
		Interlocutor	Content of cultural questions	Usage
Student A Day 1	About cultures, I felt there are so many people who are half naked. Texas is surely hot, but Japan is ... I don't know what makes such difference , so I will try to ask a buddy about it.	Buddy	Observation	△
Student B Day 4	After class, I sent a message to a buddy and asked which coffee shops he recommends around school. Since I am in the US, I felt I should explore different coffee shops to study. ...I truly respect our buddies' spirit to help. So thankful.	Buddy	Local recommendation	✓
Student E Day 4	Because of a comment from my teacher, I learned my gestures could give a negative image to some people. I also asked questions about an expression I know to a buddy and found out people may consider it as racist. Asking questions is surely important and I want to ask questions more.	Buddy	Expression	✓
Student C Day 6	[The RA] asked questions and asked about Japanese language to me. Using this time, I asked the same questions back to her and explained using drawings and photos. With these, she talked to me a lot.	RA	Language	✓
Student H Day 6	After the tour, some students were asking questions to the guide (at the volunteer site) and understanding by nodding. However, I couldn't understand and felt terrible. I had lots I wanted to ask about this organization but not being able to understand what they say was frustrating.	Guide (Volunteer) at Volunteer site	Volunteer site	×
Student A Day 7	I asked a buddy about a kick skater . Lots of people are riding them and I learned people can rent one after installing an application.	Buddy	Observation	✓
Student F Day 7	I talked to our buddies on the street. Starting from "it's hot again," I kept asking questions about whatever I saw in town . This is my first time to stay this long overseas, so this new culture is very exciting	Buddy	Observation	✓
Student G Day 10	I will write about the questions I asked to RAs today and what I thought about their answers. Question 1: In the parking lot , it seems...Question 2: In Texas, do RepublicansThen I heard Texas is Republican, but.... Their answers were interesting. I want to keep asking more questions from now on.	RA	Observation, Politics, etc.	✓
Student D Day 11	I asked (volunteers) about the election in the US which I learned about in class because I wanted to see if I can talk about something academic. However, their vocabulary was difficult, and the speed was fast, so it was hard to catch all. But they explained some words to me and gave various examples, so I was thankful. I still lack listening skills. I will work on it.	Volunteer	Politics	✓
Student B Day 14	I asked my buddy about politics in the US , because I couldn't understand the pros of the Republicans in my Multicultural Society class. He told me that ...I wanna know about politics of the U.S. more and more.	Buddy	Politics	✓
Student H Day 18	[At a volunteer site, in a freezer room] There was a foreign volunteer next to me and I wanted to ask various questions about volunteering to the person. But I was so cold that no word came from my mouth.	Volunteer	Volunteering	×
Student C Day 19	Most shockingly, when I asked him [a dorm resident] about the bombing in Hiroshima , he said American aircrafts ... I wasn't taught such a thing, so later I looked into it. It seems Japan was... World is big. My view is narrow. And topics are difficult. I really felt I need more vocabulary for academic conversation, but it was a lot of fun!	Dorm resident	War	✓

(Japanese descriptions were translated by the first author)

✓: Used the skill, △: Intention to use the skill, ×: Couldn't use the skill

and 'Content of cultural questions' from each segment and allocated codes, which are displayed in the right columns in Table 2. We highlighted the words or phrases which showed the 'interlocutors' and 'content of cultural questions.' The identified 'Interlocutors' are as follows: *Buddies*, *Volunteers*, *Residential assistants*, *Dorm residents*. The identified 'Content of cultural questions' from are: *Observation*, *Politics/War*, *Volunteer site/Volunteering*, *Local Recommendation*, *Expressions*, *Language*. The category of 'Observation' signals students' questions about what they saw and observed. Questions about politics and wars are labelled as *Politics/War*. *Volunteer site/Volunteering* is questions about a volunteer site students visited weekly or about volunteering there. *Local Recommendation* is questions to local people about their recommended places to visit. *Expressions* includes questions about certain English expressions the students encountered and the cultural acceptability of these expressions. *Language* refers to questions posed to learn about the language. We also checked if the skill was used or not from the descriptions and signified by ✓ when the skill was used, × when the skill was not used, and Δ for the intention to use the skill.

From Table 2, 'interlocutors' and 'content of cultural questions' were extracted and listed in Tables 3 & 4 to see frequency and tendency. Students asked cultural questions to their *buddies* (students in the host institution who support international students) most frequently (6 descriptions), followed by *volunteers* students worked with while volunteering (3), *RAs* (Residential Assistants in the dorm) (2), and a *dorm resident* (1). The most frequently asked cultural question is *Observation* (4), followed by *Politics* (3)/*War* (1), *Volunteer site/Volunteering* (2), *Local recommendation* (1), *Expressions* (1), and *Language* (1).

Table 3
Types of interlocutors and frequency of skill use

Interlocutors	Buddy	Volunteer	RA (Residential assistant)	Dorm resident
Frequency	6	3	2	1

Table 4
Types of content and frequency of skill use

Content of cultural questions	Observation	Politics/War	Volunteer site/Volunteering	Local recommendation Expressions Language
Frequency	4	Politics 3, War 1	2	1

Transition of use of the skill over time

Table 5 displays students' cultural questions from Table 2 in chronological order to see any transition or development in using the skill. In the earlier stage from days 1 to 10, students asked questions about *Observations* the most (days 1, 7, 7, 10) along with questions about a *Local recommendation* (day 4), *Expression* (day 4), *Language* (day 6), and *Volunteer site* (day 6). After these, questions about *Politics* emerge from days 10 to 14, followed by another political question about *War* in day 19. In cultural learning, questions about *Observations* are relatively easy and simple to ask as *visible* parts of cultures. *Politics* are more complicated to discuss and comprehend, thus requiring elaborate interaction. Although the data is limited and the progression is not rigid, examining students' use of the skill over time, rather *simple cultural questions* appeared at the beginning and *more complex cultural questions* emerged later.

Table 5
Cultural questions in chronological order

Dates	Interlocutor	Content of cultural questions
Student A Day 1	Buddy	Observation
Student B Day 4	Buddy	Local recommendation
Student E Day 4	Buddy	Expression
Student C Day 6	RA	Language
Student H Day 6	Volunteer (Guide at Volunteer site)	Volunteer site
Student A Day 7	Buddy	Observation
Student F Day 7	Buddy	Observation
Student G Day 10	RA	Observation, Politics, etc.
Student D Day 11	Volunteer	Politics
Student B Day 14	Buddy	Politics
Student H Day 18	Volunteer	Volunteering
Student C Day 19	Dorm resident	War

Simple cultural questions

More complex cultural questions

Self-rating

From days 19 to 26, a self-rating survey with the question “I ask questions about cultures” was conducted to collect quantitative data. Table 6 contains the self-rating results of Students A to H as well as their description content and its frequency. Students A, B, C, D had the highest self-rating *Agree* about using the skill. Among them, Students A, B, C wrote about using the skill 2 times in reflective journals, which is more frequent than the rest, and their ratings of using the skill seem to be supported by their reflection record. Students E and F rated *Somewhat agree* and they documented their use one time in their reflections. Students G and H rated themselves as *Somewhat disagree*, the lowest among the participants. Student H, especially, wrote s/he could not ask cultural questions two times in the reflections and his/her negative self-rating also seems to be supported by the documented evidence.

Table 6
Students' descriptions in reflective journals and their self-ratings

Dates	Interlocutor	Content of cultural questions	Usage	Frequency of description	Self-rating
Student A Day 1	Buddy	Observation	△	2	Agree
Day 7	Buddy	Observation	✓		
Student B Day 4	Buddy	Local recommendation	✓	2	Agree
Day 14	Buddy	Politics	✓		
Student C Day 6	RA	Language	✓	2	Agree
Day 19	Dorm resident	War	✓		
Student D Day 11	Volunteer	Politics	✓	1	Agree
Student E Day 4	Buddy	Expression	✓	1	Somewhat agree
Student F Day 7	Buddy	Observation	✓	1	Somewhat agree
Student G Day 10	RA	Observation, Politics, etc.	✓	1	Somewhat disagree
Student H Day 6	Guide at Volunteer site	Volunteer site	×	2	Somewhat disagree
Day 18	Volunteer	Volunteering	×		

It must also be noted that there were 7 students who did not document their use of the skill in reflective journals. The right column of Table 7 contains a list of those students. Among these, 4 answered *Agree*, 2 answered *Somewhat agree*, and 1 *Somewhat disagree*. Overall, no student answered *Disagree*, which indicates all participants

asked questions to some extent.

Table 7
Total self-ratings of use of the skill

Self-rating	Total number of respondents	Ratio	The respondents who documented their use in reflective journals	The respondents who did NOT document their use
Agree	8	53%	4	4
Somewhat agree	4	27%	2	2
Somewhat disagree	3	20%	2	1
Disagree	0	0%	0	0

Challenges students faced in using the target skill while abroad

Although we provided practice to use the target skill prior to study abroad, some students documented that they struggled in using the skill due to difficulty in English. As in Table 8, Student H could not ask questions because s/he did not understand English speech at a volunteer site. Student D reported English vocabulary was difficult and the speaking speed was fast when s/he asked questions about politics. Likewise, Student C felt difficulty in conversing about political topics and wrote about the need for vocabulary for academic conversations. Students also documented their emotions while using the skill, as Student H wrote “frustrating” and Student C wrote “it was a lot of fun!” Students’ reflective journals capture affective evidence in students’ learning.

Table 8
Difficulties students faced in using the skill

Student H (Day 6)	After the tour, some students were asking questions to the guide and understanding by nodding. However, I couldn’t understand and felt terrible. I had lots I wanted to ask about this organization but not being able to understand what they say was frustrating.
Student D (Day 11)	I asked (volunteers) about the election in the US which I learned in class because I wanted to see if I can talk about something academic. However, their vocabulary was difficult, and speed was fast, so it was hard to catch all.
Student C (Day 19)	Most shockingly, when I asked him (a dorm resident) about the bombing in Hiroshima, he said American aircrafts ... I wasn’t taught such a thing, so later I looked into it. It seems Japan was... World is big. My view is narrow. And topics are difficult . I really felt I need more vocabulary for academic conversation, but it was a lot of fun!

Discussion

How to improve pre-departure training

This in-depth analysis revealed detailed contexts of how students used the skill over time and what challenges they faced during study abroad. Using these findings, we now discuss how our pre-departure training can be improved. The current pre-departure training provides roleplay practice in simulated settings for asking cultural questions to promote behavioral changes during study abroad. As noted earlier, it is critical to make the training context similar to real-life settings for training effectiveness (Suzuki, 2015b). Thus, we compare this training context with real-life evidence captured in students’ reflective journals. The differences between training and study abroad evidence are listed in Figure 4.

1) *Buddies* and *observations* - matched training simulation

First, in our training, students practice asking cultural questions to their *buddy*, and their questions are about what they saw or noticed (*observations*). In their daily reflections, students most frequently asked cultural questions to their *buddies* and the most common questions were based on *observations*, which indicate our training context matches students’ real-life situations.

2) *Buddies* as important cultural guides

The importance of host receptivity and the buddy scheme in students' learning abroad is claimed by Jackson (2020a) and Cutting & Megumi (2017). Notably, these findings signified that buddies served as cultural guides for international students providing opportunities for cultural inquiry. A further suggestion is that intercultural training between buddies and sojourners may promote reciprocal deeper learning.

3) Additional contexts – not addressed during training

Students' journal evidence, however, revealed that the interlocutors were not only *buddies*. These included *dorm residents*, *RAs (resident assistants)* and *volunteers* at a volunteering site. The content of their questions was also not confined to *observation* and ranged from *local recommendations*, and *expressions*, to *politics*. Since training focused on only asking cultural questions to *buddies* about *observation*, these findings suggest the need for contextual expansion of the training as seen in Figure 4.

Pre-departure training [Simulation context]	Study abroad [Evidence in reflective journals]
Target skill: "Ask questions in English about cultures, such as cultural differences and surprises"	
<p>Practice question content: Observation Practice with TAs acting as: Buddy</p>  <p style="text-align: center;">Roleplay practice</p>	<p>Real question content: Observation, Volunteering, Politics, Local recommendation, etc. To whom students asked: Buddy, Dorm resident & Resident Assistant, Volunteers.</p>  <p style="text-align: center;">Buddies Dorm residents Volunteers</p>

Figure 4. Comparison between training context and real-life context

4) Issues of complex cultural questions and language

In our study, students' cultural questions, when arranged in chronological order, indicate a tendency that relatively *simple cultural questions* (i.e., *observations, local recommendations, expressions*) are asked at the beginning and *more complex questions* (*politics, war*) emerge later. Some descriptions revealed students felt it was difficult to ask complicated cultural questions because of language difficulties. The more complex the questions are, the more advanced English is required. Thus, imagining why political questions emerge later is not difficult. This finding raises critical issues. Although we observed students' struggles in English in deeper intercultural dialogues, many models of intercultural competence do not address linguistic competence (Byram & Golubeva, 2020; Deardorff & Arasaratnam-Smith, 2017) and research on integrating intercultural development and language competence is much needed. Moreover, according to Jackson (2020b), researching "host-sojourner interaction" to identify what facilitates or hinders "intercultural communication and relationship building" is still new" (pp.448-449). Our findings indicate language issues as hindering factors in complex intercultural inquiry. Thus, incorporating linguistic components to handle advanced cultural dialogues may be necessary in training.

Affective evidence in reflective journals

Griffith et al. (2016) observe that existing measures of intercultural communication often do not sufficiently collect affective and behavioral evidence which are essential in viewing interactions with local hosts. The reflective journals in ePortfolios captured students' affective aspects in their learning, such as their feelings of *frustration* and *excitement* in addition to behavioral evidence.

Kirkpatrick's model for pre-departure training

Lastly, Kirkpatrick's model suggests the importance of evaluating *behavior* (Level 3) after training in workplaces. However, how behavior can be analyzed in study abroad settings and how such findings can improve training have not been discussed. This study therefore may provide suggestions for using Kirkpatrick's model to understand students' behavior during study abroad and use real-life evidence for pre-departure training. We also found cases where students self-rated that they were using the skill, but no evidence was seen in their

reflections. A possible reason is lack of submissions and/or insufficient content within, and this limited our data collection and analysis. Ample submissions and content are indispensable for analysis of reflective journals.

Conclusion

Capturing students' learning evidence abroad has long been a challenge and using such evidence to improve pre-departure training is still lacking. Our study applied Kirkpatrick's evaluation model and conducted in-depth analysis of *behavior* (Level 3) documented in sojourners' reflective journals to see how they were using the target skill over time. Then we employed the results in a discussion on how to improve pre-departure training. Sojourners' journal evidence revealed students most frequently asked cultural questions to *buddies* and the content was about *observations*, which matches our pre-departure training context. The results signaled the importance of buddy schemes for intercultural interaction. However, sojourners had cultural engagement with more diverse people in various content, which suggested expansion of the training context. Moreover, students seem to start asking *more complex cultural questions* later, such as about politics. The evidence uncovered sojourners' language difficulty with such complex cultural questions and suggested incorporating linguistic components to handle advanced cultural dialogues. Our reflection data also captured *affective evidence* of study abroad and enabled us to witness students' lives abroad, filled with excitement, struggles, and surprises. To optimize students' learning abroad, more research is needed to better understand sojourners' behaviors in intercultural engagement to improve training. Reflective journals in ePortfolios may be a key to connect students' learning abroad to future training.

Acknowledgment

The authors would like to thank Dr. Tatsuya Hirai for his continuous support with our research and Dr. Peter Roux for critical suggestions.

References

- Byram, M., & Golubeva, I. (2020). Conceptualizing intercultural (communicative) competence and intercultural citizenship. In J. Jackson (Ed.), *The Routledge handbook of language and intercultural communication* (pp. 70-85). Oxon, OX: Routledge.
- Byram, M. (1997). *Teaching and assessing intercultural communicative competence*. Clevedon: Multilingual matters Ltd.
- Blair, D., & Cutting, M. (2015). Assessing global learning at home and abroad: Assessing global Learning: measurement, implications, and applications, *Webinar presentation in NAFSA Global Learning Faculty Conversation Series*, October 28, 2015.
- Cutting, M. (2015). Application of "significant learning" theory in a short-term study abroad program: Categorization of learning outcomes in study abroad and a new approach to learner-centered educational design. [In Japanese]. *Intercultural Education*, 41, 111-126.
- Cutting, M. (2016). Assurance of learning in international education: Assessment and outcomes in our study-abroad programs. [In Japanese]. *Journal of Japan Association for College and University Education*, 38(2), 67-76.
- Cutting, M., Goda, Y., & Suzuki, K. (2020). Instructional method and impact of pre-departure training for study abroad: From the viewpoint of transfer of learning [In Japanese]. *Journal of Japan Association for College and University Education*, 42(1), 95-104.
- Cutting, M., & Megumi, M. (2017). A practice of Japan-US global collaborative education: Intercultural collaboration of both students and teachers and use of the buddy system [In Japanese]. *Intercultural Education*, 46, 93-109.
- Deardorff, D. K. (2015). *Demystifying outcomes assessment for international educators*. Sterling, VA: Stylus.
- Deardorff, D. K. & Arasaratnam-Smith, L.A. (2017). *Intercultural competence in higher education*. Oxon, OX: Routledge.
- Eynon, B., & Gambino, L. M. (2017). *High impact ePortfolio practice: a catalyst for student, faculty, and institutional learning*. Sterling: Stylus Publishing, LLC.

- Griffith, R. L. Wolfeld, L. Armon, B.K., Rios, J., & Liu, O.L. (2016). Assessing intercultural competence in higher education: existing research and future directions. *Research Report, ETS RR16-25*, 1-44.
- Jackson, J., & Oguro, S. (2017). *Intercultural interventions in study abroad*. Oxon, OX: Routledge.
- Jackson, J. (2020a). *Online intercultural education and study abroad*. Oxon, OX: Routledge.
- Jackson, J. (2020b). The language and intercultural dimension of education abroad. In J. Jackson (Ed.), *The Routledge handbook of language and intercultural communication* (pp. 442-456). Oxon, OX: Routledge.
- Kolb, D.A. (1984). *Experiential learning: experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall, Inc.
- Kawai-juku.(2018). Nihonjin no kaigairyugaku ni kansuru kokasokutei [Survey of the impact of study abroad on Japanese people in 2018 -translation]. [In Japanese]. Retrieved January 5th, 2021, from https://www.mext.go.jp/a_menu/koutou/ryugaku/1411310.htm
- Kirkpatrick, D. L., & Kirkpatrick, J.D. (2006). *Evaluating training programs*. Oakland, CA: Berrett-Koehler Publishers, Inc.
- Morimoto, Y. (2015). Educational big data as e-portfolios and learning analytics. [In Japanese]. *Computer & Education*, 38:18-27.
- Salisbury, M. (2015). How we got to where we are (and aren't) in assessing study abroad learning. In V. Savicki., & E. Brewer (Eds), *Assessing study abroad* (pp. 15-32). Sterling, VA: Stylus.
- Shoraku, A., & Yoshida, M. (2018). Learning outcomes of overseas studies in an undergraduate program [In Japanese]. *Kobe Journal of Higher Education*, 26, 59-78.
- Suskie, L. A. (2018). *Assessing student learning: A common sense guide*. San Francisco, CA: Jossey-Bass.
- Suzuki, K. (2015a). Proposal of inverted triangle model for training design based on 4 levels of evaluation. [In Japanese]. *Proceedings in the 45th Annual Conference of Japanese Society for information and Systems in Education*, September.
- Suzuki, K. (2015b). *Kenshu Sekkei Manual* [Training design manual-translation]. Kyoto: Kitaoji-shobo.
- Vande Berg, M. P., Paige, R. M., & Lou, K. H. (2012). *Student learning abroad*. Sterling, VA: Stylus Publishing LLC.