# [研究ノート]

# Action Research:

# Designing, Implementing, and Measuring Virtual Exchange to Increase Students' Intercultural Competence

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# Abstract

This paper explains a small-scale Action Research project, following Benson's five-step 2011 model, which began by considering our "ideal interculturally competent student", blending ideas from Byram's model of Intercultural Communicative Competence (ICC), and from research carried out by NAFSA, the Council of Europe, and the OECD. The twin goals of this project were to identify our most impactful Virtual Exchange (VE), and also to offer multiple chances to work with overseas peers to students who are not able to take specific VE courses. Through qualitative and quantitative analysis of data from five modes of VE, we were able to show the effects that even short-term VE has on students. This project also identified the strengths and weaknesses of various modes of VE mainly through qualitative data in the form of guided reflections for students and faculty. The different types of exchanges were evaluated both quantitatively and qualitatively, using BEVI-j and short semi-structured interviews with focus groups. Preliminary research showed the writers what we instinctively realized: who students are before they undertake a class greatly influences the outcomes.

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#### 1. Introduction

This paper explains a small-scale Action Research project, following Benson's five-step 2011 model, which began by considering our "ideal interculturally competent student", blending ideas from Byram's model of Intercultural Communicative Competence (ICC), and from research carried out by NAFSA: Association of International Educators, the Council of Europe, and the Organisation for Economic Co-operation and Development (OECD), along with our own hopes for new students entering university during the pandemic. Our students would work towards these outcomes via tasks and experiences delivered through several types of Virtual Exchange (VE), both in required and elective classes, synchronous and asynchronous exchange, and also through several voluntary extracurricular modes. We hoped to both identify our most impactful VE, and also to offer multiple chances to work with overseas peers to students who are not able to take specific VE courses. Five modes of VE were considered: Asynchronous VE as part of a required language course; Voluntary VE as part of a student group; and, Synchronous VE in place of short-term study abroad.

We used Benson's 2011 Action Research Model (pp. 202-203) which has a five-step procedure. First, Action Research addresses issues of practical concern to the researchers and their community. In our case, the research focused on VE at the university with goals of both identifying the most impactful VE and then considering how to scale these projects to allow more student participation. The second step of Benson's model is systematic collection of data and reflection on practice. The five different types of VE were evaluated both quantitatively and qualitatively, using a mixture of the BEVI-j (the Japanese version of the Beliefs, Events, and Values Inventory) survey results, student and faculty reflection tasks, and short semi-structured interviews with focus groups. The third step is small-scale observation of change in practices. Five modes of VE were observed and the writers compared their respective merits through the data collected in step two. Benson's fourth step is the analysis of qualitative data and descriptions. This was conducted as VE was progressing and after the final exchanges has taken place. The final step involves finding solutions to the issues identified in step one. In our case, this paper shares preliminary findings on our most impactful VE, and changes in students that may be the result of our new emphasis on VE in 2021. As befits an Action Research project, we will also share how these results are being used to improve VE in future courses. In particular, we are mindful of the difficulties we faced when collecting data and will take steps to increase the number of responses from students both pre- and post-VE in order to evaluate each programme more fully.

The first step of our project was identifying successful VE programmes, before we considered which ones could be scaled. This leads to the question of what exactly is a successful VE programme. It is universally acknowledged that being able to communicate in more than one language is a basic competency for the knowledge economy. However, language competence alone is not enough. ICC skills are key for Japanese students to participate fully in global society. This need has been recognized in Europe for a long time:

the very first page of the *Common European Framework for Languages* (CEFR) published over twenty years ago sets out its aims as follows: "In an intercultural approach, it is a central objective of language learning to promote the favourable development of the learners' whole personality and sense of identity in response to the enriching experience of otherness in language and culture" (2001). VE at the University of Shimane has followed this precept, emphasizing cross-cultural collaboration and individual partnerships with overseas peers during courses. We have taken to heart Dervin and Liddicoats's 2013 advice that language education "needs to move away from an educational approach which consists of building up facts about a 'target culture', comparing 'cultures', and analyzing the cultural routines and meanings of a particular group of people to one in which the language learner as language user and intercultural mediator are foregrounded" (2013, p. 4).

In the era of globalization, many models to quantify ICC have been developed: from Hofstede's much criticized 1960s analysis along six dimensions originally analyzing IBM's international employees, to Byram's 1997 model of Attitudes, Knowledge, and Skills and the four *'savoir's* to assess students, to a huge range of recent online ICC surveys. However, according to O'Dowd & Lewis's *Online Intercultural Exchange*, "no model of intercultural competence specific to online encounters has yet been devised" (2016, p. 50).

The next section outlines an overview of our model of the attitudes, knowledge base, skills, and values we hoped VE would instill in students.

# 2. Attitudes, knowledge base, skills, and values from international education

International education is essential for students to thrive and to collaborate with people around the world to solve issues relating to border conflicts, environmental pollution, natural disasters, and displaced people. Lack of empowerment and inclusion for many groups worldwide is also a huge issue that requires time and resources. Through international education, ideally students should transcend their own country and ethnicity, encounter ideas and people from all over the world, consider issues from multiple perspectives, and develop empathy with people from very different groups.

Being a global citizen is not limited to city dwellers, or post-graduation life, or interacting with people from overseas. All humans need global capabilities. Even students in rural Japan, are influenced by foreign music, food, media and culture, and issues such as immigration, climate change, and trade.

To this end, the writers provided opportunities for exchange through many domestic and international programs. The following values, attitudes, knowledge, and skills can be acquired during university years. Students can cooperate and reflect not only with Japanese students, but also with international students, and overseas peers. They can act locally, nationally, and internationally with a sense of responsibility as global citizens, to contribute to the development of Northeast Asia and other regions.

The following table shows the skills that international education should engender.

Developing attitudes
Recognize biases due to one's upbringing and
experiences
Develop curiosity about other cultures
Perspective-taking
Respond and act flexibly
Develop a sense of citizenship
Show empathy
Become a lifelong learner
Gaining knowledge
Explore the issues facing local, national, and
international communities
Learn about culture in Japan and overseas
(Literature, history, politics, law, economics,
diplomacy, religion, philosophy, peace studies,
media, SDGs)
Learn about cross-cultural communication
ciety locally, nationally, and internationally, and act
, attitudes, knowledge, and skills.

 Table 1: Attitudes, knowledge base, skills, and values from international education.

This model is based on Byram's model of Intercultural Communicative Competence, and from research carried out by the Council of Europe, NAFSA, and the OECD.

The skills and knowledge-building goals in the lower half of the table are readily attainable through our present curriculum. However, it is harder to achieve transformational change in values and attitudes towards greater openness to other cultures, and to identify and show that such transformations have occurred. Through our different modes of VE and semesterlong chances to work with overseas peers, the writers hope to develop students' attitudes and values in line with the above model.

## 3. Measuring Intercultural Communicative Competence

Language teachers are oftentimes keen to measure study abroad and VE programs in terms of language gains. However, it is difficult to show that any language gains are a direct result of the programs. Moreover, many small universities send only a handful of students overseas for more than six months or a year. The strict Japanese job-hunting period narrows the ideal period for study abroad to second year and the first semester of third year, while the cost of a year abroad puts this opportunity out of the reach of most students. Nevertheless, the University of Shimane regularly sends over 100 students per year on much more affordable short-term programs of around one month to Canada, China, Russia, South Korea, and the United States. In addition, each year around 30 students take an elective VE course and link with three partner universities, and larger numbers of students participate in shorter month-long or one-off VEs. Although such short programs may have

little effect on language proficiency, that does not mean that they are ineffective (Nishitani, 2020). Rather, other skills and attitudes may change during short programs, which may in turn lead to language gains over subsequent months and years. However, without any data, this cannot be studied. In this study, students taking part in VE were asked to reflect upon their experiences in classes, final presentations, and in some cases through individual interviews with a teacher, and to complete BEVI-j surveys.

BEVI-j is an online Japanese-language tool suited to assessing international learning experiences, showing how students' beliefs and values change over time after intercultural experiences (Ikeda, K. et al, 2019). In brief, BEVI-j consists of 185 questions, which take around 30 minutes to complete, where respondents choose from one of four answers ranging from "Strongly Agree" to "Strongly Disagree". Research in the US has shown that BEVI is one of the better tools to measure study abroad experiences (Roy, Wandschneider, & Steglitz, 2014). Although it is not specifically designed to measure ICC, it has been widely used to evaluate student growth through various study abroad programs. Among other uses, BEVI can show the impact of learning experiences or overseas programs; help students become more self-aware; and help improve programs and experiences (Wandschneider et al., 2015, pp. 422-423). This final reason was why the writers chose to implement BEVI-j. We hoped to identify our best VEs, given our long history of implementing VE. In addition, we were unable to send any students overseas from February 2020 to September 2021 due to the pandemic so there was a unique opportunity to obtain a large amount of data from students doing VE. BEVI-j's wide usage in the US and increased use in Japan makes it easier for us to compare our students with a larger cohort in other countries (Nishitani, 2020). Additionally, in comparison to our present student surveys concerning study abroad programs and VE classes at the University of Shimane, BEVI-j is not face valid: namely respondents cannot tell what the intent of the questions is (Shealy, 2016, p. 144). With such a complex instrument, the reader is recommended to consult Shealy's 2016 guide.

As language teachers, the writers hoped to make students' hidden systems of beliefs and values visible to them, so that both educators and students might better understand why conflict can sometimes arise when they interact with people from different cultures. We are all very much the product of our upbringings, and thus the cultures which raised us play a huge role in the type of beliefs and values we hold. Social psychologists like Hofstede or Meyer claim to have mapped out the values held by people raised in various nation states based on extensive surveys concerning their value systems. Although it is unlikely that all people from the same country share the same values, it is true that our beliefs influence our behaviour. As Shealy puts it, "we humans may live out our lives, for better or worse, on the basis of beliefs about the nature of reality that have not been identified, examined, or understood" (2016, p. 117). Our students too are clearly the product of their upbringing, and most have had few opportunities to travel overseas or exchange with overseas peers before entering university. The pandemic has further limited students' opportunities to travel.

In order to facilitate students' ICC skills during VE, instructors must guide critical reflection on students' own culture and that of partners. However, as Garrett-Rucks points out "target language use Foreign Language classrooms are not always conducive to the type of deep reflection necessary to promote intercultural learning, particularly in beginning courses where learners have little mastery of target language use" (2016, p. 97). For many of our students, reflecting on their VE experiences through English is very challenging. Using BEVI-j in Japanese and debriefing in Japanese may be one way to raise student awareness of their own beliefs and values before VE.

## 4. Five modes of Virtual Exchange

In order to achieve the ICC goals outlined in the table in the second section of this paper, the writers increased VE opportunities for more students on campus. The following section discusses in detail the five modes of VE delivery we offered: Asynchronous exchange as part of a required language course; Synchronous VE as part of an elective course; Asynchronous VE as part of an elective course; Voluntary VE as part of a student group; and, Synchronous VE in place of short-term Study Abroad. Each mode is explained in detail and its data collection and analysis is discussed. For some modes, data gathering was challenging, and so this study should be seen as preliminary investigation into VE that we hope to continue.

#### 4.1 Asynchronous exchange as part of a required language course

Forty-five Japanese students in a required sophomore English course (Sophomore English Communication or SEC) participated in asynchronous video exchange with 37 American students from Central Washington University, USA, who were taking Japanese elective courses. Both sets of students were required to post 12 videos over a month. The more proficient Japanese students were placed in a Flipgrid course with 22 American students in their first year of learning Japanese, and the less proficient Japanese students worked with 15 American students in their second year of learning Japanese.

Two months before the exchange, faculty and staff at both universities collaborated to set objectives for the course, prompts for the video exchange, and comparable grade points for the tasks to encourage active participation. Once these issues were agreed upon, two Flipgrid groups were set up with each of the four tasks, and students added to the groups.

The first video was a self-introduction in the language which the students were learning. Students then had to respond to at least three videos from the partner students in the language it was recorded in: at least two videos they were interested in and the video with the fewest responses. The second prompt was to talk about how they learned to write the Japanese language, with the Japanese students talking about their childhood memories, and the American students describing how they memorized *kanji*. The third prompt was about being formal in the Japanese language. The American students expressed the same idea in three levels of Japanese politeness, while the Japanese students talked in English about the etiquette of bowing, exchanging name cards, using humble Japanese language about oneself

and honorific language to older people. The final week of the exchange required students to post reflections on the exchange: what they had expected before they joined this project, their favorite part of the exchange, what they would like to improve, and whether they would like to join a similar project in the future.

Data collected for these students included pre- and post-VE BEVI-j surveys for the Japanese students, and guided reflection tasks for both Japanese and American students. Of the 61 students from both countries who completed this final reflection task, only one student said that they would not take part in a similar project if it were offered in Fall semester. This student said they suffered from anxiety and were not comfortable showing their face on camera. However, they would try a real-time interaction if that were offered. Most students said that their language skills improved and they enjoyed the interaction. They enjoyed seeing their classmates use a foreign language and were motivated by each other. Several students enjoyed the bilingual nature of the project, with two Japanese students saying that it was difficult to speak simple Japanese. Several Japanese students mentioned gains in confidence: "I learned that it can be transmitted even if is not perfect English. I thought English can only be perfect, but I want to American students to understand it I had to tell." Another Japanese student said, "I could connect without going to site". For some American students it was the first time to interact with a native speaker of Japanese. Several American students requested a synchronous link too (only one Japanese student requested this), and one American student wanted more than a four-week connection next time.

Collected data also included reflections on the project from the instructors, one in Japan and two in the United States. The instructors felt that the bilingual nature of the project was successful. Students seemed less intimidated with the task through hearing other learners speak in a foreign language. For the Japanese students, it might have been the first time to hear foreign learners of Japanese communicate in the language. The amount of interaction on Flipgrid also impressed the instructors. From the video playback counts and hours of engagement, faculty could see that students were watching each other's videos, even if they did not reply. In one month, these 82 students generated nearly 100 hundred hours of engagement on the platform, 632 comments, 9776 video viewings, and they created 312 videos. Our American colleague said, "There was such great engagement from the students, and listening to their reflections, it was easy to see that those that took full advantage of the program gained a lot from their participation." In particular, having group to group interaction rather than pairing students worked well. If one student dropped out or did not post regularly, it did not impact the quality of the exchange. Our American colleagues also noted that students who gave feedback enjoyed the project; no one indicated any dissatisfaction with the activities, and that they were willing to continue next semester. To that end, further exchange is planned for fall semester 2021 and we intend to include synchronous exchange and incorporate ideas from student reflections.

The 45 Japanese students were asked to take BEVI-j before this exchange. Thirty

students did so. The notification emails were stopped by the university spam filter and so students had an extra hurdle to negotiate to reach the BEVI website to take the test. Participation in BEVI-j was voluntary. In May prior to their exchange, BEVI-j results for these 30 students showed that they scored high on Basic Determinism (preferring simple explanations for complex issues), scored low on Global Resonance and Sociocultural Openness, and held fairly Gender Traditional views, about men and women's roles in society. These four indices are widely held by users of BEVI-j to be affected by ICC experiences (Nishitani, 2020).

The aggregate profile in Figure 1 conceals the great variety among students for the previously mentioned three categories. While the group scored in the middle on No. 14 Gender Traditionalism (48 points), from Figure 2 it can be seen that there is in fact a wide range of views among the students. It can also be seen that over half of these students score very high on No. 7 Basic Determinism, while half show very low Sociocultural Openness (No. 15), and a third show very low Global Resonance (No.17).

These students were taking a required Content and Language Integrated Learning (CLIL) course using Sasajima's 2020 textbook *Intercultural Awareness (CLIL)* while participating in the Flipgrid exchange with American students. By the end of the semester, and after a one-month-long VE with American students, the Japanese students had learned about the following topics: intercultural awareness, diversity, ethical consumerism, food culture, lifestyle choices, tourism, and global citizenship. Students engaged with these topics through reading and listening tasks, watching short authentic videos, interviewing their classmates, and preparing for a final interview exam using these topics.

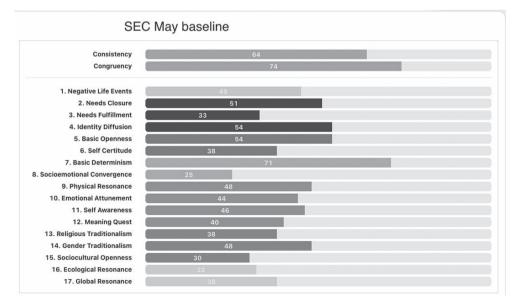


Figure 1: Screenshot of the BEVI-j aggregate profile of 30 students before asynchronous exchange (May 2021).

Decile	1	2	3	4	5	6	7	8	9	10
Consistency	0%	0%	0%	3.33%	6.67%	23.33%	36.67%	13.33%	16.67%	0%
Congruency	0%	0%	0%	0%	3.33%	6.67%	30%	23.33%	20%	16.67%
1. Negative Life Events	3.33%	10%	13.33%	20%	16.67%	6.67%	16.67%	0%	10%	3.33%
2. Needs Closure	3.33%	6.67%	10%	16.67%	13.33%	10%	13.33%	3.33%	23.33%	0%
3. Needs Fulfillment	20%	13.33%	16.67%	20%	6.67%	6.67%	6.67%	3.33%	3.33%	3.33%
4. Identity Diffusion	0%	3.33%	6.67%	20%	13.33%	13.33%	16.67%	10%	13.33%	3.33%
5. Basic Openness	6.67%	3.33%	16.67%	3.33%	13.33%	6.67%	23.33%	6.67%	3.33%	16.67%
6. Self Certitude	10%	13.33%	23.33%	10%	16.67%	0%	6.67%	10%	10%	0%
7. Basic Determinism	0%	0%	3.33%	3.33%	16.67%	10%	6.67%	20%	13.33%	26.67%
8. Socioemotional Convergence	33.33%	16.67%	13.33%	6.67%	10%	6.67%	10%	0%	0%	3.33%
9. Physical Resonance	3.33%	6.67%	10%	20%	16.67%	16.67%	3.33%	10%	6.67%	6.67%
10. Emotional Attunement	10%	6.67%	10%	23.33%	10%	13.33%	6.67%	10%	6.67%	3.33%
11. Self Awareness	16.67%	10%	6.67%	6.67%	13.33%	13.33%	6.67%	10%	6.67%	10%
12. Meaning Quest	20%	6.67%	6.67%	10%	20%	23.33%	0%	3.33%	6.67%	3.33%
13. Religious Traditionalism	3.33%	10%	26.67%	16.67%	16.67%	10%	13.33%	0%	3.33%	0%
14. Gender Traditionalism	13.33%	6.67%	10%	13.33%	6.67%	6.67%	20%	3.33%	13.33%	6.67%
15. Sociocultural Openness	23.33%	23.33%	13.33%	6.67%	6.67%	10%	6.67%	6.67%	3.33%	0%
16. Ecological Resonance	20%	13.33%	20%	13.33%	16.67%	0%	6.67%	3.33%	6.67%	0%
17. Global Resonance	10%	20%	16.67%	16.67%	6.67%	0%	10%	10%	10%	0%
Decile	1	2	3	4	5	6	7	8	9	10

#### SEC May baseline

Figure 2: Screenshot of the BEVI-j decile profile of 30 students before asynchronous exchange (May 2021).

In July after the month-long VE with American peers and the CLIL course, these students were again invited to take BEVI-j. (See Figure 3.) Only eleven students did so. Students who took the post-test could receive an extra five bonus points towards their final grade. Some of these eleven students had not taken part fully in the exchanges, so few conclusions about VE can be drawn from such limited data. Students who had taken part in the exchanges very actively already had high final grades and did not complete the second survey. In future VE projects, the importance of demonstrating how BEVI-j can help students learn more about their own growth should be emphasized, and incentives offered to students who take *both* pre- and post-tests. The figure below shows the aggregate profile of the eleven students. It can be seen that No. 7 Basic Determinism (preferring simple explanations for complex issues) and No. 15 Sociocultural Openness have hardly changed; No. 17 Global Resonance has decreased slightly, while No. 14 Gender Traditional views have increased for these eleven students. The writers view this as an issue of data collection, and not one of intercultural opportunities decreasing ICC skills. This explanation is borne out by later more complete data from 41 students in December of the same year. (See Figures 4 and 5.)

Figure 4 shows the same cohort in December 2021, after two opportunities for ICC through VE and eight months of a CLIL course on Intercultural Awareness. The final data was collected during class in December 2021 and this time 41 students completed the survey. Signage on the BEVI-j website was provided in Japanese this time to facilitate

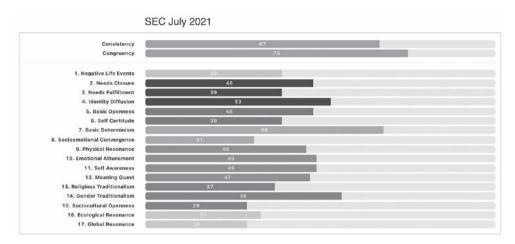


Figure 3: Screenshot of the BEVI-j aggregate profile of 11 students after asynchronous exchange (July 2021).

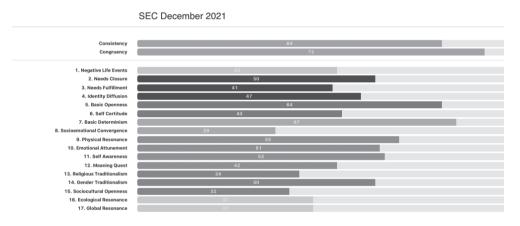


Figure 4: Screenshot of the BEVI-j aggregate profile of 41 students after asynchronous exchange (December 2021).

students finding the correct survey to answer. The aggregate reports show a snapshot of student' beliefs and values at one time. Little change can be observed between the aggregate reports in July and December in relation to the four categories most often affected by ICC awareness. However, Figure 5 shows a different kind of report: a longitudinal view of the same students in April and December, where some changes can be observed.

Due to the difficulty of collecting data, Figure 5 data is gathered from 19 students who took both surveys correctly in April and December. In the four key indices, significant changes can be observed in two categories: first, No. 7 Basic Determinism (preferring simple explanations for complex issues) decreased from 70 to 62, while No. 14 Gender Traditionalism decreased from 50 to 39 points. No. 15 Sociocultural Openness increased

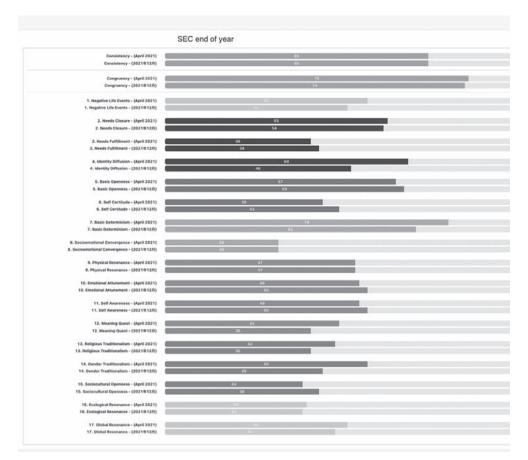


Figure 5: Screenshot of the BEVI-j longitudinal report of 19 SEC students before and after asynchronous exchange (April and December 2021).

slightly over the time frame from 34 to 38, while No. 17 Global Resonance decreased from slightly from 45 to 42 points. More work is clearly required to examine why Global Resonance declined. In particular, after the first administrations of BEVI-j in April, the writers realized that while voluntary participation in the survey was desirable, giving students time in class and grade point incentives to reflect upon their ICC through the BEVI-j survey was a more effective way to gather data. More complete BEVI-j data when coupled with guided reflection data would provide a clearer picture of the effectiveness of this mode of VE.

#### 4.2. Synchronous exchange as part of an elective course

In this section, we turn to a different mode of implementing VE: Synchronous exchange as part of an elective course. Fourteen Japanese students self-selected to participate in a challenging elective course which focuses on global understanding through synchronous video exchange with partners from multiple regions. These exchanges were arranged through the Global Partners in Education (GPE) administered by East Carolina University, USA. Students were partnered with a counterpart from a different region and collaborated on a project to be presented live during the final video link. During the semester Japanese students worked synchronously with partners in China and Taiwan to compare their experiences of college life, family and cultural traditions, stereotypes and prejudice, and the meaning of life. The students had three 90-minute synchronous links with each partner institution, and were required to contact either one or two individual partners to follow up on classroom discussions and create a project together.

Students used messaging applications such as Line and WeChat to contact their partners outside class. From anecdotal accounts it would seem that such connections on students' private social media and messaging apps lead to more contact after the classroom-based links. Several former students have contacted the writers to describe meeting former partners years after the course when one partner visited the other as a tourist or exchange student. Eppler's research (2021) on 33 institutions in 20 countries has consistently shown that students who forge a close personal friendship with an overseas partner increase their Cultural Intelligence (CQ) scores. "Students who had international friends before the [Global Understanding] course and then made new friends during the GU course had the highest CQ scores" (p. 5).

BEVI-j data was not collected from these students. Students were instead required to take the CQ survey, administered by GPE at the start and end of the course. It may have been helpful to provide more context and information about the BEVI-j as part of this invitational process, as deeper engagement at this level – helping students understand what this measure is and what they will gain by completing it (e.g., a personal report, the opportunity to reflect upon their beliefs and values, to see how the groups they are part of see self, others, and the larger world) – is associated with a higher completion rate and engagement process (e.g., Wandschneider et al., 2015). Practically, adding the survey to the syllabus and allowing classroom time to complete it also, and incentivizing reflection on ICC awareness through grade points for completion would have produced more responses. Nevertheless, these students reflected upon their synchronous exchange in group discussions, using prompts from Deardorff (2020, p. 57). After six synchronous VE links, students spoke about their experiences in small groups and then used Padlet to share their reflections on the exchange. Through Padlet, students shared their experiences on what surprised them, what had upset them, and what actions they wanted to take after this synchronous VE.

In the Padlet reflection shown in Figure 6 below, students were asked what had surprised them during VE. Many students wrote about the difference in proficiency levels. Some overseas partners were English language majors while the Japanese students were taking a limited number of English language classes. Several noted their partners' familiarity with Japanese culture and current events. In Figure 7, students were asked if anything had made them angry or upset during VE. A common theme was students' lack of confidence in their own English, and gratitude to partners who supported them when they struggled to communicate. In Figure 8, students were asked what they would like to change as a result of this experience and what actions they would take to make those changes. Students expressed a desire to learn more English, and mentioned concrete strategies of how they would do this. They also hoped to be less reserved. One student mentioned being respectful and accepting others' ideas.

For the final class of the semester, students recorded presentations after the six synchronous links and one month of asynchronous linking. (This data will be reviewed in a subsequent publication.) This task afforded students chances to reflect critically on their exchange through various prompts. Four students were also interviewed about their learning experiences, and their responses are outlined below.

When interviewed about their experiences, students reported that they learned about their own abilities to communicate ("I should make my thoughts clear to communicate fluently."), and the importance of effort in virtual exchanges ("It is not good to be quiet."). Students were able to critically evaluate their own stereotypes of other cultures ("Japanese media tells about China's bad points, so I thought Chinese people don't like Japan. Now I think they are interested." "I thought Chinese people

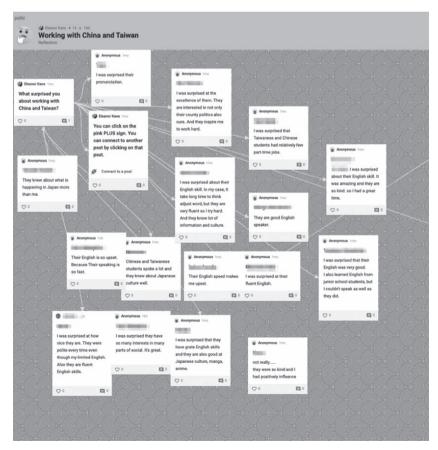


Figure 6: Screenshot of Padlet where students reflected on their synchronous VE with China and Taiwan (July 2021).

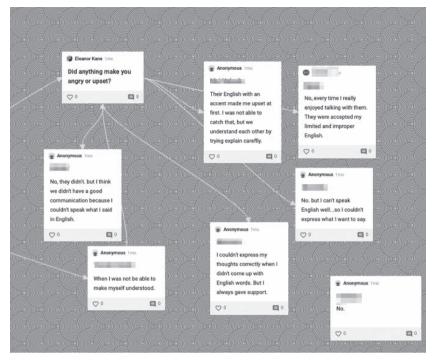


Figure 7: Screenshot of Padlet where students reflected on what had made them angry or upset during their synchronous VE with China and Taiwan (July 2021).

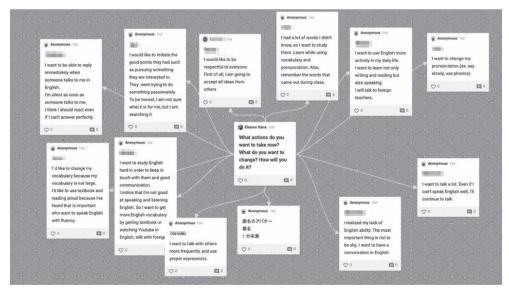


Figure 8: Screenshot of Padlet where students reflected on what and how they wanted to change after their synchronous VE with China and Taiwan (July 2021).

wouldn't know much about Japan, but they know about our music, kanji, education, movies, and food.") and identified gaps in their own knowledge of their home culture ("I don't have knowledge or concerns about my country. I thought I was familiar and not interested in regional things but I realized there was a lot I didn't know about religion, etc. I will research and learn more about social problems and political systems in Japan").

Students felt particularly strongly that their language skills were lacking ("Japanese English is slow. Other countries' English is better, so we should learn more intensively like China or Taiwan." "English is fun to speak with others, but my pronunciation is bad. I should change my method and study English more."). Some students were inspired by the exchanges to create more English speaking opportunities in their daily lives and communities ("If one person speaks [English], everyone can improve. So I will speak more with my family and friends." "I want everyone to speak English. I came to university to speak and learn in English. I want to research how to increase English learning.")

Increased confidence in communication was also reported, both for communication in general ("Now, I am confident in asking about things I don't understand and don't know. I thought it was rude and I don't like interrupting. But it is better to ask when I don't understand something." "I could make good relationships with my partners, so I think I can do that with my next partners, too.") and specifically communicating with people from different backgrounds ("I learned how to communicate with people who are different, so I can exchange ideas with many people." "I shouldn't deny any ideas or opinions of others." "I am excited because of the new knowledge and lifestyles I learned about. I feel confident in researching about these things in the future.").

#### 4.3 Asynchronous exchange as part of an elective course

The third mode of VE that we considered was asynchronous exchange as part of an elective course. (The course is called Tabunka Rikai Tokubetsu Enshuu in Japanese, hence the name on the screenshots below.) The students from section 4.2 also had the opportunity to link asynchronously with American students from our partner, East Carolina University, after the two sets of synchronous links outlined above. These 11 Japanese students partnered with 17 American students, in mixed groups of six to eight students, using Canvas to share recorded presentations on the set topics. Four of these students took BEVI-j prior to the asynchronous links. All of them were women. In June, prior to their asynchronous VE, but after the six synchronous links described above, BEVI-j results for these women students showed surprisingly that they were more Gender Traditional (No. 14) than the sophomores in Figure 1 above (68 compared to 48). However, these students had much higher No. 17 Global Resonance scores (64 compared to 38) and No. 15 Sociocultural Openness scores (49 compared to 30). Even before asynchronous exchange, they were clearly a very different group of students who had chosen an elective course where they would be collaborating with overseas students. Wandschneider et al. state that "attributing positive ratings of learning experiences only or largely to the experience itself, without accounting for who students are prior to their engagement in the experience is neither good practice nor empirically indicated" (p. 430). Many researchers have claimed that generally, students who already have high Global Resonance and Sociocultural Openness scores will

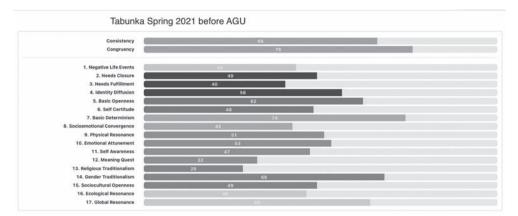


Figure 9: Screenshot of the BEVI-j aggregate profile of 4 female students in an elective VE class after synchronous exchange and before asynchronous exchange (June 2021).

Decile	1	2	3	4	5	6	7	8	9	10
Consistency	0%	0%	0%	0%	0%	0%	75%	25%	0%	0%
Congruency	0%	0%	0%	0%	0%	25%	0%	0%	50%	25%
1. Negative Life Events	0%	25%	2516	0%	0%	25%	0%	0%	25%	0%
2. Needs Closure	0%	25%	0%	0%	25%	0%	25%	25%	0%	0%
3. Needs Fulfillment	0%	25%	0%	25%	0%	50%	0%	0%	016	0%
4. Identity Diffusion	25%	0%	0%	0%	0%	25%	25%	0%	0%	25%
5. Basic Openness	0%	0%	0%	25%	0%	25%	0%	0%	50%	0%
6. Self Certitude	0%	25%	0%	0%	25%	0%	25%	25%	0%	0%
7. Basic Determinism	0%	0%	0%	25%	0%	0%	0%	0%	50%	25%
8. Socioemotional Convergence	0%	25%	0%	0%	50%	0%	25%	0%	0%	0%
9. Physical Resonance	0%	25%	0%	0%	0%	25%	50%	0%	0%	0%
10. Emotional Attunement	25%	0%	0%	0%	0%	25%	0%	25%	25%	0%
11. Self Awareness	0%	25%	0%	0%	50%	0%	0%	0%	25%	0%
12. Meaning Quest	0%	25%	0%	5/0%	0%	25%	0%	0%	0%	0%
13. Religious Traditionalism	0%	25%	0%	75%	0%	0%	0%	0%	0%	0%
14. Gender Traditionalism	0%	0%	0%	0%	0%	25%	25%	25%	25%	0%
15. Sociocultural Openness	0%	0%	25%	0%	25%	25%	0%	25%	0%	0%
16. Ecological Resonance	0%	0%	25%	25%	0%	25%	25%	0%	0%	0%
17. Global Resonance	0%	0%	0%	0%	25%	25%	0%	25%	25%	0%
Decile	1	2	3	4	5	6	7	8	9	10

Figure 10: Screenshot of the BEVI-j decile profile of the above students before asynchronous exchange (July 2021).

not change as much compared with students who score lower on these scales before study abroad or a VE programme (Nishitani, 2020).

#### 4.4 Voluntary Virtual Exchange as part of a student group

The fourth mode of VE that we considered was voluntary Virtual Exchange as part of a student group. This exchange was offered to all students. Eleven Japanese students volunteered to join an intensive week-long synchronous virtual exchange with nine North American students in August, 2021. Seven of the Japanese students were students of the University of Shimane and four of them belonged to other universities. Six of the North American students were students of East Carolina University and three of them belonged to other universities. The instructor sent emails to approximately 1000 students and seven students volunteered. The instructor invited alumni and other university's students to increase the number of Japanese participants to ensure the quality of the exchange. The North American students' participation was also voluntary and they were all interested in cross-cultural exchanges and learning Japanese culture.

The virtual exchange took place from Monday, August 16 to Friday, August 20, 2021 between 9:00 to 13:30 every day Japan time. Each meeting consisted of three sections; the instructor gave a lecture during the first 20 minutes, the participants exchanged ideas in small breakout rooms for the next 40 minutes, posting ideas on Padlet in the next 10 minutes, and the participants reported their breakout room discussion to the whole class in the last 20 minutes.

The contents of the meetings were designed to develop ICC skills, covering topics that would help participants realize their values, appreciate diversity, and build positive relationships with others. The discussion topics were summer activities, pop culture, diet and health, relationships and marriage, and future predictions and reflections. The topics on Padlets were self-introductions, summer memories, favorite music, meal or snack, popular phrases, and future predictions. The lecture topics were orientation for the participants, becoming culturally developed, expression of health in Shinto, masculinity in a Japanese traditional performing art, and approaches to avoiding uncertainty. In addition, there was one student presentation on vaccine hesitancy in minority groups in the U.S. during the third meeting.

The online discussions were lively and positively evaluated by the participants in a survey carried out after the exchange. Out of the 20 participants, 15 responded to the five-point Likert scale survey and they answered that their overall experiences were "4, very good," and "5, excellent" as can be seen in Figure 11 below.

The Japanese participants reported in their reflective essays that they became sensitive to their own cultural values. The Japanese students realized the Japanese way of expressing their emotions was more reserved than their counterparts'. They wrote "Americans

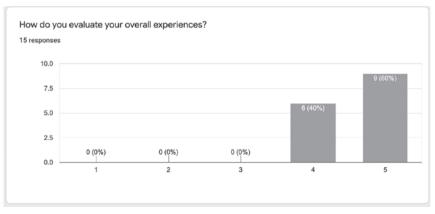


Figure 11: Student evaluations of voluntary synchronous VE (August 2021).

showed their emotions positively, while we Japanese were reticent," and "I thought I should express my feelings more so it would be easier for a speaker to elaborate their ideas." One of the Japanese participants discovered a nuanced communication of Japanese hesitancy in the Japanese emoji called *pien*. The *pien* icon has a face with big teary eyes with downward eyebrows with a tiny sad mouth. The student found the *pien* emoji expressed the feeling of regret for asking a favor.

The Japanese participants also improved their responsibility as community members. In their reflective essays, some students wrote that they would like to promote this type of exchange to other students, because exchanging ideas with the culturally different was educational. One dramatic instance happened when one American student shared her experience with COVID-19. She told everyone that her father passed away after he was infected with the virus from her brother. It was a very emotional moment and later two Japanese students, who had been afraid of being vaccinated, wrote in their reflections essays that they would get vaccinated to prevent people who could not get vaccinated from being infected.

The week-long English discussion boosted student motivation to practice speaking English. One student reported that he was afraid of making mistakes at the beginning but he

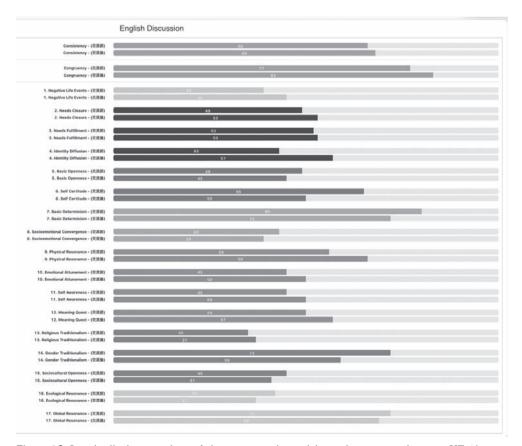


Figure 12: Longitudinal comparison of the seven students doing voluntary synchronous VE (August 2021).

realized that "making mistakes is not a bad thing, rather it is a great opportunity to improve my English speaking skills." Another student mentioned that he would like to join this type of VE again to improve his speaking skills. Another wrote that he would practice speaking English with his Japanese friends, too.

Finally, students reported increased confidence in meeting the culturally different. They were very nervous at the beginning, but as their interactions progressed, they became comfortable with each other. They found cultural differences interesting and inspiring as they positively reflected their experiences: "I learned a lot of new things that I hadn't known." One student also commented, "I want to have more cross-cultural exchanges and I feel confident about getting to know each other with those who I meet for the first time."

All seven Japanese students took BEVI-j before and after voluntary VE; see Figure 12. Although the number of the respondents is not large enough to make any generalizations, the Global Resonance score of this group was very high; namely 72 and 69 compared to the baseline score of 38 obtained for thirty Japanese students in a required English class at the same university. It is clear from Figure 12 that the participants in this voluntary exchange were deeply interested in cross-cultural exchange.

#### 4.5 Synchronous VE in place of short-term Study Abroad

Finally, the fifth mode of VE that we considered was synchronous VE in place of shortterm study abroad. Due to the pandemic, some short-term study abroad programs were replaced by online classes with partner universities. This course was open to all students across all three campuses. In this section, we look at data from students who chose to take part in a month-long online course and exchange concerning American culture offered by a partner university in the U.S. These students had 12 hours of preparatory classes in July (face-to-face for those who wished to be in a classroom, and online for students who wished to connect from home, allowing students from all three geographically distant campuses to

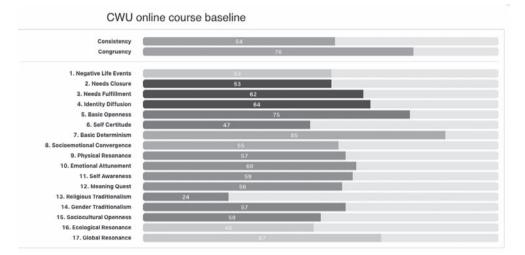


Figure 13: Screenshot of the BEVI-j aggregate profile of six students before an elective virtual online course (July 2021).

Decile	1	2	3	4	5	6	7	8	9	10
Consistency	0%	0%	0%	33.33%	0%	33.33%	16.67%	0%	0%	16.67%
Congruency	0%	0%	0%	0%	0%	0%	16.67%	50%	16.67%	16.67%
1. Negative Life Events	0%	0%	16.67%	0%	33.33%	16.67%	16.67%	16.67%	0%	0%
2. Needs Closure	0%	16.67%	0%	0%	33.33%	16.67%	16.67%	0%	16.67%	0%
3. Needs Fulfillment	0%	0%	0%	16.67%	16.67%	16.67%	0%	16.67%	33.33%	0%
4. Identity Diffusion	0%	0%	16.67%	16.67%	0%	0%	16.67%	0%	33.33%	16.67%
5. Basic Openness	0%	0%	16.67%	0%	0%	0%	0%	33.33%	16.67%	33.33%
6. Self Certitude	0%	16.67%	16.67%	16.67%	0%	0%	33.33%	0%	16.67%	0%
7. Basic Determinism	0%	0%	0%	0%	0%	16.67%	0%	0%	16.67%	66.67%
8. Socioemotional Convergence	0%	16.67%	0%	0%	16.67%	0%	50%	16.67%	0%	0%
9. Physical Resonance	0%	0%	33,33%	0%	0%	16.67%	16.67%	16.67%	0%	16.67%
10. Emotional Attunement	0%	0%	0%	0%	33.33%	33.33%	0%	16.67%	0%	16.67%
11. Self Awareness	0%	0%	16.67%	16.67%	16.67%	0%	16.67%	0%	0%	33.339
12. Meaning Quest	0%	0%	33.33%	0%	0%	33.33%	0%	0%	16.67%	16.67%
13. Religious Traditionalism	0%	33.33%	50%	0%	16.67%	0%	0%	0%	0%	0%
14. Gender Traditionalism	16.67%	0%	0%	0%	0%	33.33%	16.67%	16.67%	16.67%	0%
15. Sociocultural Openness	0%	0%	16.67%	0%	16.67%	33.33%	33.33%	0%	0%	0%
16. Ecological Resonance	16.67%	0%	16.67%	16.67%	0%	0%	0%	33.33%	16.67%	0%
17. Global Resonance	0%	16.67%	0%	0%	16.67%	0%	0%	0%	66.67%	0%
Decile	1	2	3	4	5	6	7	8	9	10

#### CWU online course baseline

Figure 14: Screenshot of the BEVI-j decile profile of the above students before virtual online course (July 2021).

take part) co-taught by faculty in different campuses. From August they had 100 minutes of class each weekday for four weeks with American professors, supported by local faculty in Japan.

Six students took BEVI-j before (see Figure 13) and after (see Figure 15) the four-week course. BEVI-j results in Figures 13 and 14 for these six students before the online course showed that, on average, they were more Gender Traditional than the sophomores in Figure 1 above (57 compared to 48), and had much higher Global Resonance scores (67 compared to 38) and Sociocultural Openness scores (50 compared to 30). Even before synchronous VE, this was a very different group of students who chose to take an online course at a partner university in the United States.

The decile profile of the six students before the online course in Figure 14 above, however, makes it clear that one student scored very low on Gender Traditionalism, lowering the average score for this measure. Again, one student scored low on Sociocultural Openness, influencing the average score for the group.

After one month of online classes and VE, it can be seen in Figure 15 below that little had changed in the four key indices. Students showed greatest gains in Self Certitude (emphasizing positive thinking and being less inclined to analyze situations more deeply) and Physical Resonance (being more open to their emotional and physical needs). Both Religious Traditionalism and Sociocultural Openness increased slightly after this online course. The decile profile in Figure 17 below shows a movement towards higher Gender Traditionalism, higher Religious Traditionalism, and more Sociocultural Openness an interesting gestalt

of findings, which highlights the importance of seeing each group, and each individual, as complex and diverse internally, regardless of their external characteristics (such as ethnicity, gender, economic, religious, or political background, etc.). In addition, it is important to understand how faculty interventions (e.g., study abroad, VE, etc.) interact with such individual and group-based characteristics to result in the T1/T2 changes observed here, which also speak to the capacities the instructors who are designing and delivering

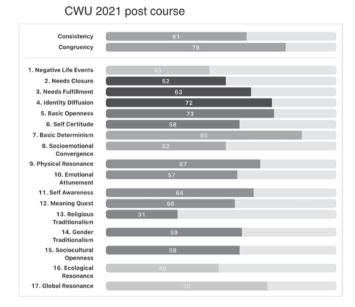


Figure 15: Screenshot of the BEVI-j aggregate profile of six students after an elective virtual online course (September 2021).

Decile	1	2	3	4	5	6	7	8	9	10
Consistency	0%	0%	0%	16.67%	16.67%	0%	33.33%	16.67%	16.67%	0%
Congruency	0%	0%	0%	0%	0%	0%	16.67%	33.33%	33.33%	16.67%
1. Negative Life Events	0%	16.67%	0%	0%	33.33%	33.33%	16.67%	0%	0%	0%
2. Needs Closure	0%	16.67%	0%	0%	16.67%	16.67%	33.33%	16.67%	0%	0%
3. Needs Fulfillment	0%	0%	0%	16.67%	0%	33,33%	16.67%	0%	33.53%	0%
4. Identity Diffusion	0%	0%	0%	16.67%	0%	16.67%	0%	33.33%	16.67%	16.67%
5. Basic Openness	0%	0%	0%	16.67%	0%	16.67%	0%	16.67%	16.67%	33,33%
6. Self Certitude	0%	0%	16.67%	0%	16.67%	16.67%	16.67%	16.67%	16.67%	0%
7. Basic Determinism	0%	0%	0%	0%	0%	16.67%	0%	0%	33.33%	50%
8. Socioemotional Convergence	0%	16.67%	16.67%	0%	0%	0%	33.33%	16.67%	16.67%	0%
9. Physical Resonance	0%	0%	0%	0%	0%	33.33%	16.67%	33,33%	16.67%	0%
10. Emotional Attunement	0%	16.67%	0%	16.67%	0%	16.67%	16.67%	16.67%	0%	16.67%
11. Self Awareness	0%	0%	0%	0%	16.67%	16.67%	50%	0%	0%	16.67%
12. Meaning Quest	0%	0%	16.67%	0%	33.33%	16.67%	0%	16.67%	0%	16.67%
13. Religious Traditionalism	0%	16.67%	33.33%	33 33%	18.67%	0%	0%	0%	0%	0%
14. Gender Traditionalism	0%	0%	0%	16.67%	15.67%	16.67%	16.67%	16.67%	16.67%	0%
15. Sociocultural Openness	0%	0%	0%	0%	50%	0%	16.67%	33,33%	0%	0%
16. Ecological Resonance	0%	0%	16.67%	33.33%	0%	16.67%	16.67%	0%	16.67%	0%
17. Global Resonance	0%	0%	0%	0%	33.33%	0%	16.67%	0%	50%	0%
Decile	1	2	3	4	5	6	7	8	9	10

#### CWU 2021 online post VE

Figure 16: Screenshot of the BEVI-j decile profile of the above students after virtual online course (September 2021).

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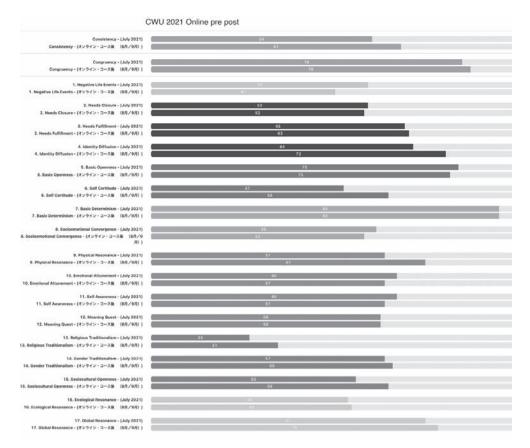


Figure 17: Longitudinal comparison of the six students doing Synchronous VE in place of short-term Study Abroad (September 2021).

these interventions. Collectively, these variables are what is referred to as the "7Ds" of change – duration, difference, depth, determine, design, deliver, debrief (i.e., why change does or does not occur, for whom, and under what circumstances) (Shealy, 2016; Wandschneider et al., 2015). We will consider such interactions more carefully in the coming Fall semester 2021 as students complete final reports and presentations about their learning experience.

A longitudinal comparison of these students' BEVI-j results is shown in Figure 18. The change to higher Religious Traditionalism, and higher Sociocultural Openness can be observed more easily in this figure. Another key indice, Basic Determinism, remains unchanged, while the positive move towards less Gender Traditionalism can only be seen the decile profile in Figure 16 above.

## 5. Conclusion

The twin goals of this project were to identify our most impactful VE, and also to offer multiple chances to work with overseas peers to students who are not taught by teachers who promote VE, or who are not able to take specific VE courses. Through qualitative and quantitative analysis of data from five modes of VE outlined in Section 4, we were able to show the effects that even short-term VE has on students. This project also identified the strengths and weaknesses of various modes of VE mainly through qualitative data in the form of guided reflections for students and faculty.

Although all five modes of VE were successful to some extent, BEVI-j data has shown the writers what we instinctively knew: who students are before they undertake a class greatly influences the outcomes. Students who self-select to take challenging courses centered around VE already have higher ICC skills. Future courses hope to make use of BEVI-j data to alert students to differences between students in the group and to provide material for discussion and reflection on how to meet course goals of VE and students' own personal goals. During this project, the instructors also began to learn how to use a new instrument and discussed how to obtain more complete data for our students taking part in VE. If we can use the tool again, we intend to build BEVI-j into syllabuses, incentivize the survey by offering bonus points to only those students who take *both* the pre- and post-tests, and debrief better in class to create interest in taking the survey.

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#### References

Asia Society and OECD. (2018). *Teaching for global competence in a rapidly changing world*. Benson, P. (2011). *Teaching and researching autonomy*. Pearson.

- Byram, M., Golubeva, I., Hui, H., & Wagner, M. (Eds.). (2017). From principles to practice in education for intercultural citizenship. Multilingual Matters.
- Byram, M. (2008). Teaching and assessing intercultural communicative competence. Multilingual Matters.
- Council of Europe. (2001). Common European framework of reference for languages: Learning, teaching, assessment. Cambridge, U.K: Press Syndicate of the University of Cambridge.

Deardorff, D. K., & Arasaratnam-Smith, L.A. (Eds.). (2017). Intercultural competence in higher education:

International approaches, assessment, and application. Routledge.

- Deardorff, D. (2020). Manual for developing intercultural competencies. Routledge.
- Dervin, F. & Liddicoat, A.J. (Eds.). (2013). Linguistics for intercultural education. John Benjamins.
- Eppler, M. (2021, May 17–19). Global partners in education: Global understanding survey results assessment report for spring 2020 and fall 2020 all countries combined [Paper presentation]. Global Partners in Education 2021, Online.
- Friedman, S. H., & Amir, R. (2019). Careers in international education. NAFSA.
- Garrett-Rucks, P. (2016). Intercultural competence in instructed language learning. Information Age Publishing.
- Hofstede, G. Hofstede, G.J., & Minkov. M. (2010). Cultures and organizations. Software of the mind. McGrawHill.
- Ikeda, K., Shealy, C., Sternberger, L., & Nishitani, H. (2019, March 25-29). COIL-BEVI Project: Understanding students' transformational learning through virtual exchange [Paper presentation]. APAIE 2019, Kuala Lumpur, Malaysia.
- Kane, E., Eguchi, M., & Huntley, M. (2021, October 27–29). Action research; designing, implementing and evaluating VE to increase students' ICC [Paper presentation]. IVEC 2021, Online.
- Kane, E., Eguchi, M., & Huntley, M. (2021, November 12–15). Virtual exchange to increase students' intercultural competence [Paper presentation]. JALT 2021, Online.
- Meyer, E. (2015). *The culture map: Decoding how people think, lead, and get things done across cultures.* Public Affairs.
- Nishitani, H. (2020, September 23). BEVI-jを用いた留学・学習効果の想定 プログラムの質保証・ PDCA・教育的介入 [Paper presentation]. BEVI-j Forum, Online.
- O'Dowd, R. & Lewis, T. (Eds.). (2016). Online intercultural exchange. Oxford: Routledge.
- OECD. (2018). Preparing our youth for an inclusive and sustainable world: The OECD global competence framework.
- Oxfam. (n.d.) What is global citizenship? https://www.oxfam.org.uk/education/who-we-are/what-isglobal-citizenship/
- Punteney, K. (2019). The international education handbook. NAFSA.
- Roy, P. Wandschneider, E. & Steglitz, I. (2014). Assessing education abroad outcomes: A review of the BEVI, IDI, and GPI. Michigan State University Office of Study Abroad.
- Sasajima, S., Kudo, T., Hongtao, J., Larry, J. & Hannah, H. (2020). *Intercultural awareness: Content and language integrated learning*. Sanshudo.
- Shealy, C.N. (Ed.). (2016). Making sense of beliefs and values: Theory, research, and practice. Springer.
- Wandschneider, E., Pysarchik, D.T., Sternberger, L. G., Ma, W., Acheson, K., Baltensperger, B., Good R.T., Bribaker, B., Baldwin, T., Nishitani, H., Wang, F., Resiweber, J., & Hart, V. (2015). "The Forum BEVI project: Applications and implications for international multicultural transformative learning". In Shealy, C. N. (Ed.), *Making sense of beliefs and values: Theory, research, and practice* (pp. 407–484). Springer.

Keywords: Virtual Exchange (VE), Intercultural Communicative Competence (ICC), synchronous exchange, asynchronous exchange

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