Research on First Year Students' Global Competence Development and its Impact on Study Abroad: An Analysis Through the Intercultural Collaborative Learning Course "MCW"

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Abstract

In 2024, the Ministry of Education, Culture, Sports, Science and Technology in Japan (MEXT) launched the Support Program for Creating Social Impact through University Internationalization. This involves setting intercultural collaborative learning courses where domestic and international students study together, gaining global competence, and fostering interest in study abroad programs to actively send domestic students. Building on this background, the present study seeks to explore three main questions: (1) Did students in intercultural collaborative learning course develop global competences? (2) What factors positively affect global competence, and (3) Whether gaining global competence promotes study abroad. Within this framework, APU's (Ritsumeikan Asia Pacific University, Japan) SI project plan[1] references previous intercultural collaborative efforts, including a first year experience course called "Multicultural Collaborative Workshop (MCW) [2]", and residential experience in the international first-year dormitory AP House. The analysis yielded three key findings. First, students generally showed an increase in global competence from the beginning to the end of the MCW course. Second, notable improvements in global competence were observed among students who actively engaged in group work during MCW, and those with residential experience in AP House who frequently interacted with peers from the opposite language standard. Third, students who developed higher levels were more likely to be motivated to participate in study abroad programs.

Keywords: Global Competence, Study Abroad Programs, Student Dormitory, MCW.

1 Introduction

In 2014, the Ministry of Education, Culture, Sports, Science and Technology in Japan (MEXT) launched the "Top Global University Project (TGU)." By the fiscal year 2023, each selected university set target numbers for the acceptance of international students and actively pursued these goals. As a result, the number of international students in 2014 was 139,185, but by 2023, this number had increased to 279,274. In 2023, "Japan-Mobility and Internationalization: Re-engaging and Accelerating Initiative for future generations," indicated creating educational environments where individuals with diverse cultural backgrounds could gather and understand each other as a future direction. Following this, in 2024, MEXT initiated the "Support Program for Creating Social Impact through University Internationalization (SI Project)" as a successor to the TGU. The SI Project aims to create a virtuous cycle of further promoting study abroad programs

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through building a system of intercultural collaborative learning at universities. This involves setting intercultural collaborative learning courses where domestic and international students study together, gaining global competence, and fostering interest in study abroad programs to actively send domestic students. The case in point for this study is Ritsumeikan Asia Pacific University (APU) (in collaboration with Kyushu Institute of Technology), one of the 23 universities selected for the SI Project. APU, known as an international university in Japan, not only has a semi-equal number of domestic and international students but also faculty, with half being Japanese nationals and the other half foreign nationals. It was ranked second nationally for internationality in the Times Higher Education "World University Rankings Japan Edition 2025."

APU has focused on creating an intercultural collaborative learning campus as one of its main goals, offering a foundation course called "Multicultural Cooperative Workshop (MCW)" for first-year students and implementing intercultural collaborative learning courses. In MCW, the course objectives are to enhance student's skills and attitudes for effective and inclusive multicultural collaboration and appreciate diversity across cultures and other dimensions of identity, with lectures on intercultural collaborative learning faculty in the first half and practical application in groups under the guidance of Student Assistants (SAs) in the second half. However, the effectiveness of MCW in enabling students to gain global competence and promoting study abroad has not been measured. APU's initiatives for global learning also include extra-curricular efforts, such as residential experience in the first-year international education dormitory AP House. Thus, the effectiveness of such a university-wide attempt also needs to be examined.

This research aims to clarify three issues: 1) Did students in MCW courses develop global competence? 2) What factors positively affect global competence, and 3) Whether gaining global competence promotes study abroad. In this context, APU, in its SI project plan, cites previous intercultural collaborative learning initiatives, including experiences in taking MCW, and residential experience in the first-year international education dormitory AP House. The effectiveness of these practices, both curricular and extracurricular, will be examined to verify the acquisition of global competence.

In this study, the following research questions are examined.

1）   To what extent has global competence improved?

2）   What elements contribute to the enhancement of global competence?

3）   Does the development of global competence encourage students to study abroad?

2   Research on Global Competence

According to Grandin & Hedderich (2009), global competence is "an umbrella term describing human ability to effectively interact with substantive knowledge, perceptual understanding, and intercultural communication skills across national borders" (p, 366). Dawney et al. (2006) have clarified that global competence can be gained not only through coursework composed solely of professional knowledge but also through experiences in classes that incorporate communication methods and leadership development, by living abroad, and participating in programs with international elements. Additionally, Lohmann et al. (2006) mentioned that mastery of a second foreign language, international classes, and programs incorporating international experiences can

facilitate acquisition, and Becker (2006) has elucidated that participating in programs with international elements and incorporating interdisciplinary components can enhance global competence. Moreover, Yamada (2022) has stated that taking general education subjects different from one's major field and experiences of studying abroad programs are effective. Common to all studies is the experience of having taken classes with international elements, such as APU's MCW. However, rather than merely having such class experiences, it is assumed that students' active engagement in classes varies individually. It is also indispensable to utilize research results to improve institutional efforts, as Deardorff (2017) points out, too often, international programs collect data but do not utilize it for educational improvement.

Additionally, Blimling (2015) has demonstrated that having residential experience in student dormitories tends to enhance global competence, and Abe et al. (2019) have identified more desirable types of dormitories, such as traditional halls and themed houses, after categorizing them by students' living styles. Indeed, the residential style of dormitories can facilitate a certain degree of forced mixing between domestic and international students. However, due to this residential style, there is a potential for further polarization between students who actively engage with students of opposite language standards and those who do not. An analysis of how each resident student engages in interactions with students of opposite language standards to gain such global competencies can demonstrate to students the desirable attitudes and approaches toward in intercultural collaborative learning educational dormitories.

3   Research Methodology and Analysis Framework

Table1: Analytical Framework
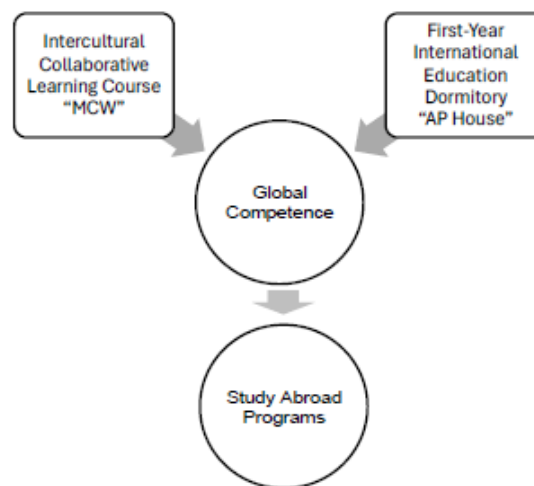
During the fall semester of 2024, all freshman students enrolled in the designated course MCW, considered foundational for deepening future learning, were surveyed using the Global Perspectives Inventory (GPI) at the start of the semester in October 2024 and at the end in January 2025. GPI developed by the University of Iowa, is used by approximately 200 universities and educational organizations in the U.S. and abroad have used the GPI to assess intercultural competence, global learning, and study abroad experiences. Before the survey, students were informed about the ethical research review involving humans at APU, that it was optional to answer any item,

and that individual responses would be anonymized for statistical processing. The survey queried the following: The survey at the start of the semester, 1) the status of gaining global competence, 2) personal information (student ID, faculty, nationality/region, gender, language standards (English/Japanese basic), residential experience living in AP House, experience living abroad, future participation in study abroad programs, involvement in MCW group work, and frequency of interaction with students speaking the opposite language in AP House, and 3) high school experiences (attendance at international schools, subject enrollment). At the end of the semester, they were asked about 1) the status of gaining global competence, 2) personal information (student ID), and 3) university experiences (subject enrollment, participation in international exchanges). The survey was conducted with 1,543 freshman students, with 1,112 valid responding at the start of the semester and 1,269 at the end of the semester, valid response rates are 72% and 82%, respectively. After data collection, cleaning was conducted, and the analysis was performed using SPSS based on framework shown in Table 1 for the 1,112 students who contributed to both surveys.

4   Analysis Results and Discussion

Changes in Global Competence through Analysis by Faculty and Language Standards

Table 2 illustrates the changes in global competence gained through the MCW[3] . As indicated, there is an overall increase in the achievement of global competence from the starting to the end of the MCW. The overall acquisition of global competence in MCW, which emphasizes intercultural collaborative learning, not only demonstrates the educational effectiveness of MCW but also supports the advancement of SI project plan.

Looking at the changes in global competence gained through MCW by language stand-ard[4] , Overall, at both the beginning and end of the MCW course, overwhelmingly positive evaluations such as "strongly agree" were noted among international students with English standards. Presumably, these students might have already had a higher level of global competence at the time of deciding to study abroad at a Japanese university like APU. Comparing the beginning to the end of the MCW, for example, "I frequently interact with people from a race/ethnic group different from my own", there is an increase in acquisition among domestic students with Japanese standards (32.4%, 34.6%). Conversely, a little decline is observed among international students with English standards (56.9%, 55.9%). Although the specific reasons are not identified, if MCW is contributing, it is imperative for the university to quickly determine the causes.

Table 2: Changes in Global Competence Gained Through the MCW

	The Starting of the MCW		The End of the MCW		Difference in Means
	Mean	Standard Deviation	Mean	Standard Deviation	
Knowing scale					
When I notice cultural differences, my culture tends to have the better approach*	3.09	0.963	3.12	0.983	0.03
Some people have a culture and others do not*	2.8	1.228	2.74	1.225	-0.06
In different settings what is right and wrong is simple to determine*	2.82	1.142	2.67	1.137	-0.15
I take into account different perspectives before drawing conclusions about the world around me	3.92	0.866	4.03	0.738	0.11
I consider different cultural perspectives when evaluating global problems	3.84	0.858	3.97	0.732	0.13
I rely primarily on authorities to determine what is true in the world*	2.9	1.016	2.89	1.009	-0.01
I rarely question what I have been taught about the world around me*	2.64	1.074	2.55	1.068	-0.09
Knowledge scale					
I am informed of current issues that impact international relations	3.33	0.962	3.57	0.914	0.24
I understand the reasons and causes of conflict among nations of different cultures	3.49	0.917	3.71	0.838	0.22
I understand how various cultures of this world interact socially	3.89	0.882	4.11	0.687	0.22
I know how to analyze the basic characteristics of a culture	3.33	0.937	3.68	0.758	0.35
I can discuss cultural differences from an informed perspective	3.59	0.889	3.82	0.742	0.23
Identity scale					
I have a definite purpose in my life	3.45	1.058	3.55	1.01	0.1
I can explain my personal values to people who are different from me	3.79	0.91	4.03	0.738	0.24
I know who I am as a person	3.64	0.991	3.83	0.91	0.19
I am willing to defend my views when they differ from others	3.36	0.951	3.48	0.897	0.12
I put my beliefs into action by standing up for my principles	3.66	0.919	3.82	0.757	0.16
I am developing a meaningful philosophy of life	3.51	0.972	3.67	0.904	0.16
Affect scale					
I am sensitive to those who are discriminated against	3.61	0.948	3.71	0.893	0.1
I do not feel threatened emotionally when presented with multiple perspectives	3.64	0.994	3.73	0.956	0.09
I am accepting of people with different religious and spiritual traditions	4.18	0.894	4.29	0.674	0.11
I enjoy when my friends from other cultures teach me about our cultural differences	4.3	0.88	4.39	0.698	0.09
I am open to people who strive to live lives very different from my own life style	3.97	0.887	4.11	0.705	0.14
Social Responsibility scale					
I think of my life in terms of giving back to society	3.31	1.001	3.37	1.012	0.06
I work for the rights of others	3.3	0.955	3.36	0.924	0.06
I put the needs of others above my own personal wants	3.25	0.999	3.33	0.959	0.08
I consciously behave in terms of making a difference	3.54	0.896	3.58	0.858	0.04
Volunteering is not an important priority in my life*	2.69	1.083	2.8	1.089	0.11
Social Interactions scale					
Most of my friends are from my own ethnic background*	3.27	1.163	3.16	1.138	-0.11
I frequently interact with people from a race/ethnic group different from my own	3.76	1.021	4.03	0.834	0.27
I intentionally involve people from many cultural backgrounds in my life	3.6	0.965	3.76	0.877	0.16
I frequently interact with people from a country different from my own	3.81	1.03	3.99	0.869	0.18

※* Indicates a reversed item

Factors Influencing the Acquisition of Global Competence

In the APU SI project plan, it is stated that both curricular and extracurricular activities are a university-wide practice of intercultural collaborative learning, such as an experience in taking the MCW[5] , and residential experience living in AP House[6] . Firstly, T-test was conducted to determine whether there is a difference in the acquisition of global competence

Table 3: The Results of T-test

("I frequently interact with people from a race/ethnic group different from my own")

		SS	DF	MS	F-Value	P-Value
Global Competence	Yes: MCW Experience	4.71	2	2.355	1.742 **	
	No: MCW Experience	1496.357	1107	1.352		
	合計	1501.067	1109			

※P-Value：P＜0.05*, P＜0.01**

based on the experience of taking the MCW. The results from paired T-test, there are overall significant differences in global competence (Table 3). This indicates that having taken the MCW leads to an increase in global competencies. Currently, MCW is a required subject for all under-graduate students, but the SI project plan proposes making it a compulsory course in the future. Moreover, SI project plan suggests that future classes should increase the pro-portion of English used and promote further mixing of domestic and international students, which will lead to greater acquisition of global competencies. Secondly, a T-test was conducted to determine whether there is a difference in the acquisition of global competencies based on the residential experience living in AP House. The results from paired T-test, there are overall significant differences in global competence (Table 4). This means that living in

Table 4: The Results of T-test

("I frequently interact with people from a race/ethnic group different from my own")

		SS	DF	MS	F-Value	P-Value
Global Competence	Yes: AP House Experience	6.947	2	3.474	3.133 **	
	No: AP House Experience	1227.31	1107	1.109		
	合計	1234.257	1109			

※P-Value : P＜0.05*, P＜0.01**

AP House as a first-year student leads to an increase in most global competencies. AP House enhances the intercultural collaborative learning environment even outside of classes. There are issues, however, such as the fact that the dormitory is primarily for first-year students only, and from the second year onward, students must find their own accommodation. AP House offers educational benefits to offset these issues.

Correlation between Acquisition of Global Competence and Study Abroad Programs

One of the APU SI project plans is to cultivate global competence through intercultural collabo-rative learning and to create an environment that encourages domestic students to participate in study abroad programs7). To investigate whether there is a correlation between the acquisition of global competence, for example, "I frequently interact with people from a race/ethnic group different from my own" and the desire to participate in study abroad, an ANOVA and multiple comparison tests were conducted. The results indicated a significant effect with $F(2, 1106) = 1.684$, $p < .001$. The null hypothesis that the average desire for study abroad is the same across all participants was rejected, suggesting that there are differences in the desire for study abroad based on the level of global competence gained. Further multiple comparison tests were con-ducted to identify which groups differed. The results showed that the mean level of "strongly agree" was significantly higher in desire for study abroad.

Analysis of Global Competence and Determining Factors in Influence on Study Abroad

Table 5: Multiple Regression Analysis of Global Competence

("I frequently interact with people from a race/ethnic group different from my own")

	Standardized Coefficient (β)	P-Value
Domestic students based on Japanese standards	0.35 **	
Domestic students based on English standards	0.12	
International students based on English standards	0.11	
Experience in taking MCW: Yes	0.38 **	
Level of involvement in group work		
Residential experience living in AP House: Yes (control variable)	0.35 *	
Frequency of interaction with students of the opposite language standard in AP House		
Adjusted coefficient of determination P-Value	0.35 **	

※P-Value : **p＜0.01, *p＜0.05

※Baseline: International students based on Japanese standards, Experience in taking MCW: No, Residential experience living in AP House: No

Table 5 shows the results of a multiple regression analysis on global competence ("I frequently interact with people from a race/ethnic group different from my own"). It was found that domestic students based on Japanese standards tend to acquire higher levels of global competence. Looking at the experience of taking MCW, it was found that students who took the MCW had gained global competence. Similarly, it is evident that students who have residential experience living in the AP House have gained more competence. However, even among students who have taken MCW, there is a significant difference in the level of involvement in group work8). Therefore, the degree of involvement in group work was added as an explanatory variable after controlling. The results indicate that students who are actively involved in group work gain more competence. This suggests that simply having taken MCW is not enough; active participation in group work with opposite language standards is crucial.

Further analysis with residential experience living in AP House shows that even students who lived there did not necessarily engage actively with opposite language standards. By controlling residential experience living in AP House and looking at the frequency of inter-actions with students of the opposite language standard9), it was found that more frequent interactions lead to greater acquisition of competence. Simply residential experience living in AP House is not enough; the key is how actively students engage with others who are the opposite language standards. The university should consider investigating possible causes of the issue and carefully devise ways to integrate such isolated students into the community. This may involve the creative efforts of Resident Assistants (RAs), who currently organize events to promote.

Table 6: Logistic Regression Analysis on Study Abroad (Agree = 1, Disagree = 0)

	Exp (β)	P-Value
Knowing scale		
When I notice cultural differences, my culture tends to have the better approach	1.222 **	
Some people have a culture and others do not	1.345 *	
In different settings what is right and wrong is simple to determine	1.654 *	
I take into account different perspectives before drawing conclusions about the world around me	1.557 *	
I consider different cultural perspectives when evaluating global problems	1.876 **	
I rely primarily on authorities to determine what is true in the world	1.554 **	
I rarely question what I have been taught about the world around me	1.543 **	
Knowledge scale		
I am informed of current issues that impact international relations	1.234 **	
I understand the reasons and causes of conflict among nations of different cultures	1.221 *	
I understand how various cultures of this world interact socially	1.665 **	
I know how to analyze the basic characteristics of a culture	1.665 **	
I can discuss cultural differences from an informed perspective	1.234 **	
Identity scale		
I have a definite purpose in my life	1.234 *	
I can explain my personal values to people who are different from me	1.356 *	
I know who I am as a person	1.114 *	
I am willing to defend my views when they differ from others	1.324 *	
I put my beliefs into action by standing up for my principles	1.554 **	
I am developing a meaningful philosophy of life	1.567 **	
Affect scale		
I am sensitive to those who are discriminated against	1.554 **	
I do not feel threatened emotionally when presented with multiple perspectives	1.768 **	
I am accepting of people with different religious and spiritual traditions	1.563 *	
I enjoy when my friends from other cultures teach me about our cultural differences	1.678 *	
I am open to people who strive to live lives very different from my own life style	1.876 *	
Social Responsibility scale		
I think of my life in terms of giving back to society	1.456 **	
I work for the rights of others	1.555 **	
I put the needs of others above my own personal wants	1.432 **	
I consciously behave in terms of making a difference	1.432 *	
Volunteering is not an important priority in my life	1.453 **	
Social Interactions scale		
Most of my friends are from my own ethnic background	1.113 *	
I frequently interact with people from a race/ethnic group different from my own	1.567 **	
I intentionally involve people from many cultural backgrounds in my life	1.765 *	
I frequently interact with people from a country different from my own	1.367 *	
Nagelkerke R^2	0.343	
P-Value	**	

※P-Value : **$p < 0.01$, *$p < 0.05$

Table 6 presents the results of a logistic regression analysis concerning the desire to participate in study abroad. As shown in Table 6 and similar to previous results from variance analysis and multiple comparisons, there is a tendency for study abroad to be significantly promoted when global competence is gained through the MCW. Global competence is essential as a qualification for participating in study abroad, and it is desirable to encourage its acquisition among students, especially at universities selected for the SI project plans, through intercultural collaborative learning course. Moreover, the experience of study abroad has been reported to correlate with higher proportions of international tasks and overseas assignments in one's career (Teichler & Jahr, 2001), and it has been pointed out that such experiences enhance employability (Giorgio Di Pietro, 2015). Therefore, gaining global competence through MCW and realizing study abroad can increase career-related international contacts and improve employability prospects graduating after APU.

5 Conclusion and Future Challenges

This research aimed to clarify two issues. The first issue was students in MCW developing global competences? and what factors positively affecting this development. The second issue was how gaining global competence contributes to increasing the desire for study abroad. The analysis revealed three main findings. First, the level of global competence increased from the beginning to the end of MCW. Second, students with MCW who actively participate in group work, and students with residential experience living in AP House who frequently interact with students of the opposite language standard, have all gained significant competence. Third, students who have gained competence are more likely to be promoted to participate in study abroad. The following directions for university reform are proposed.

There is a need to newly expand intercultural collaborative learning course both within and outside the curriculum. Indeed, APU ranks as one of the most international universities in Japan. However, despite such a rich intercultural collaborative learning educational environment, due to the segregation of classes by language standard, it is possible for domestic students with Japanese language standards to complete their four years within their own language community. These students are required to acquire 20 credits in courses of the opposite language standard for graduation, but if they do not proactively mix with students of the opposite language standard, they fail to fully utilize the intercultural collaborative learning educational environment. Increasing the number of intercultural collaborative learning courses and integrating these students are challenges that need addressing. One solution could be to abandon separate intercultural collaborative learning course by language standard and using both Japanese and English in teaching.

Note

1）SI Project Plan Documents (https://www.jsps.go.jp/j-social-i/sentei_jigyo.html)

2）MCW (Multicultural Coexistence Workshops) (https://www.apu.ac.jp/home/study/content55/)

3）At the beginning of MCW: "What extent do you agree with the following?" At the end of MCW: "What extent do you agree with the following now?" Responses were recorded on a scale from "Strongly Agree = 5" to "Strongly Disagree = 1".

4）"What is your language standard, student category?" Options to choose from included "Domestic student with Japanese language standard," "Domestic student with English language standard," "International student with Japanese language standard," and "International student with English language standard."

5）"Do you have experience taking MCW?" Responses were "Yes = 1" and "No = 0".

6）"Do you have a residential experience living in the AP House?" Responses were "Yes = 1" and "No = 0".

7）"During your time at APU, do you want to participate in study abroad programs?" Responses were "Yes = 1" and "No = 0".

8）"Do you think you were actively involved in the group work in MCW?" Responses recorded on a scale from "Strongly Agree = 5" to "Strongly Disagree = 1".

9）"Do you think you actively interacted with students of the opposite language standard in AP House?" Responses ranged from "Strongly Agree = 5" to "Strongly Disagree = 1".

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