Intercultural Social Networks: A Study of Service Learning and its Impact on Japanese-Foreign Student Learning

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Abstract

International service learning is fast becoming a popular pedagogical approach to enhance global citizenship among participating students. Through this type of experiential education, this approach gives students the opportunity to engage with local students and hone their intercultural communication skills. This paper seeks to shed light on the impact participation in an international service learning program had on two student groups at a Japanese university. Specifically, it elucidates the students' reflections on the formation of intercultural social networks. In the final part of the paper, five central concepts of social network analysis are used to explore this case of service learning: density; homophily; diffusion; structural holes; and betweenness.

KeyWords：service learning, social network analysis, density, homophily, diffusion

1. Introduction

1.1. What is Service-Learning?

International service learning programs continue to gain attention as learning opportunities for students to enhance their intercultural communication competence and a sense of global citizenship through interaction with foreign social networks. Service learning commonly refers to experiential education from volunteer and community service projects through to field studies. In terms of academic benefits, service learning sees students learn through active community engagement that stimulates their sense of citizenship (Meuers, 2018; Miyazaki et. al 2013).

1.2. What are Intercultural Social Networks?

A social network can be defined as "a network of people linked together by relatively loose social bonds or ties" (Giddens & Sutton, 2017, p. 126). Examples of social networks range from more formal networks associated with institutions such as workplaces, schools, hospitals, the military, and the bureaucracy to more informal networks that are not formally defined such as

friendship groups or groups of people who share similar interests and values. Social networks "evolve from individuals interacting with one another but produce extended structures ... These networks are constantly emerging" (Kadushin, 2012).

Intercultural social networks, as the name suggests, are social networks that bring together groups of people with different cultural backgrounds. These include international service learning programs, when for example Japanese university students go to another country and participate together with students from local universities in volunteer and community service projects. The learning opportunities that arise have two dimensions: shared participation in volunteer and community service projects, and interactions with each other and with students from the local universities.

2. Background

2.1. Situating the Research

Since the early 1990s, service learning in Japan has been seen as an avenue for students to develop social skills and a sense of responsibility as active members of society. Presently, the Japanese government is increasing its call for greater focus on the internationalization of education in Japan. As a result, Japanese universities are now being encouraged by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) to embrace curriculum design that seeks to enhance the development of global citizenship among Japanese students (Horio, 2017).

Current trends in the internationalization of Japanese education suggest that there is a genuine need to design and implement curricula that is contemporary and cutting edge. As researchers in the field of global citizenship as well as government agencies including MEXT strongly suggest, this type of curriculum development is still under-developed in Japan (Horio, 2017; O'Connell, 2017).

To answer the call for further development, this study aims to elucidate efforts being made by one Japanese university to provide a learning framework in which international service learning acts as an opportunity for students to gain intercultural communication skills and a sense of global citizenship. Through an explanation and analysis of the voices of Japanese university students participating in international service learning programs, this study will shed light on the impact such programs have in helping students develop intercultural social networks with students from local universities.

2.2. Current Trends

Firstly, in terms of domestic trends, MEXT has been supporting international programs that encourage Japanese students to become "globally competent" (McMichael, 2017). This is a broad concept that encompasses developing intercultural competency through curricula that include instruction in hands-on, practical skill sets such as real-life English communication, multilingual critical thinking and intercultural teamwork. This shift to a more proactive form of global education has been highlighted in nation-wide initiatives such as the Top Global University Project, Super Global High School Project, and most recently, the Tobitate Ryugaku Japan Scholarship. Following the Great East Japan Earthquake in 2011, this trend of moving away from traditional models of international education and more towards nurturing global competency has also been linked to a heightened interest among Japanese youth towards volunteer work. In recent times, other natural disasters in Okayama and Hiroshima have added to this high demand. As a result, more universities have developed service learning programs to provide students with the opportunity to participate in volunteer work and learn from it at the same time.

With regards to international trends in service learning, a strong focus can be seen that seeks to connect student experiences with institutional adoption and impact. With students, there has been an emphasis on encouraging them to critically reflect on their service learning experiences. Ash and Clayton's Articulated Learning process and DEAL (Describe, Examine, Articulate Learning) Framework (2004) are seen as the industry standards for encouraging students to analyze their actions within the intersecting realms of academic achievement, engaged citizenship, and personal growth. Institutionally, the creation of the Carnegie system for evaluating university-wide adoption, promotion, and impact of service learning has gone far in getting this onto the agendas of lecturers, higher education leaders, and policy makers. An example of the importance of the lecturer's role in implementing service learning is chronicled in Farmer, Perry and Ha (2016, p. 238), who note, "the professoriate is an essential element in the implementation of institutionalized service learning and faculty assessment of mutually beneficial outcomes is imperative."

3. The Study

3.1. International Service Learning Program

The Japanese university participating in this study has been running an annual international service learning program open to first-to fourth-year students (see O'Connell, 2017 for details)

since 2016, organized by one of the authors (O'Connell).

The program consists of two major components—(1) pre-departure preparation classes and (2) a two-week service learning program in New Zealand. With the cooperation of the University of Canterbury Community Hub in Christchurch, New Zealand, the participating Japanese university students have been able to gain knowledge about community engagement and the role local universities can play in helping in post-disaster recovery efforts.

In 2010 and 2011, the Christchurch community experienced two large earthquakes which inflicted a large amount of damage on the city and the lives of its citizens. Since then, the University of Canterbury has worked tirelessly through student volunteer activities in an effort to aid the Christchurch community. The positive affect of their efforts has led to the creation of a community engagement service learning course that seeks to stimulate bicultural competence, community engagement, global awareness, and innovation by opening the course to both local and international students.

The University of Canterbury Community Engagement Hub allows overseas students on either short or long-term study programs to learn and take part in community-based projects. These projects are done with the cooperation and leadership of the local University of Canterbury student volunteer organization known as the Student Volunteer Army. Students participating in their activities can experience service learning through numerous on-site activities, including volunteer activities in residential and rural areas, as well as NPO- and city council-led support services that focus on the rebuilding of the city and suburban areas (University of Canterbury, 2017). To date, a total of 11 students from the Japanese university have participated in the program over two years—five students in 2016 and six students in 2017.

3.2. Methodology

One of the main objectives within the study was to investigate what kind of impact the intercultural interaction with the local University of Canterbury students had on the Japanese university students. More concretely, for this particular study, the main questions asked were:

(1) Did interaction with the students from the Student Volunteer Army at the University of Canterbury help you improve your intercultural communication skills? If so, in what way?

(2) What impact has this service learning experience had on you overall?

(3) What insights emerged from the data using a social network analysis perspective?

A qualitative approach was used in this study, and data were gathered using student journals, final reports, and a focus-group interview of both groups in 2016 and 2017. Thematic analysis

(Boyatzis, 1998) was used as the main analytical tool for theme extraction from the data collected; this was augmented by social network analysis (Kadushin, 2012; Scott, 2017).

Data collection started by reviewing student journals. For this particular study, data collection focused on any comments referring to specific interaction with University of Canterbury students during the service learning program. This process was then repeated with the students' final reports, which reflected on their learning experiences and outcomes regarding global citizenship and intercultural understanding in New Zealand. These initial two data collection stages saw a number of comments extracted that related to interaction with local University of Canterbury students.

The final stage of data collection was a focus group interview of the participating Japanese university students. Data analysis of the first stages of data collection became the basis for questions used in the focus group interviews. Ethical considerations were given to the students firstly by informing that any and all submission of data was voluntary. Additionally, students were promised anonymity and they all signed a consent form for the use of the data in this paper.

4. Findings

4.1. Intercultural Communication Competence

An initial and thorough analysis of the student journals and final reports provided insights into the participating Japanese university students' reflections on their intercultural communication competence. A number of keywords and phrases emerged as shown by the following representative examples:

Student #2:   *"My interaction with the student volunteers helped me learn about the New Zealand students' way of thinking."*

Student #6:   *"I was able to share my experiences and thoughts about volunteering in Japan with the University of Canterbury students."*

Student #9:   *"Doing service learning projects with the University of Canterbury students meant that I could have many conversations about why they like doing this type of activity."*

Student #11:   *"The more I did activities with the University of Canterbury students, the more I was able to learn about the New Zealand culture, customs and values."*

As can be seen from the comments above, interaction with University of Canterbury students during the various service learning projects gave the Japanese university students an opportunity to learn from, communicate and exchange opinions with the local University of Canterbury students. The references to topics such as values and mindsets suggest that the students were able to positively and consciously engage in intercultural communication.

In the final stage of data analysis—the focus group interviews—these findings were used to firstly discuss the question, *"Did interaction with the students from the Student Volunteer Army at the University of Canterbury help you improve your intercultural communication skills? If so, in what way?"*

All eleven students participated in the focus group interviews and with regard to this question gave a variety of answers. Below are some of the answers:

Student #2:　*"Yes, the interaction helped me learn about the cultural influence on the University of Canterbury students' way of thinking. I was also able to explain the Japanese mindset to them, so it felt like we were both learning something new from our conversations."*

Student #4:　*"After two weeks of lots of contact and interaction with University of Canterbury students in the Student Volunteer Army I was able to understand why they are so positive about their volunteer activities. They asked about the situation in Japan. At first I couldn't answer well, but it by the end I think I was able to explain the Japanese culture better."*

Student #11:　*"Yes, I felt that my conversations with the University of Canterbury students not only helped me learn about the New Zealand culture, education system and strong will of the University of Canterbury volunteer students, but it also made me think about myself as a student in Japan because I had to explain what we do in Japan and how we react to natural disasters as a community."*

These comments clearly show that the students' intercultural communication skills were stimulated because they were required to explain their own thoughts and not just ask about what is happening in New Zealand. The substance of the conversations sheds light on the aim of intercultural understanding, which is to create mutual understanding rather than just one-way learning.

4.2. Overall Impact

In terms of the overall impact, analysis of the student journals and final reports revealed two main themes: (1) heighted global awareness and intercultural understanding; and (2) motivation to communicate in intercultural situations.

With regards to (1), comments found in the students' journals and final reports highlighted the fact that they were able to form their own definition of global citizenship. All students, in one way or another, said that it was not until they participated in the on-site field activities that they could really feel what it meant to be a global citizen. The underlying tone points to taking responsibility in community engagement no matter where they are located. In this study, this refers to the students going to New Zealand and helping as volunteers in the recovery process in Christchurch.

This evident shared-mindset was further explored in the final focus group interviews through the question, *"What impact has this service learning experience had on you overall?"* The following two extracts from the focus group interview transcript best represent the overall consensus of the students regarding the impact this service learning experience had on them:

Student #1: *"This program made me rethink my role as not only a global citizen, but also as a local citizen in Japan. I was taught many things by the experienced University of Canterbury student volunteers and they were very kind in the way they explained how to be an active volunteer. I want to use this experience to do more volunteer work in Japan."*

Student #3: *"This program has changed my way of thinking regarding my role as a citizen in society. Through the activities we did and many conversations we had with the local community members, University of Canterbury teachers and students during the program, I was able to learn the true meaning of community engagement. Students have many opportunities to use what they learn at university to help the community. All you have to do is be active about it."*

It is evident from these extracts that the impact of the service learning program experience was positive and thought-provoking for the students. Interestingly, the influence of interaction and forming of social networks was a predominant theme to emerge.

4.3. Perspectives from Social Network Analysis

Social network analysis offers powerful tools to help analyze qualitative data and understand the

experiences of groups of peoples. To understand how social networks form and develop, social network analysis developed. It is a "broad approach to sociological analysis and a set of methodological techniques that aim to describe and explore the patterns apparent in the social relationships that individuals and groups form with one another" (Scott, 2017, p. 2). It "reveals what is hidden in plain sight" (Kadushin, 2012, p. 6).

Social network analysis first emerged when "sociologists and anthropologists ... explored the 'interweaving' and 'interlocking' relations through which social actions are organized through using such textile-based metaphors as the 'fabric' and 'web' of social life" (Scott, 2017, p. 2). Gradually, from the 1930s, social scientists began to use statistics to explore such things as the 'density', 'connectedness' and 'texture' of social networks and as a result of continued work from the 1970s the key concepts of social network analysis have been proposed, discussed, debated, and agreed upon (ibid).

This present research project is a case study of two distinct social networks – the Japanese university students and the University of Canterbury students – joining together through shared experiences, interactions and conversations in a relatively limited period of time and space, and through these shared moments creating a new, larger social network. It was in this larger social network that much learning occurred.

Note that this new social network could be narrowly defined as the members only of the two groups – the Japanese university students and the University of Canterbury students – but also more broadly to include the local Christchurch people that the Japanese university students met through their volunteering activities. In this present study, it is the narrower group definition that is the focus of analysis.

In this section of the paper, five fundamental concepts of social network analysis are introduced from Kadushin (2012): density, homophily, structural holes, betweenness, and diffusion. These concepts are applied to analyze and interpret the qualitative data gathered through the journals, final reports and focus group, to illuminate both the concepts of social network analysis and also the experiences of the participants.

The first concept is **density** (Kadushin, 2012, p. 205). This refers to the number of connections between members of a network; the greater the number of connections, the greater the density of the network, and the greater the exchange of information between members. When a new group first forms and then begins to develop, naturally there are initially few connections between members. However, over time, as interactions within the group increase, these connections can grow in number, direction, intensity, and depth.

In the present case study, the Japanese university students met twice in the pre-departure

preparation classes before they went to New Zealand, so their connections within their group began to develop then. In these preparation classes, the Japanese university students were able to introduce themselves to each other, share their motivation for joining the program and their expectations of what they would achieve practically, linguistically, and personally through participating, and to affirm their shared sense that volunteering and service learning were important and worthwhile. Moreover, because all of the participants chose to join the program, they began with an expectation that other participants would have a similar sense of values and way of looking at the world. The students did not participate together in any volunteer experiences before they left for New Zealand, so they expected that they would mainly develop their connections with each other and their identity as a group after they arrived in New Zealand. Significantly, this meant that the interactions and shared experiences that the Japanese university students had with the University of Canterbury students were crucial in facilitating their sense of themselves as a group, and as learning with the University of Canterbury students.

Similarly, when two groups with shared aims from two different institutions of approximately equal standing meet, and where there is not a clear hierarchy within each group and the members within each group do not have clearly defined roles, the initial interactions and connections between individual members of the two groups may be tentative, with no clear patterns of interaction. As time goes on, however, these connections also increase in number, direction, intensity, and depth.

This pattern of interaction was visible between the Japanese university students and the University of Canterbury students. Initially, the interactions and connections between the two groups were tentative, but as they began to have shared experiences of volunteering, and to discuss and reflect about these experiences, the connections between the two groups developed and deepened. This facilitated the exploration of their shared experiences, but also provided opportunities for the students to explore each other's cultures, both more generally (Japanese culture and New Zealand culture), but also their cultures of volunteering. This process was facilitated by the second important concept from social network analysis, **homophily**.

Homophily is the idea that "people with the same values and attitudes tend to associate with one another. Interaction, in turn, leads to a greater likelihood of common values" (Kadushin, 2012, p. 204). In this case study, the Japanese university students chose to participate in the New Zealand service learning project, as did the students from the University of Canterbury, because they shared a belief in the value of volunteering and the usefulness of service learning. In the case of the Japanese university students, through the pre-departure classes, they could discuss and share their reasons for joining the project, which served to reinforce the value they saw in

volunteering, and reaffirmed their attitude that volunteering was a socially useful and meaningful experience. Similarly, when these students met the University of Canterbury students, they noted in their student journals, final reports and focus groups that they could understand the University of Canterbury Student Volunteer Army participants' way of thinking about volunteering.

Homophily is closely related to **diffusion**, when something, for example ideas or opinions, passes or flows from one part of a group to another, or from one group to another (Kadushin, 2012, p. 209). "The shape of the network, its density, the number of alternate paths from one person to the other, the extent to which interactions are concurrent, the existence of hierarchy in which some network members are leaders and others followers, as well as the size of the network, are all factors in diffusion" (Kadushin, 2012, p. 209). The comments of the Japanese university students show that there was a diffusion of ideas, initially from the organizer (O'Connell) to the students in the pre-briefing sessions, but more significantly from the University of Canterbury students to the Nanzan University students. Also, notably, "at some point in the process there is a *tipping point* when the diffusion appears to take off on its own without any further input from the outside" (Kadushin, 2012, pp. 209–210), and this seems to have occurred in this case.

The first three concepts of density, homophily and diffusion help explain the process of the Japanese university students creating and building a common sense of shared values, first with each other and then with the University of Canterbury students. However, they do not explain why these two groups met in the first place. The fourth concept, **structural holes**, is a useful tool here. A structural hole refers to the situation where two distinct social networks exist, and these two social networks would usually not naturally connect with each other. This gap between them is the structural hole. However, there is often a benefit for one group to reach out to another and move beyond their immediate social network to a more distant one, because there is a perception that at "some point, to be effective, one has to reach out to others and move beyond one's comfort zone" (Kadushin, 2012, p. 205). In the present case, there was a structural hole between the Japanese university students and the University of Canterbury students. The organizer of the Japanese university students (O'Connell) realized that there were potential benefits to creating a social network in Japan and reaching out to another social network in New Zealand, across the structural hole. The fifth and final concept of a social network approach to be introduced in this paper, **betweenness**, more explicitly helps explain his role. Betweenness refers to the person who serves as "a gateway between different parts of the network" (Kadushin, 2012, p. 205). The organizer of the Japanese university students played the role of a gateway between the Japanese students and the New Zealand students,

illustrating this notion of betweenness. Interestingly, this "person can be an important bridge between different parts of the network yet be directly connected to only a few persons" (p. 206). Initially, he knew only a few of the Japanese university students who participated in the program, and none of the University of Canterbury students, yet facilitated their interaction through organizing the program.

Briefly returning to the notion of **structural holes**, these are used not only to explain the gaps between groups, but also within groups as well. That is, members of a social network will often tend to hold similar opinions and viewpoints; when members hold dissimilar views, a gap or structural hole exists between them. However, networks "can create their own motivation; we look to others in a similar position and try to keep up with them" (p. 205). In this way, the opinions and views that members of a single social network hold often converge to minimize or fill in this structural gap. This phenomenon was also evident in this particular case study, particularly after a tipping point was reached and then there was a convergence of views across both groups.

This section has illustrated the utility of using the basic concepts of social network analysis to explore and interpret the experiences of intercultural social networks.

5. Conclusion

This study aimed to elucidate the impact of service learning on Japanese-Foreign student learning and its relation to intercultural social networks. This study focused on the Japanese university study perspective as the first part in a two-stage study on Japanese-Foreign student learning outcomes.

As can be seen from the findings, the participating Japanese students were able to effectively articulate the learning outcomes from this service learning program. They recognized the positive effect that the program had on allowing them to use their intercultural communication skills when interacting with the students from the University of Canterbury during the volunteer activities. They were also able to define what global citizenship means to them through this experience as was made evident in their reflections regarding the program's overall impact on them.

Conversely, one area in which this study is limited in its findings is that the University of Canterbury student voices have not yet been presented. As explained above, this study is separated into two stages. As such, the analysis of the impact this type intercultural experience has on the University of Canterbury students will be the next area of focus in an upcoming

paper. It is hoped that such a focus will lead to a better understanding of the benefits of intercultural exchange on social network formation among students and also help to improve the design of this international service learning program.

Acknowledgments

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異文化間ソーシャルネットワーク：
サービスラーニングが日本人と外国人大学生の
学習に与える影響の検証

オコネル・ショーン、クロッカー・ロバート

要　　旨

　ここ数年間インターナショナルサービスラーニングは、参加学生のグローバルシチズンシップ意識を高める教育方法として注目を集めるようになっている。海外にて現地の大学生との交流を持つことを通じて、こういった体験学習が参加学生には、自分自身の異文化間コミュニケーション力を向上させる機会となる。本稿では、2つのグループからなる日本の大学生がインターナショナルサービスラーニングのプログラム参加がどのような影響を与えたかを検証する。特に、学生がどのような異文化ソーシャルネットワークを築けたかということに焦点を当てるものである。最後には、「密度」、「同類性」、「拡散」、「構造的空隙」、「中心性」という5つのコンセプトがサービスラーニングにおいてどういった意味を持つかを考察として述べる。

キーワード：service learning, social network analysis, density, homophily, diffusion