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Call for Manuscripts

Manuscripts for Volume 7 (2015) of the AIU Global Review must be sent to AIU Press (aiupress@aiu.ac.jp) as an attachment to an email by September 10, 2015. Manuscripts undergo blind peer review by at least two qualified scholars.

Manuscripts MUST conform to the following guidelines:

1. All articles must be the result of original academic research bringing new elements to scholarship and of up to 10,000 words (or up to 1,000 words for a book review), including footnotes and bibliography. Please note that the journal also welcomes articles on pedagogy, empirical or theoretical in nature, with a clear potential for contributing to the relevant academic field either by their innovative approaches or by their theoretical elaboration going beyond a narration of personal experiences.

2. Manuscripts are to be submitted in Microsoft Word format, single spaced, Times New Roman font, size 11 for texts and size 10 for footnotes. Margins 25.4 mm from each of four sides, with custom page size 159.8 mm wide and 236 mm high.

3. Include a concise abstract at the beginning of the manuscript, with three to five key words.

4. Capitalize each major word in the manuscript's title, section heading and illustration titles.

5. Embolden section headings.

6. *Italicize* all foreign words (including Japanese words) and titles of books.

7. No paragraph indentation but a single space between paragraphs. No automatic spacing before and after paragraphs.

8. Sources must be cited following the Chicago Manual of Style (http://www.chicagomanualofstyle.org), either in the notes and bibliography system and/or the author-date system, or one of other internationally approved formats.

9. All charts, maps or other illustrations must be provided in black and white.

10. Attach a one-paragraph biography when submitting your manuscript.

11. Before submitting your manuscript by September 10, send to the e-mail address below a notice of intent by August 10, with the title and brief description of your article.

12. All correspondence should be sent to aiupress@aiu.ac.jp.

International Symposium

Passion across the Sea of Japan
– Friendship and cooperation of Akita, Yanbian and Primorye –

The Akita Chamber of Commerce and Industry, the Government of the Yanbian Korean Autonomous Prefecture, and the Primorye Chamber of Commerce and Industry had the first trilateral event for the promotion of economic cooperation in Akita for three days from November 27 to 29, 2014. Seizing upon this opportunity, the AIU Center for East Asia Research organized a public symposium titled "Passion across the Sea of Japan: Friendship and cooperation of Akita, Yanbian and Primorye" on Saturday, November 29 in the afternoon.

After speeches by Mr. Boris Stupnitskiy, chairperson of the Primorye Chamber of Commerce and Industry, Mr. Zhu Jiefeng, vice-secretary-general of the Government of the Yanbian Korean Autonomous Prefecture, and Mr. Miura Hiroki, Chairperson of the Akita Chamber of Commerce and Industry, three panelists, Prof. Sergei Sevastianov of the Far Eastern Federal University, Prof. Liang Chun-Xiang of Toyo University, and Ms. Hisako Tsuji of the Economic Research Institute for Northeast Asia, made brief but illuminating presentations to explore the possibilities of cooperation among the peoples of the three regions, after which they engaged in a lively discussion with the audience on how to enhance cross-border cooperation among the three regions which are tied by geography and history.

The *AIU Global Review* has the pleasure to include in the present volume the three panelist presentations made at the symposium. They were slightly adapted from the oral version and two of them (that of Prof. Liang and that of Ms. Tsuji) were translated to English from Japanese. By reading these three papers, those who were present at the symposium will certainly recall the passionate discussion they had in Suda Hall at Akita International University in spite of the freezing rain outside, and those who did not have chance to be there will learn of the possibilities the three cities have for the future.

TOYODA Tetsuya
Deputy-Director,
AIU Center for East Asia Research

Subregional Cooperation Between Yanbian and Primorye, and Possible Akita Involvement

by Sergei SEVASTIANOV

1. General description of YKAP

In my presentation I will speak about transregional economic development between Yanbian Korean Autonomous Prefecture (YKAP), China and Primorskiy krai / region (Primorye) in the Russian Far East, and possible involvement of Akita in this process of regional cooperation. Also, as I was directed by this symposium's organizers, in my presentation I will make a special focus on development and socioeconomic characteristics of YKAP.

Yanbian Korean Autonomous Prefecture is an autonomous region in the eastern part of Jilin Province, situated next to the border with the Russian Federation and the DPRK.

Area: 43,474 km2 (25% of Jilin Province Territory)
Population: 2,271,600
Administrative center: City of Yanji with a population of 650,000

Just for comparison: Primorskiy krai / region (Primorye) – federal subject of Russia, part of the Far Eastern Federal District.

Area: 165,9 km2 (almost 4 times more than YKAP).
Population of Primorye is 1,993,000 (a little less than in YKAP).
Administrative center: City of Vladivostok with a population of 630,000 (comparable to Yanji).

YKAP borders DPRK by the stream canal of the Tumen river. The total length of its border with the DPRK is 520 km. 17 kilometers away from the estuary, Tumen becomes a "boundary river" between Russian and DPRK ("juncture of three borders"). The total length of border with Russia is 230 km.

After the establishment of the People's Republic of China, local Koreans were given a status of "titular ethnic group" and some preferences concerning national culture, national labor and self-

governance. According to the Chinese population census of 2010, YKAP's demographic composition is as follows: 57.4% - ethnic Chinese (Han), 39.0% - Korean, 2.4% - Manchurian, 0.5% - other small ethnic groups. Economically active population (aged 15-64) is 80.41% of total population.[1]

Yanbian has a low population growth rate: comparing to the census of 2000, its population increased by 2.8%, meaning that the yearly growth rate is only about 0.28%. The explanation for this is not governmental limitations, but rather low levels of local development. This results in widespread trade migration to the southern regions of China. Plus many ethnic Koreans find jobs and make money in South Korea, which brings in between 1/5 and 1/3 of the prefecture's total income.

Yanbian Korean Autonomous Prefecture is an administrative unit of the second level (lower than a province, but higher than a district). The People's Government of YKAP is organizationally part of Jilin Provincial People's Government and does not have direct contact with Beijing. However, according to the Chinese system of administrative-territorial division, YKAP has a status equal to prefecture-level cities (Changchun, Harbin, etc.). This fact explains the possibility of establishing sister-city relations between YKAP and Vladivostok in 2011.

Notable specifics of YKAP as an Autonomous Prefecture are that the Korean language has a status equal to Chinese, and according to unspoken rules, the position of the Head of YKAP People's Government is supposed to be occupied by an ethnic Korean.

YKAP territories are rich with different natural resources. However only deposits of limestone (the amount of explored reserves reach 98 million tons), and coal (explored deposits: 6,6 billion tons; annual production: more than 3 million tons) have significant economic value.[2] According to the volumes of limestone and coal production, YKAP has the highest production in the province and is among the best compared to other Prefecture-level regions of Northeast China.

[1] Yanbian Korean Autonomous Prefecture. Reference and statistical bulletin, 2014.
[2] Ibid.

In 2007 around 85% of YKAP territories were covered with forest. Broad-leaved and coniferous trees are used as raw materials for the woodworking industry. “Yanbian rice” is the main crop in YKAP. It is known for its special taste and health features, which makes it one of the most famous “local brands”.

2. Modern Conditions of the Yanbian Korean Autonomous Prefecture’s Economy

In 2013 YKAP’s GDP reached 85,3 billion renminbi (annual growth rate -10%). Economic development of YKAP is facilitated by the means of international, regional and national programs. The Yanbian area is the core of the “Greater Tumen Initiative” – a project supported by the United Nations Development Program (UNDP). In addition, the “Changchun – Jilin – Tumen (Changjitu) zone of external openness” and “Hunchun exemplary zone of international cooperation” projects provide various privileges for foreign and local investors.

Agriculture, fishery and woodworking production reached 13,23 billion renminbi in 2013 (4% annual growth).[3] The value of extractive and manufacturing industry production reached 40,26 billion renminbi (12% growth).Within the structure of manufacturing industry (total worth: 40,26 billion renminbi), value of light industry reached 19,5 billion renminbi (12.6% growth), heavy industry: 20,75 billion renminbi (11.4% growth).[4]

YKAP total trade volume in 2013 reached 39,94 renminbi (13.6% growth), while external trade volume reached 2.31 billion USD (12% growth). Volume of foreign investment in YKAP reached 340 billion USD (28% growth).

Transportation

Taking into account the near-border, transit location of Yanbian, its logistics complex is crucial for economic development.

[3] Ibid.
[4] Ibid.

Not having access to the Sea of Japan, since the 1990's, China has actively promoted projects aimed at creation of transportation corridors to the North Korean port of Rajin and the Russian port of Zarubino. However, implementation of those projects is complicated by the need for coordination with neighboring countries and by a number of other external factors. For example, the Hunchun-Rajin transportation line does not have a railroad, and the Rajin Port's capacity is not sufficient to play any significant role in transferring cargo from Northeast China. Increase in cargo traffic on "Hunchun-Zarubino" route so far is not easy to achieve – according to the Chinese side – due to excessively difficult Russian customs regulations and technical problems at the "Mahalino-Hunchun" railroad. Modernization of railway stations and lines on the "Hunchun-Mahalino-Zarubino" route is not completed yet, and that limits opportunities for cargo transfer and trade assortment nomenclature (now mostly coal coming from Russia to China).[5]

As for railroads in Yanbian, there is a plan to build a high-speed railroad along the "Changchun – Tumen – Hunchun" route, which would be a huge event for the prefecture, because after its completion duration of a trip from Hunchun to the provincial center will be shortened to 2.5 hours.[6] It will also connect distant provincial cities to the network of high-speed railroads, providing an opportunity to reach developed cities of South and East China within 12 hours. (Jilin officials attach great importance to the fact that, according to Beijing's decision, a high-speed railroad from the central part of China to the Russian boarder would go through the territory of Jilin, but not in Heilongjiang province).

YKAP has a passenger airport in the city of Yanji (Chaoyangchuan, YJN). It connects the city with other major cities in China (Beijing, Shanghai, Guangzhou, Dalian, Shenyang and others), the Republic of Korea (regular flights to Seoul), Russia (3 flights per week to Vladivostok since 2014) and DPRK (charter flight to Pyongyang).

Tourism

[5] http://ria.ru/vl/20130802/953902747.html.
[6] Yanbian Korean Autonomous Prefecture. Reference and statistical bulletin, 2014.

Tourism is one of the most important sectors of the prefectural economy. This is determined by two main conditions:

1) local cultural distinctiveness, related to Korean ethnic minority concentration;
2) world-level natural attractions, especially natural park Changbaishan, which is a UNESCO world heritage site.

In 2013, 11.68 million of Chinese and foreign tourists visited the prefecture. Touristic sites in YKAP yield money primarily on domestic tourism (around 95% of the total). Good environmental conditions, traditional Korean cuisine, as well as natural medicaments are important factors attracting Chinese tourists. A sizable portion of tourists visiting Changbaishan comes from South Korea (3-4%), for whom Paektusan mountain has a sacral meaning.

The portion of Russian tourists is rather small (only Hunchun city is earning money on Russian tourism). In 2013, the number of tourists from Yanbian visiting Vladivostok reached 209 thousand, while 256 thousand Russians visited Yanbian.[7] A distinctive feature of Russian tourism to Yanbian is that it is primarily aimed at receiving medical care and cosmetic medicine services. Tourism from Japan and other countries is almost unnoticeable.

Further growth of tourism industry may be facilitated by improvement in means of transportation: completion of the Changchun-Yangji-Hunchun high-speed railroad construction, as well as increasing air traffic through Yanji airport would be very helpful.

3. Analysis of Foreign Trade, Transregional Connections of Yanbian Korean Autonomous Prefecture

Foreign connections

From the economic standpoint, the main competitive advantage of YKAP is its near-border location. In 2013, the volume of foreign trade with Russia reached 542 million USD (500 million USD accounts for export, and 42 million USD - for import).[8]

[7] Ibid.

[8] Report of the YKAP vice-governor Gu Jinsheng at the official meeting of the YKAP and Primorye administrations' on March 25, 2014

Russia is the second largest trading partner of YKAP (the first is South Korea). Footwear, textile, electro-technical products, construction materials, and food are the core of YKAP's export to Russia. Import nomenclature includes seafood, wood, coal, metals, etc.[9]

Bilateral cooperation in investment spheres demonstrates rapid growth. Twenty-six companies with investments from YKAP were established in Russia, and the total number of Chinese investments reaches 211 million USD. Russia is the biggest recipient of investments from YKAP.

Thirteen Chinese companies (half of the above mentioned 26) operate in Vladivostok, Khabarovsk, and other cities in the Russian Far East. Investment projects are implemented in the spheres of woodworking, apparel textile, footwear industry, transportation, car services, automobile and machinery repairs, agriculture, etc. In turn, 11 companies with Russian investments were opened in YKAP. They operate primarily in tailoring and manufacturing industries.[10]

On May 18, 2011 Yanbian Korean Autonomous Prefecture and the City of Vladivostok established sister-city relations. This helped to intensify contacts between officials, businessmen, etc., and exchanges by cultural and sports delegations. Partner relations established between the largest regional Universities – Far Eastern Federal University and Yanbian University are very important for academic cooperation.

ROK and DPRK's active trade relations with YKAP

Yanbian's strengths, compared to the other regions in China, are its advantageous geographic position, the presence of ethnic Koreans and rich natural resources. Its weaknesses are severe climate, labor shortages (small population growth due to constant outflow of young population to South Korea and other regions of China), low level of industrial development, small domestic market, and shortage of capital. Chinese experts predict a better future for the prefecture based on active participation in international and transborder projects.

[9] Ibid.
[10] Ibid.

First of all, this has to do with realization of “the Greater Tumen Initiative” project that is perceived by Chinese officials and experts as multi-vector development of infrastructure in YKAP.
Special hopes are pinned to the “Economic development region of Changjitu”, which includes cities of Changchun and Jilin, and the region of Tumenjian (Tumannaya) river estuary with the city of Tumen. In April 2012, the State Council of the PRC established a “pilot zone of international cooperation in the city of Hunchun” that borders Russia. According to the plan, the volume of GDP in the territory of this pilot zone would become four times bigger by 2020, which, in turn, would produce multiplicative effects on economy of Russia’s Primorsky territory.

As for transborder cooperation, both Russia and China are experiencing growing interest in developing transportation corridors between the ports of Primorsky territory (Zarubino) and Jilin Province. Yanbian could not effectively use Chinese domestic ports, because Dalian port is overloaded, as is the railroad from Yanbian to Liaoning, making cargo transfer very expensive.

Taking all factors into account, YKAP and Primorye are very interested in development of a transportation corridor: Busan (S.Korea), Niigata, Akita (Japan) – Zarubino (Russia) – Jilin Province (China). The Russian and Chinese sides now strongly believe that the transport infrastructure in the Russian Far East will have a positive change in the near future, with the recent advent into this project of a new very prominent player – a big Russian holding company called “Summa Group” (its founder, main shareholder and chair of the board of directors is Ziyavudin Magomedov). In May 2014, during the Russian President’s visit to China, the president of the “Summa Group”’ and the governor of Jilin province concluded an agreement on building a “Great Zarubino Port” in the Troitsa bay. Its estimated capacity is 60 million tons of cargo a year, and the amount of required investments is 1,3 billion USD.

Later in October 2014 during the visit to Russia by Chinese Prime Minister Li Keqiang, “Summa Group” and the Jilin Province signed an agreement on building a “dry port” in the Hunchun area. The agreement supposes leasing out 310 hectares of Chinese land to “Summa Group” for next 50 years, which will be used for

construction of infrastructure for logistic center supposed to process about 40 million tons of cargo a year.[11] The estimated amount of investment to build this "dry port" is 300-350 million USD.

"Summa" is going to launch the Great Zarubino Port in 2018. Its cargo base will be mostly formed by freight flow from Northeastern to Southern provinces of China. About 60% of the total load may fall on inter-China transit. The volume of freight will be 60 million tons a year at the initial stage, and later it may reach 100 million tons a year. Several new cargo terminals would be constructed in the Zarubino Port, such as: Grain transfer terminal with 10 million tons capacity to be built by "United Grain Company" (50%-1 share belongs to "Summa"), Container terminal for up to 2 million TEU a year, General Cargo terminal (25 million tons), terminal for transfer of RoRo cargo, terminal for aluminous cargo. Total amount of investment into Zarubino port's strategic renovation and construction of "dry port" in Hunchun is expected to reach 3 billion USD.

"Summa" will provide almost one third of required money directly, and the remaining part will be covered by the funds of the Federal Program for Development of the Russian Far East and Siberia. Also various Russian and Chinese banks and companies are considered as possible co-sponsors. To finance this huge project, "Summa" is also planning to submit an application for 42 billion rubles to the National Welfare Fund.[12]

Besides, "Summa" has already found a partner for the Great Zarubino Port project in Hong Kong: China Merchants Holding International (CMHI)[13], which is owned by Chinese state corporation China Merchants Group and Goldman Sachs. The two sides have signed an agreement of intent, under which the Chinese company is to become a minority shareholder in the port. In addition, CMHI will provide the port with a cargo load (4 million tons of grain and 500,000 TEU-containers at the initial stage) and will become a co-sponsor.

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[11] http://www.kommersant.ru/doc/2588607

[12] http://www.radidomapro.ru/ryedktzij/nedvijimost/promichlenaya/summa-magomedova-poprosit-u-fnb-46-milliardov-na-10537.php

[13] CMHI had been launched in Hong Kong in 1992. It is a largest asset of the China Merchants Group (CMG possess 55% of CMHI shares, and Goldman Sachs has 45% of its shares). CMHI has its share in 7 from 10 largest container ports in China.

Moreover, the Ministry for the Development of the Russian Far East included Zarubino port in its list of 14 Territories of Advanced Development, which has already been approved by the Russian Government.[14]

Economic cooperation with the DPRK and Republic of Korea

According to the opinion of local officials in YKAP, China's business relationships with South Korea and North Korea are in good shape. In YKAP, representatives of these states cooperate well and are ready to make concessions in business.

Yanbian has a motorway to the North Korean port of Rajin. It is used for transportation of domestic freight within China. However, because of DPRK political reasons, Yanbian is not allowed to use it for transfer of foreign cargo.

YKAP economic cooperation with Japan

According to YKAP experts, Japan is not very eager to invest in Yanbian, because of its small domestic market, underdeveloped local infrastructure and logistics, complicating the transportation of products to the other market or back to Japan.

However, the region has several successfully operating Japanese companies. The largest among them is a garment factory producing jeans (under a Japanese brand) operating in the free economic zone in the city of Hunchun. Its production goes to the Japanese market. Besides that, there are local radio electronics factories and agricultural farms that are oriented to the Japanese market. One should also bear in mind that YKAP is located in Jilin Province, in which several Japanese car makers have factories (most of them are in the city of Changchun and oriented to the local market). So there are no political limitations to the Japanese economic presence in YKAP being a multi-ethnic region with the high level of tolerance.

[14] http://primamedia.ru/news/economics/11.11.2014/399896/primorskomu-portu-zarubino-nashli-krupnogo-investora-v-kitae.html

Generally, there are a number of precursors for the development of further cooperation between YKAP and Japan:

- Yanbian is a comfortable base for processing raw materials, both of Chinese and Russian origin, and using relatively cheap labor to turn raw materials into the final product (and later import it tax-free to Japan);
- Japanese business may use Yanbian as the base for opening industrial enterprises with further offtakes of products to the domestic market in China; and
- Yanbian may offer land for environmentally clean agricultural production with further export to Japan.

CONCLUSIONS:

First, YKAP is making a lot of efforts aimed at developing transborder economic cooperation with the regions of neighboring states (Russia, DPRK, and Republic of Korea) by taking part in several international and regional projects. Most important among them are: “Greater Tumen Initiative”, “Pilot zone of extended external openness Changchun – Jilin –Tumen (Changjitu)”, “Hunchun exemplar zone of international cooperation.”

Second, Russia is the second largest trade partner of YKAP after South Korea. In 2013 the export of YKAP to Russia reached $500 million, import – $42 million. Besides that, investment cooperation demonstrates rapid growth. Currently, the volume of mutual investments constitutes $334 million, $211 million of them accounts for Chinese investments.

Third, taking into account economic development and geographic position of YKAP, its potential for increasing international connections with foreign countries is closely tied to the formation of the modern transborder logistical system and creation of international transportation corridors. Tourism should become another key sphere of international cooperation.

Fourth, Yanbian is extremely interested in the development of transportation corridors to the North Korean port of Rajin and Russian port of Zarubino. Of the two, Zarubino has become the top priority for YKAP. It has a number of advantages over Rajin, such as the existence of a railroad connection to China (Rajin currently has no rail

link to China and the mountainous terrain makes its construction and operation costly). Besides, North Korea has a political stability problem. Zarubino port is a key section of the emerging transborder transportation corridor "Busan (South Korea) – Niigata (Japan) – Zarubino (Russia) – Changjitu (China)". Russian government and "Summa Group" in particular are ready to make substantial investments into its development. Moreover, project "Big port Zarubino" has been recently included into the Russian federal program for creation of the Territories of Advanced Development. In this regard, Japanese companies may wish to engage "Summa Group" to negotiate possible options and conditions for participation in this very promising project.

Fifth, according to the YKAP representatives, so far Yanbian is not commercially interesting for Japanese capital due to its small local market and underdeveloped infrastructure. However, with the construction of Zarubino (Russia) – Changjitu (China) transportation segment, the situation should change in a positive way. Especially taking into account that there are no political or legislative limitations to Japan's economic presence in the Prefecture.

Finally, two more reflections:
Firstly, the interests of Russian and Chinese business, as well as the governments of Primorsky and YKAP, in creating effective transportation corridor Zarubino - Hunchun are now fully matched. It should be noted that Russia, just a few years ago, used to be wary about allowing major Chinese participation in its Southern Primorye ports, but now it seems Moscow has given the green light for Chinese investments in port facilities. Besides, the fact that the influential Russian holding company "Summa Group" joined the project allows us to envisage its successful implementation within next 4-5 years.

Secondly, protracted deterioration of Russian-American relations creates preconditions for the formation of new geopolitical reality, when Russia's "pivot" to the East becomes inevitable. Hence the emergence of new proposals and more active realization of existing Russian-Chinese, Russian-Korean (both Koreas) and other regional projects, including, for example, the Greater Tumen Initiative, is becoming more probable. At the beginning, it will affect transportation aspects of transborder cooperation; however, in the near future, we will, probably witness intensification of transborder trade,

tourism, energy, humanitarian cooperation and other forms of collaboration, both in the GTI format and within other regional projects. In this regard, it makes sense for the Japanese business community, especially from the west coast prefectures, to consider more active engagement in regional cooperation projects within the Russia-China-Korea border triangle that are currently experiencing a “second wind” in their life cycles.

Inter-Regional Cooperation for the Development of Tourism: Six Proposals

by LIANG Chun-Xiang

1. Introductory Remarks

It was in 1984 that I came to Japan for the first time as a recipient of a Chinese government scholarship. I studied tourism at the graduate school of Rikkyo University and returned to Beijing to continue my research and teaching in tourism. I found a post in Niigata and came back to Japan in 1995. Since 2001 I have taught at Toyo University in Tokyo, and am now at the Department of International Tourism Studies in the Faculty of Regional Development Studies.

It was in Niigata that I realized the importance of the Sea of Japan and started to study the development of tourism in the area surrounding the Sea of Japan. Now the scope of my research has expanded to include the whole region of Northeast Asia. In my brief presentation today, I would like to highlight the regional cooperation for the development of tourism and make six proposals for tourism cooperation among Akita, Yanbian and Primorye.

2. Inter-Regional Cooperation for the Development of Tourism

The essence of tourism cooperation between regions (NB - “regions” in this article refer to subnational regions such as Akita, Primorye and Yanbian.) lies in synergy with other regions. It is to promote tourism not independently in every region but together with other regions. To do so, every region must make shine the tourism attractions it has. The combination of two Chinese characters, *Guangguang* or *Kanko* which means tourism in Chinese and Japanese, tells us that the promotion of tourism is to let visitors appreciate the attractions each region has. Tourism will bring tourists and revitalize the regional economy. The economic impact of tourism depends on how much consumption activities visitors have in the region, eating and shopping among other

things. Every region needs to enhance its attractions to make it worth it for people coming from outside to spend money.

In many cases, individual regions do not have tourism attractions strong enough to shine alone and need to cooperate with other regions. Our question is how the three regions, Akita, Yanbian and Primorye, can work together to strengthen their attractions in synergy and develop tourism, while intensifying the exchanges of goods and mutual visits of peoples. These three regions are geographically close to each other, either directly (Yanbian and Primorye) or across the Sea of Japan (Akita and Yanbian/Primorye). The geographical proximity has resulted in active comings and goings among the three regions. However, the interactions among the three regions have been so far mostly in the government sector and the business sector, leaving behind the potential development of tourism.

Tourist exchanges among China, Japan and Russia generally focus on the major cities such as Tokyo, Osaka, Kyoto, Beijing, Shanghai, Moscow, and St. Petersburg. One of the policy issues for these three countries is to diversify the foreign tourist destinations and to promote international tourism in small cities and rural areas. Our three regions have excellent tourism attractions which we cannot find in such places as Tokyo, Beijing or Moscow, which we can further strengthen in synergy. It is not impossible to design a new tourist route connecting the three regions.

3. Six Proposals

Globalization has changed the world. It made less meaningful the development of tourism in each region alone and opened the way for inter-regional tourism cooperation between our three regions. Expanding beyond the governmental and business cooperation, the promotion of inter-regional tourism will bring about the mutual understanding and friendship among the peoples across borders. Against this background, I would like to make six proposals as follows:

1) The three regions make annual plans on people-to-people exchanges and set target numbers of mutual visitors, which must be realistically feasible with efforts added to the current level of exchanges.

2) The three regions should work together in circulating information on the touristic attractions of their respective regions.

3) There should be cruise tours visiting the three regions. The tour can originate, for example, from Yanbian, visiting Vladivostok by land or by sea, visiting Akita by sea, and then coming back to Yanbian.

4) There should be more sports exchanges among the youth of the three regions. Each region has its own competitive sports, which can be promoted in the other two regions as part of educational and other types of exchanges.

5) There should be more cultural exchanges among the three regions. The three regions are at the crossroads of various types of Western and Eastern cultures. The Autonomous Province of Yanbian can offer not only Chinese but also Korean cultures. The combination of Japanese, Chinese, Korean and Russian cultures can provide rich exchange experience.

6) There should be development of green tourism. The three regions have rich traditions in agriculture, forestry and fishery. Together with cultural differences, they have the potential for exciting people-to-people exchanges with experience-oriented tourism.

4. Concluding Remarks

The three regions are far off from the capital of their respective countries. But it is not impossible for them to be at the center of the transnational region of the Northern coasts of the Sea of Japan. The ongoing globalization makes it no longer necessary to go through the capitals to have international exchanges, which can be more localized, i.e. adapted to the specifities of local needs. Akita, Yanbian and Primorye can have economic and cultural exchanges different from the ones among Tokyo, Beijing and Moscow.

Besides, it is often in the small cities and rural areas far off from the capitals we can find the essence of national cultures. The three regions can promote cooperation with their distinctive national and local features, which can be as valuable as, if not more than, the

cooperation among the three national capitals. In the general context of globalization and localization, the three regions should aim to create a transnational inter-regional community across the Sea of Japan.

Logistics to Connect Akita, Primorye and Yanbian

by TSUJI Hisako

Introduction

Japanese cities on the Sea of Japan have a long passion for exchanges and communication across the sea. Their passion, little known or understood by people in Tokyo, is backed by the history and drove them to a number of sister city agreements with the cities on the other coast (cf. Table 1).

Table 1. Examples of Sister Province/City Agreements between Japan and Primorye/Jilin

Sister province/city agreements with cities in the Primorye Region	with the Primorye Region	Toyama Prefecture, Osaka Prefecture, Akita Prefecture, and Tottori Prefecture
	with Vladivostok City	Niigata City, Akita City, and Hakodate City
	with Nakhodka City	Maizuru City, Otaru City, and Tsuruga City
Sister province/city agreements with cities in the Jilin Province	with Jilin Province	Miyagi Prefecture
	with Changchun City	Sendai City, Chitose City
	with Jilin City	Yamagata City, Matsue City
	with Hunchun City	Sakaiminato City, Joetsu City
	with Siping City	Susaka City

(Source: Council of Local Authorities for International Relations, Japan)

Unlike cultural and other exchanges of public and grass-roots entities, business exchanges of private entities must satisfy the requirement of profitability. It is the fundamental principle of free market economy that every company seeks the best products from all over the world for the best price via the best transportation route and method. Friendship alone cannot be the reason to choose a transportation route and mode. If Akita is to develop a freight transportation route with Primorye and/or Yanbin, it must be for economy of cost and time for the

transportation itself and the facility of business visits because of the geographical proximity. With this expectation in mind, let me make in this presentation a couple of proposals for the development of business cooperation between Akita and Primorye/Yanbian.

2. Primorye and the Trans-Siberian Railway

Primorye, literally meaning coastal area, is one of the three exits Russa has to the ocean: the Baltic Sea coast to the west, the Black Sea coast to the south, and the Far Eastern coast to the east. Vladivostok Port and other major ports, connected to many Russian cities by rail, make Primorye a strategic region for the transport of merchandise from East Asia to Russia and vice versa. Through these ports Russia exports such items as coal, petroleum, natural gas, ferrous ores and non-ferrous metals, timber, marine and aquatic products, and grain produced in Sibera and the Russian Far East. It also imports such items as automobiles (new and used), automobile parts, construction machinery, electric machinery, and consumer products. The rail network allows the transportation of merchandise to such remote places as Moscow, Kazakhstan and Uzbekistan. The volume of container freight was affected by the Lehman Crisis but has continued to increase since then.

Merchandise from Japan enters the Russian territory either through Primorye or the Baltic coast. The transportation from Tokyo to Moscow takes roughly 45 days by sea (through Suez Canal), but it takes only 25 days via the Trans-Siberian Railway, even if the railway is more costly than the sea route. If the final destination is on the east of the Urals, the advantage of the railway becomes clearer both in terms of cost and time.

Table 2. List of Import Items from Russia to Akita (2013)

Items	Values (in million yen)	Shares (%)
Non-ferrous ores	7,025	54.0
Timber	5,731	44.0
Plywood	27	0.2
Fruits and vegetables	24	0.2
Others	205	1.6
Total	13,012	100.0

(Sources: Customs Statistics)

Timber makes up 44.0% of the import from Russia to Akita (cf. Table 2) and Akita Port receives as much as 11.7% of the total import of timber from Russia (cf. Table 3). Russian timber is produced in Siberia and the Far East and is usually shipped to Japan from the ports in the Primorye Region. But in 2012 and 2013, most of timber was shipped from St.Petersburg. It would be interesting to examine how this happened and why Primorye lost an important part of its freight.

Table 3. Japanese Imports of Russian Timber by Customs (2013)

Port of import	Values (in million yen)	Shares (%)
Fushiki – Toyama	7,398	15.0
Akita-Funakawa	5,731	11.7
Tokyo	5,642	11.5
Kawasaki	5,028	10.2
Niigata	4,809	9.8
Ishinomaki	3,090	6.3

(Sources: Customs Statistics)

3. Primorye and the Energy Resources

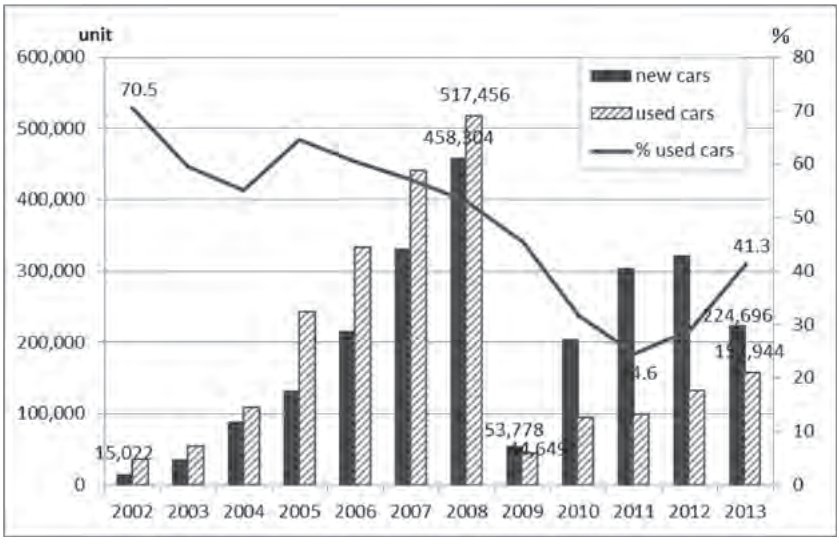
Energy resources occupy 82.3% in values of Japan's import from Russia, of which petroleum accounts for 43.0%, natural gas 26.6%, petroleum products for 6.6 %, and coal for 6.0%. Russia's share in Japanese import of energy resources is on the rise. Russia accounts for 7.0% of Japan's import of petroleum (#5), 9.8% of natural gas (#4), 6.0% of coal (#4). Most of coal is produced in Kuzbass in Siberia and shipped from the ports in Primorye.

Energy resources occupy 44.0% of Akita's international imports with petroleum (11.2%), petroleum products (18.0%) and coal (14.8%). However, there is no import of energy resouces from Russia to Akita. Petroleum comes to Akita from Indonesia, Australia, Gabon and Sudan; petroleum products from Korea, Malaysia, Singapore, China, the Netherlands and others; and coal is brought in from Australia, Indonesia, the U.S. and others. Even if Russian energy resources do not fit the needs of Akita now, the relatively short distance and transportation cost would make such import desirable in the future.

4. Pro-Japan Consumers and Economic Development in Primorye

Russian consumers especially in the Far East have a strong preference for Japanese products. In supermarkets in Vladivostok we can find Japanese consumer products such as shampoo, cosmetics, disposable diapers, and seasonings sold for double or triple their prices in Japan. In the Russian Far East, Japanese used cars attract very strong trust and attachment. The raise in the tariff after the Lehman Crisis drastically reduced the number of used cars exported from Japan to Russia, but it has gradually recovered and now 41.3% of Japan's export of cars to Russia is used cars. Used cars attract attention especially in times of recession and cannot be overlooked.

Chart 1. Export of Cars from Japan to Russia



(Sources: Customs Statistics)

President Putin has been taking measures to promote the development in the Far East. Most recently the Russian government designated fourteen areas as candidates for Territories of Priority Development (TOP) and five of them are planned in Primorye, namely, Nadezhdinsky, Zarubino, Russky Island, Mikhailovsky, and Vostochny Petrochemical Complex. These TOP will enjoy the preferential tax system and the simplification of administrative procedures, and Japanese companies may find interests in investing

there. If the automobile industry develops there, that would expand the export trade from Japan.

Akita's trade with Russia is currently unbalanced with only 13.4% export and 86.6% import. The export in consumer goods, used cars and automobile parts would help the expansion of export.

5. Yanbian and the access to the Ocean through Zarubino Port: "Borrowing the Port and Getting Out to the Ocean"

The Yanbian Province is landlocked due to lack of direct access to the ocean. Hunchun is the closest Chinese town to Japan since it is only 800 km away from Japan. Kojima Fashion Group has its factory in Hunchun, the key city in the Tumen River Economic Development Area, cannot help transporting its products by truck or by train 1,300 km to Dalian Port and then shipping them to Japan. It usually takes seven to ten days from Hunchun to Japanese ports via Dalian. If a sea route across the Sea of Japan is opened, it should take only three days to bring products from Hunchun to Japan.

The city of Hunchun plans to "borrow a [foreign] port to have access to the ocean (jiegang chuhai)." The port of Rajin in North Korea and the port of Zarubino in Russia are available. (The port of Posyet in Russia had a sea line to Akita from 1998 to 2003, but is no longer available because now specialized for the export of coal.) The port of Zarubino is only 65km from the Sino-Russian border and is served by roads and a railway. It is a natural good harbor and remains unfrozen during the winter. The railway from there is connected to the Trans-Siberian Railway and was used for the transport of Mazda cars to Moscow for four years from 2008 to 2012. But Zarubino Port used to be a fishing harbor and has yet to be equipped with freight handling facilities. There have been numerous projects for the renovation of port facilities including the feasibility studies in cooperation with the Japanese government since 1996, but none of them has produced tangible results.

The city of Vladivostok was the venue for the annual summit of the Asia-Pacific Economic Cooperation (APEC) Forum in September 2012 and the Russian Far East attracted much attention from the federal government and major companies in Moscow. Summa Group, a Moscow-based rapidly growing business group with significant

investments in such sectors as port logistics, telecommunications, the oil and gas, and grain industry, declared its intention to construct a grain terminal at the port of Zarubino. Summa Group announced its "Big Port Zarubino" development project in 2014 and is preparing projects for transit transportation for Chinese freight in cooperation with the Jilin Province and the Heilongjiang Province. While there is not yet any official announcement, Summa Group plans to reinforce the freight handling capacity up to 100 million tons per year. They seem to have a blueprint with four major types of berths: container berths, grain berths, alumina berths, and multipurpose berths, where the last type of berths will be used for bulk transport, roll-on/roll-off (RoRo) transport, and passenger transport. The construction of the facilities should start later in 2015 and Phase 1 should start its operation in 2018 (cf. Table 4). The "Big Port Zarubino" will include Yanbian in its service area ("Hinterland") and give a new momentum for economic exchanges with Akita and other Japanese ports.

Table 4. The Big Port Zarubino Development Project by Summa Group

Terminal	Annual Handling Capacity			Quay Line Length	Others
	Phase 1	Phase 2	Phase3		
Container	500,000 TEU	1,500,000 TEU	2,000,000 TEU	1,800m	680 ships per year
Grain	10 million tons	20 million tons	40 million tons	1,530m	storage capacity 400,000 tons
Alumina	2 million tons				
Multipurpose				1,645m	
Bulk	25 million tons				
Ro-Ro	1,500,000 cars				
Passengers	500,000 passengers				

(Sources: various news reports)

The challenge for Akita Port will start there. The operation of the "Big Port Zarubino" does not guarantee active trade between Akita and Yanbian. The main Chinese ports handling Akita-China trade are

Shanghai, Qingdao, Tianjin and Dalian. How much flow of merchandise we have now between Akita and Yanbian or other cities in Jilin, via Dalian, is unknown. The determination of the current volume of freight between Yanbian (and other cities in Jilin) and Akita is necessary before preparing a strategy for the future.

6. Cooperation between Japanese Ports

It should be emphasized once again that the “Big Port Zarubino” will not result in economic exchanges without a direct sea route. Between the Russian Far East and Japan, Mitsui O.S.K. Lines and FESCO Transportation Group jointly operate regular container liners twice a month servicing Vostochny, Vladivostok, Tomakomai, Yokohama, Nagoya, Kobe, Moji, Toyama, and back to Vostochny in circuit. Akita Port wishes to join this circuit, but has difficulties in finding enough freight to do so. In addition, Sinokor operates a small container ship weekly between Mikawa and Vladivostok (Sollers Terminal), but it is for Toyota Motor Corporation and its factory in Vladivostok. Since this twice-monthly operation is not enough for many users, and many Japanese ports including Akita are not serviced, most freight goes through Busan despite the need for often time-consuming reloading there.

Niigata Port has made much effort to open a direct sea route with Zarubino and other ports on the side of the Sea of Japan, with numerous test operations and without regularization of a sea route. Naoetsu Port had the same wish and the Joetsu City concluded a sister city agreement with the Hunchun City, but did not succeed in setting up a sea route. The reason is always the lack of freight.

If individual ports cannot collect enough freight to open up a sea route, they can work together. I sincerely hope that Akita, Niigata and other ports can work together to open a sea route to Vladivostok and Zarubino without making a detour to Busan or to the Pacific coast. It is time for cooperation rather than competition between Akita, and Niigata and other ports on the Sea of Japan.

World Class Universities and the Japanese Higher Education Policy Initiatives

TERANO Mayumi

Abstract: This paper aims to clarify the notion of world-class universities (WCU) in the context of knowledge economy and globalized society, and analyze the characteristics of recent initiatives of Japanese government and higher education institutional especially in response to global rankings. It examines competitive funding schemes and envisions reforms towards WCU through the analytical framework that identifies strategic foci, areas of university operations and reform phases. The paper begins with a summary of a current understanding of the notion of WCU. It is followed by the explanation of global rankings and its impacts on government and institutional drives. It then examines the recent initiatives and discusses reform focuses on the leadership, autonomy and university missions. The paper concludes with reflection on the analysis, a proposed analytical framework of reform approaches, and ideas for future research.

Keywords: world-class university, education policy, Japan, internationalization

1. Introduction

The economy is becoming increasingly knowledge-based, where decisions are driven by expert knowledge and research. The contribution of higher education to develop research and innovation, as well as the human resources to lead such a society, has become a central concern for scholars and professionals in higher education. The increased information technology and the ease of human mobility have advanced the globalization of research, education, and numerous aspects of higher education operations, or vice versa. Pursuing excellence on a global scale is part of this flow and the expression ‘world-class university – WCU’ has become part of the language used

in institutional and government strategy in higher education. The expectations placed on higher education in the knowledge-based economy have increased the concerns for accountability in the way universities make decisions and organize their functions. This increased attention for accountability let to the development of internal and external quality monitoring and assurance mechanisms, including student evaluations of institutions (Santiago et al., 2008). It can be said, therefore, the knowledge-based economy is leading institutions' operations themselves to be knowledge-based: this paper will refer to the set of information and data needed by institutions to operate as "institutional knowledge-base", which includes the results of institutional research and internal evaluation.

In this situation, the reference to international comparisons and status are made in policy discussions of the higher education sector (Hazelkorn, 2008). This is caused by the growing recognition of expertise developed through cross-national and regional knowledge, and its influence on local concerns (Marginson, 2011). The research in science, technology, medicine and mathematics (STEM) has been global by nature, but the growing connectivity between the local and cross-national affairs and people has made studies in various disciplines 'global'. The term 'global' can be distinguished from 'international' in a sense that global considers phenomena as 'worldwide' in its scope without highlighting nations as units. Global dimensions of higher education have been responded by internationalization of purpose and various aspects of function (Knight, 2004), in both academics and administration. Global connectivity and outputs particularly in research are key concerns for institutions, and their effectiveness is increasingly measured and judged on those grounds. The results affect institutional, as well as nations', standing in the global community, and the 'excellence' exhibited in such standing became an identifier of WCU.

In Japan, the government, especially the Ministry of Education, Culture, Sports, Science and Technology (MEXT), has undertaken numerous policy measures to develop WCU to strengthen its higher education sector in an intense competition with the growth in the neighboring countries. WCU is referred, in the Japanese context, mainly to a competitive research university, as the Ministry of Economy, Industry and Trade (METI) translates it as "世界水準研究拠点大学" (*Sekai-suijyun kenkyu kyoten daigaku*), which literally

means ‘universities with a world-level research center’. The METI has identified that a WCU entails providing the environment for active cross-national research collaboration and becoming a host for world leading scholars and industry representatives to realize innovation (METI, 2011).

Global comparisons and rankings have been used extensively to identify WCU and make relevant policy decisions as rankings are increasingly considered to represent the quality and performance of individual institutions, hence affecting their competitiveness in the global talent market (Ramakrishna, 2013). Rankings are however criticized for not providing ‘an empirically verifiable material basis’ (Marginson, 2013: 15). Cases are seen where ranking positioning resulted in changes of university presidents and funding allocation by the governments and institutions. In global rankings, performance measure and standards affect the global standing of institutions: concerns and issues are often no longer confined within national boundaries but discussed in a global space. In the higher education sector, global concerns, standards, and goals now exist and they sometimes override national level specificities and priorities (Maringe, 2010).

This paper aims to clarify the meaning of WCU in the context of knowledge economy and globalised society, and analyze the characteristics of current government and institutional approaches especially in response to global rankings. The paper examines approaches in Japanese higher education sector towards WCU through issues, areas of operations and phases of reform.

To do so, it first summarizes the current understanding of WCU. It is followed by the explanation of global rankings and their impact on government and institutional drives to reforms. This leads to examining the recent initiatives in Japan within the analytical frameworks that reflect the above viewpoints. The paper concludes with the reflection on the analysis, a proposed analytical framework of reform approaches, and ideas for future research.

2. World-Class University (WCU)

The notion of WCU often makes a reference to globalization phenomena in higher education where education and research

activities across borders and competition for recognition and talents are observed on a global scale. This shows how higher education and individual institutions receive the impact of global economic, political, cultural, and education forces (Marginson and Rhoades, 2002; Appadurai 1996; Held et al. 1999). Higher education has operated in an international manner even in the earliest days, particularly among some of the dominant systems in Europe and the Arab world, such as the Catholic Church that influenced the structure and ideology of relevant educational institutions (Marginson and Rhodes, 2002). However, the aspect that distinguishes globalization impacts from such internationalization is the increased integration of systems and relationships where information and people move quickly with the mediation of technology (ibid.: 288).

The term WCU is used interchangeably with 'research universities' and flagship universities, and the concept is often tied with governmental and institutional measures to strengthen national competitiveness in globalized society (Wang, et al. 2013). In terms of the true meaning of it, the trouble is, as Altbach (2004) described, 'no one knows what a world-class university is, and no one has figured out how to get one' (ibid.: 1). The ways in which scholars, institutional leaders and policy makers define world-class universities include positioning in global league tables, developed by ranking systems, and quality of programs offered, determined, for example, through quality assurance initiatives. The elements that define high ranking position and quality assurance however have also become complex, reflecting the increased diversity in the institutional and service characteristics in the sector. Yet, the number of global rankings have expanded over the last two decades, which have driven institutional and government policy initiatives. This shows the consensus that the elite status of being a world-class university relies on cross-border recognition rather than self-declaration (Altbach & Salmi, 2011).

There are also some key attributes that scholars (Altbach, 2004; Liu, et al. 2007) have identified that characterize WCU, which include talented students, faculty with high qualifications, excellence in research and teaching, academic freedom, well-equipped facilities, autonomous governance, and financial resources. Salmi (2009) summarizes them as a high concentration of talent, abundant resources, and favorable and autonomous governance. These qualities as WCU

have been commonly pursued through three distinctive policy measures; competitive funding to make centers of excellence; promoting internationalization; and governance reforms at both governmental and institutional levels (Wang, et al., 2013; Ramakrishna, 2013).

The strategic funding schemes observed include the following:
- 985 Project (China, developed in 1998)
- Brain Korea 21 (South Korea, developed in 1999)
- Excellence Initiative (Germany, developed in 2005)
- Global COE (Centers of Excellence) Program (Japan, developed in 2007)
- World Premier International Research Centers Initiative (Japan, developed in 2007)

These schemes had focused on developing a limited number of institutions to effectively implement reforms towards internationalization and excellence in research, which, in turn, improve their global ranking status. This 'centers of excellence' approach is often set up to provide competitive funding to implement projects of limited duration, to strengthen the availability of academic resources and management structures that are critical conditions for world-class status (Olsson and Meek, 2013). The conditions for and phases of building WCU will be considered in order to develop a framework of policy analysis in a later section. These schemes are considered to help narrow the gaps in sector influence between institutions in the center, high-performing institutions generally in the USA and the UK, and those in the periphery (Ramakrishna, 2013). At the same time, they are criticized as widening the gap between institutions they focus on and the rest, as they focus on institutions with already strong sector influence. There are other criticisms on the way WCU are identified with reference to global rankings, particularly because of questions of validity and the extensive focus on research, which cause some negative consequences on broader roles of higher education when institutions and governments' initiatives become biased, and when it leads to creating a status culture in the higher education sector (Marginson, 2014). These aspects will be reflected upon in the following section on global rankings.

3. Global Rankings

While university rankings first appeared at the beginning of the twentieth century, since the beginning of the twenty-first century, a rapid increase in the number of rankings has been observed both nationally and internationally (Marope and Wells, 2013). In Japan, universities are often compared according to the '*hensachi* ranking', a measure based on the score on the standardized university entry exam of admitted students to each university, which reflects popularity and competitiveness, as well as based on rankings published by newspapers such as the Asahi Shimbun and the Yomiuri Shimbun (Hazelkorn, 2009: 67). The globalization of higher education, particularly in the twenty-first century, has lead to the appearance of global rankings, rankings of universities on a global scale. The Academic Ranking of World Universities, or 'Shanghai Ranking', started in 2003, has been a forerunner in this field. Currently there are a large number of national and global rankings available: the Shanghai Ranking website alone lists 52 national rankings and six other global rankings (ShanghaiRanking Consultancy, 2014a).

3.1 Usages, Effects, and Calculations

Global rankings have been used to compare the competitiveness of universities through various lenses and, increasingly, for other purposes as well. For prospective students, for example, global rankings may offer information about the prestige as well as student satisfaction of academic programs they are interested in. For staff and existing students looking for international opportunities, global rankings offer information about how internationalized institutions are, in terms of staff and student bodies as well as engagement in international exchanges.

Rankings influence various aspects of higher education institutions. The OECD (2009) recognizes that they affect 'the modernization and rationalization of institutions, the professionalization of services and marketization of higher education, the research mission and fields of investigation, curriculum and disciplines, faculty recruitment and new career/contractual arrangements, and student choice and employment opportunities' (ibid.: 72). Institutions increasingly use rankings to build their own brand and self-awareness, as competition intensifies through globalization and the decreased number of students due to changing demographics (ibid.).

Rankings also have an effect on policy decisions. Policy makers use rankings to identify issues and policy approaches to strengthen the higher education sector. For example, they refer to rankings to identify institutions' prestige and active engagement in research in order to allocate funding to turn institutions into flagship universities. In Japan, the Ministry of Economy, Trade and Industry, in a recent discussion of internationalization of university research (METI, 2011), has referred to the result of QS World Ranking 2011/2012, where the position of Tokyo University and Kyoto University was 25nd and 32th, respectively. The report claims that their positioning was caused by the inadequate number of foreign scholars and students. This was reflected in recent policy measures, such as the Top Global University Project (started in 2014), that uses indicators such as the ratio of international staff and students in its selection criteria.

Rankings, in general, are determined by scores produced by a combination of scores assigned to institutional performance dimensions, weighted according to the specific focus of each ranking system. For example, the Times Higher Education ranking refers to 13 performance indicators that are grouped in five areas of concern, each area accounting for a percentage of the overall scores. For example, the performance indicators on 'Research' comprise of the number of published articles, income from research funding, and a measure of the reputation of published research. The measure of 'International Outlook' generally includes the percentage of international academic staff and students and the amount of internationally collaborated research.

Table 1: THE ranking assessment methodology for 2013-2014

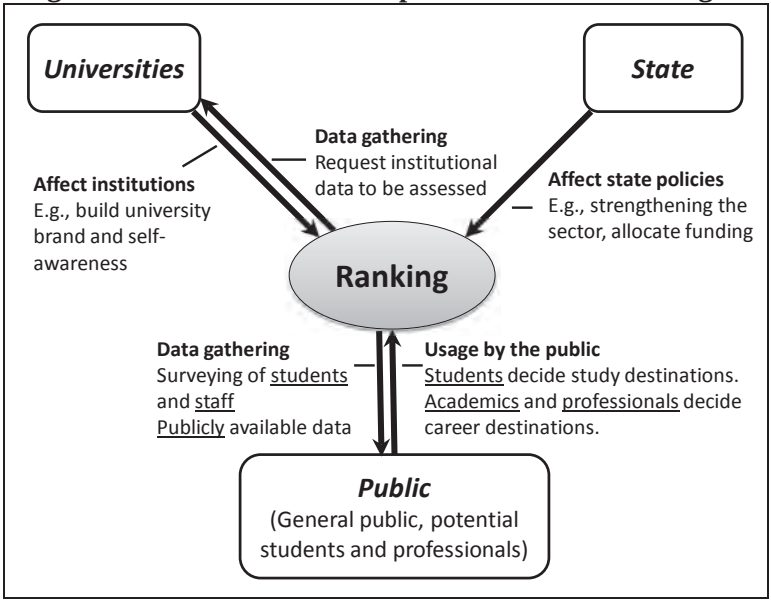
Areas	*Performance indicators*	*Weighting (%)*
Teaching	the learning environment	30
Research	volume, income and reputation	30
Citations	research influence	30
Industry Income	Innovation	2.5
International Outlook	staff, students and research	7.5

Source: (THE, 2014)

However, the set of indicators and areas are not universal and each ranking system employs its own set of indicators to assess different areas of performance. For example, the Shanghai Ranking assesses 'Quality of Education' by the number of alumni of an institution winning Nobel Prizes and Fields Medals, while the THE ranking focuses on the learning environment for indicators in the 'Teaching' area. Unlike the indicators used to assess the 'Research' area of the THE ranking system described above, the 'Research Output' of Shanghai Ranking is assessed by the number of academic papers published in Nature and Science magazines as well as those indexed in the Science Citation Index-expanded and Social Science Citation Index (ShanghaiRanking Consultancy, 2014b).

Ranking systems may collect data through different means: surveys they conduct, publically available data such as citation indices, and data provided directly by institutions. The indicators are generated based on data collected through one or more of the above methods. Data provided by universities include the Thomson Reuters Annual Academic Reputation Survey, and the bibliometric data drawn from the Web of Science (Pratt, 2012). To increase their visibility in rankings, some institutions or individual departments submit this data to the ranking systems in order to be assessed.

Diagram 1: Interactions and impacts relevant to rankings



The interactions between ranking systems and universities, governments ('state'), and the public are summarized in Diagram 1.

3.2 Criticisms

Global rankings are, however, under a number of criticisms due to biases, often caused by technological and methodological limitations, as they only evaluate certain aspects of university activities and performances (Marginson and Van der Wende, 2007; West, 2009).

One criticism is that there is no theoretical or empirical justification for the weighted scores based to a set of indicators for individual institutions. The weighting scheme of existing global rankings is considered to lack robustness (West, 2009). The weights assigned to the underlying measures affect the result of institutions' ranking positions considerably. The weighting is mostly pre-determined rather than allowing the viewers to choose according to their priorities. As apparent from Table 1 above, the weighting among indicators within each area of concern is also not specified. These suggest the existence of biases in the rankings, which affects the marketability of institutions, given the wide usage of rankings described in the previous section.

Another criticism is that some of the indicators are not reliable. Many rankings refer to data of reputational surveys, which often lacks legitimacy (Brooks, 2005). The same can be said for rankings that refer to the visibility of the institution on the Internet, such as Webometrics and G-Factor, as they prevent institutions with mostly non-English websites from being recognized for their influence in the sector (Ismail, 2010). Inoki (2014) points out the problem of the short-term view of current indicators. For example, indicators such as reputation and research output (e.g., the number of published and cited articles) rely on 'established knowledge' through which the institutions are judged on pragmatism, rather than observing the innovative and intellectual activities and their long-term impact, which can be understood as 'knowledge in the making'. This makes the rankings conservative, biased and short-sighted (ibid.: 23).

Besides the skepticisms on methodology and validity, critics question the broader impact of rankings, particularly on power balance and

focuses in higher education sector. Similarly to the focused funding schemes in Japan discussed earlier, some of the uses of the rankings re-enforce the current elite status of a limited number of institutions, as they tend to favor English-speaking, research intensive, and large-sized institutions with strength in science research (Marginson and Van der Wende, 2007). These institutions attract talented researchers and students, international research and collaborations, funding and other opportunities, which further strengthen their standing in the market (Hazelkorn, 2009). The investments of institutions and governments, therefore, go towards fulfilling these requirements, particularly in increasing research capacity (Hazelkorn, 2011) as short-term goals, at the expense of longer-term, diverse missions and visions that reflect local and national social goals (Hazelkorn, 2009; West, 2009). For example, it was observed that, in Japan, government tends to promote funding schemes that boost the university's publications and the number of Nobel Prize winners, which improve universities' ranking positions. This type of policy, as Inoki (2014) argues, may result in promoting research that is low quality and short-sighted, which does not pursue the true values of academic research. The values of academic research are to explore verity, innovation and intellectual activities, and they reflect the core existence of university (ibid.). The prioritization of research due to competition through rankings is also criticized as causing a detrimental impact on undergraduate teaching, as research activities are increasingly prioritized, despite the central position of teaching in university missions (Van der Wende, 2008). Reflecting the recent drives towards WCU, Van der Wende (2013) alerts us to 'the need to re-balance and differentiate institutional missions', including education and research, and pursue excellence in 'a broader range of dimensions' of higher education (ibid., 90).

As a response to some of the criticisms above, ranking systems have been recently developed in Europe, such as CHE-Ranking and U-Multirank (started in 2011), that allow for more user-centered and flexible rankings. U-Multirank enables users to choose a set of indicators to produce customized rankings, which may not be necessarily research oriented. The indicators used in U-Multirank have more variations and are able to provide information reflecting different university missions. A number of institutions that are excluded from research oriented rankings, such as smaller-sized, teaching-oriented institutions, appears in the list and may be ranked

together with the ones with similar profiles, as system that is called ‘like-with-like’ selection. U-Multirank also assigned ranks to groups of institutions with similar performance rather than to individual institutions, which may exaggerate the distance between institutions positioning (U-Multirank, 2014).

4. Framework of Analysis

The concept of WCU and the reference to rankings have largely driven recent university and government initiatives. As discussed in the previous sections, both WCU and global rankings are subject to a number of criticisms, which may lead to the following shortcomings in initiatives: (a) focusing only on research; (b) increasing the gap between universities; and (c) missing long-term objectives due to short-sightedness. In order to capture these shortcomings, this section proposes a framework that analyzes initiatives along three dimensions: phases of development, strategic foci, and areas of operations. The first two dimensions are based on existing literature and will be explained in the following. The third one provides a novel perspective that will be introduced below.

The proposed framework can be used to analyze initiatives towards establishing WCU. The analysis framework can be used by researchers, but also by institutions and governments when evaluating existing initiatives, by identifying gaps and areas for further development. At the same time, it can also be used as a guiding framework for establishing a comprehensive set of initiatives, both at the institutional and governmental level. This section proposes a generic framework through which such initiatives can be examined, which will be applied to the Japanese case in the next section.

Marginson (2011) suggests WCU, particularly to pursue excellence in research, are realized through three phases that are inter-related; ‘capacity’, ‘connectivity’, and ‘activity’ (Marginson, 2011: 39). Universities first need to develop a capacity to operate, such as in research, which is expanded through connectivity, which is achieved by the use of technology, the development of partnerships, the establishment of networks and the ongoing exchange of staff and students. Capacity and connectivity enable global activities to become WCU (ibid.).

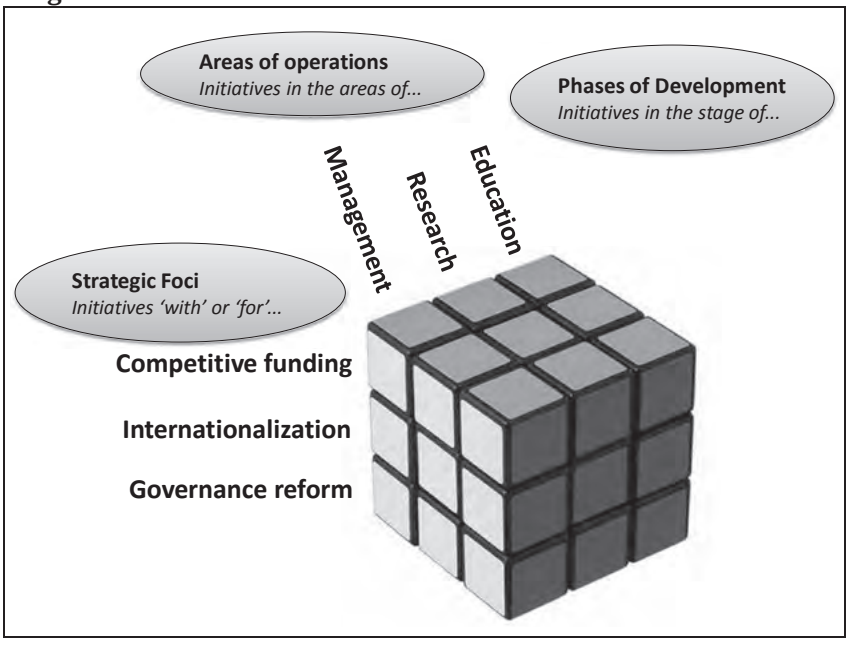
Having examined government initiatives internationally, such as the ones introduced in the section on WCU, scholars identified three common strategic foci towards WCU: 'competitive funding schemes', 'internationalization', and 'governance reform' (Wang, et al., 2013:2-3; Ramakrishna, 2013). Competitive funding schemes refer to projects that are developed under specific themes and goals, and they solicit the application from institutions to undertake projects in limited time frames. Internationalization refers to those strategies aimed at strengthening cross-national research and education activities, which span from students exchanges, cross-border education provisions, internationalization of the education environment (commonly referred to as "internationalization at home"), to cross-national research collaboration. There are a number of variations in the definition of governance, and it may refer to frameworks or systems at national and institutional levels and it may comprise of 'a complex web including the legislative framework, the characteristics of the institutions and how they relate to the whole system' (OECD, 2008: 68), including financial matters, accountability, and communication systems (Hénard and Mitterle, 2009). Governance, in this analysis, is broadly defined as the system that determines the responsibility and accountability within a higher education institution. In this paper, governance is seen to comprise institutional leadership, management and administration (Reed, Meek and Jones: 2002: XXVII), as they exist in a structure and define the natures of one another (Hénard and Mitterle, 2009). Therefore, governance reform refers to initiatives related to strengthening leadership, management and administration towards excellence.

In addition to the two dimensions above, since the reform process needs to affect all aspects of university operations and roles within them, the framework will include the perspective of "areas of operations" which are defined, in this framework, as education, research and management. First of all, institutions operations are split into academic affairs and administrative affairs, represented by the management area of operation. In order to identify if there is a bias toward research, which is one of the shortcoming hypothesized, academic affairs are further split into education and research.

These three aspects are interconnected, therefore form complex relationships. The proposed framework identifies this connectedness form a novel three-by-three Rubik cube as presented in the Diagram 2.

One of aims of this framework is to analyze the comprehensiveness of initiatives, and to aid the design of a systematic approach to develop WCU.

Diagram 2: The Rubik-cube framework for WCU initiatives



The assumption here is that each initiative, or an aspect of an initiative, represents one of the cubes in this framework. For example, the cube on the top layer at the front corner represents a 'competitive funding' scheme to achieve excellence in 'management' of a university in the 'activity' stage toward WCU. Combining these three aspects provides a detailed analysis framework for initiatives. The 'phases of development' aspect addresses the importance of initiatives, reflecting the progress towards global activities and can be used to identify whether the initiatives are suitable for the current stage. The 'strategic foci' aspect addresses the main approaches necessary to establish WCU: as different foci might be In different phases of development, combine these two aspects provides useful insight. Finally, the 'areas of operations' aspect addresses the structure within higher education initiations: within a single foci, different areas of operations might be in different phases of development, which need to be captured by a comprehensive analysis framework. Combining these three aspects

will help identify initiatives for each area of operations at appropriate stages of development addressing different strategic foci towards establishing WCU.

5. Toward WCU in Japan

5.1 Existing Initiatives in Japan

As discussed earlier, the notion of WCU often has a strong research focus and this is the case in the Japanese higher education context, symbolized by the common Japanese translation of the term, 'universities with a world-level research center' (METI, 2011). The sector is facing pressure to reform and strengthen, due to the increased competition with neighboring countries investing heavily to establish WCU. The domestic problem of decreasing population of young people also contributes to the urgency of strengthening the sector, in order to attract talented students and internationally-achieved scholars to grow further the sector, hence the nation's competitiveness (Hazelkorn, 2009). The rapidly ageing population and the decreasing number of young people mean a decrease in tax income, despite the growing need of investment in higher education, and many universities are unable to fill the available seats, which was expanded in the 1990s in response to the baby boom. A decreasing number of students also affects the availability of future scholars. The drive to attract international scholars has intensified especially after 2004, when national universities became incorporated and gained the flexibility to offer distinctive tenure and salary packages to potential scholars. These internal and external factors have driven initiatives in Japan towards WCU, especially aiming at high positioning in global rankings, which is an important factor for attracting skilled scholars and motivated students.

In Japan, higher education matters are mainly under the jurisdiction of the MEXT, and other ministries like the METI, for example, which works on higher education issues that affect economy and industrial activities. METI especially works with the higher education sector on research to provide the knowledge-base or 'soft infrastructure' for innovation in industry (METI, 2012). MEXT's policies related to higher education are dealt with by the education and science and technology sections.

5.2 Analysis

The initiatives to be analyzed will focus on government funding schemes between January 2003 and August 2014, when global rankings expanded along with a drive to develop centers of excellence world-wide. A list of the considered initiatives is shown in Table 2, together with the years in which they were implemented.

Table 2: A list of Initiatives

Initiatives	Implemented
Global COE (Center of Excellence) Program	2002- (2007-)*
Program for Enhancing Systematic Education in Graduate Schools	2007-2011
Program for Promoting High-Quality University Education	2008-2010
Project for Establishing University Network for Internationalization (Global 30)	2009-2011
Program for Promoting University Education	2009-2011
The Leading-edge Research Infrastructure Program (Strategic Fund for Strengthening Leading-edge Research and Development)	2010-2012
Re-Inventing Japan Project	2011-
Program for Leading Graduate Schools	2011-
Top Global University Project**	2014-
AP***	2014-2018

*The program existed since 2002 but funding scheme exists since 2007
**This includes 'Global Human Resources Development Project' which was previously independent from Top Global University Project.
***'Daigaku Kyoiku Saisei Kasoku Program' (大学教育再生加速プログラム) [Program for expedite regeneration of university education]
Source: Created based on JSPS (2014)

These are competitive, project-based initiatives that solicit applications from higher education institutions to undertake projects towards specific goals. The characteristics and priorities of each initiative will be examined by referring to the project statements and selection criteria.

The subsets of initiatives for each of the strategic foci will be identified and analyzed separately but all three foci will draw on initiatives that are within the list of competitive funding schemes above. In other words, the funded schemes will be analyzed also on elements of internationalization and governance. The analysis within each focus will also include the observation according to the areas of

operations. Phases of development will be analyzed through observing the types and rankings of recipients.

5.3 Competitive Funding Schemes

The above listed competitive funding schemes include a variety of priorities, aims, and target institutions. The assumption, from the discussion earlier on rankings and the concept of WCU, is that the focus of schemes is mainly on research institutions, leading universities, and STEM fields. Therefore, the schemes were analyzed to examine these potential biases. Table 3 below shows the schemes according to: the focus (i.e., research or education); division of recipient institutions among national, prefectural, and private; and the coverage of social sciences fields. For the projects that span multiple years, numbers are shown as (../../..), listed from the latest year to the furthest. In other words, if a scheme allocated funding from 2007 until 2009, the value 10/20/30 corresponds to 10 for 2009, 20 for 2008, and 30 for 2007. In the 'Total' row, the value is the number of accepted institutions from all schemes and years, so an institution that has been accepted by multiple schemes or in multiple years would be counted more than once.

From this data, we can observe, first of all, that the number of recipient institutions decreased over time, especially for the first two schemes, which might have been caused by the economic crunch. Secondly, the number of accepted national universities is much higher than the others, despite the actual ratio of national versus private institutions in the sector. There are a number of education-focused schemes rather than research-focused ones, and the schemes focused on education ensures its specific purpose be met by disallowing the grantees to spend funds on research activities. The ones focused on research are available only to a smaller set of institutions, namely to universities and not to junior colleges and technical colleges. Moreover, those schemes that emphasize international competitiveness in both research and education tend to be available only to universities. Although accepted projects on STEM fields are predominant, there are a number of social sciences focused ones as well. What we cannot see here, however, is the actual amount of funding allocated to individual projects, so the distribution of investments among disciplines cannot be determined.

Table 3: List of initiatives and numbers of accepted institutions
(R: Research focused schemes / ED: Education focused schemes)

Initiatives	National Univ.	Prefectural Univ.	Private Univ.	Social Sciences
Global COE Program (R)	7/55/50	0/0/3	2/13/10	0/12/14
Program for Enhancing Systematic Education in Graduate Schools (ED)	20/40/91	1/4/8	8/22/27	11/25/53
Program for Promoting High-Quality University Education* (ED)	67	13	67	n.a.
Global 30* (ED)	7	0	6	n.a.
Program for Promoting University Education* (ED)	51	12	32	n.a.
The Leading-edge Research Infrastructure Program (R)	10	0	0	0
Re-Inventing Japan Project (ED)	8/9/13	0/0/1	3/3/5	6
Program for Leading Graduate Schools (ED)	15/14	1/1	1/2	3
Top Global University Project (R/ED)	n.a.	n.a.	n.a.	n.a.
AP* (ED)	15	4	28	n.a.
TOTAL	472	48	229	124

*Numbers includes junior colleges and technical colleges
Source: Calculated by the author by the JSPS project websites.

From the perspectives of short-term and long-term focus, examining the details of funding schemes and selection criteria of recent programs like Top Global University, there is the awareness that the importance of long-term output, as described in 'knowledge in the making', has increased. As one of the evaluation criteria of Top Global University, for example, MEXT (2014a) refers to indicators that focus on longer-term research impact rather than the traditional one-off indicators: the criteria referred to an article produced by the National Institute of Science and Technology Policy (NISTEP), part of MEXT, which conducted a benchmark of universities' research performance in terms of the increase in research outputs during a period of four to five years rather than the number of recent publications (Saka and Kuwahara, 2012). According to the report, comparing the research outputs between 1997-2001, 2002-2006, and 2007-2011, those universities that exhibited a significant increase in output were not the University of Tokyo, Kyoto University, or Tohoku University, former imperial, public universities that usually appear in higher positions in league tables, but included private as well as mid-level universities. They included University of Japan, Jyuntendo

University, Tokyo Agricultural University, and Ehime University (ibid.). According to Altbach (1998), the universities in the former group are considered to be at the 'center' of the sector and the latter groups to be in the 'periphery'.

What we can see from here is that funded schemes cover diverse concerns and institutions, both in education and research, and the selection criteria take into consideration long-term outputs rather than only short-term achievements. At the same time, from the decreasing number of recipient institutions and the focus on long-term output in the selection criteria, especially in view of the goal of establishing WCU, the prospects may be limited in supporting the less-achieved institutions. As discussed earlier, competitive funding for developing centers of excellence contributes to narrow the gaps between forerunners of WCU and the ones in development (Rakakrishna, 2013). In Japan, the rise of private universities seen in recent years has lead to them becoming part of the 'center', rather than the 'periphery', and this is in part caused by government support, as well as government control and policy borrowing (Yonezawa, 2014: 192). At the same time, there is a risk that the gap between the supported and unsupported institutions may increase in the future due to recent tendency by funding schemes to strengthen those that are already in the 'center'.

5.4 Internationalization

Internationalization has been the center of the strategic approach towards WCU through various measures strengthening graduate school education and research outputs.

In the education area of operations, one of the schemes under consideration that focused on internationalization, although restricted to a small number of institutions, was the Global 30 Program (Ishikawa, 2011). Reflecting the demographic problems in Japan and concerns for internationalized education, the 300,000 International Students Plan was announced in 2008 (MOFA, n.d.) with the aim of increasing the number of international students and revitalize Japanese universities by 2020: this plan led to Global 30, whose main focus was to bring in students from abroad. After 2011, with the onset of 'Re-Inventing Japan Project', the term "global human resources" became frequently used in subsequent policy initiatives and activities to

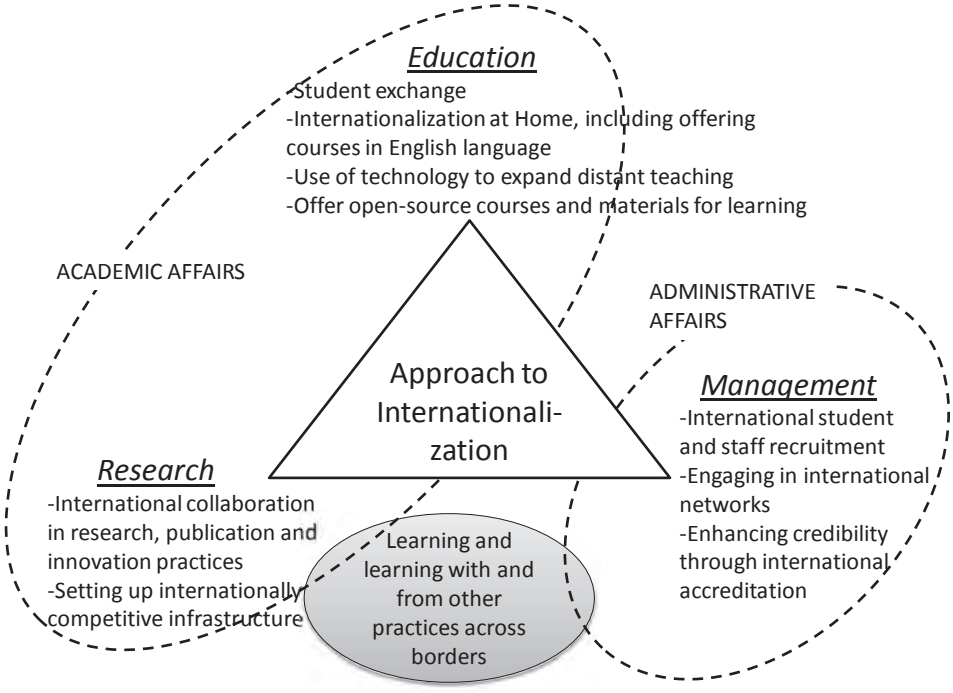
increase international experience of Japanese students were emphasized. Enriching language education and offering courses in English is considered to serve both the purposes of strengthening an internationalized learning experience, especially in terms of language, and inviting international students, and considered a form of "internationalization at home". Alongside this, the tendency in the international community has been to focus on the role of universities in strengthening employability of graduates, as addressed by the Organization for Economic Development and Cooperation (OECD) (2009). As part of this tendency, Japan has experienced a drive towards strengthening employability through internationalization of Japanese student experience, both by "internationalization at home" and offering opportunities to study abroad, with the aim of developing global human resources. The shift away from attracting international students to Japan may also be due to a lack of financial incentives, unlike in many other countries where international students are a significant source of income. A lack of offshore delivery of higher education, a common internationalization strategy in many Western countries, may also be a factor in the focus on internationalizing the domestic campus. There is an increasing interest in offering distance education or free online courses, inspired, among others, by the MOOCS programs popularized in the United States, but language barriers limit the involvement of Japanese universities (MEXT, 2014b).

In the research area of operations, international collaborations and publications have been strongly promoted through some of the above schemes. Internationalization of university campuses is also pursued with the aim of attracting achieved foreign scholars to enhance research and innovation, especially in the STEM fields. Making an extensive investment to develop an internationally competitive research infrastructure also serves this purpose, as seen in the Leading-edge Research Infrastructure Program and the Global COE Program.

In the management area of operations, selection criteria are observed in the areas of enrollment, human resources and quality management systems. These include recognizing International Baccalaureate, having an international hiring system, and being accredited by internationally recognized bodies, such as JABEE and AACSB (MEXT, 2014b). These selection criteria can be interpreted as an

effort to increase international transferability of education. Since 2011, Re-inventing Japan Project and subsequent schemes, observed selection criteria include introduction of a GPA system, use of English Language in operations and academic activities, flexibility in academic calendar, and a numbering system of courses according to American university standards. Therefore, efforts towards standardization, especially concerning the American system, characterize a part of internationalization efforts in the recent schemes. Diagram 3 shows some of the international aspects observed in the schemes under consideration and organizes them based on the areas of operations: it also indicates how education and research efforts are often related and fall under academic affairs, while management falls under administrative affairs.

Diagram 3: Internationalization in three areas of operations



Different initiatives falling under different areas of operations are, however, connected, as symbolized by the central triangle representing the overall approach to internationalization, a reminder of

the importance of coherence among various initiatives. The diagram above can be applied at different levels, e.g., government, institutions, and specialized agencies within an institution: it is important that coherence be maintained at each level. Furthermore, as schemes are created and implemented, the issue of coherence may be an important concern in the process of policy borrowing towards WCU.

5.5 Governance Reform

Among the examined schemes, the four most recent programs, "Re-Inventing Japan", "Program for Leading Graduate Schools", "Top Global University", and the "AP Programs", had governance and management related selection criteria and / or program descriptions. Among these initiatives, governance related statements are expressed in terms of hiring, faculty/staff development (FD/SD), planning and decision making, and institutional research (IR). Some of them seem to overlap with aspects of management for internationalization but, for Top Global University, for example, the selection criteria for governance are separate from the management for internationalization ones, as the former focus on matters related to accountability and responsibility. Accountability statements are expressed in terms of planning to strengthen staff members' capacity, defining expected roles and required skills, having a long-term vision and an objective view of the state of reform, and, finally, having clear and effective ways to achieve these goals. Responsibility statements are expressed in terms of providing executive level authority to international staff or faculty members, having specialized administrators, and providing leadership and autonomy in making decisions to university presidents (MEXT, 2014a: 8-9). The use of accreditation and IR, which may reflect the increased focus on knowledge-based reforms, and strengthening of leadership of university presidents to expedite decision making characterize recent reform initiatives. This approach to governance reforms has been advocated by MEXT in recent years (MEXT, 2013).

6. Discussion

The analytical framework mainly referred to the three strategic foci, making reference to areas of operations and phases of development, although the elements of these three aspects often overlapped; a more systematic examination could be pursued as future work. The analysis

however provides us with some insights in government initiatives towards WCU in Japan.

While the analysis focused only on funding schemes, internationalization is still a strong focus, with initiatives at the capacity and the connectivity phases; however, capacity initiatives do not have enough focus on faculty and staff, but mostly focus on students' internationalization at home and abroad. A limited bias towards STEM fields, at least in the number of funded programs, was observed, reflecting in part the biases of global rankings; in the long-term a more balanced approach might be necessary, so that success in the STEM fields is not at the expense of excellence in other fields. Research and education were both addressed in the initiatives under consideration, unlike how hypothesized, which is contrary to the bias observed in global rankings. More programs at the activity phase and in the management area would be beneficial to provide a comprehensive approach to developing WCU. Governance reforms, on the other hand, were not addressed directly, but were mainly included as part of the selection criteria: this might be an area where the individual institutions have taken the lead, while the role of the government has been to advocate and guide such reforms (MEXT, 2013). In the rest of the section, two concerns relating to autonomy of institutions, namely knowledge-based decisions and leadership, are explored to provide guidance in the development of initiatives in the 'governance reform' focus.

6.1 Autonomy and Knowledge-based Decisions

Autonomy has been a driving principle of recent reforms in higher education: in the more autonomous university, increasingly institutions have to make knowledge-based decisions, i.e. decisions based on the institutional knowledge-base, such as based on IR and policy borrowing. At the same time, the responsibilities in higher education have expanded and have become more complex overall (Whitchurch, 2008), due to modernization as well as the increased autonomy. As a consequence, the boundaries in terms of the roles and required expertise between faculty and administrators have become increasingly blurred. In countries with substantial increases in institutional autonomy and improvement in the governance arrangements within institutions, professionalization tendencies of higher education administrators has been observed in areas such as

finance and student admission, as well as in those who administer them (OECD, 2008). Autonomy is considered to be the foundation of institutional effectiveness and quality, as it is also recognized as the principle in the process of higher education accreditation, particularly in the United States (Franzosa, 1996), where professionalization of higher education management is considered to be relatively advanced. Professionalization is also a consequence of university administrators growing dependency on research, in order to drive knowledge-based decisions within higher education systems and to construct necessary strategic plans (Olsson and Meek, 2013).

At the same time, the academics are required to handle administrative tasks, such as research grant writing, project planning and management, team management, ethics, research dissemination, internal and external relations, and sometimes marketing. To cope with the demands of research and administration, close collaboration and effective interactions between the academics and administrators is unavoidable, particularly in a more professionalized and knowledge-based society. Indeed, in the higher education sector, where managerialism and professionalization is advanced, a new group of professionals has emerged, which is called 'higher education professionals' or 'professional staff', who handle some of the administrative tasks above and share some of the characteristics of both academics and administrators (Whitchurch, 2008, Krücken, Blümel, & Kloke, 2009, 2012). Professional staff may:

- Have high academic credentials (Master's or Doctorate)
- Deal with institutional initiatives that require a range of specialist knowledge and skills
- Undertake quasi-academic functions such as conducting lectures and relevant events
- Move into academic management (such as Deans and Pro-Vice-Chancellors)
- Undertake academic-related tasks and be recognized as "specialist" but under non-academic contracts (Whitchurch, 2008).

The tendency of professionalization of university management and staff is seen due to the increased autonomy of universities, especially where public funding support has decreased and universities are expected to plan and manage their own operations and finances. The

tendency in Japan is no exception. After corporatization of national universities in 2004, institutions gained autonomy to decide revenues and expenditures but they are required by law to develop strategic plans and set targets on enhancing the quality of teaching and research (Yamamoto, 2005). In his discussion of new university corporations, Yamamoto (2005) expects that the emphasis on institutional performance and flexibility to adjust to changing circumstances will increase, rather than traditional focus on 'equity' and 'fairness' (Yamamoto, 2005: 13). Some universities have taken measures to increase the management capacity by collaborating with the private sector. For example, during the last several years, Kobe University has invited experts from the private sector to advise on the management system of the university. It also collaborated with a few national universities in the region to communicate strategies and enhance the management of those universities.

These tendencies tell us that universities engage in various attempts to strengthen the professionalization and institutional knowledge-base in their management approaches in the changing economy and political setting. These initiatives reflect the phases of institutional development towards excellence through developing capacity, increasing connectivity, both internally and externally, and executing activities.

6.2 Autonomy and Leadership

As discussed earlier, one recent government measure is focused on strengthening the leadership of university executives and managers in order to enable efficient and fast decision making and actions for reforms. From the point of view of enhancing professionalization and institutional knowledge-base, the capacity and the approach of leadership require deliberation. In other words, those who are given unique authority may not always be equipped with the required expertise in all of the areas of university missions and operations, as well as the relevant initiatives. From the educational perspective, for example, the expertise includes higher education pedagogy, curriculum, and assessment. This means that on-going communication and relations with various experts is essential to professionalization and institutional knowledge-base for a sustainable growth. On a similar note, in the discussion of organizational transformation, leadership theories are critiqued to emphasize agency and autonomy

over ‘communication’ and ‘relationality’ (Edwards, 2010: 138). Emphasis on agency and autonomy tends to focus on objective results rather than involvements and processes. Here, ‘agency’ refers to an established organization as well as individual or collective action, which is called ‘human agency’ (Marginson and Rhoads, 2002: 283). Washida, a professor at Otani University, argues (Chuokoron, 2014) that universities require a ‘community model’ of management, where members contribute to setting directions and making decisions, rather than a ‘company model’ where decisions are often made by a limited number of executives and board members. Universities hold a pool of experts who are agencies themselves that reflect multiple and complex roles and expectations placed on them. They act as ‘agencies’ that exercise their expertise to ensure that the university meets its expectations.

6.3 Developing Autonomous WCU

The above sections discussed, first, the links between autonomy and knowledge-based decisions, which lead to the professionalization of university administration. Secondly, it discussed the types of leadership that enable autonomous decision making, which emphasized the community model approach that involves institutional members acting as agencies. These reflections reveal that developing experts who can act as agencies in the institution is key to achieving autonomy, which is a requirement for WCU. These experts should come from both faculty and higher education professionals.

In developing initiatives that will support such governance reforms, we need to develop sustainable strategies. Researchers (Applebaum and Wohl, 2000; Forster, 2005; Kotter, 1995, Quoted in Edwards, 2010) analyzed that poor results of reforms are often linked to focuses that were narrowly placed on 'transforming organisational culture or [...] on the restructuring of organisational operations and systems', which are considered to be ‘reductionist’ (Edwards, 2010). This reductionist approach makes many transformational programs fail, and Edwards (2010) further notes that 'focusing on the exterior, objective aspects of organisations can result in the dominance of outcomes over process, in measurement over meaning, products over people' (138). At the same time, however, the availability of structure, accountability and decisiveness are important parts of effectiveness. ‘Leaps’ in transformation are considered to lack continuity and, instead,

incremental learning and changes are emphasized by theorists that advocate for continuous transformation (ibid.). These theoretical arguments tell us that reform process could fail when focus is placed on rapid changes and results rather than continuity and process.

Desirable autonomy in higher education needs to accompany leadership that incentivizes the involvement of and communication among various experts as agencies, and the organizational structures that enable such dynamics. It is important that the approach to reform involves initiatives that help increase the capacities of university faculty and staff, and encourage professional development. The focus on sustainability through continuous actions to further communication, accountability and decisiveness will also contribute to effective reform efforts towards WCU. It would be beneficial to develop government initiatives in the 'governance reform' focus, starting at the 'capacity' phase, and specifically targeting faculty's and higher education professionals' development to enable them to step into the role of expert agencies within institutions and lead the autonomous WCU.

7. Conclusion

This paper examined some of the recent Japanese government higher education policy initiatives in the context of globalization and knowledge-based society, where internationally shared data and rankings are used extensively to define what is 'world-class'. The impact of rankings is extensive, as they define short-term and long-term priorities of institutions and governments (West, 2009). This paper has clarified the meaning of WCU in this context, although limited, and analyzed the characteristics of current government and institutional approaches especially in response to global rankings. Global rankings inform decision makings at different levels although they face methodological limitations that create biases. The policy initiatives to upgrade universities' international recognition and impact have helped narrow the gaps among institutions, but also sometimes widen the gaps between them, when the selections are made based on the existing performance. The analysis of Japanese higher education reform initiatives have identified that WCU is seen from both research and educational perspectives, but the selection process seem to focus on flagship institutions, rather than narrowing gaps in the sector. The discussion highlighted the notion of 'autonomy' which underpins effective and sustainable reform in

higher education. The recent corporatization of national universities granted increased management autonomy to institutions (Yamamoto, 2005), but the capacity for reforms towards WCU requires the views of sustainability, which is enabled by expert thinking, sustainable communication, and decisiveness. The paper also proposed a new analytical framework emphasizing that initiatives should be looked at from multiple perspectives to evaluate their coherence and comprehensiveness.

The analysis in this study is based on the publicly available information about competitive funding schemes relating to WCU since 2003. Therefore, the historical outlook of this issue or a deeper analysis involving project details and the decision making processes were not explored. The framework of analysis was used to analyze initiatives mainly from the three 'strategic foci' perspective; hence additional analysis might be possible from the 'areas of operations' of universities and 'phases' of development perspectives, which might lead to further insights. Another area of future work might be to look at the responses on the notion of WCU and rankings from institutions with various institutional priorities, as the notion of 'tertiary education ecosystem' in which different institutions and systems require 'different pathways' is an important part of reform in the globalization context (Salmi, 2011).

Based on the proposed framework, this paper analyzed the initiatives above, and was able to identify some gaps; an area for further initiatives. Particularly, it analyzed the notion of autonomy and two of its consequences in the development of WCU; namely the areas of professionalization of higher education due to the need for knowledge-based decisions and the different models of leadership within the institutions. Based on these recommendations further initiatives in the governance reform focus have been suggested.
For future work, it would be worth applying the framework for different contexts; expand to initiatives that go beyond funding schemes, apply to a different national context, and apply to a different levels, e.g. to the institutional level. It would be also interesting to evaluate whether the framework could be effectively used as a means of comparative analysis, for example, comparing Japanese initiatives to initiatives of another country, to examine the policy differences.

References

Altbach, P.G. (1998). *Comparative higher education*. Norwood: Ablex.

Altbach, P.G. (2004). *The Costs and Benefits of World-Class Universities*. AcademieOnline. January-February, 2004. [Available online] http://bcct.unam.mx/adriana/ bibliografia %20parte%202/ALTBACH,%20P..pdf

Altbach, P.G. & Salmi, J. (Eds.). (2011). *The Road to Academic Excellence: Emerging Research Universities in Developing and Transition Countries.* Washington, DC: The World Bank.

Appadurai, A. (1996). *Modernity at Large: Cultural Dimensions of Globalisation.* Minneapolis: University of Minnesota Press.

Applebaum, S.H. and Wohl, L. (2000). Transformation or change: Some prescriptions for health care organizations', *Managing Service Quality, Vol. 10 (3).* 293-315.

Brooks, R. (2005). 'Measuring university quality'. *Review of Higher Education*, 29(1), 1-21.

Chuokoron (2014). 'Hamidashiteiru koto ni sionzaiigi gaaru' [Significance of being different]. *Chuokoron*, August 2014.

Edwards, M. (2010). *Organizational Transformation for Sustainability: An Integral Metatheory*. Routledge.

Forster, N. (2005). *Maximum performance: A practical guide to leading and managing people at work.* Cheltenham: Edward Elgar.

Franzosa, S. (1996). 'The evaluation of the higher education system in the United States of America.' In R. Cowen (Ed.) *The World Yearbook of Education: The Evaluation of Higher Education Systems.* London: Kegan Paul.

Hazelkorn, E. (2008). 'Learning to live with league tables and ranking: The experience of institutional leaders'. *Higher Education Policy, 21*, 193-215.

Hazelkorn, E. (2009). 'Ranking and the Battle for World-Class Excellence: Institutional Strategies and Policy Choices. *Higher Education Management and Policy*, vol21. No.1.

Hazelkorn, E. (2011). *Rankings and the Reshaping of Higher Education: the battle for world-class excellence*. Houndmills: Palgrave Macmillan.

Held, D., McGrew, A., Goldblatt, D. and Perraton, J. (1999). *Global Transformations*. Stanford: Stanford University Press

Hénard, F. and Mitterle, A. (2009). *Governance and quality guidelines in Higher Education*. Paris: OECD.

Inoki, T. (2014). 'Daigaku ni rankuzuke nado dekinai' [One cannot rank universities]. *Chuokoron*, February 2014. 22-31.

Ishikawa, M. (2011). 'Redefining Internationalization in Higher Education: Global 30 and the making of global universities in Japan'. In Willis and Rappleye (Eds.). *Reimaging Japanese Education*. Oxford: Symposium. 193-224.

Ismail, E. M. (2010, December). 'Ranking of universities'. In *2nd International Conference on Assessing Quality in Higher Education* (pp. 6-8).

JSPS – Japan Society of Promotion of Science (2014). *Programs*. http://www.jsps.go.jp/english/programs/index.html (Accessed August 15, 2014)

Knight, J. (2004). 'Internationalization Remodeled: Definition, Approaches, and Rationales'. *Journal of Studies in International Education*. 8(2). 5-31.

Kotter, J.P. (1995). Leading change: why transformation fail. *Harvard Business Review. March/April*:59-67.

Krücken, G., Blümel, A., and Kloke, K. (2009). 'Towards Organizational Actorhoo d of Universities: Occupational and Organizational Change within German University Administrations'. *FÖV Discussion Paper. No. 48*. German Research Institute for Public Administration Speyer (FÖV). Speyer 2009.

Krücken, G., Blümel, A., and Kloke, K. (2012). *Occupational and Organizational Change in Higher Education Administration in Germany*. International Conference "Changing Conditions and Changing Approaches of Academic Work". Berlin, June 5th, 2012.

Liu, L., Cheng, Y., & Liu, N.C. (2007). 'Social science research in research universities'. In N.C. Liu & L. Zhou (eds.). *Building research universities for achieving the goal of an innovative country*. Beijing: China Renmin University Press.

Maringe, F. (2010). 'The Meaning of Globalization and internationalization in HE: Findings from a world survey'. In Maringe, F. and Foskett, N. (Eds.). *Globalization and Internationalization in Higher Education*. London: Continuum. 17-34.

Margionson, S. (2011). Asia-Pacific Universities in the Global Space: Visions of University Presidents. In Marginson, S., Kaur, S.,

and Sawir, E. (Eds.). *Higher Education in the Asia-Pacific*. New York: Springer. 37-52.

Marginson, S. (2013). 'Different roads to a shared goal – Political and cultural variation in world-class universities'. In Wang, Q., Cheng, Y., and Cai Liu, N. (eds.). *Building World-Class Universities*. Boston: Sense. 13-34.

Marginson, S. (2014). 'University Rankings and Social Science'. *European Journal of Education*,Vol. 49, No. 1, 2014. 45-59.

Marginson, S. and Rhoades, G. (2002). 'Beyond national states, markets, and systems of higher education: A glonacal agency heuristic'. *Higher Education*. 43(3). 281-309.

Marginson, S. and Van der Wende, M. (2007). 'To rank or to be ranked: the impact of global rankings in higher education', *Journal of Studies in International Education. Vol.11(3-4).* 306-329.

Marope and Wells (2013). 'University rankings: The many sides of the debate'. In Marope, P.T.M., Wells, P.J., and Hazelkorn, E. (Eds.). *Rankings and accountability in higher education: Uses and Misuses* (Education on the Move Series). Paris: UNESCO. pp.7-22

METI (2011). *Kenkyu Kaihatsu no Kokusaika nitsuite* (*Internationalization of Research Development).* November, 2011. [Available online] http://www.meti.go.jp/committee/summary/0001620/035_05_00.pdf

METI (2012). *Soft-Infrastructure Development Special Committee – Mid-term Report*. http://www.meti.go.jp/committee/summary/0003843/report_01.html (Accessed September 1, 2014)

MEXT (2013). *Daigaku no Gabanansu Kaikaku no Sokushin ni Tsuite* [Toward the University Governance Reform]. Central Education Council, MEXT. [Available online]. (Accessed August 2013) http://www.mext.go.jp/component/b_menu/shingi/toushin/__icsFiles/afieldfile/2014/01/20/1343469_1_1.pdf

MEXT (2014a). *Top Global University Project – Application Guideline*.

MEXT (2014b). *Academic and Technology Infrastructure to Strengthen Function and Produce Innovation.* http://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu4/031/attach/1348337.htm (Accessed, September 1, 2014).

MOFA (n.d.). *300000 Foreign Students Plan*. http://www.studyjapan.go.jp/en/toj/toj09e.html (Accessed, September 1, 2014).

OECD (2008). *Tertiary Education for the Knowledge Society, Vol. 1*, OECD, Paris.

OECD (2009). *Learning our lesson: Review of Quality Teaching in Higher Education*. Paris: OECD.

Olsson, Å. and L. Meek (2013). *Policy brief: Research and Innovation Management*. Programme on Innovation, Higher Education and Research for Development - IHERD.

Pratt, S.M. (2012). 'The Global Institutional Profiles Project: A New Approach to Evaluating Academic Institutions'. In Wang, Q., Cheng, Y., & Liu, N.C. (eds.). Building World-Class Universities: Different Approaches to a Shared Goal, Rotterdam: Sense Publishers. 181-196.

Ramakrishna, S. (2013). 'World University Rankings and the Consequent Reactions of Emerging Nations'. In Wang, Q., Cheng, Y., & Liu, N.C. (eds.). *Building World-Class Universities: Different Approaches to a Shared Goal*, Rotterdam: Sense Publishers. 117-128.

Reed, M.I., Meek, V.L., & Jones, G.A. (2002). Introduction. In A. Amaral, G.A. Jones, & B. Karseth (Eds.), *Governing higher education: National perspectives on institutional governance* (pp. xv-xxxi). Dordrecht: Kluwer Academic Publishers.

Saka, A. and Kuwahara, T. (2012). *Benchmarking Research & Development Capacity of Japanese Universities 2011*. National Institute of Science and Technology Policy (NISTEP), Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan.

Salmi, J. (2009). *The challenges of establishing world-class universities*. Washington, DC: The World Bank.

Salmi, J. (2011). 'The road to academic excellence: Lessons of experience'. In Altbach, P.G. and Salim, J. (Eds). *The Road to Academic Excellence: Emerging Research Universities in Developing and Transition Countries*. Washington, DC: The World Bank.

Santiago, P., Tremblay, K., Basri, E., and Armal, E. (2008). *Tertiary education for the knowledge society. Vol. 1, Special features: governance, funding, quality*. OECD.

ShanghaiRanking Consultancy (2014a). *Ranking Resources*. http:// www.shanghairanking.com/resources.html (Accessed August 10, 2014)

ShanghaiRanking Consultancy (2014b). *ARWU Methodology*. (http://www.shanghairanking.com/ARWU-Methodology-2014.html#2) (Accessed August 15, 2014).

Times Higher Education – THE (2014). *Methodology*. (http://www.timeshighereducation.co.uk/world-university-rankings/2013-14/world-ranking/methodology) (Accessed August 15, 2014).

U-Multirank (2014). *Methodology*. [Website] (Accessed August, 2013). http://www.u-multirank.eu/#!/methodology?section=undefined

Wang, Q., Cheng, Y., and Liu, N.C. (2013). 'Building World-Class Universities : Different Approaches to a Shared Goal'. Wang, Q., Cheng, Y., and Cai Liu, N. (Eds.). *Building World-Class Universities*. Boston: Sense Publishers. 89-102.

Wende, M.C. van der. (2008). 'Rankings and classifications in higher education. A European perspective'. In J.C. Smart (Ed.). *Higher Education Handbook of Theory and Research, Vol. 23*. Dordrecht: Springer. Pp. 49-71.

Wende, M.C. van der. (2013). 'An Excellence Initiative in Liberal Arts and Science Education: The case of Amsterdam University College'. In Wang, Q., Cheng, Y., and Cai Liu, N. (Eds.). *Building World-Class Universities.* Boston: Sense Publishers. 89-102.

West, Peter W.A. (2009). 'A Faustian bargain? Institutional responses to national and international rankings'. *Higher Education Management and Policy. No.1, Vol. 21, Issue: 1*. Paris: OECD. 1-10.

Whitchurch, C. (2008). 'Shifting Identities, Blurring Boundaries: The Changing Roles of Professional Managers in Higher Education'. *Research & Occasional Paper Series*, Center for Studies in Higher Education (CSHE). University of California, Berkeley.

Yamamoto, K. (2005). *Corporatization of National Universities in Japan: An Analysis of the Impact on Governance and Finance*. Center for Research on University Management and Policy (CRUMP) Working Paper Series, No.3. The University of Tokyo.

Yonezawa, A. (2014). 'The Development of Private Higher Education in Japan since the 1960s: A Reexamination of Center-Periphery Paradigm'. 183-194. In Maldonado-Maldonado, A. and Bassett, R.M. (2014). *The Forefront of International Higher Education*. London: Springer.

The Perception Gap between International Students and the University Regarding Student Support: A Community Psychology Perspective

ABE Yuko

Abstract: This article is a report of the continuation of earlier research on the adaptation of international students, carried out by the author in the framework of community psychology. The present article is focusing on the issue of differences between systems of support for Japanese students going to study abroad as presented by host institutions and their perception by students participating in these systems. The remarkable difference, confirmed in this study, between the view of host institutions and students' perceptions indicates the need for interventions for the purpose of improvement of student well-being and such interventions require good understanding of the source of the problem. Community psychology provided good methodological tools for such analysis.

Keywords: Study abroad students, Cultural adaptation, Support for international students, Community psychology.

Introduction

This article is a report on the continuation of my earlier research on student adaptation carried out in the framework of community psychology. In the past, I was focusing on the methodology of research (Abe, 2009a) and on the system of support for international students coming for study abroad to Akita International University, Akita, Japan (Abe, 2010). I also investigated and analyzed factors important for student involvement in local community activities intended as adaptation for their study abroad (Abe, 2013).

The present article focuses on the issue of the differences between systems of support for Japanese students going to study abroad as presented by host institutions and their perception by students

participating in these systems. The present article focuses on the issue of the differences between systems of support for Japanese students studying abroad as presented by host institutions and their perception by students participating in these systems. The striking differences between the views of host institutions and students' perceptions indicate the need for interventions for the purpose of improvement of student well-being and such interventions require good understanding of the source of the problem. Community psychology provided good methodological tools for such analysis. The very definition of community psychology justifies my choice of this framework.

> "Community psychology concerns the relationships of the individual to communities and society. Through collaborative research and action community psychologists seek to understand and to enhance quality of life of individuals, communities and society" (Dalton et.al, 2001, p5).

The purpose of this paper is not only to examine the differences between institutional perspectives and students' perspectives, but also to explore and determine directions for intervention leading to improvement.

The present study applies qualitative methods that are frequently used in community psychology. The context of my study is well suited to an established description of research problems to which this methodology is usually applied, as explained by Dalton, et.al.

> "Qualitative methods are usually based in contextualized perspective, in which a central goal is to understand the meanings of a phenomenon for persons who experience it [...] Qualitative methods are now enjoying a renaissance in psychology, in part due to critiques of the limitations of quantitative methods. That renaissance is becoming especially important in community psychology" (Dalton et.al, 2001, p88).

Here, as frequently done in qualitative studies, I analyze a relatively small sample of data in agreement with the common practice described in general characterization of qualitative methods.

> "The researcher relies on a sample of informants to provide accounts of the setting or phenomenon studied. This sample of

> persons is usually small to facilitate the level of detail needed. Researchers may also rely on their own experiences as sources of information. [...] The aim of research is to understand a phenomenon "from the inside", from the perspective of the persons studied. This includes understanding how they perceive and explain these experiences in the context studied. Explanation is largely equated with understanding the meaning of the setting for those persons. [...] Qualitative studies study a small sample intensively, in depth. Generalizability of findings is more limited with these small samples than with larger quantitative studies. However, qualitative methods afford in-depth analysis of subgroups that are often overlooked in quantitative analyses of larger samples. In addition, the thick description generated by qualitative research allows other researchers to compare in depth the nature of the context and persons studied with other samples" (Dalton et.al, 2001, p. 90-91).

In this article I analyze data from 15 Japanese students of a single university who participated in a compulsory study abroad program that lasted one year. The data were collected upon their return to Japan in the form of half-structured interviews and questionnaires conducted by electronic mail during their stay abroad. Part of the data was already used in my earlier study of the involvement of study abroad students in local community activities (Abe, 2013). Since the interviews were carried out by the author in Japanese, all statements of students included below are in my translation into English. The questions of the interview were addressing many aspects of students experience and the support system in host institution was only one of the topics described by respondents. The content of each interview was recorded with permission of the students and then transcribed by the author. The data regarding the host institutions were collected from their homepages, from the student reports about their study abroad programs, and from staff members of the home university international center.

Since the main goal of the present study is to understand the differences between institutional and individual views of the study abroad support systems, community psychology, because it prioritizes interest in the relations and interactions between an individual and his/her structured environment offers the most adequate general conceptual framework.

The Ecological Model employed in community psychology is placing the level of ”individual” experience and behavior in the center, surrounded by expanding levels of “microsystems“ (friends, families, social support network, etc. - environments in which the person engages indirect, personal interaction with others over time (Bronfenbrennner, 1979); “organizations” consisting of sets of “microsystems” (such as classes staff, board making up a school departments and other units making up a university, etc. (Durlak & Wells, 1997)); “localities” (defined by geographic characteristics identifying larger scale settings for interactions between “individuals” and “microsystems” or “organizations”; “macro-systems” including society usually understood as nations, cultures, as well as governmental economic institutions beyond the community (Bronfenbrennner, 1979).

Although the present study focuses on the three lower levels, those of “individuals”, “microsystems”, and “organizations”, one of my conclusions, to which I will refer later, is that cultural aspects belonging to the “macro-systems” level are of great importance.

In this paper “individuals” are students participating in a study abroad program. “Microsystems” consist of friends from their own school who had earlier experience at the host university, new Japanese friends met at the host university, international friends met at the host university, teachers, host families, roommates, individual officers at the host universities¸ workers in, or owners of, local businesses with whom students were interacting directly and frequently.
“Organizations” - host universities - are represented by decision making officials with whom students did not interact personally or interacted with only occasionally. The “Macro-systems” is characterized by the cultural, economic, and legal system of the country where the host university was located.

Community psychology applies not only ecological structuring of the individual’s environment, but also to ecological principles adapted from the original field of biological ecology: interdependence, cycling of resources, adaptation, and succession (Kelly, 1966, Trickett, et.al, 1972). The principle of interdependence states that no matter whether we talk about high level or low level systems, they exhibit a high degree of complexity. Every change of one part within the system is

always followed by many other changes in different parts. The principle of cycling of resources states that in order to understand a system, we have to examine how resources are defined, used, created, conserved and transformed. The principle of adaptation is about the fundamental role of person-environment fit, and it focuses on the issue how individuals deal with constraints or demands of an environment utilizing available resources. The principle of succession states that understanding of the systems must take into account patterns of changes over time. This is a meta-principle, as it applies to all three earlier principles. The principle of interdependence has been guiding all my research about the experience of study exchange students. I was analyzing multiple factors important for success of involvement in community activities as a means of adaptation (Abe, 2013). In this paper, I am expanding the range of factors by analyzing the functioning of support systems provided by host universities.

This broader perspective requires inclusion of the resources provided by host universities and their relationship to other resources defined, used, created, conserved and transformed by students. Since the adaptation of students is the main theme of my continuing study, the role of the principle of adaptation is obvious here. In this paper, the unavoidable changes caused by the transition to a usually very different environment create a need for intervention, which in turn motivates this study. The succession principle is reflected in this study through the focus on patterns of changes resulting from actions of students and corresponding evolution of "microsystems" and "organizations".

Preliminaries

In my former research (Abe, 2013) focusing on involvement study in community activities during study abroad and using data from the same informants, I classified informants into four types which are, (1) the successful involvement type, (2) the unplanned involvement type, (3) the unsuccessful involvement type, and (4) the disinterested type, and then, I discussed characteristics of each of them.

In chart 1, the upper row refers to informants who had interaction with the local community and the lower row to those who did not. Also, the left column whether or not indicates the presence of motivation towards interaction was strong, and the right one indicates that it was

low even before informants arrived at onsite for the year abroad program. The capital letters in the brackets refer to interviewed informants.

The outcome of the qualitative analysis shows two types of factors influencing students' involvement in the local community. One type consists of personal, internal factors such as a student's desire to build social networks that provide supportive resources or a student's positive attitude towards overcoming setbacks. The other consists of social, environmental, and external factors such as a good school support system, friendly attitudes of the members of the community towards Japan and their willingness to accept people from different cultures. Both types turned out to have a significant on students' successful involvement. Deficiency in just one of the two types of factors necessitated substantial presence of the other, as the following examples show

Chart 1: Classification of students according to Community Involvement

	High Motivation	Low Motivation
Involvement of Community	Type 1 Successful Involvement Informants: B, J, K, M, N	Type 2 Unplanned Involvement Informants: D, E, G, H
No Involvement of Community	Type 3 Unsuccessful Involvement Informants: A, C, I	Type 4 Disinterested Informants: F, L, O

Among the students classified as Type 1, there were examples of students with a very high level of determination (due to the strong type of personality or good motivation), which made them deeply engaged in community in the presence of the positive external factor, but also which helped them to overcome adverse external conditions. In other words, a negative environmental factor can be compensated by the personal strength of will.

However, Type 3 gave examples of the opposite results. The influence of the negative environmental factor was stronger than that of personal will, and students did not engage in community in spite of their interest in doing so. In contrast, Type 2 students who were in the environmentally stimulating engagement adapted so well that they didn't need much personal motivation to get engaged.

As expected, Type 4 students who did not have any interests in being involved from the beginning and whose environment was not stimulating their involvement, were not engaged in any community activities.

In my former analysis (Abe, 2013) the existence of a support system at the host university played an essential role. However, its assessment was based on the interview data provided by the students, which means that it was based on student perception. There is a legitimate question as to what kind of support was actually provided by universities. Did these students correctly recognize the resources provided by the universities? If not, why not? How did they evaluate the resources?

There is no objective answer to the question about actual support. Even if the host universities created some support system, presumably a "good" one, lack of information or many other possible reasons could make these systems ineffective. Thus, we have to consider both perspectives, that of organizations, formally more objective in the sense of factual existence of resources, and that of students who for various reasons could have been deprived of resources.

The first step in my present research was the collection of new data that consisted of published or announced information regarding support systems for international students at the host universities. Then I made a comparative analysis, which confirmed the existence of differences between the organizational perspective and the perceptions of students. The result confirmed the existence of the gap between these two perspectives. Why are there some differences between the view of a university and perceptions of students? The purpose of this paper is to explain these differences and to identify the cause of their occurrence, which ultimately can direct intervention.

Support Systems in Host Universities and Their Perception by Students

The most important part of the research reported in this paper was a comparative study of the factual information provided by the host universities and the reports from informants about the existence of support systems and their experience in engaging services of such systems.

As mentioned before, data about the institutional perspective on university support was collected through the review of the host universities' web pages and through interviews with staff members of the home university international office, who are in direct contact with staff members and officials of the host universities. Several different types of support systems are considered, such as (1) the variety of peer support programs (sometimes called "buddy programs" or "mentor programs"), (2) academic support systems such as academic advising, tutoring, writing centers, and local language support, (3) community involvement as a part of class activities, such as service learning classes or classes with field work, (4) introduction to home-visit/homestay programs, and (5) information about local community events, etc.

Information regarding the institutional view of support systems was compared with the reports from students regarding their experiences. The results of the comparison are presented in the following chart, in which in addition to the columns comparing specific support programs, there are two columns representing (6) comprehensive support system and (7) friendliness of local people, which is spontaneous / informal support of local people. Entries in the comprehensive support system column were based on responses from universities to the question of whether or not they have a particular division in their organizational structure for international student support or more generally whether they provide special support for international students. For the perspective of students, entries were based on their responses to the general question of whether or not they were happy about the support that they received during their year abroad. The last column was based on students' perceptions of the spontaneous and informal support of local people. This is not support provided by the institutions, but it was included here due to its important role in a later discussion.

Chart 2 Summary of the differences in the view of support

		country of study	peer support program		academic support		local community involvement class activities		home stay/visit		local event infromation		comprehensive support system		friendliness of local people
			university	students	university	students	university	students	university	students	university	students	university	students	students
successful involvement	B	US 1	○	○	○	○	○	○	○	○	○	○	○	△	△
	J	Taiwan 2	○	○	○	×	×	×	×	×	×	×	○	△	○
	K	Tailand	×	×	×	×	×	×	×	×	×	×	○	△	○
	M	US 2	○	○	○	○	○	○	○	○	○	○	○	○	○
	N	HongKong	○	○	○	×	○	○	×	×	×	×	○	△	○
involvement without plnanning	D	Macao	○	○	×	×	○	×	×	×	×	×	○	○	○
	E	Taiwan 1	○	×	×	×	×	×	×	×	×	×	○	△	○
	G	Germany	○	×	×	×	×	×	×	×	×	×	○	△	×
	H	Mexico	×	×	×	×	×	×	○	△	×	×	○	△	○
insuccessful involvement	A	Canada	○	○	×	×	○	×	×	×	○	×	○	×	×
	C	US 3	○	○	○	○	○	○	○	○	○	×	○	×	△
	I	UK	○	×	×	×	×	×	×	×	○	○	○	×	○
disinterested	F	Norway	○	×	×	×	×	×	×	×	×	×	×	×	△
	L	Austria	○	○	×	×	○	×	×	×	○	not available	○	△	×
	O	US 4	○	○	○	×	○	×	○	○	○	×	○	×	△

Academic advising, and the academic support system in general, whose mission is to help all students of a university, not only those coming from abroad, is included here because it is one of the most important forms of help for international students whose main objective in their study abroad program is to continue their education in a new and unfamiliar environment. Also, academic support systems frequently help in creating social networks for connecting with the new community.

Each column of the chart has two sub-columns. The left-hand sub-column represents the views of the host universities, and the right-hand sub-column shows students' recognition and perception of institutional support. Data used in the analysis included the content of interviews already analyzed for other purposes in my earlier research. However, the informants were questioned again regarding relevant aspects of their experience, and additional information was included regarding students' views of their about the "friendliness of local people".

Circles in the chart represent affirmative statements of the existence of support. Crosses represent a definite statement of non-existence. Triangles represent partial affirmation. It has to be emphasized that acknoweldgement of the existence of specific programs in columns 2-6 marked by a circle does not necessarily mean that the informant participated in the program. It confirms that the informant knew about the existence of the program, had access to it, and for some reason is convinced about the value of the program. Frequently, this conviction results from personal participation, but it may also be due to hearsay. The last column (undivided) reports the informant's assessment of the friendliness of local people, which is the subjective view of the macro-level cultural characteristic. However, it frequently played a crucial role in the overall experience of informants.

The chart shows significant discrepancies between factual information from the organizational perspective of host universities and informant reports. More detailed examination of these discrepancies explains their sources. This can be achieved through analysis of the reports from informants. It can be noticed that the four types of students in the classification based on involvement in the community formed similar patterns of perception between members of the same group, but different patterns between members of different groups. For this

reason the report of analysis of the patterns was structured by the framework of types of involvement.

The first pattern comes from the successful involvement type. Generally, it can be said that Type 1 students received and understood information about support provided by host universities correctly and made effective use of those support systems. The exception is students' perception of the "comprehensive support system". The universities' view is that they provide sufficient support systems, but four out of five students thought that the comprehensive support system was unsatisfactory. The possible reason was the difference between the university and student expectations. Since student J responded that she used neither peer support program nor academic support, I would like to refer to J's interview to examine this issue.

J entered her study abroad program after finishing an introductory level of Chinese language study. Since her language level was sufficient only for basic communication, she asked for support from the university. She said:

> I heard that there was an orientation, but it was only lunch without any administrative information. But they call this "orientation".
>
> Each international student had one local volunteer student to help. But most international students met with their volunteer helpers only a few times and for a very short time. We had to deal with the course registration ourselves, without any help from volunteers. International students helped each other. There was no explanation about registration and we didn't know where to go, how to do it… it took a long time. School officers assumed that everything was OK because they gave us volunteers. Most of the school officials don't understand or speak English so they were not helpful to international students who didn't understand Chinese like me.

Similarly, the university support system did not seem to be sufficient for other international students at the J's host university. However, students of this type could overcome difficulties in diverse ways. J continued:

> Since the support for international students was not sufficient, we had to develop spirit to stand on our own feet. The culture shock I experienced was much bigger than expected, but my acceptance of the new environment came very quickly.
>
> There were a very small number of people who could speak English in the administrative office and we had to speak Chinese when we had administrative questions such as credit transfer. These were very important matters for me, so I had to commute to the offices several days to explain my situation to the staff member. It was not just a few times, so for me it was like "exchange program activities". … The support was really not enough, but these people had nice personalities and they tried hard to understand me, and I in turn tried very hard to communicate.

The next pattern exhibited in responses from students of Type 2 of the unplanned involvement was similar to pattern of Type 1, but with a slight increase in differences with the organizational view (difference not in one, but in three programs). Here as well, the university perspective and the student perspectives of "comprehensive support system" were very different. Three students out of four thought the comprehensive support system was not sufficient. The reasons seem the same as for Type 1.

The students who belong to this type went to study in Macao, Taiwan, Mexico and Germany. Except for the student who went to Germany, informants felt that the local community people were very friendly and pro-Japanese and open in relations with foreigners. Even Student D who gave the affirmative response regarding comprehensive support system and used information about programs to get involved in the "peer support program" admitted that the comprehensive support was not really fully prepared.

It can be observed that this type of community involvement gave students an opportunity to use the benefits of supportive social environment outside of the university. Of course, very often you have to use the university network to reach out for contacts with the community at large. H had a great support from her homestay family and neighbors and based on this she expanded a broad network towards her community, but without introduction from the university,

she would not have gotten the homestay family. Also the "buddy program", which three people used, contributed to the extension of their social network at the first stage of their life abroad.

As stated before, H developed a wide social network through the homestay family. But the arrangement of her homestay was actually quite accidental. She said the correspondence from the university was very slow and she did not get any information about accommodation before departure. On her arrival, she was surprised to hear that the homestay family was already arranged. She reflected on this as follows:

> It was pretty much a mess. I suddenly had my homestay family but some of the students didn't get the family they were supposed to have, or things like that [...] .It was the start of the messy confusing life in Mexico! Well, I felt, 'Never mind! I can't help it!'

This is how she accessed the Mexican community life. She continued:

> They invited me everywhere, such as every weekend's relative gathering, a lot of events etc. I talked to Mama, my Mexican Mama, all the time. Also to my sisters, their friends, [...]. I don't know what they felt about me, but for me the relationship was so deep, just like with the real mother, real family for me, very, very close.

Next, let us look at student D. The reason D was very satisfied with the university support was that the responsible organization for international students in this university was a Japanese research center. Normally, the division taking care of international students is relatively big, such as international students' center or international affairs. In case of D, it was a Japanese research center with a small, "cozy" atmosphere and which consisted of Japanese teachers or people understanding Japanese language and culture. However, D was not happy about other sections' support. Here are her words:

> Teachers and staff members in the Japanese center helped with everything, such as course registration and everyday life [...] they were really warmly communicating with us all the time and it was really helpful. But with something outside of their field, we had to

> deal with other offices in university and there, support was really awful. We could solve most of the problems, fortunately, in the Japanese area support places.

This example suggests an important aspect of support, which will appear in the negative form below. If the section responsible for international students has a more personal attitude, and its staff members are familiar with the culture of students, it could offer a much more satisfactory support system.

According to the examination of the first two types, the views of the universities and the students' perspectives of "comprehensive support system" were different. The difference was even bigger in the reports from informants belonging to the Type 3 of unsuccessful involvement. Universities claimed that they provided support but the perceptions of all students in this group were totally opposite. They responded that there was "hardly any support" or "very insufficient support".

Moreover, in their reports, informants were clearly contradicting claims of the host universities. For instance, C tried to look for the local community involvement program, since he heard about its existence. But in his attempts to join it, he was only sent from one section to another and could not find information about the service anywhere. He felt that the staff members were cold and looked down on international students, and also their attitude towards their job was not very enthusiastic. C said:

> I have been doing community volunteer work in Japan and I looked forward to doing it also while in abroad. Before departure, I had information that the university would introduce us to community involvement activities, but actually, I went to ask many sections, and they said 'not here' every time and sent me to other places [...].in the end I had enough of it.

C also mentioned that the staff attitude was very unpleasant:

> "Asking questions to the staff member, they do this (the gesture of shrugging their shoulders) [...] besides, they pretended that they don't understand my English, of course my English was not so good but I was sure they didn't try [...] I was so frustrated [...]."

> "Basically, they were not in the office, the office closed very early and I have never seen that they are doing extra work like our staff (in Japan)! I wanted to tell them to do your job properly!"

Student I also had similarly negative impression about the attitude of the staff.

From the organizational point of view of the university, the meaning of the university support system was a designation of some division of administrative structure as "International Center" and assignment of some staff members to deal with international students. However, for students purely formal creation of an administrative division was not enough. They expected understanding of visitors' needs, friendly, warm atmosphere and dedication of staff members towards their responsibilities.

We should carefully consider the intercultural communication issues, such as differences in cultural values or in communication style when studying support systems for study abroad students. The expectations regarding concepts such as professionalism and the division between private life and work are very different across cultures. Although one of the main goals of study abroad programs is an introduction into a host culture, the support system must take into account that its most important role is to help students in their first steps in a new culture, and therefore home cultures of students cannot be ignored.

Although the level of English language proficiency was relatively high among all informants in this study, they experienced lots of problems in communication. This suggests that simply increasing the requirements of high proficiency in English as the main language of international communication for participants in student exchange is not going to resolve all problems.

The last group of informants belongs to Type 4 of those disinterested in the community involvement. If you do not have any interest or desire to involve in the community, it is obviously not happening. In this case the social environment has a much lower influence on the success of students' study abroad. However, it does not mean that students' perception of the host university should be closer to the

organizational view of university. These students need a good support system, too. Moreover, they may need it more than students who can get support through the involvement in community activities.

Therefore, it is not a surprise that the difference between the view of the universities of their comprehensive support system and perception of students in this group was also very big. In one case of a university in Norway, there was an agreement, in that both sides agreed that the system was absent. There were also differences in the view of particular types of support programs, although students admitted that they did not make much effort in looking for such programs.

There is a legitimate question to what degree the deficiencies in support systems are responsible for the passive attitude of students in this group. If these students had better support systems, they could grow interest in participation in some programs. After all, students of Type 2 did not intend to become involved in the community activities, but they actually got involved and felt happy about this experience. We can only speculate, but for instance in the case of student L, who had lost his interest in community involvement because of his bad experience at the home campus, he could have gotten involved in community activities at his host university if he had known about the program and if he had been sufficiently encouraged to participate in it.

Conclusions and Suggestions for Interventions

As stated before, the preliminary analysis of data showed consistency in the patterns of informant responses with the classification of students into the four types according to two variables: their actual involvement in the community activities during study abroad (two levels of the variable: involved or not involved), and their interest in community involvement (two levels of the variable: prior interest or lack of prior interest). The report summarized in the chart was structured according to these types. However, this structure is in the present paper of secondary character. It can help to detect causal relationships in the subject of the present study.

For instance, I found that the two levels of the variable related to prior interest are not reflected in substantial difference in students' negative perception of the comprehensive support systems in host universities.

This supports the conclusion that the negative view is not the result of the passive type of the personality of students.

The study shows a very high level of consistency among the informants in the negative view of the host university comprehensive support systems. Twelve out of fifteen students differed in their view of the comprehensive support system with their host universities claiming that they provide such systems. Among the three informants whose views were in agreement with their host universities, in one case the agreement was that such system does not exist.

Further analysis showed that the differences in views between students and universities were predominantly caused by the different views of what comprehensive support system means. Organizational view of the universities was that a comprehensive support system consists of administrative division of staff members delegated to deal with international students and a range of specific programs for these students. According to students, the method of operation in such divisions of administration is not much different from functioning of other divisions. Interpreting this in the Ecological Model, universities placed their support system at the level of "organizations", while students expected support systems at the level of "microsystems" that create opportunities for much closer contacts. Staff members dealing with international students frequently do not have any skills beyond those possessed by staff members in other divisions, and they seem to have little training regarding cultural differences, intercultural communication. Sometimes, they lack proficiency in English.

The relatively high consistency of the university view and perceptions of students belonging to Type 1 (those who were interested in community involvement and who actually joined programs of community involvement) confirms the existence of support in specific programs.

But the difference in the view on the comprehensive system of support indicates its shortcomings. Students' negative view cannot be explained by their passive attitude, or lack of engagement and such. This also shows that a comprehensive support system cannot be limited to specific programs but requires some revisions in administrative work of the divisions responsible for international students.

As mentioned above, there is a very clear deficiency in intercultural communication preparation of staff members. Systematic deficiency sometimes can be made up by positive cultural characteristics at the "macro-level". Students are willing to accept messy organization when staff members or local people are friendly and exhibit personal interest in well-being of visitors. However, the organizations should not expect this is a sufficient solution.

Although actual resources or training culture of the host institutions differ at each university, and it might not be easy to develop an appropriate system, staff members should have better knowledge of home cultures and communication styles of international students. Intercultural competency of staff members in international centers of the universities should be also trained in subjects such as cultural differences in values and norms, cultural differences in the concept of professionalism or of adult behavior, in the divisions between private life and professional life, between aggressive and humble attitude, how customer service is valued and well developed, and so on. It is, of course, impossible to train staff members to understand all cultures in the world, but it should be possible to equip staff members with some level of expertise.

On the other hand, students should be better trained in intercultural communication as well. The home university of informants provides intercultural education for students and home campus is authentically international, but it did not prevent the occurrence of problems. Informants knew about cultural differences, but had problems with their habitual reactions.

Why was the intercultural environment of their home campus inefficient in the preparation for study abroad? One of the possible reasons can be identified in the insufficient level of intercultural interaction. Even though the sharing their dormitory room with international students is mandatory for first year Japanese students, and many Japanese students have international classmates before going to study abroad, these forms of interaction are not sufficiently supportive of intercultural understanding and development of intercultural skills. Students themselves, both Japanese and international, complain about limitations in interaction. This shows that there is a need for some forms of intervention, in particular at the

"micro-systems" level, especially for Japanese students before they leave for their study abroad. Some attempts of such interventions have been implemented as a part of the class (Abe, 2009b), but their scale was limited to a relatively small number of students. The collaborative method of institution level should be developed.

Also, preparation of students for study abroad should include practical experiences in the form of training such as intercultural simulations. There are some examples of such interventions. Tanaka (2007) implemented an intercultural social skills training, and Takahama & Tanaka (2012) developed such type of training, which focused on Japanese students who would be going to the United States. This might not be suitable for all students, but already implemented types of training can be revised and adapted to the needs of students from other institutions and with other destinations of study abroad.

The patterns of differences between student perceptions grouped into four types in this study shows that the community involvement, planned or not, is the main factor in students' perceptions, in particular of the comprehensive support systems, but also of specific programs. While students classified in the first two types (planned or not planned community involvement) were strongly critical about the comprehensive support system, students classified in the third or fourth type (no actual community involvement) with one exception made categorical statements of the non-existence of a comprehensive system, and therefore their view was more negative.

We can conclude that the actual community involvement was an important compensatory factor in their study experience in absence of a satisfactorily functioning comprehensive support system. This can be used for the suggestion to expand utilization of community involvement as a means to support study abroad students. This could be an important role of the comprehensive support systems in the host universities.

Finally, we can reiterate the suggestion made in reference to students classified in the fourth type that the role of comprehensive support systems should include better dissemination of information about the opportunities provided by support programs and better encouragement to participate in these programs.

References

Abe, Yuko. “Methods of community psychology in fostering adaptation of international students at Japanese universities. “ *AIU Global Review,* 1(2009a):40-44.

Abe, Yuko “Practice Based Innovation in Course Design: Reflection on the Development of a Course Fostering Authentic Intercultural Relationships.“ *Journal of multilingual multicultural studies and practices,* 2(2009b):70 -85.

Abe, Yuko. “Creating authentic Japanese language environment for international students: an application of community psychology to language learning pedagogy. “*AIU Global Review,* 2(2010):234-245.

Abe, Yuko. “Japanese year abroad students’ community involvement: An attempt of qualitative analysis based on interview method.“ *Japanese Journal of Community Psychology,* 16(2) (2013):178-192.

Bronfenbrennner, Urie. *The ecology of human development.* Harvard: Harvard University Press, 1979.

Dalton, James H., Elias, Maurice J. & Wandersman, Abraham, *Community Psychology: Linking Individuals and Communities.* Stamford, CT: Thomson Learning, 2001.

Durlak, Joseph. & Wells, Anne M. “Primary prevention mental health programs for children and adolescents: A meta-analytic review.” *American Journal of Community Psychology.* 25(1997):115-151.

Kelly, James G. “Ecological constraints on mental health services. “ *American Psychologist,* 21(1966):535-539.

Trickett, Edison, Kelly, James G., & Todd, David M. “The social environment of the school: Guidelines for individual change and organizational redevelopment.” In S. Golann & C. Eisdorfer (Eds.), *Handbook of Community Mental Health,* (1972) 351-406. New York: Appleton-Century-Crofts.

Tanaka,Tomoko. “Social skills as cross-cultural correspondence ability of hosts for enhancing interpersonal relationship formation.” 2007 https://kaken.nii.ac.jp/d/p/ 16530403.ja.html Accessed December 28, 2014.

Takahama, Ai. & Tanaka, Tomoko. “Lifestyle of Japanese students in the U.S. who had taken the American social skills learning session before their stay in the U.S. focusing on interpersonal

behavior and relationships." *International Communication Research*, 24(2012):41-63.

A Corpus-Based Analysis of Non-Standard Polite Forms of Verbs in English, Chinese, and Korean Learners of Japanese[1]

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Abstract: This article examines the use of non-standard polite forms of verbs by L2 learners of Japanese, using a cross-sectional spoken learner corpus called KY-corpus. It demonstrates that semi-polite verbs, which are made up of plain forms of verbs plus the polite copula *desu*, develop over ACTFL-OPI proficiency scales by forming a conjugational paradigm that consists of affirmative non-past, affirmative past, negative non-past, and negative past forms, with no indication of L1 transfer. The complete paradigm appears in the utterance of learners with advanced level proficiency. The study also shows a comparison of the development of the semi-polite verbs with that of standard polite verbs or other non-standard polite expressions, and proposes a hypothesis about acquisition and the order of development of a variety of polite expressions. Based on the result of this study, I attempt to account for the reason why L2 learners can acquire and develop paradigmatic uses of the semi-polite verbs.

Keywords: polite forms, semi-polite verbs, proficiency, paradigmatic development

1. Introduction

In Japanese, two speech styles, polite and plain, are grammatically encoded as polite and plain forms of predicates, respectively. All types

[1] This article is largely based on my oral presentation at International Conference on Japanese Language Education (ICJLE) Nagoya 2012 (Horiuchi, 2012b), and partly based on Horiuchi (2012a).

of predicates such as copulas, adjectives and verbs have both polite and plain forms to distinguish those styles. For example, a verb like *kak-* 'to write' is associated with the standard paradigms of polite and plain forms, as shown in Table 1 and 2.

Table 1: The paradigm of the standard polite forms of verbs

Polite V	Affirmative	Negative
Non-past	*kak-imas-u*	*kak-imas-en*
Past	*kak-imas-ita*	*kak-imas-en des-ita*

Table 2: The paradigm of the standard plain forms of verbs

Plain V	Affirmative	Negative
Non-past	*kak-u*	*kak-ana-i*
Past	*kai-ta*	*kak-ana-katta*

The standard polite forms of verbs consist of the stem of a verb such as *kak-* ('to write'), which is followed by the polite verbal suffix, *-(i)mas-*, which is, in turn, followed by tense markers such as *-u* (non-past) and *-(i)ta* (past), or by a negative morpheme *-en*. The negative past is marked by a periphrastic form, a combination of the negative morpheme and the past-tense form of polite copula, *des-(i)ta*.[2] Regarding the standard plain forms of verbs, they are made up of the stem of a verb, which is followed by tense markers such as *-u* (non-past) and *-(i)ta* (past). Their negative forms involve the negative adjectival suffix, *-(a)na(i)*, which is, in turn, realized as *-anai* (non-past) or *-ana-katta* (past).

Though those styles, polite and plain, are canonically distinguished in all Japanese predicates, current linguistic studies have revealed the fact that copulas and adjectival predicates can be used with new variants of negative polite forms (or ***nai desu* forms**). They contain a negative adjective *nai* (cf. Bloch, 1946), which is used in plain forms of predicates, and the non-past tense form of polite copula, *desu* (Fukushima and Uehara, 2001, 2004; Hudson, 2008; Kawaguchi, 2010; Kobayashi, 2005; Noda, 2004; Tanomura, 1994; Uehara and Fukushima, 2008). Some studies suggest that the *nai desu* forms of adjectives or copulas are currently more prevalent than the standard negative polite counterparts, especially, in casual conversational

[2] Otoguro (2007) proposes a formal account of the periphrastic form of negative past polite verbs.

settings (Fukushima and Uehara, 2001, 2004; Kobayashi, 2005; Noda, 2004; Uehara and Fukushima, 2008).
Furthermore, some of the above-mentioned studies also reveal the fact that native speakers of Japanese use *nai desu* forms of negative polite verbs as frequently as their standard polite counterparts (or ***masen* forms**), in conversational settings, as shown in Table 3 (Fukushima and Uehara, 2001, 2004; Uehara and Fukushima, 2008).

Table 3. The paradigm of polite verbs with new variations[3]

	Affirmative	Negative	
Non-past	*V-mas-u* POL-NPST/AFF	(i) *V-mas-en* POL-NEG	(ii) *V-nai-desu* NEG-POL
Past	*V-mashi-ta* POL-PAST	(i) *V-mas-en deshi-ta* POL-NEG POL-PAST	(ii) *V-nakat-ta desu* NEG-PAST-POL

However, the other studies suggest that *nai desu* forms of verbs are not used as frequently as *masen* forms in written texts (Hudson, 2008; Noda, 2004; Tanomura, 1994). In addition, *nai desu* forms tend not to be chosen as 'standard' forms of negative polite verbs in popular Japanese language textbooks, grammar reference books, and the former JLPT Test Content Specifications.[4] Even in a textbook like Genki (2nd ed.), which adopts *nai desu* forms of copulas and adjectives, the *nai desu* forms of negative polite verbs are treated as 'substandard' in a footnote.[5]

Despite the fact that *nai desu* forms are not treated as standard negative polite verbs in written texts or in Japanese language teaching, Hudson (2008) and Martin (1976) observe the following native

[3] A list of symbols used in this paper is summarized as follows; AFF: affirmative, COP: copula, NEG: negative, NPST: non-past tense, PAST: past tense, POL: polite, SFP: sentence-final particle, and TOP: topic.
[4] I made reference to *Minna no Nihongo* (1998, 3A Corporation), *Genki* 2nd ed. (2011, The Japan Times), Iori et.al. (2000), Ichikawa (2005), Yoshikawa (1989), as well as The Japan Foundation & Association of International Education (2002). According to Uehara & Fukushima (2008), other popular textbooks that were published before 1990 list only (i) variants of negative polite copulas. Among them, Japanese: The Spoken Language (1987, Yale University Press,), An Introduction to Modern Japanese (1977, The Japan Times), and A Course in Modern Japanese (1983, Nagoya University Press) list (i) variants of negative polite adjectives as well as (ii) variants.
[5] Only *masen* forms were used for negative polite verbs in other popular textbooks that were published before 1990 (Uehara & Fukushima, 2008).

speakers' uses of negative and affirmative forms of substandard polite verbs which consist of plain forms of verbs followed by a polite copula '*desu*' (hereafter, following Hudson, I call the substandard polite verbs '**semi-polite verbs**').

(1) Examples of semi-polite forms of verbs in L1 learners' utterances.

a. Affirmative/Non-past:
kaeru *desu*
go.home COP.NPST
"(I) go home." (Martin, 1976)

b. Affirmative/Past:
watashi *ni* *wa* *kikime* *at-ta* *desu* *nee.*
I for TOP effect have-PAST COP.NPST SFP
"(it) had an effect on me." (Hudson 2008)

c. Negative/Non-past:
doositeka *wakar-anai* *desu* *ga.*
why know-NEG COP.NPST SFP
" (I) do not know why, but ….." (Hudson, 2008)

d. Negative/Past:
ano koro *wa* *mada* *zenzen sira-nakatta* *desu.*
those days TOP yet at all know-NEG.PAST COP.NPST
"(I) didn't know that at all in those days." (Hudson, 2008)

Investigating the semi-polite verbs in Japanese, Hudson (2008) proposes a hypothesis that a new type of polite style, the **semi-polite style**, has currently been established or has emerged in the Japanese language (cf. Uehara and Fukushima, 2008). That is, she claims that the following paradigm has been added to the conjugational system relevant to the distinction among styles in Japanese.[6]

Table 4. The paradigm of semi-polite forms of verbs

	Affirmative	Negative
Non-past	*V-u desu* AFF/NPST POL	*V-na-i desu* NEG-NPST POL
Past	*V-ta/da desu* AFF/PAST POL	*V-nakat-ta desu* NEG-PAST POL

[6] The integration of polite markers into *desu* is predicted as prospective polite morphology in Japanese by Inoue (1998) in his observation of historical change of Japanese polite expressions.

In addition to the native speakers' uses of semi-polite verbs, L2 learners of Japanese happen to use the semi-polite verbs, which are observed by Noda (2001), Sakoda (2012), and Kawaguchi (2006), as follows.

(2) Examples of semi-polite verbs is L2 learners' utterances

a. *nihon ni korareta desu ne.*
Japan to COME.POT.PAST COP.NPST SFP
"(I) could come to Japan." (Noda 2001: p. 46)

b. *deki-nai to omou desu yo ne.*
can.do-NEG comp think COP.NPST SFP SFP
"(I) think that (I) cannot do (it)." (Sakoda 2012: p. 119)

c. ookii *miti wa toor-anai desu ne.*
big road TOP pass-NEG COP.NPST SFP
" (I) do not go through a wide road." (Kawaguchi 2006: p.17)

Although the semi-polite verbs do not seem to be explicitly and formally taught in classrooms, their use can be observed in L2 learners' utterances as above. This fact leads to the following questions: How could L2 learners acquire such semi-polite verbs without any formal instruction? How often and when do they use the verbs? Is the occurrence of the verbs taken as a simple error (or mistake) or as an output of the grammar systematically internalized by the L2 learners? Is the occurrence affected by L1 interference or observed by L2 learners in general? Are there other types of non-standard polite expressions? How do they coexist with standard polite verbs as in Table 1? To answer these questions, I examine the occurrence of semi-polite verbs in Japanese, based on a spoken learner corpus called KY-corpus.

This article is organized as follows. In the next section, I will summarize previous studies on the occurrence of non-standard polite verbs in L2 data. In section 3, the method of this study is presented. The results demonstrate the paradigmatic development of semi-polite verbs in section 4. The section 5 presents some analyses of the L2 use of standard and non-standard polite expressions by answering the above-mentioned questions.

2. Some studies on the occurrence of semi-polite verbs

In this section, I will provide an overview of previous studies on the

occurrence of semi-polite verbs in L2 data, and delimit the goal and the object of this study.

There have been relatively few studies on L2 acquisition of semi-polite verbs. Nevertheless, Noda (2001) and Sakoda (2012) examined a few examples as part of their studies[7]. Explaining the reasons behind semi-polite uses of Japanese by L2 learners, Noda (2001) claims that the affirmative past-tense forms of semi-polite verbs such as *kai-ta desu* ("wrote") are produced due to rationalization of the conjugational system by L2 learners of Japanese as well as a colloquial use of such verbs by native speakers of Japanese. The rationality of the affirmative past semi-polite verbs is based on the following three reasons: 1) they have a unified polite marker *desu* (i.e., standard polite forms use another polite marker *masu*, which is used for verbs only), 2) they involve a simpler rule for polite forms such as the combination of a non-polite (or plain) form of verb plus a polite marker *desu* (i.e., one cannot find a non-polite portion in standard polite forms), and 3) they reflect the general word order in Japanese in that an element signaling tense precedes an element signaling listener-oriented modality such as sentence-final particles (i.e., standard polite forms use a reverse word order).

Investigating strategic schemes in communication behind non-standard uses of Japanese by L2 learners, Sakoda (2012: 116-120) argues that the semi-polite verbs such as *omow-u desu* ("(I) think") or *omow-ta desu*[8] ("thought") are produced as an interlanguage form of a transitional stage to the so-called *-no desu* form such as *omowu-no desu* or *omow-ta-no desu*, which involves a plain form of predicate followed by a nominalizer *-no* plus an invariable form of polite copula, *desu*.

In addition to the above studies, Kawaguchi (2006) studied the L2 acquisition of a negative form of the semi-polite verbs (i.e., V-*nai*

[7] Kanazawa (2008) examined the use of polite forms, *-masu* and *-desu*, by L2 classroom learners and by non-native speakers who acquired Japanese without formal instructions, though it focuses on only those limited polite expressions.

[8] The plain forms of verbs whose stems end with a consonant /w/ must alter the consonant with /t/ when a past tense morpheme *-ta* is followed. In case of *omow-* (to think), the past tense form must be pronounced as *omot-ta* instead of *omow-ta*.

desu), in comparison with the negative form of the standard polite verbs (i.e., V-*masen*). The result suggests that L2 learners with advanced proficiency tend to use V-*nai desu* forms rather than V-*masen* forms.

Though those studies take interesting views on the use of semi-polite verbs by L2 learners, they are based on a limited number or form of examples, and fail to observe a systematic use of the semi-polite verbs that involves basic conjugation forms such as non-past affirmative, past affirmative, and non-past negative, and past negative. In this study, however, I will try to reveal the actual use of semi-polite verbs by observing a larger body of data and dealing with a paradigm of the verbs' conjugation forms, testing the following hypothesis.

- Hypothesis: L2 learners of Japanese develop paradigmatic uses of semi-polite verbs

Furthermore, no studies have observed other variants of polite verbs in Japanese, which are produced by L2 learners. The present article deals with those variants as well as semi-polite verbs.

3. Methods

3.1 Data

In this section, the method of this study is presented. First of all, this study used a spoken learner corpus called KY-Corpus, a collection of data which are elicited from ACTFL Oral Proficiency Interviews with L2 learners of Japanese who speak English, Chinese, or Korean as their first languages. It includes 90 interview data per each L1 group that are evenly collected from each sublevel of the ACTFL-OPI scale as shown in Table 5 (i.e., Novice-low/mid/high, Intermediate-low/mid/high, Advanced-low/mid/high, Superior).

The data set of the KY-Corpus is available as plain text files. Also, it is stored in an online corpus analysis tool called Tagged KY-Corpus, which includes search options such as proficiency levels, first languages, parts of speech, semantic classification, morphological units, grammaticality, as well as word search. [9]

[9] Tagged KY Corpus is available online (http://jhlee.sakura.ne.jp/kyc/).

Table 5: Data collected in KY Corpus

Level \ L1	English	Chinese	Korean
Novice	5	5	5
Intermediate	10	10	10
Advanced	10	10	10
Superior	5	5	5
Subtotal	30	30	30
Total	90		

3.2 Procedures

This study followed these steps: 1) searching individual word forms that constitute a paradigm of semi-polite verbs from Novice to Superior for each L1 group, 2) counting the number of the semi-polite verbs and filling each cell of a paradigm table with the number, 3) analyzing the development of semi-polite verbs on the basis of the facts regarding whether or how they form paradigms.

3.2.1 Word Search

First, I searched possible word forms associated with semi-polite verbs. The input forms for the word search can be determined in the following way.

(3) Formal properties of semi-polite verbs for word search:

a. Affirmative Non-past: Type *desu* (“です”) following one of the syllables such as /wu/ (う), /tsu/ (つ), /ru/(る), /nu/ (ぬ), /mu/ (む), /bu/ (ぶ), /ku/ (く), /gu/ (ぐ), /su/ (す).
b. Affirmative Past: Type *desu* (“です”) following either of the syllables /ta/ (た) or /da/ (だ).
c. Negative Non-past: Type *desu* (“です”) following the negative adjectival suffix /nai/ (ない).
d. Negative Past: Type *desu* (“です”) following the past tense form of negative adjectival suffix /nakatta/ (なかった).

Though the word search as above could match desired output forms in many cases, I removed some noises, which coincidentally emerged from the output of the search, by means of visual inspection. In particular, I removed past-tense forms of adjectival expressions out of

the output expressions which result from the operation (3b), since the input letter sequences like *-ta desu* (たです) or *-da desu* (だです) are contained in past-tense forms of adjectival expressions like *taka-katta desu* ("(it) was high" たかかったです), of adjectival suffixes like *tabe-ta-katta desu* ("(I) wanted (to eat it)" 食べたかったです), or of negative past forms like *tabe-nakatta desu* ("(I) did not eat (it)" 食べなかったです).

As tools for word search, I used a text editor called *Hidemaru* editor as well as the Tagged KY corpus.

3.2.2 Number Counting

Next, I counted the number of semi-polite verbs produced by each subgroup of L2 learners classified by proficiency levels and first languages (L1). Each cell of a paradigm table (see Table 4) was filled with the number of occurrences. For semi-polite verbs that consist of a plain form of verb followed by a polite copula *desu*, each cell of the following table is filled with number of occurrences.

3.2.3 Criteria for paradigmatic development

In this study, "development" means the formation or completion of a conjugation paradigm. One can identify whether/when learners develop semi-polite verbs, based on whether/when each of the paradigm cells is filled with a number more than 0.

3.2.4 Comparison with other non-standard polite expressions

Table 6: The defective paradigm table for *–mas- desu* forms

	Non-past	Past
Affirmative	*V-mas-u desu*	*V-mas-ita desu*
Negative	*V-mas-en desu*	*? V-mas-en des-ita desu*

Whereas this study mainly focuses on semi-polite verbs as in (1) and (2), I investigated three other non-standard polite expressions. One of them is a group of verb forms that include a polite verbal suffix *masu* followed by an invariant form of polite copula *desu* (hereafter, I call them **V-*mas- desu* forms**). For instance, these verb forms are instantiated like *kak-i-mas-u-desu* (affirmative, non-past), *kak-i-mas-en-desu* (negative, non-past), and *kak-i-mas-i-ta desu* (affirmative,

past) for a verb such as *kak-* "to write". Since they lack negative past forms due to the lack of negative past forms of a polite verbal suffix *masu*[10], they cannot be identified with fully inflected verbs, but can be taken as forming a defective paradigm in the sense that there is a missing cell associated with a conjugational paradigm (cf. Baerman, Corbett, and Brown 2010; Haspelmath and Sims, 2010).

Another type of non-standard polite expressions are so-called *no desu* forms of verbs, which involve plain forms of verbs followed by a nominalizer *no* and a copula *desu*. The ***no desu* forms** are not purely polite expressions, since they convey not only a sense of politeness but also various modal meanings such as explanation or emotion (Kuno 1973, Makino and Tsutsui 1986). Nevertheless, they are included as a non-standard polite expression. Their paradigm table is shown below.

Table 7: The paradigm table for *no desu* forms

	Non-past	Past
Affirmative	*V-u/ru no desu/da*	*V-ta/da no desu/da*
Negative	*V-nai no desu/da*	*V-nakatta no desu/da*

One more type of non-standard polite expressions are **hybrid forms** which fuse V-*mas- desu* forms and *no desu* forms. Instead of plain forms of verbs, standard polite forms of verbs are followed by *no desu* forms as follows.

Table 8: The defective paradigm table for hybrid polite forms

	Non-past	Past
Affirmative	*V-mas-u n desu*	*V-mas-ita n desu*
Negative	*? V-mas-en n desu*	*? V-mas-en des-ita n desu*

For the same reason as V-*mas- desu* forms, the hybrid polite forms cannot have their negative past forms. In addition, they do not seem to have negative non-past forms, either, perhaps due to a phonological constraint that avoids a series of nasal /n/ sounds, which arise when a non-past negative polite form (i.e., *-masen*) is immediately followed by a nominalizer *no*.

[10] That is, the negative past forms of *mas-* are periphrastic forms that combine the negative form of *mas-* (i.e. *masen*) with the past-tense form of polite copula (i.e., *desita*).

3.2.5 Comparison with standard polite verbs

For the sake of comparison, I counted the occurrence of each conjugational form of standard polite verbs as shown in Table 1.

4. Results

In what follows, I will show tables that include the number of occurrences of each member in an alleged paradigm for semi-polite verbs, V-*mas*- *desu* forms, *no desu* forms, and hybrid forms. The number of occurrences is shown in parentheses. A dark shaded region of a paradigm indicates that all of the members in a paradigm occur at least once or more. That is, it signals a L2 development of paradigmatic use of non-standard polite verbs. A lightly shaded region of a paradigm indicates a 'defective paradigm' which involves a cell for a missing conjugational form (cf. 3.2.4). I omitted a paradigm table in which no cell was occupied.

4.1 Occurrence of semi-polite verbs

Table 9 shows the occurrence of semi-polite verbs produced by L2 learners of Japanese who speak English, Chinese, and Korean as L1, respectively. It demonstrates that the paradigmatic use of semi-polite verbs develops at Advanced levels for English-speaking learners and Korean-speaking learners, and at Intermediate and Advanced levels for Chinese-speaking learners. That is, it suggests that L2 learners of Japanese generally tend to develop the paradigmatic use of semi-polite verbs at an Advanced level, though some might develop it earlier.

Table 10 is a summary of all learners' use of semi-polite verbs. It reflects the above-mentioned generalization. Also, one can observe the outstanding use of negative non-past forms.

Table 9: Occurrence of semi-polite verbs in each L1 group

English-speaking learners' semi-polite verbs		
Novice	Non-past	Past
Affirmative	*V-u/ru desu (0)*	*V-ta/da desu (0)*
Negative	*V-nai desu (2)*	*V-nakatta desu (0)*
Intermediate	Non-past	Past
Affirmative	*V-u/ru desu (0)*	*V-ta/da desu (1)*
Negative	*V-nai desu (10)*	*V-nakatta desu (2)*
Advanced	Non-past	Past
Affirmative	*V-u/ru desu (3)*	*V-ta/da desu (1)*
Negative	*V-nai desu (22)*	*V-nakatta desu (2)*
Superior	Non-past	Past
Affirmative	*V-u/ru desu (0)*	*V-ta/da desu (3)*
Negative	*V-nai desu (21)*	*V-nakatta desu (0)*
Chinese-speaking learners' semi-polite verbs		
Intermediate	Non-past	Past
Affirmative	*V-u/ru desu (5)*	*V-ta/da desu (1)*
Negative	*V-nai desu (46)*	*V-nakatta desu (2)*
Advanced	Non-past	Past
Affirmative	*V-u/ru desu (4)*	*V-ta/da desu (5)*
Negative	*V-nai desu (43)*	*V-nakatta desu (2)*
Superior	Non-past	Past
Affirmative	*V-u/ru desu (3)*	*V-ta/da desu (1)*
Negative	*V-nai desu (7)*	*V-nakatta desu (0)*
Korean-speaking learners' semi polite verbs		
Novice	Non-past	Past
Affirmative	*V-u/ru desu (0)*	*V-ta/da desu (0)*
Negative	*V-nai desu (4)*	*V-nakatta desu (0)*
Intermediate	Non-past	Past
Affirmative	*V-u/ru desu (5)*	*V-ta/da desu (0)*
Negative	*V-nai desu (16)*	*V-nakatta desu (3)*
Advanced	Non-past	Past
Affirmative	*V-u/ru desu (4)*	*V-ta/da desu (1)*[11]
Negative	*V-nai desu (35)*	*V-nakatta desu (2)*
Superior	Non-past	Past
Affirmative	*V-u/ru desu (0)*	*V-ta/da desu (0)*
Negative	*V-nai desu (7)*	*V-nakatta desu (0)*

[11] I found only one example of V-*ta desu* (i.e., *haitta desu* "entered") in the text data of KA03's utterance, though Tagged KY-corpus cannot find it.

Table 10: All learners' semi-polite verbs

Novice	Non-past	Past
Affirmative	*V-u/ru desu (0)*	*V-ta/da desu (2)*
Negative	*V-nai desu (6)*	*V-nakatta desu (4)*
Intermediate	Non-past	Past
Affirmative	*V-u/ru desu (10)*	*V-ta/da desu (2)*
Negative	*V-nai desu (72)*	*V-nakatta desu (7)*
Advanced	Non-past	Past
Affirmative	*V-u/ru desu (11)*	*V-ta/da desu (7)*
Negative	*V-nai desu (100)*	*V-nakatta desu (6)*
Superior	Non-past	Past
Affirmative	*V-u/ru desu (3)*	*V-ta/da desu (4)*
Negative	*V-nai desu (14)*	*V-nakatta desu (0)*

4.2 Occurrence of other non-standard polite expressions (1): V-*mas- desu*

Table 11: Occurrence of V-*mas- desu* in each L1 group

English-speaking learners' V-*mas- desu*		
Novice	Non-past	Past
Affirmative	*V-mas-u desu (2)*	*V-mas-ita desu (1)*
Negative	*V-mas-en desu (0)*	*?V-mas-en des-ita desu (0)*
Intermediate	Non-past	Past
Affirmative	*V-mas-u desu (0)*	*V-mas-ita desu (0)*
Negative	*V-mas-en desu (3)*	*? V-mas-en des-ita desu (0)*
Chinese-speaking learners' V-*mas- desu*		
Novice	Non-past	Past
Affirmative	*V-mas-u desu (0)*	*V-mas-ita desu (0)*
Negative	*V-mas-en desu (4)*	*? V-mas-en des-ita desu (0)*
Intermediate	Non-past	Past
Affirmative	*V-mas-u desu (2)*	*V-mas-ita desu (0)*
Negative	*V-mas-en desu (8)*	*? V-mas-en des-ita desu (0)*
Advanced	Non-past	Past
Affirmative	*V-mas-u desu (0)*	*V-mas-ita desu (0)*
Negative	*V-mas-en desu (1)*	*? V-mas-en des-ita desu (0)*
Korean-speaking learners' V-*mas- desu*		
Intermediate	Non-past	Past
Affirmative	*V-mas-u desu (0)*	*V-mas-ita desu (0)*
Negative	*V-mas-en desu (3)*	*? V-mas-en des-ita desu (0)*
Advanced	Non-past	Past
Affirmative	*V-mas-u desu (0)*	*V-mas-ita desu (0)*
Negative	*V-mas-en desu (5)*	*? V-mas-en des-ita desu (0)*

Table 11 shows the occurrence of V-*mas- desu* forms, one of the non-standard polite expressions, produced by L2 learners of Japanese who speak English, Chinese, and Korean as L1, respectively. It demonstrates that L2 learners do not develop the paradigmatic use of V-*mas- desu* forms, unlike the case of semi-polite verbs.

Table 12: All learners' V-*mas- desu*

Novice	Non-past	Past
Affirmative	*V-mas-u desu (2)*	*V-mas-ita desu (1)*
Negative	*V-mas-en desu (4)*	*?V-mas-en des-ita desu (0)*
Intermediate	Non-past	Past
Affirmative	*V-mas-u desu (2)*	*V-mas-ita desu (0)*
Negative	*V-mas-en desu (14)*	*?V-mas-en des-ita desu (0)*
Advanced	Non-past	Past
Affirmative	*V-mas-u desu (0)*	*V-mas-ita desu (0)*
Negative	*V-mas-en desu (6)*	*?V-mas-en des-ita desu (0)*

Table 12 is a summary of all learners' use of V-*mas- desu* forms. Though each L1 group does not develop the paradigmatic use of the forms mentioned above, L2 learners as a whole might develop a 'defective' paradigm at the level of Novice. The lightly shaded region indicates the defective paradigm, which involves a paradigm cell for a missing conjugational form (i.e., Negative Past). In addition, the occurrence of negative non-past forms alone increases.

4.3 Occurrence of other non-standard polite expressions (2): *-no desu* forms

Table 13 shows the occurrence of another type of non-standard polite expressions called *no desu* forms, which are produced by L2 learners of Japanese who speak English, Chinese, and Korean as L1, respectively. It demonstrates that the paradigmatic use of *no desu* forms develops at Advanced and Superior levels for each L1 group. No occurrence of the forms can be observed at Novice and Intermediate in Chinese-speaking learners' data and at Novice in Korean-speaking learners' data. It could therefore be generalized that L2 learners of Japanese suddenly develop the paradigmatic use of *no desu* forms at the level of Advanced and Superior.[12]

[12] Yamauchi (2009) examines only affirmative non-past variants of *–no desu* forms and comes to the same conclusion.

Table 13: Occurrence of *no desu* forms in each L1 group

English-speaking learners' *no desu* forms		
Novice	Non-past	Past
Affirmative	*V-u/ru no desu/da (1)*	*V-ta/da no desu/da (0)*
Negative	*V-nai no desu/da (0)*	*V-nakatta no desu/da (0)*
Intermediate	Non-past	Past
Affirmative	*V-u/ru no desu/da (1)*	*V-ta/da no desu/da (0)*
Negative	*V-nai no desu/da (0)*	*V-nakatta no desu/da (0)*
Advanced	Non-past	Past
Affirmative	*V-u/ru no desu/da (133)*	*V-ta/da no desu/da (40)*
Negative	*V-nai no desu/da (31)*	*V-nakatta no desu/da (4)*
Superior	Non-past	Past
Affirmative	*V-u/ru no desu/da (77)*	*V-ta/da no desu/da (26)*
Negative	*V-nai no desu/da (17)*	*V-nakatta no desu/da (2)*
Chinese-speaking learners' *no desu* forms		
Advanced	Non-past	Past
Affirmative	*V-u/ru no desu/da (71)*	*V-ta/da no desu/da (45)*
Negative	*V-nai no desu/da (29)*	*V-nakatta no desu/da (4)*
Superior	Non-past	Past
Affirmative	*V-u/ru no desu/da (92)*	*V-ta/da no desu/da (26)*
Negative	*V-nai no desu/da (24)*	*V-nakatta no desu/da (1)*
Korean-speaking learners' *no desu* forms		
Intermediate	Non-past	Past
Affirmative	*V-u/ru no desu/da (9)*	*V-ta/da no desu/da (0)*
Negative	*V-nai no desu/da (0)*	*V-nakatta no desu/da (0)*
Advanced	Non-past	Past
Affirmative	*V-u/ru no desu/da (160)*	*V-ta/da no desu/da (57)*
Negative	*V-nai no desu/da (69)*	*V-nakatta no desu/da (11)*
Superior	Non-past	Past
Affirmative	*V-u/ru no desu/da (220)*	*V-ta/da no desu/da (48)*
Negative	*V-nai no desu/da (37)*	*V-nakatta no desu/da (4)*

Table 14 is a summary of all learners' use of *no desu* forms. It reflects the above-mentioned generalization. Particularly, one may notice the sudden increase of each conjugational form in number after Advanced levels.

Table 14: All learners' *no desu* forms

Novice	Non-past	Past
Affirmative	*V-u/ru no desu/da (1)*	*V-ta/da no desu/da (0)*
Negative	*V-nai no desu/da (0)*	*V-nakatta no desu/da (0)*
Intermediate	Non-past	Past
Affirmative	*V-u/ru no desu/da (10)*	*V-ta/da no desu/da (0)*
Negative	*V-nai no desu/da (0)*	*V-nakatta no desu/da (0)*
Advanced	Non-past	Past
Affirmative	*V-u/ru no desu/da (364)*	*V-ta/da no desu/da (142)*
Negative	*V-nai no desu/da (129)*	*V-nakatta no desu/da (19)*
Superior	Non-past	Past
Affirmative	*V-u/ru no desu/da (389)*	*V-ta/da no desu/da (100)*
Negative	*V-nai no desu/da (78)*	*V-nakatta no desu/da (7)*

4.4 Occurrence of other non-standard polite expressions (3): hybrid polite forms

The following table shows the occurrence of third type of non-standard polite expressions called hybrid polite forms, which are a mixture of V-*mas- desu* and *-no desu* forms, produced by L2 learners of Japanese who speak English, Chinese, and Korean as L1, respectively.

Table 15 Occurrence of hybrid polite forms in each L1 group

English-speaking learners' hybrid polite forms		
Superior	Non-past	Past
Affirmative	*V-mas-u n desu (3)*	*V-mas-ita n desu (5)*
Negative	*?V-mas-en n desu (0)*	*?V-mas-en des-ita n desu (0)*
Chinese-speaking learners' hybrid polite forms		
Advanced	Non-past	Past
Affirmative	*V-mas-u n desu (0)*	*V-mas-ita n desu (8)*
Negative	*?V-mas-en n desu (0)*	*?V-mas-en des-ita n desu (0)*
Superior	Non-past	Past
Affirmative	*V-mas-u n desu (2)*	*V-mas-ita n desu (4)*
Negative	*?V-mas-en n desu (0)*	*?V-mas-en des-ita n desu (0)*
Korean-speaking learners' hybrid polite forms		
Superior	Non-past	Past
Affirmative	*V-mas-u n desu (1)*	*V-mas-ita n desu (0)*
Negative	*?V-mas-en n desu (0)*	*?V-mas-en des-ita n desu (0)*

At a glance, Table 15 appears to show that L2 learners do not develop the paradigmatic use of hybrid polite forms. However, let us recall that the hybrid polite forms are, at best, associated with a defective paradigm, in which two conjugational forms are difficult to realize (i.e., Negative Non-past and Negative Past). If this is the case, it can be argued that occurrence of both Affirmative Non-past and Affirmative Past forms signals the development of paradigmatic use of the hybrid polite forms. Following this logic, one can generalize that the paradigmatic use of hybrid polite forms develops at the level of Superior for English-speaking and Chinese-speaking learners. The lightly shaded region indicates a defective paradigm. No occurrence of the forms was observed at Novice, Intermediate, and Advanced in English- and Korean-speaking learners' utterances and at Novice and Intermediate in Chinese-speaking learners' utterances.

Table 16 is a summary of all learners' use of hybrid polite forms. It reflects the above-mentioned generalization.

Table 16 All-learners' hybrid polite forms

Advanced	Non-past	Past
Affirmative	*V-mas-u n desu (0)*	*V-mas-ita n desu (8)*
Negative	*?V-mas-en n desu (0)*	*?V-mas-en des-ita n desu (0)*
Superior	Non-past	Past
Affirmative	*V-mas-u n desu (6)*	*V-mas-ita n desu (9)*
Negative	*?V-mas-en n desu (0)*	*?V-mas-en des-ita n desu (0)*

4.5 Occurrence of standard polite verbs

Lastly, the following set of tables shows the occurrence of standard polite verbs produced by all L2 learners of Japanese, which are sub-classified by L1 groups and proficiency levels.

Table 17 All learners' use of *masu* (Affirmative, Non-past)

masu	Novice	Intermediate	Advanced	Superior	Total
English	83	350	384	216	1033
Chinese	93	479	524	244	1340
Korean	80	325	328	152	885
Total	256	1154	1236	612	3258

Table 18: All learners' use of *masen* (Negative, Non-past)

masen	Novice	Intermediate	Advanced	Superior	Total
English	26	107	64	21	218
Chinese	18	115	80	51	264
Korean	15	66	76	26	183
Total	59	288	220	98	665

Table 19: All learners' use of *mashita* (Affirmative, Past)

masita	Novice	Intermediate	Advanced	Superior	Total
English	34	211	145	45	435
Chinese	29	148	126	75	378
Korean	43	203	113	26	385
Total	106	562	384	146	1198

Table 20: All learners' use of *masen deshita* (Negative, Past)

masen desita	Novice	Intermediate	Advanced	Superior	Total
English	0	18	8	1	27
Chinese	0	3	2	4	9
Korean	0	2	4	2	8
Total	0	23	14	7	44

As one might expect, the use of standard polite verbs are much more frequent than the use of semi-polite verbs and other non-standard polite expressions. Nevertheless, it is worth mentioning that the use of negative past forms are less frequent than that of other conjugational forms. Interestingly, no L2 learner uses the negative past forms at the level of Novice as in the table 20.

5. Analysis

In this section, I will analyze the result of this study shown in Section 4 by answering several questions raised in Section 1.

- Question 1: How often and when do L2 learners use semi-polite verbs?

The number of occurrences of semi-polite verbs suggests that L2 learners do not use them frequently, in comparison with the use of standard polite verbs. Quantitatively, it would seem that the use of semi-polite verbs is not worth studying, but the study of their paradigmatic use is worthwhile, since analysis implies a systematic development of L2 learners' grammar.

As for the period of the use of non-standard verbs, L2 learners use them paradigmatically at the level of Advanced, though some of them started using some forms earlier than that level. The paradigmatic use ceases at the level of Superior.

(4) Examples of semi-polite forms of verbs in L2 learners' utterances

a. Affirmative/Non-past:

Kekkoo	*atarasiku*	*tukuru*	*desu*	*ne.*
quite	newly	make	COP.NPST	SFP

"(someone) builds (it) quite recently" (EAH01) [13]

b. Affirmative/Past:

nihon	*ni*	*korareta*	*desu*	*ne.*
Japan	to	could come	COP.NPST	SFP

"(I) could come to Japan as an international student." (CAH03)

c. Negative/Non-past:

Densya,	*totemo*	*zikan doori*	*ko-nai*	*desu*
train	not.at.all	on time	come-NEG	COP.NPST

"Trains won't come on time at all." (CAH02)

d. Negative/Past:

Hantai	*wa*	*si-nakatta*	*desu.*
opposition	TOP	do-NEG.PAST	COP.NPST

"(I) did not oppose (it)." (KA05)

It is not easy to identify the reason why L2 learners develop a paradigmatic use of semi-polite verbs at a particular proficiency level, but the fact seems to be related to the development of L2 grammar regarding tense and aspect. Compare the following excerpts from ACTFL Performance Descriptors for Language Learners – Presentational.[14]

(5) a. Advanced: Produces narrations and descriptions in all major time frames on familiar and some unfamiliar topics.

[13] The parenthesized letters and numbers in (4) indicate individual learners. The first letters, E, C, and K correspond to the learner's first language such as English, Chinese, and Korean. The second and third letters stand for language proficiency levels like Novice/Intermediate/Advanced/Superior and for their sublevels like Low/Mid/High.

[14] http://www.actfl.org/sites/default/files/pdfs/PDLL-PresentationalChart.pdf

b. Intermediate: Expresses own thoughts and presents information and personal preferences on familiar topics by creating with language primarily in present time.

As a tense-aspect system in L2 grammar develops at the advanced level, all kinds of predicates including semi-polite verbs begin to be used at that level paradigmatically.

- Question 2: Is the occurrence of the semi-polite verbs taken as a simple error (or mistake) or as an output of the grammar systematically internalized by the L2 learners?

The result of this study suggests that the occurrence of semi-polite verbs is not simply a coincidental error or mistake, but reflects the output of the grammar that L2 learners systematically internalized, since it constitutes a conjugational paradigm. Not individual use but paradigmatic use of verbs can be evidence of a systematic L2 acquisition of verbs.

Here, recall the Hypothesis that I proposed in Section 2: L2 learners of Japanese develop paradigmatic uses of semi-polite verbs. The answer to Question 2 suggests that this hypothesis can be verified by at least a cross-sectional spoken learner corpus data like the KY-Corpus.

In contrast to semi-polite verbs, however, other non-standard polite expressions except for *no desu* forms cannot fully complete their paradigms, so that the occurrence of V-*mas*- *desu* and hybrid forms implies a simple error or mistake.

- Question 3: Is the occurrence of semi-polite verbs affected by L1 interference or observed by L2 learners in general?

There is no significant difference in the occurrence of semi-polite verbs produced by each L1 group. The semi-polite verbs can be acquired by any L2 learners who have different L1 backgrounds. That is, a general mechanism of interlanguage grammar enables L2 learners to acquire or develop the grammar that produce the semi-polite verbs.

- Question 4: Are there other types of non-standard polite expressions?

Yes. There are at least three types of non-standard polite expressions such as V-*mas*- *desu* forms, *no desu* forms, and hybrid forms. L2 learners can develop defective paradigms of V-*mas*- *desu* and hybrid forms at best. The paradigm of *no desu* forms can be developed by L2 learners, but they must be distinguished from the paradigm of semi-polite verbs, since the former is taught or instructed in classrooms as a sentence pattern that is associated with modal meanings such as explanation, but not as a verbal conjugational form that is used to express politeness. Therefore, it is quite natural that L2 learners acquire and develop the paradigm of *no desu* forms. In contrast, the paradigm of semi-polite verbs is not formally taught or instructed in classrooms. It is not natural for L2 learners to acquire or develop such a paradigm.

- Question 5: How do semi-polite expressions coexist with standard polite verbs?

The following table summarizes a paradigmatic development of each type of polite expressions for L2 learners in general.

Table 21: Summary of paradigmatic development of polite expressions

	Novice	Intermediate	Advanced	Superior
Standard polite				
V-*mas*- *desu*				
Semi-polite				
no desu				
Hybrid polite				

Note: Dark shaded regions indicate completion of a paradigmatic table, and lightly shaded ones emergence of a defective/partial paradigm or emergence of a paradigm from a particular L1 group.

Standard polite verbs develop through all levels of proficiency, but they are not used paradigmatically at the level of Novice. A defective paradigm of V-*mas*- *desu* forms emerges at the level of Novice, but it disappears later. Semi-polite verbs develop as a paradigm at the level of Advanced, but the paradigm begins being developed by Chinese-speaking L2 learners at the level of Intermediate. *No desu* forms develop after the level of Advanced. A defective paradigm of hybrid polite forms emerges at the level of Superior.

The summary as above suggests the hypothetical development order of polite expressions shown in Figure 1. In the development order, it is important to note that there is no substantial difference between semi-polite and *no desu* forms. They develop at almost the same proficiency level. This result is incompatible with the result of Sakoda (2012)'s case study. As I mentioned in Section 2, she claims that semi-polite verbs are interlanguage forms that occur *before* the L2 development of *no desu* forms. Contrary to Sakoda's position, I assume an almost *simultaneous* or parallel acquisition of both semi-polite verbs and *no desu* forms, due to almost the same morphological operation, which I will discuss below.

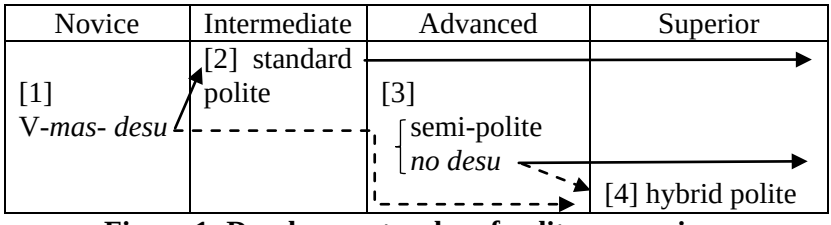

Figure 1: Development order of polite expressions

- Question 6: How could L2 learners acquire such semi-polite verbs, without any formal instruction?

It is probably reasonable to assume that the answer confirms Noda's (2001) hypothesis: the L2 acquisition of semi-polite verbs is attributed to influence of native speakers' expressions and rationalization of the conjugational system by L2 learners (See Section 2).

Although the influence of native speakers' expressions cannot be proven so easily, the possibility cannot be readily dismissed, since the actual use of semi-polite verbs by native speakers has been observed by some linguists like Martin (1976) and Hudson (2008). Furthermore, it can also be observed in a large-scale collection of representative texts of the Japanese language called the Balanced Corpus of Contemporary Written Japanese (BCCWJ).[15] Table 22 shows the number of semi-polite verbs that appeared in BCCWJ until 1999, the last year of a research project for the development of KY-corpus.

[15] In particular, I used the web search tool called *Chunagon* (https://chunagon.ninjal.ac.jp/login).

Table 22: Number of occurence of semi-polite verbs in BCCWJ until 1999

	Affirmative	Negative
Non-past	88	273
Past	66	37

Next, the rationalization of the conjugational system by L2 learners cannot be easily proven either, but at least taken as a feasible account. As I indicated in section 2, Noda defines the rationalization such that semi-polite verbs 1) have a unified polite marker *desu*, 2) involve a simpler rule than that of standard polite forms, and 3) reflect the general word order in Japanese.

This definition seems to be descriptively adequate, but I would like to propose an alternative account that is based on the following set of principles.[16]

(6) The rationality of paradigm: A paradigm of verbal predicates is more rational if it satisfies more conditions out of the following set.
   a. Each paradigm cell associated with a lexeme must be instantiated.
   b. Each paradigm cell associated with a lexeme must be occupied by a single word form.
   c. Word forms that constitute a paradigm are obtained by a simpler morphological operation.
   d. The simpler morphological operation must be applied to all cells of a paradigm equally.

Note that this concept of rationality of paradigm is distinct from that proposed by Noda (2001). What he calls a 'paradigm' is the one that consists of negative past forms of nominal, adjectival, and verbal predicates, but not the one that consists of polarity (affirmative, negative) and tense (past, non-past).

Now, let us compare the L2 learnability of polite expressions in Japanese, based on the rationality of paradigm (6). The paradigms of

[16] Horiuchi (forthcoming) proposes a morpheme-based account of the rationalization of the conjugational paradigm, but it is not incompatible with the lexeme-based account in this article, since the same concept like paradigmatic rationalization is interpreted from different perspectives.

semi-polite verbs and *no desu* forms, which are reproduced below, can be rated as the most rational in light of (6).

Table 4: The paradigm of semi-polite verbs

	Affirmative	Negative
Non-past	*V-u desu* AFF/NPST POL	*V-na-i desu* NEG-NPST POL
Past	*V-ta/da desu* AFF/PAST POL	*V-nakat-ta desu* NEG-PAST POL

Table 7: The paradigm table for *no desu* forms

	Non-past	Past
Affirmative	*V-u/ru no desu/da*	*V-ta/da no desu/da*
Negative	*V-nai no desu/da*	*V-nakatta no desu/da*

Both paradigms satisfy condition (6a), since each cell that constitutes both paradigm tables is associated with a lexeme that realizes (or instantiates) as an actual word form. For instance, the lexeme for a verb like TABERU is realized as *tabe-ru (no) desu*, *tabe-ta (no) desu*, *tabe-nai (no) desu*, and *tabe-nakatta (no) desu*. They also satisfy condition (6b), because there is a sole word form that occupies each cell. Conditions (6c) and (6d) can also be satisfied by those paradigms. The morphological operation associated with each cell is very simple like 'attach *(no) desu* to plain forms', and is applied to all cells.

Next, recall the paradigm of standard polite verbs. It is less rational than semi-polite verbs and *no desu* forms.

Table 23: The paradigm table of standard polite verbs

	Affirmative	Negative
Non-past	*V-mas-u*	*V-mas-en*
Past	*V-mas-ita*	*V-mas-en des-ita*

The paradigm of standard polite verbs satisfies condition (6a), since each cell that constitutes the paradigm table is associated with a lexeme that realizes (or instantiates) as an actual word form. For instance, the lexeme TABERU for a verb like tabe ("to eat") is realized as *tabe-mas-u, tabe-mas-ita, tabe-mas-en*, and *tabe-masen des-ita*. It is hard to tell that the paradigm satisfies condition (6b), because a linguistic change is now in progress. As many researchers point out (Fukushima and Uehara, 2001, 2004; Kobayashi, 2005; Noda, 2004; Uehara and Fukushima, 2008), the use of semi-polite negative forms

(i.e., V-*nai desu*) is becoming popular among native Japanese people and is getting almost as frequent as the use of standard polite verbs. If so, the cells for negative word forms in the paradigm of standard polite verbs can be occupied by two negative counterparts. Conditions (6c) and (6d) cannot be satisfied by those paradigms, either. The morphological operation associated with cells for Affirmative Non-past, Affirmative Past, and Negative Non-past is simple like 'attach a morpheme, which signals a grammatical function, to the stem of polite suffix *-mas-*.' However, the morphological operation associated with the cell for Negative Past is totally different from the one for Affirmative Non-past, Affirmative Past, and Negative Non-past. The former includes at least three operations such as attaching a negative morpheme *-en* to *-mas-*, inserting a polite inflectional copula stem *-des-* that can inflect for tense, and attach a past-tense morpheme *-ita* to the stem *-des-*[17].

Lastly, the defective paradigms for V-*mas- desu* forms and hybrid polite forms, which are reprinted below, are less rational than that of standard polite verbs.

Table 6: The defective paradigm table for V-*mas- desu* forms

	Non-past	Past
Affirmative	*V-mas-u desu*	*V-mas-ita desu*
Negative	*V-mas-en desu*	*?V-mas-en des-ita desu*

Table 8: The defective paradigm table for hybrid polite forms

	Non-past	Past
Affirmative	*V-mas-u n desu*	*V-mas-ita n desu*
Negative	*?V-mas-en n desu*	*?V-mas-en des-ita n desu*

Since those paradigms contain the standard polite verbs as a part of instantiated or realized word forms, Conditions (6c) and (6d) cannot be satisfied. Moreover, they cannot satisfy even conditions (6a) and (6b), since Negative Past of V-*mas- desu* forms (i.e., V-*mas-en des-ita desu*) and Negative Non-past/Past of hybrid polite forms (i.e., V-*mas-en n desu*, V-*mas-en des-ita n desu*) cannot easily be realized as

[17] The vowel /i/ appears as an epenthesis before a past morpheme *-ta/da*, which follows *-mas-* or *-des-*, in order to avoid a sequence of consonants (i.e., **mas-ta* → *mas-i-ta, des-ta* → *des-i-ta*). The same epenthesis occurs if the so-called consonant verbs (i.e. verbs whose stems end with consonant) are followed by -mas- (e.g., *kak-u* 'write': **kak-mas-u* → *kak-i-mas-u*).

natural Japanese expressions. In fact, by using the Balanced Corpus of Contemporary Written Japanese (BCCWJ), I found only 4 examples of V-*mas-en des-ita desu* and no example of V-*mas-en n desu* and V-*mas-en des-ita n desu*, though there are 26 examples of V-*mas-en no desu*, which sounds like a formal, written form.

In sum, in light of the rationality conditions in (6), the paradigms of semi-polite verbs and *no desu* forms are most rational and learnable. The paradigm of standard polite verbs is the second best. The least rational and learnable paradigms are those of V-*mas- desu* forms and hybrid polite forms. Thus, L2 learners can develop the paradigmatic use of semi-polite verbs as well as that of *no desu* forms. In contrast, they cannot fully develop the paradigmatic use of V-*mas- desu* and hybrid polite forms, due to the systematic deficiency of their paradigms. As for the paradigm of standard polite verbs, it is less rational than the paradigms of semi-polite verbs and *no desu* forms, but is still learnable. My speculation about this puzzle is that the learnability is brought about by the effect of formal instruction at an early stage and of sustained learning of the verbs throughout L2 learning periods.

6. Concluding remarks

In this study, I examined the use of semi-polite verbs and compared the result with the use of other non-standard polite expressions and that of standard polite verbs, by using a cross-sectional spoken learner corpus. The result of this study revealed the fact that L2 learners in general tend to develop paradigmatic uses of the semi-polite verbs. Although their occurrence is not as frequent as that of the standard polite verbs, the rationality of the paradigm of the semi-polite verbs facilitates their acquisition. Even the paradigm of the standard polite verbs is under the influence of the semi-polite verbs, in the sense that the former paradigm is now admitting non-standard counterparts of negative forms as its member (cf. Kawaguchi 2006).

In addition to the development of a paradigmatic use of semi-polite verbs, I demonstrated that the interlanguage grammar enabling L2 learners to produce semi-polite verbs is not affected by the knowledge of learners' L1 or L1 transfer, but is commonly shared by all L2 learners.

Another finding that this study made is a development order of (non)standard polite expressions. Though the research on development or acquisition order in L2 acquisition has been limited to grammatical morphemes (cf. Dulay, Burt, and Krashen, 1982), the development order that I proposed extends the scope of study into inflectional paradigms. I hope that the extended scope of this study serves to promote deeper understandings of 'systematic' knowledge of L2 learners' grammar.

The last contribution of this study to the field of SLA is my proposal of a hypothetical explanation about the reason why L2 learners learn or acquire semi-polite verbs and develop their paradigmatic uses. The hypothetical explanation itself must be examined further, but I demonstrated a possibility that L2 learnability is affected by rationality of a linguistic system like the inflectional paradigm.

Lastly, though I tried to demonstrate the development of paradigmatic uses of semi-polite verbs by using a cross-sectional spoken learner corpus data, this method of study has a limitation in the sense that it cannot, in principle, examine a longitudinal course of development of individual learners' grammar. As for the research done by using a longitudinal spoken learner corpus data, readers can refer to Horiuchi (forthcoming), which demonstrates the paradigmatic development of the use of semi-polite verbs by individual L2 learners over a period of time.

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References

Baerman, M., Corbett, G.G., and Brown, D. (eds.) (2010). *Defective Paradigms: Missing forms and what they tell us.* NY: Oxford University Press.

Bloch, B. (1946). Studies in Colloquial Japanese II Syntax. *Language Vol. 22, No.3*, pp. 200-248. The Linguistic Society of America.

Dulay, H., Burt, M., and Krashen, S. (1982). *Language Two.* NY: Oxford University Press.

Fukushima, E. and Uehara, S. (2001). *Gendai nihongo ni okeru teineitai hiteikeishiki.* ["Negative polite forms in Modern Japanese"] *Bulletin of Tohoku University International Student Center 5, pp.* 11-17.

Fukushima, E. and Uehara, S. (2004). *'Iimasen' to sika boku wa iwanai desu*: 2 polite-style negative forms in Japanese conversational discourse. In M. Minami and M. Asano (eds.), *Linguistics and Japanese Language Education III*, pp. 269-286. Tokyo: Kurosio Publishers.

Haspelmath, M. and Sims, A. D. (2010). *Understanding Morphology [2nd edition]*. London, UK: Hodder Education, an Hachette UK Company.

Horiuchi, H. (2012a). *Eigoken gakushuusha no DESU to MASU: Paradigm no goorika to gakushuusha dokuji no bunpoo* ["English-Speaking Japanese Learners' DESU and MASU: Rationalization of Paradigms and Learners' Unique Grammar"] In the *Proceedings of the 19th Princeton Japanese Pedagogy Forum*, pp. 169-180. Princeton University, NJ. [http://www.princeton.edu/pjpf/past/19th-pjpf/Proceedings12_Online.pdf]

Horiuchi, H. (2012b). *Nihongo gakushuusha ni yoru DESU to MASU no bunpoo*. ["Japanese Language Learners' Grammar of DESU and MASU"]. In *the Proceedings of the 2012 ICJLE vol. 2*. p. 277.

Horiuchi, H. (2014). *Nihongo Gakushusha no hi-hyojunteki teineitaidoshi no paradigm no hattatsu: judanteki hatsuwa corpus data no baai* [Development of the Paradigm of Learners' Semi-polite Verbs: In the Case of Longitudinal Spoken Corpus Data]. In *the 8th International Conference on Practical Linguistics of Japanese (ICPLJ8) Conference Handbook*: pp.202-205, National Institute of Japanese Language

Horiuchi, H. (forthcoming). On the paradigmatic development of semi-polite verbs in L2 acquisition of Japanese: A longitudinal spoken learner corpus analysis. *Journal of Japanese Linguistics Vol. 30*.

Hudson, M.E. (2008). *Riyuu* 'reason' for *nai desu* and other semi-polite forms. In K. Jones and T. Ono (Eds.), *Style Shifting in Japanese,* pp. 131-160. Amsterdam: John Benjamins.

Ichikawa, Y. (2005). *Shokyu Nihongo Bunpo to Oshiekata no Pointo* [Points of Elementary Japanese Grammar and the ways of teaching it]. Tokyo: Three A Network Ltd.

Inoue, F. (1998). *Nihongo Wocchingu [Japanese Language Watching]*. Tokyo: Iwanami Shoten.

Iori, I., Takanashi, S., Nakanishi, K., and Yamada, T. (2000). *Shokyu o Oshieru Hito no tame no Nihongo Bunpo Handobukku* [A Handbook of Japanese Grammar for Those Who Teach Beginners' Courses]. Tokyo: Three A Network Ltd.

Kanazawa, H. (2008). *Ryuugakusei no Nihongo wa Mirai no Nihongo* ["International Students' Japanese as the Japanese Language in the Future"]. Tokyo: Hituzi Shobo.

Kawaguchi, R. (2006). The influence of native-speaker variation on non-native speakers. *Journal of Japanese Language Teaching*, No.129: pp. 11-20. The Society of Teaching Japanese as a Foreign Language. [In Japanese]

Kawaguchi, R. (2010). Factors Related to the Shift from the -masen to the –nai desu Form: In Terms of Language Change of the Negative Polite Verb Form. *Journal of Japanese Language Teaching, No.144*: pp. 121–132. The Society of Teaching Japanese as a Foreign Language.

Kobayashi, M. (2005). On the use of '*-masen*' and '*-nai desu*' in Japanese conversation. *Journal of Japanese Language Teaching No.125*, pp. 9–17. The Society of Teaching Japanese as a Foreign Language. [In Japanese]

Kuno, S. (1973). *The Structure of the Japanese Language*. Cambridge, MA: The MIT Press.

Makino, S., and Tsutsui, M. (1986). *A Dictionary of Basic Japanese Grammar*. Tokyo: The Japan Times.

Martin, S. A (1975). *Reference Grammar of Japanese.* New Haven: Yale University Press.

Noda, H(arumi). (2004). Factors relating to the use of *-masen* and *-nai desu* as polite negative form: Based on a usage investigation and on a questionnaire investigation of young generation speakers. *Mathematical Linguistics Vol. 24, No. 1,* pp. 228-244. The Mathematical Linguistic Society of Japan. [In Japanese]

Noda, H(isashi). (2001). *Gakushuusha dokuji no bunpoo no haikei* ["A background of learners' unique grammar"]. In Noda et al. (2001), *Nihongo Gakushuusha no Bunpoo Shuutoku* ["Acquisition of Grammar by L2 Learners of Japanese"]: pp.45-62. Tokyo: Taishuukan.

Otoguro, R. (2007). Paradigm Gaps and Periphrases in the Japanese Conjugation System. In *Proceedings of Western Conference on Linguistics 2007*, pp. 160-172, University of California, San Diego.

Sakoda, K. (2012). *Hibogowasha no nihongo communication no kufuu* ["Means of communication in Japanese by non-native speakers"]. In Noda (ed.) (2012), *Nihongo Kyooiku no tame no Communication Kenkyuu* ["Studies on Communication for Japanese Language Teaching"]: pp.105-124. Tokyo: Kurosio Publishers.

Tanomura, T. (1994). A Corpus-Based Study on the Polite Negative Predicate Forms in Japanese (Linguistics). *Bulletin of Osaka University of Foreign Languages* 11, pp. 51-66. [In Japanese]

The Japan Foundation and Association of International Education (2002). *Japanese Language Proficiency Test: Test Content Specifications [Revised Edition]*. Tokyo: Bonjinsha.

Uehara, S. & Fukushima, E. (2008). *Masen* or *Nai Desu* – That is the question: A case study into Japanese conversational discourse. In K. Jones and T. Ono (Eds.), *Style Shifting in Japanese*, pp.161-184. Amsterdam: John Benjamins.

Yamauchi, H. (2009). *Proficiency kara Mita Nihongo Kyooiku Bunpoo* ["Japanese Pedagogical Grammar from the Viewpoint of Proficiency"]. Tokyo: Hituzi Shobo.

Yoshikawa, T. (1989). *Nihongo Bunpo Nyumon* [An Introduction to Japanese Grammar]. Tokyo: ALC Press.

Credit Cards and Other Payment Means of Students of Akita International University

Emmanuel CHÉRON

Abstract: The objective of this study is to provide insight as to credit cards uses and dangers among AIU students. First, differences in credit card usage between Japan and the United States are briefly introduced, followed by a review of results of previous credit cards surveys conducted in Japan. Ownership of credit cards by students has generated concern that they may end up being financially overextended and unaware of the long-term consequences. Responding to these facts, two objectives guided this study. The first was to gather benchmark information about credit card use among Akita International University (AIU) students. The second was to examine AIU students' attitudes toward credit card use, their money handling habits, their understanding of the implications of credit card debt and the effect of credit card use on important aspects of their university experience. A representative survey of 202 AIU students indicated that 57.4% had credit cards and that they were especially needed when studying abroad. Many positive but also negative comments were provided by respondents with respect to credit cards. More than a quarter of the comments were about concern about the risk of easily running over budget.

Keywords: Credit cards, AIU students, usage, attitudes, financial education

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1. Introduction

Ownership of credit cards among students in the United States has decreased from 42% in 2010 to 35% in 2012 according to Sallie Mae, an American financial institution specializing in saving, planning and paying for education (Sallie Mae, 2013). This fall is attributed to the recent Credit Card Accountability Responsibility and Disclosure (CARD) Act of 2009, restricting access to credit cards to individuals below the age of 21. In Japan, ownership of credit cards among students is under-studied and worth investigating in comparison with US data.

In Japan, one limited previous survey among students in Shizuoka University by Nakakoji (2006) indicated a lower credit card ownership at 28.6% compared to the most recent 35% in the US. With no studies published since, the situation in Japan is in need of investigation. It is likely that card usage among Japanese students may have recently increased especially for students in universities getting more involved in study abroad programs.

The substantial number of students holding credit cards has generated concern that some students are unaware of the long-term consequences associated with their financial problems. The years at university are a time of transition from financial dependence to financial independence. Although most students arrive at university with an academic plan in mind, few come with a financial plan. The financial knowledge and practices students develop during their studies affect their future financial well-being. If used responsibly, credit cards can provide a number of advantages to students such as a convenient means of payment, a useful tool for learning financial responsibility, a resource in case of emergencies, and a means to establish a good credit history.

With respect to credit card use, AIU may present a different situation compared to other Japanese universities. First, the AIU campus is located in the countryside of Akita prefecture a different environment than urban universities in Tokyo or other big cities. There are only two or three shops near the campus and most students need to take a bus for in-person shopping. In addition, AIU students coming from all over Japan may need to use more long distance transportation, such as

airplane, which can entail online bill payment with credit card. Second, all students are required to study abroad for one year over the course of their studies. In their destination country, the main payment method may be by credit cards, while Japan has been traditionally a cash-based country. Given this situation, credit cards usage behavior of AIU students may differ from that of other university students in Japan.

The objective of this research study is to provide a detailed description of credit card ownership, usage behavior and non-credit-related means of payment of AIU students. In addition, an understanding of the perceived benefits and detriments of credit cards by students can help formulate recommendations for improving marketing methods and customer financial education support to potential and current student holders of credit cards.

The rest of this paper will first briefly introduce the differences between credit card use in Japan and the United States and review previously published research on credit cards in Japan. Then, it will look at unexplored areas of the research topic, and formulate specific research questions. Then, the research method, including preliminary qualitative student interviews, survey pretests and the quantitative survey design are described. Finally, the main survey results are presented with recommendations for managers of credit card organizations, students, parents, and universities.

2. Review of literature

Institutional factors behind the differences between credit cards in the US and Japan were described by Mann (2002). He concluded that: “credit cards in Japan (compared to the US) are used for a smaller share of transactions, with a higher average amount, and with less borrowing per transaction”. In fact, credit options are limited in Japan since the common repayment system consist of one payment (*ikkai barai*) or a roll-over of fixed monthly payments (*revolving barai or bunkatsu barai*). In Japan, the international card brands do not issue cards but rather provide the network to card issuing companies. Recent trends, with the introduction of the global approval system of Visa, MasterCard and American Express brands in Japan, seem to indicate a gradual convergence between Japan and the west.

Credit card usage has been growing substantially in Japan over the past several years, and credit cards have become one of the major payment methods. The Japan Consumer Credit Association (2013) reports that about 320 million credit cards have been newly issued since 2008, from 346 companies and organizations. Japan Credit Bureau (JCB) (2012), one of the biggest Japanese credit card companies, conducted its own research targeting 3500 respondents over all generations in 2012. The survey reported that 87% of respondents had credit cards. This number was found to increase from 75.6% to 90.8% as age increased from respondents in their 20s to those in their 50s. In all generations, the percentage of female respondents with credit cards was larger than that of male respondents. Other differences were also observed among age groups. The average number of credit cards possessed by those in their 20s was 2.5, with an average monthly debt of 38,363 yen. However, those in their 50s had an average of 4.1 credit cards with an average debt of 74,743 yen per month (see Table 1). The survey reported that ownership rates of credit cards and monthly average debt would likely increase as cardholders' purchasing power increases. Although this survey usefully provides information on the general population in Japan, it does not cover the student population in universities.

The only available previous study by Shizuoka Prefectural University undergraduate student Nakakoji (2006) indicates that those numbers tend to be lower among university students. She conducted a survey targeting 77 university students and 29 working adults. Since the representativeness of that survey was not formally checked, estimates were tentative. Her results showed that only 22 university students had their own credit cards. On average they held 1.2 credit cards and incurred on average a debt of less than 10,000 yen monthly in their accounts (see Table 1). She also surveyed the types of credit cards used, and found that almost all university students had either bank-issued credit cards or retailer-issued credit cards, while working adults also had cards issued by credit card companies and transportation companies, such as ANA and JAL. There were only a few who had credit cards issued by manufacturers and oil companies. It seems that university students obtained their first credit card through financial institutions or retail stores they often use, and then they choose credit card companies or transportation companies as their second credit card issuer, depending on their interests.

Table 1: Previous research studies of JCB (2012) and Nakakoji (2006)

Study	Sample type	Credit card ownership (%)	Number. of cards	Monthly debt (Yen)
JCB	20s	75.6%	2.5	38,363
JCB	50s	90.8%	4.1	74,743
JCB	Total	87.0%	3.5	64,100
Nakakoji	University students	28.6% (22 out of 77)	1.2	Less than 10,000

The top reasons to obtain credit cards given by respondents were similar among university students and working adults. Answers of university students were the following: “Credit cards have similar functions as membership card”, “Point system or other services are attractive” and “For travelling overseas,” while the answers for working adults were: “It is easier to make a payment”, “Point system or other services are attractive” and also “For traveling overseas.” The answer “It is easier to make a payment” was especially typical of working adults, and half of them mentioned this reason as their motivation to use a credit card.

With respect to types of buying situations when a credit card is used as a means of payment, there was no substantial difference among university students, working adults and JCB survey’s respondents.

Typical answers given in Nakakoji’s research were: “At department stores”, “For Internet shopping”, “For traveling overseas”, and “For transportation fees”. In addition, working adults mentioned: “At home appliance stores”, “At gas stations”, “At restaurants” and “For communication fees”. It should be noted that 9 out of 37 answers from students were “Never used.” These results show that working adults tend to pay with their credit cards in a wider number of buying situations than students, with some of them, not using their credit card even if they have one. Nakakoji surveyed 55 out of 77 students who do not own credit cards as well. Out of 55, 34 answered they had not yet obtained a credit card. More than half of those students said they were not interested in obtaining credit cards. Their main reasons were: “Being worried about spending too much”, followed by “Being worried about credit card theft” and “No need”. There were only a few students answering: “Troublesome to obtain the card” or “Need to pay a commission fee”, in addition to the three main reasons above. Thus,

concerns about difficulties of money management and fear of credit card theft (related to information protection) seem to be key factors to deter university students from becoming new credit card holders.

3. Unexplored areas of the research topic

University students represent a key entry and future potential market for credit cards. Most students have to run their own household separately from their parents and can be described as being just one step away from becoming "independent adults". Many surveys of credit card holders across several generations of respondents in Japan have been conducted, but few surveys were only targeting university students. However, to know their specific usage and attitudes toward credit cards is essential in order to guide appropriate marketing approaches. The specific context of AIU is worth investigating since students who do not have many stores nearby face a different shopping environment compared to other urban Japanese university students. In addition they have to plan for a mandatory one-year study abroad including appropriate means of payment for registration and tuition fees, travels and day-to-day living expenses overseas.

4. Research questions

Since usage of credit cards by students in Japan is under-researched with very limited reliable previous secondary data, it was decided to start with primary qualitative exploratory research followed by a quantitative survey of AIU students as our target population of respondents.

The following three research questions (RQ) are addressed in this study of AIU students' credit cards usage:

RQ1: What is the extent of AIU students' ownership of credit cards?

RQ2: What is the extent of Japanese AIU students' ownership of credit cards compared to international students and to US students?

RQ3: How are AIU students using their credit cards and other means of payment?

RQ4: What does motivate them to have credit cards and what are their perceived positive and negative features of credit cards?

5. Primary qualitative data sources of information

This qualitative first step allowed us to gain better insights and ideas about the research problem and helped us to structure a better survey questionnaire for a subsequent quantitative data collection.

5.1 Informal interviews with students about their knowledge and use of credit cards

Several informal interviews were first conducted with students, followed by preliminary results of fifteen survey pretest respondents. The results from this exploratory research tentatively indicated that although students hold credit cards, they tend to not find them useful. According to preliminary observations, older students tended to have significantly more credit cards. Most students did not know much about credit cards, and it seemed that credit knowledge was not significantly related to debt levels or ownership of credit cards.

Informal interviews with three different AIU international exchange students chosen at random were conducted to collect relevant information about credit card ownership, usage, knowledge and experience. These three interviews of international exchange students revealed that contrary to what one might expect, those students may not always hold a credit card and for two of them, the reasons behind it were related to difficulties in keeping control of accumulated spending or to religious values. In the case of one student, holding a credit card and being able to manage it well indicated the importance of the role model of parents as well as the convenience of credit cards for traveling overseas.

6. Survey pre-tests and research methodology

In the survey pretests, 9 out of 15 students said they did not have a credit card and had no ideas about credit cards, while the rest said they had credit cards but did not use them regularly. Most students who participated in the pretest surveys were Japanese students. Since, at AIU, international exchange students account for about 20% of all students, they should also be investigated.

After some adjustments based on the pretest results, a quantitative survey questionnaire was finalized. It consisted of 18 close-ended questions with an appropriate skip pattern and one last open-ended question asking for positive or negative opinions about credit cards. The format of the survey was organized in two columns fitting on just only two pages to appear as easy to complete as possible, thus reducing potential refusals and incomplete surveys (See Appendix A).

The methodology of the research consisted of surveying a first sample of AIU students on campus during the autumn semester of 2013. Since the resulting sample strongly over represented senior students, a second data collection was organized in the spring semester of 2014. For the second data collection, research assistants followed target quotas based on level of study, student gender and student status (regular or international) in order to redress the first sample and obtain a total final sample as representative as possible of the AIU student population. There is no reason to believe that ownership of credit cards would have systematically varied within each class level between the autumn semester of 2013 and the spring semester of 2014. This is confirmed by a non significant ($p = .12$) Fisher exact test of ownership of credit cards for available observations of junior and senior students in 2013 and 2014.

7. Findings and answers to research questions

7.1 Survey results

Once collected, the survey questionnaires were first reviewed for completeness and consistency. A codebook was then prepared and data was entered into an Excel spreadsheet program and subsequently converted into an SPSS (Social Package for the Social Sciences) file. In addition, all comments given by respondents to the open ended question 19 about their opinion on credit were coded into mutually exclusive and exhaustive categories as shown in Appendix B.

7.2 Sample demographics

The descriptive profile of the sample is shown in Table 2. Most students lived on campus (93.4%). And many were females (60.2%). With respect to nationality, a majority of respondents were Japanese

(75%) and 30.8% reported they had a part time job. On the university website (http://web.aiu.ac.jp/about/data, 2014), the AIU total student population is reported to be 870, of which 62% are females and 38% are males. In addition, the percentage of international students is indicated is indicated to be 19.2%.

Table 2: Sample profile

Sample size	202
Gender	Female: (60.2%) Male: (39.8%)
Student's level	Freshmen: 24.2% Sophomores: 26.3% Juniors: 21.7% Seniors: 27.8%
Student's nationality	Japanese: 75% International: 25%
Living on campus	Yes: 93.4% No: 6.6%
Employment	Part time job: 30.8% No part time job: 69.2%

According to Table 2, the final sample was reasonably representative of the population in terms of gender and international students were slightly over represented (25% vs. 19.2%). As far as students' level was concerned, the distribution of respondents in each of the four class ranks being quite evenly distributed was deemed representative of the student population.

Table 3: Proportion of credit card holders by student level

Student's level	Credit card ownership		Total
	Yes	No	
Freshmen:	6 (12.5%)	42 (87.5%)	48 (24.2%)
Sophomores:	31 (59.6%)	21 (40.4%)	52 (26.3%)
Juniors:	30 (69.8%)	13 (30.3%)	43 (21.7%)
Seniors:	48 (87.3%)	7 (12.7%)	55 (27.8%)
Total	115 (58.1%)	83 (41.9%)	198

Not surprisingly, as shown in Table 3, the freshmen population had a much lower overall percentage of credit card holders than upper-

classmen. A highly significant degree of association between student's level and card ownership was confirmed by a Chi-square value of 62.67 for 3 degrees of freedom, an associated probability below .001 and strong symmetric measures of association Phi and Cramer's V equal to .563.

7.3 Detailed survey results

As indicated in Appendix 1, the percentage of AIU students owning a credit card was estimated to be 57.4% according to Question 1 (This number is slightly different from 58.1% in Table 3 because of missing values related to student's level). Answers to Question 3 revealed that 62.9% obtained their credit card after beginning university.

AIU students stand below the overall JCB Japanese average of 87.4%, however they stand at a similar or slightly below the average level of university students in America (nearly two-thirds according to Science Daily, 2012) but at a much higher level than other universities in Japan (28.6%) according to Nakakoji (2006). Given a sample size of 202, the confidence interval representing the margin of error for the estimated percentage of credit card ownership is plus/minus 5.96% (see computation with correction for finite population at the end of Appendix A). Thus, the true percentage value in the population of AIU students lies within a critical interval of 51.44% to 63.36%, with a probability of 95%. Like Nakakoji who found a higher ownership among women, in the AIU sample of 148 Japanese students, the proportion of women with a credit card was 57.3% vs. 42.7% for men. However, this was not enough to conclude that there was a statistically significant relationship between ownership rate and gender (Fisher exact test $p = .87$). For the total sample of all AIU students surveyed, ownership was 62.6% for women and 37.4% for men. The association was still not found significant (Fisher exact test $p = .47$).

Given the higher proportion of international exchange students in the upper class levels as shown in Table 4, it was expected that their ownership rate of credit card would be higher than for Japanese students.

As expected, the proportion of international exchange students having a credit card (80%) was found higher than for regular Japanese students (50%) and this was statistically significant (Fischer exact probability test p = .000).

Table 4: Proportion of Japanese and international students by student level

Student's level	Type of student		Total
	Japanese	International	
Freshmen:	47 (31.8%)	1 (2.0%)	48 (24.2%)
Sophomores:	40 (27.0%)	12 (24.0%)	52 (26.3%)
Juniors:	26 (17.6%)	40 (34.0%)	43 (21.7%)
Seniors:	35 (23.6%)	20 (40.0%)	55 (27.8%)
Total	148 (100.0%)	50 (100.0%)	198 (100.0%)

However, if the Japanese student sample was weighted to reflect the same proportion of student levels as observed for international exchange students, Japanese students having a credit card would be 83%, a very similar proportion as the 80% found for international students.

7.3.1 Reasons why some AIU students did not have a credit card (N = 86)

Of those AIU students who did not have credit cards (See question 2 in Appendix A), the most frequent reasons mentioned were the following: Being worried about spending too much (30.77%), a complicated system to obtain the card (26.92%), and not having a fixed income (20%). If additional comments from respondents are taken into account, such as "I do not need it", "Because I am still underage" or "Credit card scam is very scary", our top finding reasons were the same as those of the Nakakoji report with: Being worried about spending too much (52.73%), no need (38.19%), and being worried about credit-card theft (32.73%).

7.3.2 Plan to obtain a card in the future for those who did not have a credit card (N = 85)

More than half (68.2%) were interested in obtaining one (See question 18 in Appendix A). This was much higher than 38.2% found in the Nakakoji study. AIU students with no credit cards appear more likely to obtain a credit card in the future than other Japanese students. In addition, those planning to obtain one in the future tended to worry less about having their credit card stolen (33.3% vs. 66.7%; Fisher exact test p = .024) and mentioned being worried less often about spending too much money. Even if not statistically significant, those who answered “complicated system to obtain” or “not having fixed income” tended to be more willing to obtain a credit card in the future.

7.3.3 Initial reason to obtain a credit card for those who had one (N = 116)

The top three reasons to obtain a credit card (See question 4 in Appendix A) were: "for using when studying abroad (52)", “for online shopping" (46), “suggested by parents (43)" and "for traveling overseas" (39). The top reasons in the Nakakoji study were: “service points were attractive” and “for traveling overseas”. Although the traveling overseas reason was common to our findings and those of Nakakoji, it seems that the reasons of “for studying abroad” and “for online shopping” are more specific to AIU students and that service points are not so important to them. Since students tend to spend less with credit cards than the average Japanese population, the point service system does not appear to be as attractive for them as it is for the general adult population surveyed by JCB (2012).

Answers to question 4 were given in reference to the preceding question about when they obtained their first credit card (Question 3) and the most frequent reason was “for using when studying abroad”(52). Thus, answers to question 4 confirmed that the most important motivation to obtain a first card after entering university was related to the AIU requirement of study abroad.

7.3.4 Average number of credit cards owned by AIU students (N = 114)

According to question 5 (See Appendix A), students with credit cards (57.4% of the total) owned an average of 1.94 credit cards and the most frequent students cards were Visa (45) and MasterCard (38), with some having more than one. This is not surprising since they are the two most internationalized credit card companies. When students had more than one card, they were in decreasing order: Visa, MasterCard and American Express. In addition, students owning more than one card tended to have additional ones from the same credit card company. This may be the case because of simpler application procedures. The average number of credit cards of AIU Japanese students was found to be lower (1.68) than for international students (2.38) and was statistically different ($t = 2.55$; $p=.014$).

However, the average number of credit cards of AIU students (1.68) appears to be higher compared to other university students in Japan with an average of 1.2 cards found by Nakakoji (2006). In addition, unlike the findings from JCB (2013) and Hancock et al. (2012) summarized in Science Daily (2012), there was no statistical difference between the average number of credit cards between males (1.86) and females (1.97) among all the AIU students survey sample ($T = .495$; $DF = 111$; $p = .62$).

7.3.5 Usage frequency of credit cards by AIU students (N = 106)

In reference to question 6, 54% of students answered that they use credit cards a few times a month, followed by “a few times a week”(20%) and “rarely”(16%). In Nakakoji study, 10 out of 22 respondents answered “Never” and five respondents answered “Rarely”, in addition, in contrast with AIU students no respondent answered “Almost daily” and only three answered “A few times a week”. Thus, AIU students appear to pay with credit cards somewhat more frequently than other university students in Japan.

7.3.6 Average monthly balance incurred by AIU students (N = 114)

Results for question 7 in Appendix A were showing a higher proportion of AIU students charging substantial monthly amounts than in Nakakoji's findings. Of 114 AIU students answering this question, 39.5% incurred between 10,000-50,000 yen and 33.3% incurred less than 10,000 yen debt monthly. Since AIU students tend to buy more with credit cards they may be more exposed to the risk of accumulating unpaid debt. The percentage of 36% incurring a monthly debt higher than 50,000 yen was not observed in Nakakoji's study.

7.3.7 Type of credit card purchases by AIU students (N = 115)

Frequency results for question 8 in Appendix A indicate travel expenses (92) and clothes (76%) as the two most frequent purchases made by AIU students with a credit card. These items are similar to Nakakoji's results, but different from the most frequent purchases of JCB's findings with mobile communication fees being the most frequent.

7.3.8 Frequency of credit card bills paid by parents (N = 115)

Answers to question 9 indicated that more than one third (30.4%) of the AIU students reported that their parents or others never paid their credit card bills and 28% reported that their parents always paid the bills on a regular basis. After grouping the answers "Almost always" and "Always" together, and all other answers to question 9 together, they were cross-tabulated with answers to question 17 on job status (if they had or not a part time or a full-time job). Although there was a trend with 43.8% with no job having their parents pay the bills vs. 34.1% for those with a job, there was no statistically significant association between being employed and having parents pay the monthly bill (Fischer exact probability test $p = .33$). Thus, having some income from a full time or a part-time or job does

not significantly affect how much AIU students get money support from their parents.

7.3.9 Frequency of use of electronic money and ranking of three payments methods

In reference to question 10, electronic money was found to be used by 38.8% of respondents and as indicated by results to question 11, the most regular payment method was cash followed by credit card and electronic money. This confirms the comments of Kazuhiko Okamoto, Representative Director and Country Manager, *Japan Visa Worldwide (Japan) Co Ltd* in an interview (Betros, 2012). In Japan, credit cards account for 12% of all yearly retail consumption, while in other developed economies, it is 30-40%. For cultural, regulatory and other reasons, Japan still remains a predominantly cash society.

8. Answers to main research questions

This study confirms that AIU students' usage behavior of credit cards is different from that of the university students in Shizuoka investigated by Nakakoji (2006). The average percentage of Japanese AIU students holding credit cards in 2013 and 2014 was higher (50% vs. 28.6%). This rate of 50% is lower than the average of 62.2% for university students from six states in the US (Hancock, Jorgensen and Swanson, 2012) but higher than the 35% recently reported by Sallie Mae (2013) in the US as well. However, compared to international exchange students of similar class level (using a proportional weighted procedure), Japanese AIU students end up with an almost similar point estimate percentage of credit card ownership (83% vs. 80%)

The latest Sallie Mae Ipsos study based on 1200 interviews with undergraduate students in the US reveals the following proportions of credit card ownership by class level: Freshmen 21%, Sophomores 28%, Juniors 38%, Seniors 68% (Sallie Mae, 2013). The proportions in our study for only Japanese AIU students (n = 148) were: Freshmen 13%, Sophomores 50%, Juniors 65%, Seniors 91%. Thus, except for Freshmen, a higher proportion of Japanese AIU students were found to own credit cards than their US counterpart. The overall proportion was 35% in the US compared to 51% for Japanese AIU students.

The average number of credit cards owned by Japanese AIU students was found to be higher than that for Shizuoka university students (1.68 vs. 1.2) and they tended to use credit cards more frequently. Different reasons were also found for obtaining a first credit card and for what AIU students pay for with credit cards. The main reasons for AIU students were for studying abroad and for online shopping, and they mostly tended to use credit cards to pay for traveling expenses, clothing and educational expenses.

Sixty percent of the 122 respondents who gave comments said using credit cards was useful and convenient, especially when buying things that cannot be purchased at the AEON mall, the only shopping center close to the AIU campus, or in nearby shops. In addition to the AIU campus location, comments also confirmed that AIU students obtained credit cards in relation to needs related to their university program's overseas study system and to the AIU campus location. However, twenty six percent of the comments were negative in relation to overspending and security (See question 19 in Appendix A and examples of comments coded from -2 to +2 in Appendix B). The distribution of positive and negative comments was analyzed in relation with gender, nationality and credit card ownership. A significant difference ($T = 2.53$; $DF = 120$; $p = .013$) was found only for credit card ownership, with students not having a credit card providing on average more negative comments ($N_1 = 50$; mean = .10) than credit cards holders ($N_2 = 72$; mean = .79). Thus, for students with credit cards, higher familiarity might reduce perceived risks, while for students with no experience of credit cards, risks are perceived higher.

9. Implications of findings

9.1 Recommendations for managers

Since higher education institutions can do little to regulate the credit card industry, credit card companies must be very careful and painstaking in targeting students as new customers. Considering that young adults are sensitive to most marketing strategies, credit card companies need to be cautious in informing their customers about credit card use and the consequences of too much credit card debt.

From a marketing perspective, it is likely that, with the requirement of studying abroad, travelling overseas and the need of shopping online, AIU students' credit card behavior may be different from other university students in Japan. Therefore, specific marketing strategies particularly aimed at AIU students and similar populations may be needed. For example, benefits designed for students and related to payments with credit cards such as travel, health and other insurance types, could be offered. If more travel-related benefits were available with credit cards, more students would be become positive towards credit card ownership.

However, a negative image of credit cards, especially for those AIU students who do not have a credit card, creates anxiety, influencing some students to avoid obtaining credit cards. Katsuwada, Teratani and Nogami (2013) in a study about credit cards of 103 Waseda university students, report that a feeling of insecurity toward credit cards have a relatively more negative impact on the ownership rate of credit cards than the positive impact related to positive feelings toward credit cards. If credit card companies want to attract new students to obtain credit cards, they should strive to reduce those negative images by offering financial education programs rather than talking only about the benefits of credit cards.

Five credit cards websites in Japanese were investigated in detail: Visa, MasterCard, American Express, JCB and Japan Post Bank. Only MasterCard was found to offer a translated comprehensive financial educational program in Japanese following the format of a classroom lesson about shopping online: “Safetina’s online shopping lesson” and a comprehensive “Introduction to “Financial Management.” All other Japanese websites put forward the benefits of their credit cards with explanations of their point system, offer of gifts and other benefits such as travel insurance. A Visa finance literacy program is available only in English on the American website.

Since there are also some students who do not know how credit cards function, credit card companies could prepare financial educational pamphlets to be distributed on campus. They should also setup a personal financial education section such as the one of MasterCard on their website for beginners, so that those students can understand how to use credit cards. Lack of clear knowledge and understanding of how

credit cards operate also prevents some students from applying for credit cards.

The main negative images of AIU students were concerns about ‘spending too much’ and ‘information insecurity’. To alleviate the ‘information security’ concern, credit cards companies are developing more secure online payment systems along with better technology using secure microchip based cards. As regards the concern of ‘spending too much’, on the other hand, credit card companies should be able to do something. For example, they may want to provide credit card account statements weekly instead of monthly or each time a person pays with a credit card. The weekly statement or ‘every-single-time statement’ can be much simpler, indicating only the amount the person paid, the accumulated debt and the account balance. Sending the information online in real time to customers could be the best way of knowing how much was used so far and thus helping to avoid spending too much. A respondent’s comment such as the following: “I think it is too easy to spend money you do not have on a credit card and then you are found with a huge bill. Therefore, I prefer using debit cards”, would suggest that debit cards capped at a zero account balance would be more appealing to those who worry about spending too much. Considering the fact that students who are afraid of using credit cards tend to worry about spending too much money and are concerned about their card being stolen, credit card companies would increase their chance of having them to adopt credit cards if they inform students about personal financial management and improvement of card security and online payment systems.

9.2 Recommendations for students and parents

Given that a certain number of students have a major credit card before going to university, parents can play an important role in educating their children about credit cards and financial responsibility even before they leave home. University students need to understand that credit card use has advantages and disadvantages. When students fail to use credit cards appropriately, there will be significant consequences affecting their student experience and possibly their future.

University students should understand that credit cards are not sources of free money. Therefore, creative ways of financing their education, other than the use of credit cards, should be explored and implemented.

Students should know that credit cards marketing strategies are aggressive and effective, but they must learn to resist the temptation by understanding the advantages and disadvantages of credit cards use and taking a broader or long term perspective on life and educational priorities.

9.3 Recommendations for universities

Previous studies in the US have suggested that financial health is an important component of student well-being (Robb, 2011). With increasingly difficult and complex financial decisions, it is understandable that young students may find it an important source of stress. Given that a majority of AIU students possess at least one credit card by the end of their sophomore year, universities should consider educating students about the meaning of credit card use and its implications. Since younger first and second year students have a relatively lower rate of credit card ownershi and less knowledge about them, new student orientations could offer personal financial education to these students in order to introduce them to credit cards' application conditions and usage as well as helping them alleviate or eliminate existing and future problems with credit card debt.

Universities which recognize the usefulness and risks of credit cards for students should allow credit card companies to solicit student business on campus. However, given the student level of concern about credit cards revealed in the open-ended question of our survey, universities could ask these companies to provide personal educational programs designed to educate students about the credit card system, personal financial responsibility, and consequences of too much credit card debt.

10. Limitations, conclusion, and further research directions

10.1 Limitations

One limitation of using a quota sampling procedure to obtain a representative sample in terms of student level and nationality is that

such a procedure does not deliver a probability sample. Thus, the assumption of a probability sample needed to compute a critical interval of the true population of AIU students having a credit card is not met. In addition, all other statistical significance tests are only tentative estimations. Further, when weighting the Japanese student sample by student level to make it comparable to the international student sample, computing statistical significance to the point estimation is not applicable.

Some additional limitations are related to the time and specificity of the AIU student population making it difficult to make valid comparison with others credit cards surveys conducted in Japan and the US. When conducted in Japan, one previous survey was covering the whole population and two were focused on a student population. In the case of student populations one was dating from 2006 and may have been too old to provide a reliable benchmark. The US surveys covering the student population may be a better benchmark, but the institutional credit cards system differences between the US and Japan (including a recent regulation introduced in the US) may introduce systematic distortions in the comparison.

10.2 Conclusion and further research directions

In spite of some limitations, this study improves upon the previous one by Nakakoji (2006). It offers an updated and more representative quantitative and qualitative detailed current account of the situation of credit card ownership, frequency and type of usage by a group of university students. It does also include a comparison between Japanese and international exchange students as well as the latest available data of student credit card ownership in the US. Possession of credit cards by AIU international exchange students at about 80% was found similar to Japanese students at comparable class level. Investigation of comments related to credit cards indicated that a quarter of students expressed negative concerns, especially those at lower class levels and often not yet having a credit card. One finding of this survey was that AIU students who hesitate to obtain credit cards were concerned about “spending too much”. In a future investigation, this negative aspect could be explored in more details to find out the reasons behind such a negative image and how credit card companies could address this concern. More specifically, variables such as the role of parents and financial knowledge could be further

explored to explain their influence on credit card attitudes as was done in the US by Hancock et al. (2012). Finally, it was found that AIU students were not much attracted by point services. Further exploration of this low interest for point services would be needed to help credit cards companies better adjust their services to the needs of AIU students.

Appendix A
Survey Results
Credit Card Survey for Research Project

The objective of this survey is to help us understand the credit card usage of AIU students and provide us greater insights into the college students' behavior related to credit card usage. There are no right or wrong answers.

1. **Do you have any credit cards?(N=202)**
   A) Yes (Go to Q3) (**116; 57.4%**)
   B) No (**86; 42.6%**)

2. **If no, why do not you have any credit card? (Check all that apply) And skip to Q10. (N=86)**
   __7_ Inconvenience **(6th)**
   _35_ Complicated system to obtain **(2nd)**
   _26_ Not having fixed income **(3rd)**
   _40_ Being worried about spending too much **(1st)**
   _10_ Being worried about credit-card theft **(5th)**
   _12_ Others, specify: parents, no need now___**(4th)**

3. **When did you obtain your first credit card? (N=116)**
   A) Before beginning college (43; **37.1%**)
   B) After beginning college (73; **62.9%**)

4. **What is the reason why you decided to get the credit card at that time? (Check all that apply) (N=116)**
   _39_ For traveling overseas **(4th)**
   _52_ For using when studying abroad **(1st)**
   _46_ For shopping on the internet **(2nd)**
   _16_ To earn points to get various goods/services **(7th)**
   _20_ For paying the cost of living (Gas, Electricity, Housing, water charges and so on) **(6th)**
   _43_ Because suggested by your parents **(3rd)**
   _22_ To avoid carrying cash **(5th)**
   __8_ Because there was a promotion campaign **(8th)**
   __7_ Others, specify: get good credit, emergencies, study abroad, airline mileage **(9th)**

5. How many of the following credit card accounts do you have: (N=114)

MasterCard	0 **67**	1 **38**	2 **5**	3 **2**	4 or more **2**
Discover	0 **112**	1 **2**	2 **0**	3 **0**	4 or more **0**
JCB	0 **111**	1 **1**	2 **1**	3 **0**	4 or more **1**
American Express	0 **99**	1 **12**	2 **3**	3 **0**	4 or more **0**
Diners Club	0 **100**	1 **10**	2 **0**	3 **0**	4 or more **0**
Visa	0 **54**	1 **45**	2 **12**	3 **2**	4 or more **1**
Others, specify__	0 **82**	1 **29**	2 **3**	3 **0**	4 or more **0**

6. How often do you use your credit card? (N=106)

__3_ Almost daily **(5th)**
_21_A few times a week **(2nd)**
_57_A few times a month **(1st)**
_17_ Rarely **(3rd)**
__8_ Emergencies only **(4th)**

7. On average, how much do you leave payable on your credit card monthly? (N=114)

_38_ Less than ￥10,000 **(2nd)**
_45_￥10,000-￥50,000 **(1st)**
_23_￥50.001-￥100,000 **(3rd)**
_18_ More than ￥100,000 **(4th)**

8. Which of the following do you purchase with your credit cards? (Please check all that apply) (N=115)

_46_ Food **(4th)**
_76_ Clothes **(2nd)**
_16_ Communication **(7th)**
_56_ Educational expenses (such as textbooks, tuition, school supplies) **(3rd)**
_92_ Travel expenses **(1st)**
_38_ Entertainment expenses **(5th)**
_34_ Electronic equipment/utility **(6th)**
__5_ Other, specify: gas, utilities, everything__. **(8th)**

9. How often do your parents (or others) pay your credit card bills? (N=115)

_35_ Never **(1st)**
_23_ Once in a while **(3rd)**
_11_ Frequently **(5th)**
_14_ Almost always **(4th)**
_32_ Always **(2nd)**

10. Do you use other electronic money such as WAON? (N=196)

Yes **(76; 38.8%)**
No **(120; 61.2%)**

11. Please, rank the following three payment methods based on your regular usage.

[1-the most regular, 3-the least regular]

(Weighted index)	1st (3)	2nd (2)	3rd (1)	N
(**529**) Cash	**152**	**34**	**5**	191
(**227**) Credit Card	**25**	**63**	**26**	114
(**136**) Electronic money	**10**	**41**	**24**	75

12. What is your gender? (N=201)

A) Male **(80; 39.8%)**
B) Female **(121; 60.2%)**

13. What is your age? (N=201)

__30_18 or younger **(14.9%)**
_123_19-21 **(61.2%)**
__45_22-24 **(22.4%)**
___3_25 or older **(1.5%)**

14. What is your class rank? (N=198)

_48_ Freshman **(24.2%)**
_52_ Sophomore **(26.3%)**
_43_ Junior **(21.7%)**
_55_ Senior **(27.8%)**

15. What is the initial letter of your student ID? (N=200)
_150_B (Japanese) **(75%)**
__50_G (International) **(25%)**

16. Do you live on campus? (N=197)
_184_ Yes **(93.4%)**
_184_ No **(6.6%)**

17. Are you employed, either part-time or full-time? (N=195)
__60_ Yes **(30.8%)**
_135_ No **(69.2%)**

18. If you do not hold any credit card, do you plan to obtain any in the future? (N=85)
__58_ Yes **(68.2%)**
__27_ No **(31.8%)**

19. Please give us your opinion (positive or negative) about credit cards: (N=122) (See examples in Appendix B)

Coded comments	Frequency	Percentage
Negative (-2)	**24**	**19.7%**
Negative, but (-1)	**8**	**6.6%**
Neutral (0)	**16**	**13.1%**
Positive, but (1)	**30**	**24.6%**
Positive (2)	**44**	**36.1%**
Total	**122**	**100.0%**

Thank you very much for your cooperation.

Margin of error for Q1 (Percentage with credit cards)

N = 202; Yes = 57.4%; CI = p +/- $z_{\alpha^*} \sqrt{\frac{p(1-p)}{n}} \sqrt{\frac{N-n}{N}}$

95% CI = 57.4% +/- 1.96*sqrt(.574*.426/202)*sqrt(870-202/870)
= 57.4% +/- 5.96%

Thus, the real proportion Π of AIU students with credit cards in the population has a probability of 95% of being included in the following range:

[51.44%< Π <63.36%]

Appendix B

Examples of classified comments about credit cards from question 19

Comments	Coding*
I think it can be dangerous as you don't always know how much money you already spent.	- 2
I actually don't know how the credit card functions, so I don't use it often because I feel scared to use it	- 1
Positive: can save mileage points. Negative: sometimes you will not realize how much money you have used.	0
It is convenient to have them when ATM is closed. But having too many would be not good.	+ 1
It makes transactions easier faster, etc. Good to have points too.	+ 2

*(Entirely negative: -2; Negative: -1; Both negative and positive comments: 0; Positive: +1; Entirely positive: +2).

References

Betros, C. 2012. Visa Worldwide (Japan) Co Ltd, Executive impact, Japan Today, Jan 16. Retrieved August 18, 2014, from: http://www.japantoday.com/category/executive-impact/view/visa-worldwide-japan-co-ltd

Credit Card Accountability Responsibility and Disclosure Act of 2009 (enacted). H. R. 627, 111th Cong. 1st Sess.

Debbaut, P., Andra Ghent and Marianna Kudlyak. 2013. Are Young Borrowers Bad Borrowers? Evidence from the Credit CARD Act of 2009. The Federal Reserve Bank of Richmond, Work - ing Paper *Series*, WP 13-09R. Retrieved March 15th, 2014, from: http://www.public.asu.edu/~aghent/research/DebbautGhentKudlyak_July2013.pdf

Hancock, Adam M., Bryce L. Jorgensen, Melvin S. Swanson. 2012. College Students and Credit Card Use: The Role of Parents, Work Experience, Financial Knowledge, and Credit Card Attitudes**.** *Journal of Family and Economic Issues.* DOI**:** 10.1007/s10834-012-9338-8.

JCB. 2012. Research on credit card usage. Retrieved September 29, 2013, from http://www.jcbcorporate.com/news/pdf/report 2012.pdf

Japan Consumer Credit Association. 2013. The number of credit card newly issued. Retrieved October 31, 2013, from: http://www.j-credit.or.jp/information/statistics/investigation.html

Katsuwada, Hiroyuki, Teratani, A and Nogami, R. (2013). *The relationship between ownership rate of credit cards and positive or negative feelings toward credit cards among university students*. Waseda University School of Commerce, Retrieved September 29, 2013, from: http://www.ibi-japan.co.jp/japf/pdffiles/06_04.pdf

Mann, Ronald J. 2002. Credit Cards and Debit Cards in the United States and Japan. Monetary and Economic Studies. January 2002. Retrieved March 20, 2014, from: http://www.imes.boj.or.jp/research/papers/english/me20-1-5.pdf

MasterCard. “Safetina’s online shopping lesson” and “Introduction to Financial Management”. Retrieved August 18, 2014 from: http://www.mastercard.co.jp/personal/online-shopping-lesson.html and http://www.mastercard.co.jp/personal/financial-management/index.html

Nakakoji, M. 2006. Credit card use behavior among university students. Retrieved October 24, 2013 from: http://koide-phys.com/u-shizuoka/semi/05/nakakouji05.pdf

Robb. C. A. 2011. Financial Knowledge and Credit Card Behavior of College Students. *Journal of Family and Economic Issues*. 32: 690-698. DOI 10.1007/s10834-011-9259-y.

Sallie Mae's National Study of Usage Rates and Trends. 2009. “How Undergraduate Students Use Credit Cards,” April 2009, http://inpathways.net/SLMCreditCardUsageStudy41309FINAL2.pdf.

Sallie Mae. 2013. Fewer College Students Use Credit Cards, Most Maintain No or a Low Balance, April 24, Retrieved October 26th, 2014, from: http://news.salliemae.com/press-release/financial-literacy/fewer-college-students-use-credit-cards-most-maintain-no-or-low-bal

Science Daily. 2012. College Students and Credit Card Debt: Parents Have a Powerful Influence On Their Children's Financial Behaviors. Retrieved March 15th 2014 from: http://www. sciencedaily.com/releases/2012/10/121018123056.htm

Science Daily. 2013. Young credit card users are more responsible than older borrowers. October 8. Retrieved October 31, 2013, from: http://www.sciencedaily.com/releases/2013/10/131008090732.htm

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