

Learning English for Study Abroad

KOBAYASHI Aya (ayakoba408@pharm.showa-u.ac.jp),^{1*} ITABE Hiroyuki²

¹ Department of Pharmaceutical Education, School of Pharmacy, Showa University, Tokyo, Japan

² Division of Biological Chemistry, Department of Molecular Biology, School of Pharmacy, Showa University, Tokyo, Japan

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Abstract

Purpose: With universities in Japan being asked by the government to globalize and provide more opportunities for study abroad, our university has a credit-based electives for students. Based on the belief that English language study is needed prior to the study abroad to facilitate their participation in overseas academic activities, we have established our called English Salon to serve as an educational session. The purpose of our study was to uncover what approaches and materials for studying English are appropriate in preparing students for study abroad. **Methods:** Students had done extensive reading, pharmaceutical science-related vocabulary, pronunciation review and presentations. Upon completion of their study abroad programs, students were asked to respond to a questionnaire regarding the English language study they had done prior to going on the program. A hierarchical cluster analysis in their responses was conducted using the KH Coder freeware. **Results:** The results of the cluster analysis showed frequently quoted words were “think (*omou*)” and “English (*Eigo*).” The correlation between the following pairs: “myself (*jibun*)/learn (*manabu*)” “study abroad (*ryūgaku*)/ think (*omou*)” “word (*tango*)/conversation (*kaiwa*)” were considered relevant. **Discussion:** Given the strong correlation between “myself/learn” and “word/conversation” that were led to believe that students’ studying served as a motivation for their desire to study. And we surmised students need word (*tango*) and conversation (*kaiwa*) for study abroad. **Conclusion:** Students increased vocabulary prior to going abroad, they put those words to use at partner universities and hospitals. However, an uncover approach in English Salon was to practice medical conversations.

Keywords: Preparatory education prior to study abroad, English Salon, elective subject, questionnaire survey

Introduction

The Japan Student Service Organization has found that some 70,000 Japanese university students participated in study abroad programs in 2013.^{a)} However, the Cabinet Office has set a target of raising that number to 120,000 for fiscal year 2020.^{b)} Furthermore, the Ministry of Education, Culture, Sports, Sciences and Technology has deemed the nurturing of superior individuals who can play an active role in international society to be of vital importance, and it is actively promoting globalization in curriculums.^{c)} The Japan Business Federation (commonly known as Keidanren) has also entered into this arena to support the move by launching a grant program for university students planning to study abroad and holding global career meetings for students engaged in long-term overseas studies.^{d)}

With Japan bolstering its efforts to globalize and promote overseas study, Showa University School of Pharmacy has added a credit-based study abroad program to the elective classes for Year(Yr)-3, -5 and -6 students

to create an environment for students to engage in such activities. Yr-3 students can receive a credit through the course, or “Medical care-support Science”. The general instructional objective of this course is “to master the basic skills necessary to hold discussions in English about fundamental science that serves as the fundamental base of modern science, in order to become a pharmacist capable of functioning in international settings in the future.” Yr-5 and -6 students can take a course entitled “Exchange Program in Sister Schools” that worth 2 and 4 credits for Yr-5 and -6, respectively. The objective of this course is to master the basic knowledge and skills needed to become a pharmacist or a drug innovator who can respond to developmental trends in internationalization and adopt a future international perspective. Upper-year students who choose to study abroad are obliged to achieve the following;

1) The program is designed for language learning with the goal to facilitate students studying pharmaceutical science/pharmacy (PS/P) using English as the medium of

instruction at a foreign institution.

- 2) Students should learn and understand the differences from other countries in such systems as PS/P education, scientific study, medical care, and insurance systems.
- 3) Students must be able to use English to give study presentations, participate in journal reading groups, and engage in discussions.
- 4) Students should be able to participate in an internship at a hospital using the Problem Oriented System (POS).
- 5) Students should be able to make case reports with reference to literature review.

Muta¹ has reported that students coming back from their study abroad program have consistently reported they should have proactively tackled studying English and English conversation before leaving for the program. We have found in previous questionnaire surveys that English ability was one of the inhibitory reasons to study abroad.^{2,3} Accordingly, it seems that the student's perceived need to study the language is leading them to hesitate going for overseas study. The report by Nishito et al.⁴ have found that students desires further language study as well as expanded international activities including increase opportunities to participate in student exchange programs.

Therefore, we considered the possibility that our English Language Study Society (hereafter, "English

Salon"), which was already in place, might be able to help English acquisition by students planning to study abroad. The purpose of English Salon is to provide a study opportunity for students who have trouble acquiring English ability but who yet have a desire to learn on their own initiative. The Salon serves as a venue for self-directed language study so students can overcome their reluctance toward English learning. All those who wanted to participate in English learning, including students from the other schools and nurses working at the University Hospital, were affirmatively given a place in the Salon. Activities were geared to prepare and support those aspiring to go for study abroad in English-speaking localities. However, it was unclear what kind of curriculum was best suited for such a study program, as different students have needs and fields of study. The purpose of the present study was therefore to use student questionnaires to uncover what approaches and materials for studying English are appropriate in preparing students for study abroad.

Methods

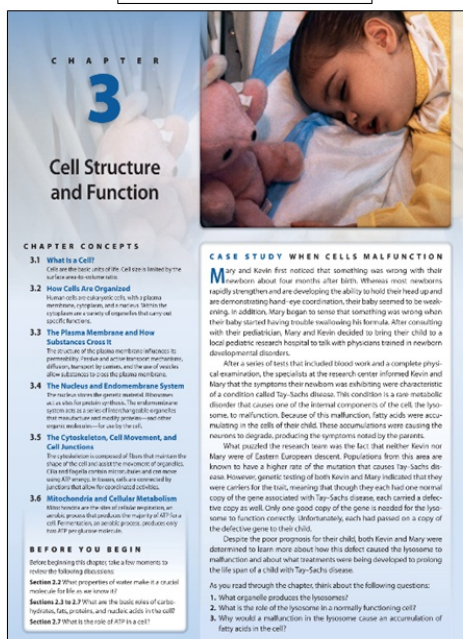
1. Leaning English for Study Abroad

English Salon was held once a week from 6 to 7 p.m. from April to July, from October to the first week of December, and from the fourth week of January to March.

Details of Study	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sept.	10 Oct.	11 Nov.	12 Dec.	1 Jan.	2 Feb.	3 Mar.
English self-directed study (reading aloud)												
Pharmaceutical texts in English, TOEIC drillbooks, etc.												
*Extensive reading of scientific textbooks												
Museum visits, field trips to hospitals and pharmacies												
*Pharmaceutical Vocabulary booklet												
Seminars in English by external English-language instructors												
*Presentation drafting												
*English pronunciation review												
Speaking Improvement seminar												

Table 1 : The English Salon schedule for the 2014 academic year

Human Biology



Vocabulary booklet

『P516「海外における薬剤師の役割を知る」 知っておくべき薬学英単語集 2』

【化学・物理】	化学	物理
水素	hydrogen	chromophore
酸素	oxygen	ultraviolet (UV) light
窒素	nitrogen	infrared light
塩素	chlorine	fluorescence
二酸化炭素	carbon dioxide	radioisotope
一酸化窒素	nitrogen oxide	methanol
アンモニア	ammonium	ethanol
リチウム	lithium	isopropanol (イソプロパノール)
カルシウム	calcium	hexane (ヘキサン)
マグネシウム	magnesium	charge
硫黄	sulfur	hydrophobic
リン	phosphorus	hydrophilic
塩酸	hydrochloric acid	covalent bond
硫酸	sulfuric acid	hydrogen bond
硝酸	nitric acid	double bond
リン酸	phosphoric acid	conjugated double bond
NaOH	sodium hydroxide	energy
過酸化水素	hydrogen peroxide	keto function (ケトン)
鉄イオン	ferrous/ionic iron	aldehyde function
原子	atom	
元素	element	【生物】
化合物	compound	antibody
分子	molecule	antigen
原子 (水素・酸素)	proton	immunity
中性子	neutron	lymphocyte
原子力発電所	nuclear power plant	vaccination
核兵器	nuclear weapon	endotoxin
原子爆弾	atomic bomb	circulation
太陽電池	solar cell	tissue fluid
太陽電池	cell	replication
太陽電池	cell	transcription
太陽電池	cell	translation
太陽電池	cell	DNA repair
太陽電池	cell	albumin (アルブミン)
太陽電池	cell	actin

Pronunciation software



Fig 1: Obligatory materials for students

Participation in the Salon required Yr-5 and -6 students who elected to participate in the study abroad program. Table 1 shows the schedule of English Salon for the 2014 academic year.

Study contents marked with asterisks (*) indicate obligatory materials for students opting for the program.

Figure 1 shows study contents of extensive reading (April-June), a self-produced vocabulary booklet (September-March) and pronunciation adjustment software (September-March). The instructor assigned the textbook “*Human Biology (chapter3; Cell Structure and Function)*,” (<http://highered.mheducation.com/sites/dl/free/.../chapter03.pdf>; 2014/3/11 accessed) and the students prepared Japanese translated reports through self-study. Once a month, the instructor reviewed the reports. Listening practice was also conducted using narration material based on a textbook. Progress in vocabulary and pronunciation was periodically checked with short tests. The instructor had students memorize and practice pronunciation from a list of 210 words listed in a booklet. Pronunciation adjustment software (GlobalvoiceCall, Hoya Service Corporation, Tokyo) which grades individual pronunciation on a scale of “Bad,” “Normal,” “Good,” “Excellent,” or “Perfect,” was used by instructors for pronunciation practice, and the grades were subsequently reported to the students.

Students were also guided on the use of self-study units on day-to-day English conversation, such as conversations in libraries or restaurants that are included as standard offerings in the software. Small tests on the spelling and meaning of English words as well as on listening were held once a week. Instruction on creating presentation materials was provided from October through March. Students were required to give presentations at their overseas universities, including a self-introduction. Accordingly, in English Salon the students talked about the details of their presentations in front of their instructors, who checked them to see if they were grammatically correct and whether they were being delivered at an appropriate speed. Two practice sessions were held prior to going on the program. Furthermore, a two-hour seminar with a native English-speaking instructor was undertaken to train students in preparing and oral delivery of presentations in English based on materials previously assigned by the instructor.

2. Questionnaires Survey of Students after Returning from the Study Abroad Program

Table 2 shows the number of students who attended study abroad programs of the Showa University School of Pharmacy from 2011 to 2014.

A survey of the activities in the programs was

Student	Course titles	Overseas universities	2011	2012	2013	2014
Yr-3	Medical care-support Science	University of California at Los Angeles (UCLA)	4	4	4	2
Yr-5,-6	Exchange Program in Sister schools	Albany College of Pharmacy and Health Sciences (ACPHS)	5	4	3	2
	Exchange Program in Sister Schools	Maharakham University(MSU)	2	2	2	2

Table 2: The numbers of Students who attended study abroad programs

Question 1) Please write down your overall impressions about having studied abroad.

Question 2) Please write down in simple terms what you did during each week over your study abroad program.

What you learned during Week 1

What you learned during Week 2

What you learned during Week 3

What you learned during Week 4

What you learned during Week 5

What you learned during Week 6

Question 3) Do you have any requests for the university where you studied?

Question 4) Do you have any requests for the Showa University School of Pharmacy?

Question 5) What sorts of preparations would have better prepare you prior to study abroad?

Question 6) Are there any changes you notice in yourself from having studied abroad?

Table 3: The Questionnaires

conducted with 6 students who attended Maharakham University (MSU) in Maha Sarakham Province, Thailand, between 2012 and 2014, and 5 students who attended the Albany College of Pharmacy and Health Sciences (ACPHS) in New York State, U.S.A., between 2013 and 2014. The survey was designed using the open-response method. All surveys were conducted within two weeks after students had returned from their respective programs. The questions used are shown in Table 3.

A hierarchical cluster analysis (Ward's method) for frequently appearing words was carried out on the questionnaire responses using the KH Coder freeware (<http://khc.sourceforge.net/>) to analyze cluster appearance patterns of relevant words.

Results

After summaries of the scientific textbook were compiled under the instructor's guidance, students were given a USB flash drive containing an audio file with the final text read aloud by a native speaker. This was used to drill their listening skills.

Short tests on the vocabulary booklet were given once a week, and continued until just before departure.

Most students scored less than 50% on the tests. The same questions were repeated over the 30 weeks of the course until each student scored at least 70% (21 of 30 questions). All students were able to achieve at least this score by the time of their departure. Vocabulary pronunciation was scored using a five-tier evaluation system. Students were repeatedly drilled to adjust their pronunciation of the terms in vocabulary booklet using the pronunciation-adjustment software. Opportunities were created for students to get a feel for pronunciation firsthand from American exchange students visiting Showa University in June and July. ^{e)}

Writing and delivery of presentations in English is an obligatory part of the program. Instruction in giving presentations included checking the grammar of the English text in the presentation manuscript, and noting if the content of a slide did match the speech content. Students were able to make presentations after completion of presentation seminars conducted by native English-speaking instructors. Table 4 shows the responses to the survey conducted after students had studied abroad in Thailand and U.S. in 2014. Figure 2 shows the results of frequently quoted words from the student questionnaires.

Question 4) Do you have any requests for Showa University School of Pharmacy?

Thailand: I *think* it might have been better to have also worked on following (writing down) *conversations* about the details of *medical care*. For medical terminology, it might be good to have a system where you put together lists of words that people who actually went to *study abroad* did not understand or newly learned while being there. The lists would increase in size every year and get passed on to the next cohort that goes.

U.S.: Requiring students to exchange journals and reports with their teachers in *Japan* about conditions of training in *the U.S.* and the internship situation would be a good idea. (Having something like a portfolio would be good because that means what they get trained in won't be left unfinished. Reports-writing can train a person to produce what has been learned.)

Question 5) What sorts of preparations would have better prepare you prior to study abroad?

Thailand: Given the many opportunities for discussion with local students anywhere and anytime, it would have been better to have developed and acquired *English ability* more. In particular, it would be better memorize medical terminology (generic names of medicines, names of illnesses, names of diagnosis and treatment departments, mechanisms of action, etc.). Knowing *medical terms* is important. I *thought* the names of *departments*, *human anatomy*, and names of *diseases* were particularly important.

U.S.: Practicing interviews with patients in *English*, figuring out how to read articles and give presentations (how to *think* in statistical terms, how to read graphs, etc.; extremely in-depth questions were asked when making presentations), and studying pharmacology. Refresh what was learned in internship at *hospitals* and *pharmacies* in Japan. Furthermore, if you can understand and translate *English* you learned ahead of time, you won't have difficulties during training.

Question 6) Are there any changes you notice in yourself from having study abroad?

Thailand: Comparing with the *American* and *Thai* students I was embarrassed about the low levels of my knowledge, which was a good stimulus as I felt I would have to try harder after I got back to *Japan*. I was frustrated by the fact that I would have been able to understand more if I had had better listening comprehension. That made me think that while I had been poor at listening comprehension and avoided it until now, in the future I would like to be continually exposed to *English*.

U.S.: I heard people describe me as shy since at first when I was asked for my opinion about something I would *think* for a bit and not say anything. However, I came to realize that I could say even just a little bit of what I was *thinking* and that the tempo of back and forth in a conversation was important. I felt that my communication abilities improved from having had that experience. I came to feel that I wanted to study *English* more and go to *the U.S.* again.

Table 4: Responses to 2014 Students Questionnaires

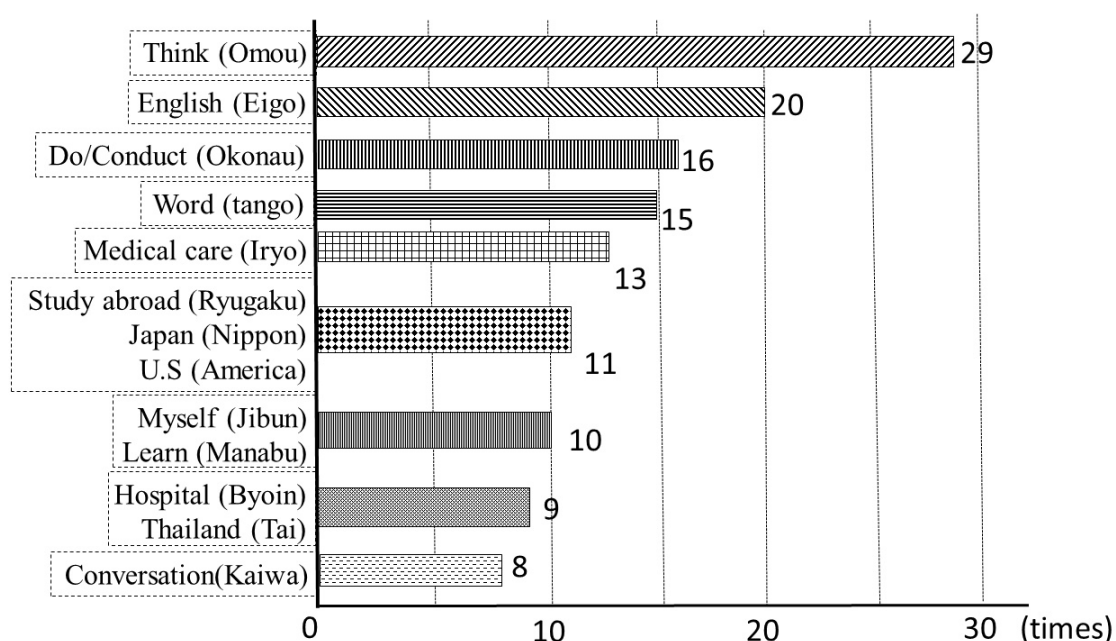
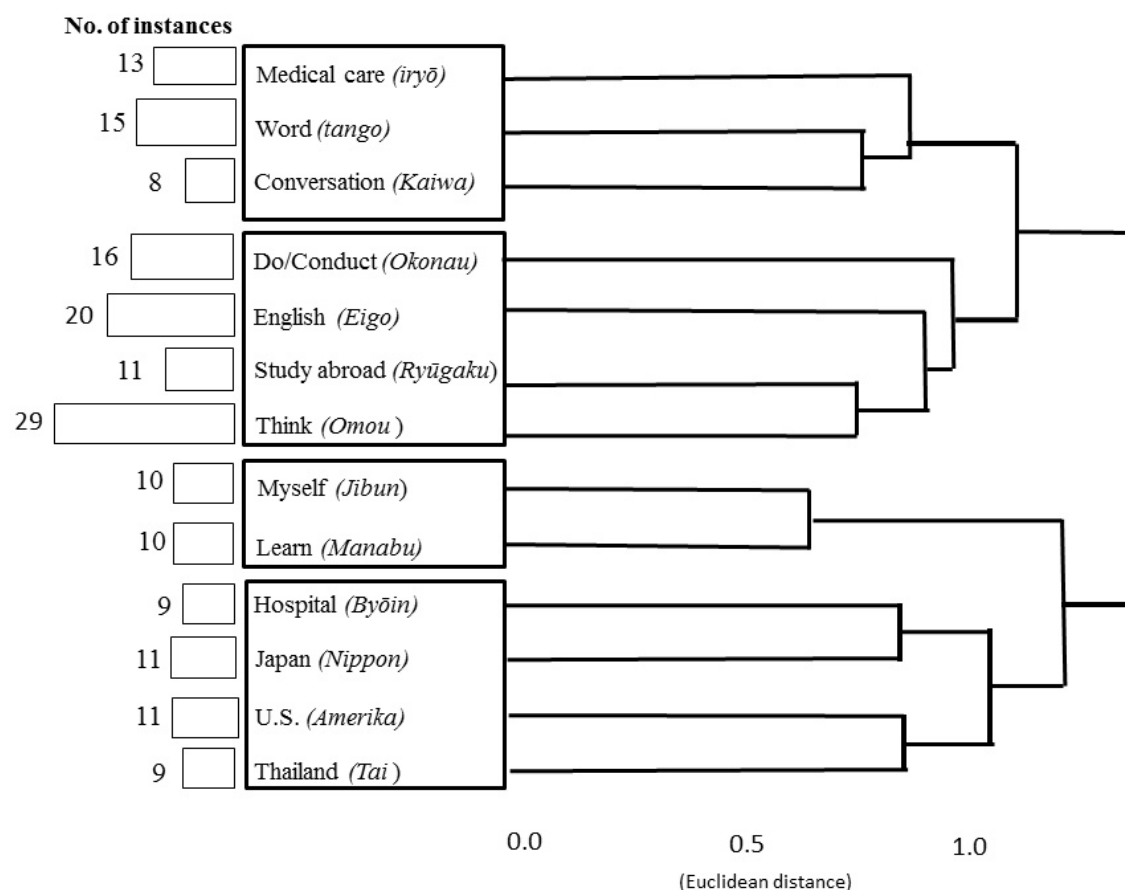


Fig. 2: Frequency quoted words (repeated for more than eight times) from Students



Method of analysis: KH Coder: <http://khc.sourceforge.net/> (freeware) software for performing statistical analysis of text data

Fig. 3: Frequency quoted words and Dendrogram of cluster analysis

The list of high-frequency words was topped by “think (*omou*)” [29 times], followed in descending order of frequency by “English (*Eigo*),” “do/conduct (*okonau*),” “word (*tango*),” “medical care (*iryō*),” “study abroad (*ryūgaku*),” “Japan (*Nippon*),” “the US (*Amerika*),” “myself (*jibun*),” and “learn (*manabu*)” (Fig.2). The results of the cluster analysis using this questionnaire were broken up into four clusters (groups) by close distance between high-frequency words. (Fig. 3) “Medical care, word, conversation,” “do/conduct, English, study abroad, think,” “myself, learn,” and “hospital, Japan, the US, Thailand.” Based on the relative distance of word pairs, “myself / learn,” “study abroad / think,” and “word / conversation” were considered to be more similar.

Discussion

English Salon began to provide a study venue for students

who have the desire to learn on their own initiative in 2008.^{2,3} Showa University began exchange programs with partner institutions in the U.S., Thailand, and South Korea in 2010. In line with this, the Society became English Salon and added the new objective of providing opportunities to prepared students who were planning to study abroad in English-speaking countries before going for the program. Furuya’s report⁵ indicates that study abroad not only increases students’ motivation to study English, but is also linked to increases in autonomy and social awareness. The goals of the present study project were developed with the view that studying English was one possible method of preparing students for study abroad so that students could learn and grow from their participation. Accordingly, in the hope that the results would be useful to future students, the present student questionnaire was administered to Yr-5 and -6 students who regarded participation in English Salon as essential. Additionally, the study elucidated to what extent the

material they studied in preparation for study abroad was appropriate and what aspects of it were required for that purpose. The present study showed that study-abroad program-exposed students were aware of the need to have adequate English ability for them to study abroad beneficially. It is conceivable that students came to understand that they were expected to study overseas not to learn English but rather to use English for PS/P learning. They could appreciate learning about things other than English from their experience of using English. The free response questionnaire survey was conducted among students who had completed the study abroad program.

1. A cluster analysis for resemblance words

The analysis result showing that “myself” and “learn” each occurred 10 times showed a strong correlation between these words. This can be thought to show that going to study abroad is a motivating factor linked to their desire to learn. There was also a clearly strong correlation between “word” and “conversation.” It is conceivable that this was because by studying the instructor-compiled booklet prior to going abroad, students put those words to use in journal-reading groups at their destination institutions and for POS in hospitals. Furthermore, there was also strong correlation between “study abroad” and “think,” which may be linked to students affirmative thinking from having being exposed to overseas experiences. According to Nakagawa⁶, one can learn and develop four typical features from study abroad; i) improvements in a person’s communication abilities, ii) learning about other cultures, iii) having a more tolerant attitude toward other cultures, and iv) the ability to cope with different values as possible outcomes of interacting with foreign cultures. The present study shows that more exposure of studying English conversation at actual health facilities as a means to improve communication ability might be needed, specifically with regard to learning done in preparation for study abroad. In the future, students are expected to put in more time and effort into practicing English conversation before going abroad. In doing so, they will be able to actively deal with an extensive range of social, cultural and clinical settings after their return.

2. A cluster analysis for frequently quoted words

The cluster analysis of the questionnaire responses extracted “English,” “word,” and “study abroad” as the most frequently quoted words. This may be because students had thought learning English for study abroad

mainly entailed learning vocabulary. We surmise that the words “think,” “do/conduct,” and “learn” came up frequently because these words express the thoughts and actions of students as well as learning on their own initiative. Ikeda’s study⁷ has showed that having a study abroad experience heightens one’s understanding of other cultures and capacity to apply that understanding, and has a positive influence on a student’s autonomy and ability to get things done. In line with Furuya⁵ and Ikeda’s studies,⁷ one can infer that the results of the present cluster analysis likewise indicate that providing students planning to go for study abroad with a venue for English familiarization will not only facilitate their travel but also pursuit of knowledge in certain specialty fields. Furthermore, overseas experience will also increase their motivation on their return, and contributes to improving their sense of autonomy on the whole.

“Medical care,” “Japan,” and “the US” were also quoted frequently. In the U.S. and Thailand, study-abroad students have opportunities to visit local hospitals and pharmacies to learn about local treatment practices and to go on field trips to actual health care facilities. However, conversations that take place in such facilities demanded more than what were taught in English Salon. Furthermore, students did not study contents related to disease symptoms and signs as well as medical treatment in Japan and the U.S. in English before going abroad. The fact that these three words came up in the results suggests the need to present future PS/P students planning to study abroad with more opportunities to practice English conversations that assume a dispensing and clinical setting in English Salon.

Survey responses such as “thinking and acting on my own initiative” and “learning on my own initiative” lead us to infer a forward-looking attitude in the home-coming students, thus confirming changes in student motivation, attitude, and stance in English-learning.

Conclusion

Students studied vocabulary a booklet prior to going abroad, they put those words to use in journal-reading groups at partner universities and for POS in hospitals. Uncover approaches in English Salon were to practice conversations that assume a medical treatment setting. As a result, the current levels of conversation to improve communication among pharmacists using English is not thought to be adequate. Improvements must be made to the English Salon for the benefit of future students who plan to study abroad.

Notes

- a) Government of Japan, Ministry of Education, Culture, Sports, Science and Technology. Survey of the Current Situation Regarding Japanese University Students Participating in Study Abroad Activities. Conducted by Japan Student Services Organization <http://www.mext.go.jp/a_menu/koutou/ryugaku/_icsFiles/afiedfile/2015/03/09/1345878_01.pdf>
- b) Government of Japan, Cabinet Secretariat, Policy Issues: Liaison Council for the Ministries and Agencies. Concerned on Promoting Youth Participation in Overseas Study Activities. <<http://www.cas.go.jp/jp/seisaku/ryuugaku/>>
- c) Government of Japan, Ministry of Education, Culture, Sports, Science and Technology. International Strategies at MEXT: Building up Our Nation's International Competitiveness in an Era of Global Competition. <http://www.mext.go.jp/a_menu/kokusai/senryaku/teigen/05092901/002.htm>
- d) Japan Business Federation. Policy Statement/Survey Report. Activities for Promoting the Cultivation of Internationally-Oriented Human Resources. <http://www.keidanren.or.jp/policy/2014/033_besshi.pdf>
- e) Albany College of Pharmacy and Health Sciences. Global Experience. Elective Rotations. <<http://acphs.edu/albany-campus/global-experiences/elective-rotations>>

References

- 1 Muta, Y. (2009). English Proficiency Before and After a 3-Month Study Abroad Program: Potential of the NJC integrated Ryugaku System. *Nagasaki Junior College kenkyū kiyō*, 21, 1-10.
- 2 Kobayashi, A., Saito, I., Numazawa, S., Nakamura, A., Kiuchi, Y., Hashimoto, M., Sato, H., Itabe, H. (2011). Questionnaires survey of 2nd-4th year pharmacy students in Showa University for the Study Abroad and English Self learning. *The Showa University Journal of Pharmaceutical Sciences*, 2(1). 91-99.
- 3 Kobayashi, A., Saito, I., Numazawa, S., Nakamura, A., Takamatsu, S., Kanemitsu, T., Handa, S., Hashimoto, M., Hiraizumi, Y., Itabe, H. (2013). A Survey of 2nd-4th Pharmacy Students at Showa University Regarding Their Attitudes toward Studying Abroad and English. *The Showa University Journal of Pharmaceutical Sciences*, 4(2), 179-88.
- 4 Nishito, T., Tsukinoki, R., Cardenas, X., Kobayashi, M., Kobayashi, T. (2014). Nursing Students' Views on International Exchanges in the Nursing Education. *Osaka Medical College Journal of Nursing Research*, 4, 96-104.
- 5 Furuya, N. (2005). Evaluating a Short-Term Study Abroad Program. *Bunka Gakuen University kiyō, Jinbun-shakai kagaku kenkyūs*, 13, 1930.
- 6 Nakagawa, K. (2012). Nihonjin gakusei to ryūgakusei no ibunka kōryū: Ibunka sesshoku kyōdōteki katsudō wo tōshita daigaku kyōiku e no tekiō to ishiki henyō [Cross-cultural exchange among Japanese and International students: Mutual change and Adaptation to the University Education along cross-cultural contact and collaborative activities]. *ibid.*, 13, 1-10.
- 7 Ikeda, Y. (2011). Kaigai ryūgaku no igi to meritto wo kangaeru: Kaigai ryūgaku ni yotte nani ga erareru ka [Considering the Significance and Merit of study abroad: What should students gain from studying abroad?]. Japan Student Services Association (JASSO) web magazine, *Ryūgaku kōryū*, 4, 1-10.