

AY 2019 Project Achievement Report of ALL DOSHISHA Co-Learning Program

Project Title
Have an experience that makes you want to know the screws and convey them to others

Project Members			
Role	Name	Major	Grade
Leader	Takumi Miyazaki	Chemical Engineering	1 st year Undergraduate Student
Sub-leader	Yui Fujiwara	Chemical Engineering	1 st year Undergraduate Student
	NYAMBU NATHANIEL MUPE	Mechanical Engineering	2 nd year Graduate Student
	Adi Patria	Science of Environment and Mathematical Modeling	1 st year Graduate Student

Expenditure			
Expenditure Items	Unit Price	Quantity	Amount
Transportation Fee			
Advanced meeting at Maruemu Works (Daito City)	840	1	840
Poster Printing Fee for event announcement			
A0 Paper Size	500	1	500
A1 Paper Size	250	11	2,750
Honorarium			
Lecturers of Maruemu Works	10,000	2	20,000
Appreciation Gifts			
Visit the factory of Maruemu Works	2,180	1	2,180
		Total	26,270

Purpose of the Project and Reasons

In recent years, screws have advanced on the cutting edge of space development and automobiles, but we have noticed that screws are not well understood even though they are in our everyday lives. In addition, the purpose is to visit Japanese small and medium-sized enterprises, convey the high precision of screws and the current situation, and make foreign students interested by seeing and interacting with screws. By learning more about screws, we could increase the number of international students to Doshisha University (especially the Department of Mechanical Engineering).

Details of Project Implementation (More than 1 page)

- Describe specifically your group project implementation in chronological order.
- Describe the roles of your group members and what they actually did for the project.
- Appropriately, you can attach photos by which we can see your work if you have.

(Less than half of the format)

In June, the ALL DOSHISHA co-learning program has started with three students, Miyazaki, Fujiwara and MUPE. Among them, we wanted to convey the advance of small and medium-sized enterprises with high Japanese technology and made it a screw that supports the foundation of life. In order to attract international students, we have selected several companies with excellent screw technology on the Internet. Among them, the homepage was translated in English, the introduction video of the company carefully introduces the screw manufacturing process, etc., and we are interested in foreign students because they are also developing technology for the latest medicine. We decided to Maruemu Manufacturing Co., Ltd. because it was judged that the content was received and that it met their purpose. After making an appointment by e-mail to express the planned contents of this program to the company, we decided the contents, the number of people, and the cost of the whole project to be done by e-mail with the company and created the plan book. The content was divided into two: a company visits to Doshisha University giving lecture on the basics of screws for participants, and a factory tour in which participants visit the company to guide them inside the factory. Since we thought that some of the participants of this project would have people who do not have specialized knowledge, we made the contents of basic technology and history. Also, by giving a lecture one week before the factory tour, we had the aim of making the most of the knowledge we had learned in advance during the actual factory tour.

On August 7, Miyazaki visited Maruemu Manufacturing Co., Ltd., to confirm the contents of the project that was carried out this time using the plan created in advance, and decided the specific implementation schedule, and plans to visit the guided factory tour.

On October 10, thanks to the call from the Faculty Office of Science and Engineering, ADI joined the project members, and it became more encouraging to have two international students

On October 11, I visited the company again by train with Fujiwara and confirmed the contents of PowerPoint that will be spoken in the lecture that we had requested in advance. Also, on the day of the lecture, Fujiwara will be the moderator and the company will have two parts in English, a historical story about screws and a story about technology. Based on the decided plan contents, we created a poster for publicity for recruiting participants in English, put a large picture so that more people can see it as an event related to screws when they see it immediately, QR Code made it easy for anyone to apply, and posted with permission on campus. The poster was created mainly by MUPE. In addition, we also sent notifications to international students of our university by e-mail and divided into two sections, lecture and factory tour, so that we can apply for participation.

On November 12, we reported the number of people who gathered to the company, and 12 people participated in the lecture and 11 people participated in the factory tour. On November 15, the lecture was held at the lounge on the 2nd floor of RIKEN, Doshisha University Kyotanabe Campus, and the screen was used to explain the history and uses of screws in English in an easy-to-understand manner. Fujiwara was in charge of moderation here. At the end, we handed out the questionnaire and asked them to write their impressions. The content asked how much interest and knowledge has changed in screws compared to before the lecture, and the purpose of this questionnaire is to embody how meaningful this lecture was.



Group photo of the lecture

On November 22, for the factory tour of Maruemu Co., Ltd. we gathered at Doshisha University and then headed by train. We were divided into two groups, Japanese and international students, and spoke Japanese and English to companies. The content was to actually see the screw manufacturing process that we learned from the lecture, and to see the precision equipment that measures the strength of the screw. During the tour, international students asked the staff in charge many questions and deepened their knowledge. Finally, we set a Q&A time of about 30 minutes. Also, we tried not to forget even after finishing by giving the screws to all the participants. Later, we asked the participants to answer the questionnaire via the Internet, and we were able to know how much success was achieved by asking about changes in the image of screws and changes in the image of regarding environmental problems.



Group photo of the factory tour

Acquirement of Competences through the project (More than 1 page)

- Describe the results compared with the goals and objectives in your project proposal.
- Describe what kind of skills and abilities you improve since the project started.
 - 3 elements of global mindset (①Global vision, ②Respect for diversity, ③Intercultural understanding)
 - Fundamental competencies for working persons (3 Competencies/ 12 Competency Factors)
 - ①Ability to step forward (Action) ②Ability to think through (Thinking), ③Ability to work in a team (Teamwork)
- In the case of non-achievement of the goals, please write specifically ①what you could not have done in the plan, ②the factors, ③the solutions.

Through this project, our group set the goal of making international students at Doshisha University interested in screws.

First, according to the questionnaire, more than 80% of the respondents said that they became more interested in screws after the lectures and tours. We think that we were able to achieve it enough considering many questions according to the questionnaire, "The guidance from the technicians at the factory tour was kind and easy to understand." "The screws are simple, but I was very interested." "The machines I saw at the factory were all cool. It is worth doing next year. Some of the international students wanted an internship. I think it was more effective to see the screws manufactured in front of what we learned in advance.

Next, regarding the goal of having international students of Doshisha University to listen and see and touch screws during the actual visit, international students got interested and told friends and family so that more international students would come. To that end, we gave away the screws that remain as shapes to finish my study abroad program so that we would not forget it when we returned. In addition, by posting the activity details on the Doshisha University website, we have devised a way for foreigners to be interested and come to see us.

As for self-development, we learned the basic communication method of the society by first communicating through the project. It was the first time to complete a series of signature methods and business fixed phrases. It is very creative to think from the beginning. We think that our independence and empathy have improved with own exciting activities.

However, we think that information management and situational understanding between teams did not go very well. Sometimes we were confused because we could make decisions based on my own judgment without contacting the team about the contact from companies and Doshisha University. We think that the solution is to create a system that transfers and shares what is sent.

Future Expected Results of Ripple Effect (Within 1 page)

- Describe how it will be desirable that the University will use your project outcomes in the future.
- Write the approaches as many as possible for more spreading out the project outcomes.

By reporting the details of our activities to other small and medium-sized enterprises, we can strengthen our ties and appeal overseas. By strengthening the connection, it is believed that we will be able to work more dominantly in future co-study programs and the activities will become more active. By appealing overseas, Doshisha University will be recognized as an interesting university that is different from other universities, and we will be able to increase its recognition overseas and attract more people. From now on, we will send the activity report by e-mail so that the students in the university can be interested in the activity. There are a few people who participated in this activity by e-mail notification, so it would be effective to create an easy-to-read sentence that summarizes the activity content in both English and Japanese.

AY 2019 Project Achievement Report of ALL DOSHISHA Co-Learning Program

Project Title
The Operation of Japanese Train～relationship between train's operation facilities and Japanese train diagrams～

Project Members			
Role	Name	Major	Grade
Leader	Tatsuya Fujimori	Department of Electrical Engineering	B1
	Misato Mori	Department of Chemical Engineering	B1
	Midori Kamura	Department of Mathematical Science	B1
	Shouq Alansari	Department of Mechanical Engineering	M1

Expenditure Items	Unit Price (yen)	Quantity	Amount (yen)
Transportation Fee			
Advanced meeting at West Japan Railway Company (Osaka City)	1,360	3	4,080
Appreciation Gifts			
Visit the factory of West Japan Railway Company	2,268	1	2,268
Total			6,348

Purpose and aim of the Project

Railroad in Japan is famous for its prompt work. First of all, we conduct a lecture for students from both foreign countries and Japan that teaches how the operation technologies that are in the front line are been managed, and gain participants' interest. And then, we actually go visit an institution related to the operation technologies to hear, think, and experience. Witnessing the cutting edge technologies stimulates the participants' motivation even for their academics.

In addition, we upload and report our accomplishments on a website of Doshisha University in order to present the advanced technology of Japanese railroad to many more students.

Successful project of ALL DOSHISHA Co-learning program gains interests from both at home and abroad, which encourages more international students to study at Doshisha University.

Details of Project Implementation (More than 1 page)

- Describe specifically your group project implementation in chronological order.
- Describe the roles of your group members and what they actually did for the project.
- Appropriately, you can attach photos by which we can see your work if you have.

(Less than half of the format)

We asked West Japan Railway Company (hereinafter referred to as “JR WEST”) to cooperate with our project. The reason is that JR WEST has Shinkansen services which conduct the cutting-edge technologies and exists in near place and it is very famous. In late September, we mailed the person who are in the transport department of JR WEST for the first time. In early October, we went its head office as a pre-meeting to tell outline of ALL DOSHISHA Co-learning program and contents of train group's project. As a result, JR WEST officially cooperated us. We did the pre-meetings at three times. We discussed lecture contents concretely and the date of the project (February 18th) was fixed in the second pre-meeting. In the third pre-meeting, we adjusted the contents in Power Point, which we showed the day of the project to understand it easily both international students and Japanese students.



We told information of this project to the students who are interested in study abroad and international students in the faculty of Science and Engineering by using Google Form. We showed them its timetable in attached file.

We visited West Japan Railway Company Employee Training Center on February 18th and conducted a facility tour and lecture of relationship between operation facilities and train diagram.

In a lecture, we learned ways of making diagram based on operation facilities by the officers from the transport department from transport department. Especially, we learned conditions and standard ways of thinking about operation facilities, we need in order to realize the punctual train service considering several restrictions.



For example, they show a Run Curve which is used to make diagrams. As an output, we have done a quiz of adding essential operation equipment in order to enable diagrams to be utilized. It included difficult contents, but participatory style, not just learning passively must have expanded an understanding.

In a tour, we have looked to see how divergences and signals, which we have learned in the lecture, are actually controlled. We also experienced a driving operation for Shinkansen and learned how drivers are actually using diagrams for operation. We surprised that train drivers consider so many complex conditions. For example, the timetables in detail are



decided within ± 5 seconds. The participants said they have enjoyed both lecture and tour with interesting content. The event has been a meaningful experiment.

Through this project, Tatsuya Fujimori mainly negotiated with JR WEST, made some kinds of materials and translated Japanese to English in the day of visiting company. Misato Mori mostly translated the materials into English. Midori Kamura chaired the lecture and made ideas of the poster which is used to gather the participants. Shouq Alansari made and designed the poster. The contents of visiting facility in this project made a difference since we have planned at first. We changed the contents by discussing with the officer of the transport department and the project members.

Acquirement of Competences through the project (More than 1 page)

- Describe the results compared with the goals and objectives in your project proposal.
- Describe what kind of skills and abilities you improve since the project started.
 - 3 elements of global mindset (①Global vision, ②Respect for diversity, ③Intercultural understanding)
 - Fundamental competencies for working persons (3 Competencies/ 12 Competency Factors)
- ①Ability to step forward (Action) ②Ability to think through (Thinking), ③Ability to work in a team (Teamwork)
- In the case of non-achievement of the goals, please write specifically ①what you could not have done in the plan, ②the factors, ③the solutions.

At the point of planning, the project was to be conducted through two days, one day for a lecture of making a diagram and another day for control room visit. However, control room visit was not permitted because of security aspect. After discussing with the project members and the person from JR WEST in charge of this project, we have shifted to another plan, conducting a one-day tour for both lecture and viewing of operation services. At the West Japan Railroad Company Employee Training Center, we have experienced the cutting-edge technologies with international students. Therefore, we would say we have basically achieved our original goal.

Reflecting the project, technical terms may have been difficult for international students to understand. Listing some vocabularies of operation services and techniques and preparing a document with simple explanation in English must have helped the participants to understand. Another concern is that we need more effective way to tell about our project, so we must think about specific ideas. Disseminating of the project achievements leads to gain interest from more people even for ALL DOSHISHA Co-learning Program after next year. Therefore, we continue activities to get people interested in ALL DOSHISHA Co-learning Program, which encourages more international students to study at Doshisha University.

At the beginning, this train group was only consisted of three Japanese members. It was difficult to consider how the project could contribute to both international and Japanese students. However, since Ms. Alansari later had joined our group, we could introduce some ideas from an international aspect. We learned that some participants could be not familiar with railroad. We have arranged the lecture to make the introduction with basic explanations for all participants to get ready. Therefore, we could understand the different cultures and different set of value from international aspects.

We got helped by people from the office, but we could complete the project which have improved our social life basic skills, independence, and ability to get things done. It was hard to think a new project, explain and understand the project to international students with different backgrounds. However, we could gain valuable experiences as

a member of the project management such as paperwork and contacting with companies. We could also increase our problem-solving capacity through the experience of changing our plan in the middle of the project. On the other hand, there were some problems of working with a team. Each member was busy, and we could not get together more often, that most of meetings were done with only two or three members. Main factor of the problem is that the project was pressed for time. We could have set regular schedules for meetings beforehand for getting more active discussions and conducting the better project.

On the day of the project, we were impressed with active discussions and interests of international and Japanese students during the diagram quizzes in the lecture and Shinkansen operation simulator experience. We would like to thank again to JR WEST for kind cooperation.

Future Expected Results of Ripple Effect (Within 1 page)

- Describe how it will be desirable that the University will use your project outcomes in the future.
- Write the approaches as many as possible for more spreading out the project outcomes.

After the academic year, we will release the results of this project to get increase the number of international students at Doshisha University during recruitment and activities of ALL DOSHISHA Co-learning program. In addition, we hope that it also releases on the website and anyone reads it constantly so that many people can be interested in this project. Moreover, we need to think and change how to appeal this project on the website. For example, changing the location of this project's contents. Finally, we expect to increase the students who are interested in ALL DOSHISHA Co-learning program.

AY 2019 Project Achievement Report of ALL DOSHISHA Co-Learning Program

Project Title
Explore Japan's cutting-edge technologies from a different point of view in science and engineering through symposium (NTT group)

Project Members			
Role	Name	Major	Grade
Group Sub Leader	Ryoto Morihara	Intelligent Information Engineering and Sciences	B1
	Mami Akakabe	Environmental Systems Sciences	B1
	Kein Kimura	Electrical Engineering	B1
	Fernandez Don Martin Pante	Electrical and Electronic Engineering	M2
	Mohammed Awad Hajjaj	Information and Computer Science	D2

Expenditure			
Expenditure Items	Unit Price	Quantity	Amount
Appreciation Gifts			
Visit the factory of NTT West	2,160	1	2,160
TOTAL			2,160

Purpose of the Project and Reasons
<p>Today, people are getting concerned about 5G that can attract interest from overseas, we focus on that ICT became part of our life. We thought we can learn about ICT in today's advanced information-oriented society and its surroundings. This is why, we decided to request NTT west to allow us to hold the tour. NTT west has one of the largest facilities in Japan. We started this project with these aims.</p>

Details of Project Implementation (More than 1 page)

- Describe specifically your group project implementation in chronological order.
- Describe the roles of your group members and what they actually did for the project.
- Appropriately, you can attach photos by which we can see your work if you have.

(Less than half of the format)

We did preparation for the tour.

First, Morihara had Prof. Kato contact with the officer of NTT west in mid. August, and ask our requests for the officer in August 23.

After that, in 5pm. October 29, we had the officer come to Doshisha University and held a meeting with Morihara, Akakabe, Kimura, and Prof. Kato. Then, we decided next three things.

First is to check some words to prepare for interpretation for those who can't speak Japanese because there is no person who can teach us ICT in English. This task was shared with Morihara and Kimura.

Second thing is to be careful not to tell the location of the facility to those who don't visit there and to hand in the report about who take part in. The facility will be exposed to the threat of terrorism if the location leaks because it is one of the largest ones in Japan. The report was wrote by Morihara, Akakabe, and Kimura.

Last thing is to make a poster to looking for participants. Fernandez also joined Co-learning program last year, so we had him make basic version poster, and made perfect version with all members. When we recruit participants, we didn't put poster on the wall in university but used mailing list. The mail was wrote by Morihara, Akakabe, and Kimura.

In 2 pm. November 26, we visited NTT west with Morihara, Kimura, Fernandez, other participants and teachers. This tour consists of four parts.

First, we saw IP facilities. These are machines which send and receive data with the method of packet communication. This method is used when we read web pages.

Next, what we saw is transmission facilities that concern the quality of information communication.

After that, we went to see cable tunnel. This place was strictly guarded as even members of the company can't enter without permission.

Lastly, we saw electric power equipment. That is necessary to run facilities as mentioned before, so many things are prepared for emergency.

After the tour, in order to accomplish the second purpose of this project, we held a tour in Doshisha. First, Morihara took an appointment with the officer to see the server room in Doshisha University and recruit new participants. Through some meetings with Morihara, Akakabe, Kimura, and the officer in December 4 and 11, the contents was decided like this.

First thing is to prepare documents for participants. This time, we got a detailed one before the tour, so Morihara translated it into English.

The other thing is to recruit participants. We wrote a mail and send it as same as last time tour.

We got lecture with some machines in server room and core switch room. The officer said he can't explain about machines in English, but a lot of technical terms in Japanese are based on English one and participants are specialize in engineering, so we could proceed the tour smoothly with some documents.

Then we achieve two purposes, so Morihara wrote report and had the officer of NTT west check it.

Acquirement of Competences through the project (More than 1 page)

- Describe the results compared with the goals and objectives in your project proposal.
- Describe what kind of skills and abilities you improve since the project started.
 - 3 elements of global mindset (①Global vision, ②Respect for diversity, ③Intercultural understanding)
 - Fundamental competencies for working persons (3 Competencies/ 12 Competency Factors)
- ①Ability to step forward (Action) ②Ability to think through (Thinking), ③Ability to work in a team (Teamwork)
- In the case of non-achievement of the goals, please write specifically ①what you could not have done in the plan, ②the factors, ③the solutions.

Our group proceeded with this project with the next object: ① Hold tours to see facilities in person ② Get lectures about ICT ③ Develop an understanding about ICT used in smartphones.

First of all, we write about the result. Concerning about ①hold tours to see facilities in person, we were allowed to enter secret area, and the officer granted our requests. We spent quality time in there.

Next, we want to write about ②get lectures about ICT, we could get lectures with in facilities of NTT west and it is easier to understand than in classroom, so we can gain deeper understanding.

However, we couldn't translate well during the tour in NTT west and couldn't help those who can't speak Japanese to understand sufficiently. That caused from lack of preparation. From this experience, before the tour in Doshisha, we not only translate the document but put explanations about technical terms. This move enabled us to proceed the tour more smoothly.

Next topic is about our skills improved through the project.

First, the ability to think through is my weak point. There were some mistakes I overlooked, and I took too much time to make poster. I think it is not so hard to correct this ability because it can be strengthened in daily life. When we held meetings, course of the NTT west tour had been already decided before we discuss, but the tour in Doshisha can be decided as we wanted, so creativity was strengthened to a certain degree.

Second topic is about ability to work in a team. I think it was also got better than before.

Throughout this project, there were something I couldn't do well, but I could improve a lot of abilities. I had many good experiences.

Future Expected Results of Ripple Effect (Within 1 page)

- Describe how it will be desirable that the University will use your project outcomes in the future.
- Write the approaches as many as possible for more spreading out the project outcomes.

First, we write about “how it will be desirable that the University will use your project outcomes in the future”. This should be used as advertising material on HP when recruiting participants for new projects. Addition to it, it is also good that to have the officer of NTT west introduce other departments when new project is planned.

To put the result on Doshisha HP is effective, but we think its effect is limited because that page will be seen only by those who already know the existence of this project. This is why, we think it is necessary that to make the project widely known for students.

It is needed that to increase the number of participants to make the project widely known. Now, in ALL DOSHISHA Co-learning program, only Japanese plan projects, but in this case, the number of participants depends on the projects. I think also international students should plan projects. Addition to it, ask international students in ALL DOSHISHA some questions like “where did you know about ALL DOSHISHA?” “Why did you decide to join it?” or something like that.

Lastly, what will happen if we increase the publicity of ALL DOSHISHA. One thing is some companies who want to support this program can be emerged. And if we proceed some projects and achieve the goal, we can accomplish the main purpose, “Increase the number of international students” more easily.