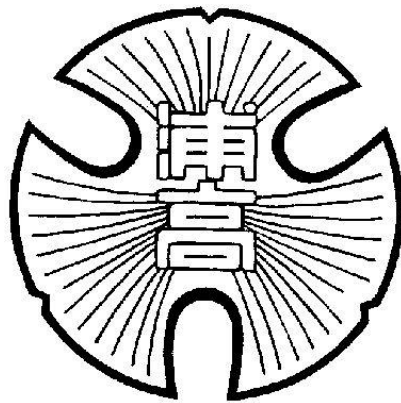


SGH Summary Report

2014-2015



Saitama Prefectural Urawa High School

Saitama Prefectural Urawa High School
Designated Year 2014
SGH Summary Report
(2014 - 2015)

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Editor: the Research and Development committee of SGH at Urawa High School

Cooperation: Scott Aikin, Kai Osawa

Publisher: Saitama Prefectural Urawa High School

Principal: Takeshi Sugiyama

Address: Ryoke 5 - 3 - 3, Urawa-ku, Saitama City, Saitama, 330 - 9330, Japan

Tel: 048 (886) 3000

Fax: 048 (885) 4647

Preface

Urawa Prefectural High School was designated as a Super Global High school in 2014. In this report, we have put together a record of activities from the past two years.

We applied for SGH for the following reasons. First, we aim to equip Urawa High School students to become global leaders. Students should always try to overcome the difficulties they face. With this in mind I want our students, who are expected to play an important role in the world, to strengthen themselves by nurturing more global views and interacting with various kinds of people.

Second, we want to share our approach to education with the world. There are 56 high schools designated as SGHs in Japan, and we want to share our approach with these other schools. Also, the designation as an SGH has increased the number of visitors to our school. I believe transmitting the approach of our school's all-around education to others will have a positive effect on the future direction of education in Japan.

Third, I think being an SGH will augment the education of our school. If you already think that your education is satisfactory, there is little room for improvement. From now on, by receiving feedback from other SGH schools, we will be able to enhance the education of Urawa High School.

In the last two years, SGH activities have already elevated Urawa High School's potential in two main areas, the research in our advisory groups and international exchanges. I am proud that our students, faculty, parents and the alumni association are working together to passionately build and promote the education at our school.

I sincerely hope that our SGH program will help produce more and more global leaders who will positively influence the world wherever they are through innovation and compassion.

Takeshi Sugiyama
Principal

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Report 1

Advisory Groups

Our SGH program has started with project studies in integrated study (SGH Seminars) and foreign exchange with our sister school as the two main parts.

Project studies in integrated study have a prior history of over 15 years since they started as advisory groups in 2000. Every second-year student is enrolled in one of the 40 unique courses, with their own unique focus, doing research, and writing a final paper about the course's theme proposed by the instructor. Even before being designated as an SGH, there were various types of courses and numerous researches were conducted. Thanks to the SGH program, our advisory groups have been able to address more and more social and global issues in line with our core themes of "Enrichment of Society", "Sustaining a Global Environment", and "Universal Values of Humanity".

In this report, you can learn the main activities in 2014 and 2015, see a list of the Advisory Groups in 2015 and some of their syllabi, browse the contents of the presentations in the summary report at the Fukutake Learning Theater of the University of Tokyo (the same as its distributed leaflet), and read the summary of the mid-term report in September, 2015.

You can also read the report "Should Japan accept immigrants?" from "the Collected Papers of SGH Seminar 2014" as one of the example of our students' works.

The videos of the summary report at the Fukutake Learning Theater will be available on our school website from the end of this April.

Fiscal 2014 Main Activities of Saitama Prefectural Urawa High School SGH

4/9	Wed.	Guidance on integrated study
4/16	Wed.	Guidance on Advisory Groups
4/30	Wed.	Advisory Groups 1
5/14	Wed.	Advisory Groups 2
5/26	Mon.	Reiwa Seminar "A Vocalist who Sings Abroad" (Chikusa Tomita : a baritone singer)
6/4	Wed.	Advisory Groups 3
6/18	Wed.	Advisory Groups 4
6/25	Wed.	Advisory Groups 5 Reiwa Seminar "Brain Surgery and Brain Chemistry" (Hiroyuki Kamiguchi : RIKEN)
7/2	Wed.	Visit to The University of Tokyo
7/7	Mon.	Summer School Program at University of Michigan (~July 18)
7/8	Tue.	Seminar on developing global human resources (Naoya Okamoto : Cambridge)
7/10	Thu.	The Boeing Higher Education Program (Developing English presentation skills)
7/11	Fri.	Advisory Groups 6
7/23	Wed.	The Boeing Higher Education Program (Presentation, cross-cultural communication)
7/25	Fri.	Basic lecture class on English Debate
7/27	Sun.	Aspen Classics Seminars (~Aug. 2) three times
8/25	Mon.	The principal visits Whitgift (~August 29) SGH Joint meeting (University of London • University of Cambridge • Whitgift School)
9/1	Mon.	English Assistant Mr. Siam visits Urawa H. S. (~Sep. 26) Foreign student Mr. Sergej visits Urawa H. S. (~present)
9/10	Wed.	Steering and Orientation Committee Advisory Groups 7
9/13	Sat.	School Festival, Whitgift School photo exhibition (~Sep.14)
9/24	Wed.	Seminar for students sent to Whitgift School 1
9/29	Mon.	Reiwa Seminar "Listen Your Heart" (Mitsuru Murai : the chairman of J.League)
10/1	Wed.	Advisory Groups 8
10/7	Tue.	Education minister of Queensland, Australia visits Urawa H. S. (Lecture meeting • questions and answers)
10/8	Wed.	Guidance on Advisory Groups (the second term)
10/17	Fri.	Short-term foreign students comes from Whitgift School (~Oct. 25)
10/21	Tue.	Lecture about deciding one's future (Atsushi Amano : Prof. at Juntendo Univ.)

10/22	Wed.	Advisory Groups 1
10/27	Mon.	Reiwa Seminar "Who is in Great Demand? (Minoru Nakazato : University of Tokyo)
10/29	Wed.	Advisory Groups 2
11/1	Sat.	Prefectural tournament of English debate (third place)
11/6	Thu.	Seminar for students going to Whitgift School (part 2)
11/17	Mon.	Asahi Lecture by the Univ. of Tokyo "Ages of Environmental Governance" (Jin Sato)
11/19	Wed.	Advisory Groups 3
11/26	Wed.	Advisory Groups 4 Lecture by the Univ. of Tokyo "Medical Ethics"(Prof. Kazuo Yamamoto) SGH Seminar "Invitation to Glycobiology"(Mr. Yamamoto) Reiwa Seminar "Seeking after the Dark Mater in Space" (Shingo Kazama : High Energy Accelerator Research Organization) The workshop on parliamentary debate (Tomohiro Nakagawa)
12/3	Wed.	Advisory Groups 5 Lecture by the Univ. of Tokyo "Are there aliens?" (Kentaro Nakamura)
12/4	Thu.	Selection of students who would attend Whitgift School for one year
12/12	Fri.	The Univ. of Tokyo: PEAK foreign students' session
12/13	Sat.	Participation in the All Japan High School English Debate Tournament (-Dec.14) Exchange meeting of parliamentary debate with metropolitan high schools
12/15	Mon.	Embassdor Kennedy visits Urawa H. S. (Speech・Discussion) Asahi Lecture by the Univ. of Tokyo "Bringing out the Best of yourself through Daily Conversation" (Mihoko Otake)
12/16	Tue.	Advisory Groups 6
1/14	Wed.	Advisory Groups 7
1/26	Mon.	Asahi Lecture by the Univ. of Tokyo "Fostering a society of cooperation"(Hidekki Koizumi))
1/28	Wed.	Advisory Groups 8
2/2	Mon.	Asahi Lecture by the Univ. of Tokyo "Living together in a Global Community" (Tadashi Mori)
2/4	Wed.	Management and Guidance Committee
2/13	Fri.	Student selection for the next year's summer seminar abroad
3/24	Tue.	Short-term students sent to Whitgift School (-Mar.31)
3/30	Mon.	The Boeing Higher Education Program (information engineering)

Fiscal 2015 Main Activities of Saitama Prefectural Urawa High School SGH

4/7	Tue.	Advisor of international interaction (Tom Kiford) comes to Urawa H.S. (-June 31)
4/7	Tue.	The Workshop for nurturing global leaders (NGO Blue Dolphins)
4/15	Wed.	Guidance on Integrated Study
4/22	Wed.	The first SGH lecture meeting "Living in the Global Age" (Yutaka Kase: Sojitz)
4/22	Wed.	Registration of Advisory Groups
5/7	Wed.	Advisory Groups 1
5/22	Wed.	Advisory Groups 2
6/2	Tue.	Reiwa Seminar "What I can do as an administrative officer" (Hiroyuki Suehiro, the head of Kanto Regional Agricultural Administration Office)
6/3	Wed.	Advisory Groups 3
6/14	Sun.	NFLJ Oita Debate Champion •qualified for American Tournament
6/17	Wed.	Advisory Groups 4
6/24	Wed.	Advisory Groups 5
7/8	Wed.	Advisory Groups 6
7/6	Mon.	Summer School at the Univ. of Michigan 1 (- July 17)
7/11	Sat.	Project of Advisory groups Japanese Archery with Foreign Exchange Students of PEAK at the Univ. of Tokyo
7/11	Sat.	Sergej, AFS foreign student leaves for home.
7/19	Sun.	Summer School at the Univ. of Michigan 2 (- July 31)
7/19	Sun.	Whitgift Summer Program 1 (- August 2)
7/26	Sun.	Whitgift Summer Program 2 (- August 9)
8/3	Mon.	Aspen Classics Seminar (- August 13) three times
8/20	Sat.	The Boeing Higher Education Program (aerospace engineering)
8/26	Wed.	Advisory Group Project Brief session of the efforts by Volunteering for ciber-crime prevention
		Long-term student delegates leave for Whitgift School (- July, 2016)
		AFS annual student delegates leave for Mexico (- July, 2016)
9/1	Tue.	Jacob, foreign student from Denmark visits Urawa High School.
9/9	Wed.	Advisory Groups 7 (Submission of the paper)
9/11	Fri.	The preliminary meeting for the second SGH delegation (Whitgift School and WHO)
9/12	Sat.	School Festival, the exhibition of photographs by students who went to Whitgift
9/13	Sat.	School Festival, mid-term reporting of SGH, the first meeting of the Management and Guidance Committee

9/18	Fri.	The second guidance of SGH delegation (Whitgift School and WHO)
9/30	Wed.	Reiwa Seminar "Consider the qualifications for the elite" (Masaru Sato :writer•a former analyst of the Ministry of Foreign Affaires)
10/7	Wed.	Advisory Groups 8 (Presentation•Evaluation)
10/9	Fri.	Reiwa Seminar "Subject Undecided" (Hiroshi Nobe:Keio University Law School)
10/13	Tue.	Exchange students from Whitgift School visits Urawa High School (- July, 2016)
10/14	Wed.	Resislation for the second-term Advisory Groups
10/23	Fri.	Guidance on the long-term delegation to Whitgift School
10/28	Wed.	Advisory Groups 1
11/6	Fri.	Reiwa Seminar (Masakatsu Shibata:the director of Institute of Microbial Chemistry)
11/4	Wed.	Advisory Groups 2
11/18	Wed.	Lecture on future course (Kosuke Motani: Demographic Challenges)
11/18	Wed.	Advisory Groups 3
11/25	Wed.	Advisory Groups 4
12/2	Wed.	Advisory Groups 5
12/15	Tue.	Advisory Groups 6
1/3	Wed.	Advisory Groups 7 (Submission of the paper)
1/8	Fri.	SGH Workshop (the 1st-grade students)
1/27	Wed.	Advisory Groups 8 (presentation•Evaluatuion)
2/3	Wed.	Advisory Groups distribution of collection of papers
2/8	Mon.	Reiwa Seminar (Goro Abe: Nintendo Software Planning & Development)
2/10	Wed.	SGH intramural presentation (the 1st and 2nd grade students) Advisory Groups, distribution of the collection of papers)
2/10	Wed.	Screening students for the next overseas summer seminar
2/13	Sat.	Fiscal 2015 SGH Summary Report
2/16	Tue.	the second meeting of the Management and Guidance Committee
3/17	Wed.	Short-term delegation to Whitgift Schoo and WHO (- March 26)

School Year 2015 List of Advisory Groups in the First Term

No	Teacher	Name of the Course	Summary
1	H. KOBAYASHI	Urawa High School -Its History and Future-	We are going to consider the future of Urawa High School through learning about its 120-year history.
2	TAKADA	The First Step in Learning German	We are going to learn the basics of German, especially its grammar, comparing it with English, which is one of the Germanic languages.
3	NAKAGOSHI	The film "Ben-Hur"	We are going to think about ancient Rome and Christianity through watching the film.
4	E. NAKAMURA	Military Arts	We are going to examine people and the history concerning military arts.
5	FUJI	Intensive Reading of the Works by Charlie Chaplin	We are going to read English texts. You need to prepare hard for the class. I hope we will sometimes watch movies.
6	MINAGAWA	Comparative Reading of "The Little Prince" in French and in English	You will learn the basics of French. Then you can compare the French text and the English text of "The Little Prince". Through this activity, you will do a research paper.
7	Koji AOKI	Reading <i>TIME</i>	I welcome those who are good at English. You will read articles from <i>TIME</i> , finding a theme based on those articles and writing a report in English.
8	IWAMOTO	Nurturing Global Leaders from Fukui Prefecture who can Contribute to the Development and Prosperity in East Asia	I was delegated from Fukui as a teacher to this school this year. Fukui prefecture is a small prefecture located on the sea of Japan. It is comfortable to live in, has close relations with East Asian Countries, and has high-level on the Happy Index. In this course I want you to learn more about Fukui and propose the way students in Fukui can contribute to the development of East Asian countries.
9	OURA	Consideration into the Situations in the World	We are going to read as many newspaper articles as possible. You will do a research paper on social, welfare, medical, or international topic. As you read, you will find a theme to write a paper

			on.
10	R. TAKAHASHI	Stock Prices and the World Economy	We are going to participate in the game for high school students to learn about stocks held by Tokyo Stock Exchange, Inc. We will learn about economic systems and social movements.
11	NAGASAWA	Preventing Children from Getting Involved in Cyber-Crimes	Almost everyone is familiar with the concept of cyber-crimes. You probably learned about them in elementary or junior high school, as perhaps you had classes which dealt with them. In spite of many teachers' efforts, the number of cyber-crimes and other online incidents has been increasing year by year. Why is this happening? This course will investigate and analyze what is needed for children to protect themselves from cyber-crimes. You will also give a trial lesson on cyber-crime at an elementary or junior high school. I want you to plan a creative Internet lesson that includes movies, short plays, quizzes, and games. You will also conduct negotiations about necessary adjustments at schools.
12	HIRUNUMA	Gender-Equal Society	We are going to investigate the efforts in offices, local areas, and houses regarding a gender-equal society.
13	S. NARA	Research on travel with Seishun 18 tickets	Using 18 train tickets, we will travel to areas of different cultures.
14	NOZAKI HARADA	International Interaction by Using the Internet	We are going to interact with students at the University of Dhaka and specialists at JICA in Bangladesh through a tele-seminar system in cooperation with international NGO and JICA. We welcome those who are interested in international understanding.
15	YAMANAKA	How to Increase the Number of Foreign Tourists	We are going to consider the merits of increasing the number of foreign tourist to Japan and examine the ways do so. We will also propose effective and concrete plans to encourage foreign tourists to visit Japan again.

16	NAGASE OKADA	Investigation into Power Problems in Japan "Consider the Future of Nuclear Power Plants and Renewable Energy"	We analyze advantages and problems of nuclear power plants and renewable energy from the viewpoints of science, politics, economics, and history, trying to propose a policy for 2030 for Japan. This is a major problem facing your generation.
17	IGUCHI	Biological Evolution and the Theory of Evolution	We are going to analyze the history of biological evolution and the theory of evolution.
18	SASAKI	Japanese Mathematics	We are going to examine Japanese mathematics, which was developed mainly in Edo period. At first, you will research the backgrounds of the development and make a mid-term presentation.
19	TSUBURAYA	Matrix (in Mathematics)	We are going to deal with the teaching unit "Matrix", which is now not included in the course of study of mathematics at high school.
20	NAOI	Are There any Alien Beings from Another Planet?	Are there any living things outside the earth? Are there intelligent lives in space (alien beings)? You will examine the possibility through analyzing research on biology and astronomy, and then you will need to write a paper based on what you read.
21	MORIZUMI	Medical Ethics	Each student writes a report on one of the various themes in medical ethics, and makes a presentation where opinions are exchanged and reviewed by your peers.
22	AKIYAMA	The World of Tennis	We are going to learn the history and the rules of soft tennis, which originated in Japan, have fun with it, and consider how it should be advanced in the future. We will also practice tennis.
23	ONODERA	Sport Morphology -Investigation into Gymnastics-	We are going to investigate the theory and the practice of gymnastics.
24	NAKAYA	Consider Tactics Using Table Tennis as an Example	We are going to examine table tennis in terms of tactics, How can we play advantageously? We will do some research in order to seek answers to that

			question.
25	MATSUMURA	Mental Training in Sports	We are going to consider how you should do mental training in daily training and mental control in competitions.
26	MUTO	Japanese Archery Class with Foreign Exchange Students	We'd like to rediscover Japan's own values through learning the culture of Japanese archery, which not only is a sport but also contains the spirit of with foreign students.
27	MORITA	Analysis of Movements in <i>Kendo</i>	You will watch DVDs of national competitions in the <i>kendo</i> hall. Then we will investigate differences between your movements and movements of best players in Japan.
28	KIKUCHI	Methodology of Swimming Race	We are going to examine the methods of training for swimming races.
29	IIDA	Para-Sports and Social Problems	Para-sports originally come from sport rehabilitation and they now have a wide variety of forms, such as competitive sports represented by the Paralympics and lifelong sports intending to help maintain your health or enhance your quality of life. You will learn the features of para-sports and discuss the social issues concerning them.
30	KIDO	Consideration into the dependence on IT	According to a recent study, the average student uses a smart phone for over 2 hours a day. We are going to delve into "IT Fasting" and aim to reconsider our relationship with IT, especially cell phones.
31	IWASAKI	Science of Light and Color	We are going to learn about phenomenon concerning light and color through experiments.
32	ONOSE	Exploration into the Beauty of Italy	We are going to explore the attractions of Italy including the art, history, geography, food, and language, searching for the basic elements of the beauty of Italy.
33	SAITO	Study on Jazz	We are going to examine Modern jazz, especially bebop and hard bop between 1940s – 1960s. We will also learn the culture and the historical

			backgrounds of these two musical trends.
34	M. TAKAHASHI	Study on Relieving Tension	This course will analyze the theory of rakugo "Relieving Tension" proposed by Shijaku through his rakugo. We are not going to analyze laughter in theory, but discuss it with each other after reading books about "Relieving Tension".
35	T. NARA	Exploration of English Subtitles	We are going to analyze ways of adding explanatory titles to foreign languages and experience the world of subtitles.
36	HASE	English Jokes	We are going to consider how Japanese culture and set of values are different from those of the U.K. through English jokes.
37	HARASHIMA	Fire, Metal, and Human Beings	We are going to make a bar by melting silver, and beat it repeatedly, producing a teaspoon. Of course you will write a paper after that. You will need to pay about 1,500 yen (the current price) for silver metal.

School Year 2015 List of Advisory Groups in the Second Term

№	Teacher	Name of the Course	Summary
1	NAKAGOSHI	The film "Amadeus"	You are going to think about the culture and customs of absolute monarchy in the Western Europe through watching the film.
2	OURA	Messages from Folktales	We are going to examine closely folktales and grasp their universal messages which modern society also has to learn. We will read "The Tale of the Bamboo Cutter", <i>Otogizoshi</i> , and other writings.
3	FUJI	Intensive Reading of the Works by Charlie Chaplin	We are going to read English texts. You need to prepare hard for the class. We will sometimes watch movies.
4	MINAGAWA	Comparative Reading of "The Little Prince" in French and in English	You are going to learn the basics of French. Then you can compare the French text and the English text of "The Little Prince". Through this activity, you do some research based on your own theme.
5	S. NARA	Research on travel with Seishun 18 tickets	Using 18 train tickets, we will travel to areas of different cultures.
6	AKIYAMA	Reconsideration into the Japanese Language	We are going to examine the Japanese language, which we regard as a mere communication tool in your daily life.
7	SETOYAMA	Living in Multicultural Societies	We are going to consider global views, and the required skills to live in multicultural societies. You will write a report through discussing things such as countries which have promoted multiculturalism or in which research on multiculturalism has progressed.
8	AOKI	Reading <i>Time</i>	I welcome those who are good at English. You will read articles from <i>TIME</i> , finding a theme based on those articles and writing a report in English.

9	IWAMOTO	Nurturing Global Leaders from Fukui Prefecture who can Contribute to the Development and Prosperity in East Asia	I was delegated from Fukui as a teacher to this school this year. Fukui prefecture is a small prefecture located on the sea of Japan. It is comfortable to live in, has close relations with East Asian Countries, and has high-level on the Happy Index. In this course I want you to learn more about Fukui and propose the way students in Fukui can contribute to the development of East Asian countries.
10	SAITO	Analysis on Local Areas	We are going to perform statistical processing, and try to make arguments based on it. We aim to find local problems of towns or villages in Saitama prefecture.
11	KANEDA	Minorities	There are several types of definitions for minorities. For example, there are the LGBT, Japanese diaspora, "halfs" (the term in Japanese for Japanese who have one non-Japanese parent), "quarters" (the term in Japanese for Japanese who have one foreign grandparent), and many other types. We are going to conduct behavioral analyses of minorities from multi- and counter-cultural points of view. This course aims to help students gain a broader perspective on minorities, identify new minorities, clarify each minority's way of thinking and living, and enable students to look at Japan's current social biases in regards to each minority.
12	IIDA	Parasport Interaction	We are going to understand the rules and features of para-sports, by experiencing them with other members. I hope you will all gain firsthand knowledge and insight about minorities in cooperation with NPOs.
13	HIRUNUMA	Marginal Village (Genkai Shuraku)	In the TV drama "The Village of Napoleon", various ideas are put into practice to revitalize the village. By thinking about such ideas, we are

			going to propose ways to prevent the disappearance of regions.
14	NOZAKI HARADA	Interactive Communication	We are going to examine interactive communication by interacting with young people abroad through Skype, and listening to people involved in TEDxTokyo. We'd like to explore the possibility of ICT devices, so you can use the school's iPad during this seminar.
15	YAMANAKA	What is Open-Mindedness?	This course will consider what open-mindedness means and get a better understanding of what needs to be done to create a barrier-free society through learning sign language. We are going to learn the basics of sign language with the help of a teacher from the Saitama Hearing-loss Association.
16	H. KOBAYASHI	"PHYSICS FOR SENIOR STUDENTS"	We are going to discuss the similarities and differences between physics textbook of Japan and that of Australia by reading both of them.
17	T. NARA	Visual Basic for Applications (VBA)	We are going to learn the advantages and usage of VBA through programming.
18	IWASAKI	Physics Experiments	This course is arranged for those who take the 2-credit physics course and will take the 4-credit course in the year three. We are going to conduct experiments which we do not deal with in regular classes. Those who are interested can also participate regardless of their selection of courses.
19	TSUBURAYA	Matrix (in mathematics)	We deal with the teaching unit "Matrix", which is now not included in the course of study of mathematics at high school. Textbooks will be prepared for you. You have to study before each class. You are supposed to make questions at the end of the course. This is a full-year course but you can participate in the second course only if you are willing to do the what we covered on your own in the first half.

20	NAOI	Are There any Alien Beings from Another Planet?	Are there any living things outside the earth? Are there intelligent lives in space (alien beings)? You will examine the possibility through analyzing research on biology and astronomy, and then you will need to write a paper based on what you read.
21	IGUCHI	Brain Death and Organ Transplant	This course will examine brain death, how it is determined and the symptoms before and after organ transplant. Based on these understandings, we will examine the problems involved.
22	NAGASE OKADA	Investing Power Problems in Japan "Consider the Future of Nuclear Power Plants and Renewable Energy"	We analyze advantages and problems of nuclear power plants and renewable energy from the viewpoints of science, politics, economics, and history, trying to propose a policy for 2030 for Japan. This is a major problem facing your generation.
23	ONODERA	Sport Morphology "Investigation into Gymnastics II"	This course is a two-course group. Both the first and second courses must be taken together.
24	MUTO	Japanese Archery Class with Foreign Exchange Students	This course aims to rediscover Japan's own values through learning Japan's own culture of Japanese archery, which not only is a sport but also contains Zen spirit with foreign students. (Students with experience are welcomed.) Reference books: Vol.1 and Vol.2 of Japanese archery textbook, "Japanese Archery"(Eugan Herrigal) Evaluation: I consider your paper, practice, etc. comprehensively.
25	MATSUMURA	Mental Training in Sports	This course will examine how you to do mental training in your daily training routines and for competitions.
26	MORITA	History of <i>kendo</i>	We are going to learn the history of kendo, increase our knowledge of this martial art.
27	NAKAMURA	Military Arts	This course deals with military arts in general.

28	R. TAKAHASHI	Four-Stance Theory	In four-stance theory, there are inherent physical features, and we will try to categorize them into four types, examining each "stance". This course deals with this theory.
29	KIDO	Let's produce Card Games.	We are going to produce card games dealing with dependence on IT and Internet issues. During the course, we will reconsider our relationship with IT, and discover how we can make the best use of IT.
30	SASAKI	The World of <i>Go</i>	This course aims to experience the world of <i>go</i> , in which you are required to have skills for logical thinking, and the ability to focus narrowly as well as broadly.
31	ONOSE	Exploration into the Beauty of Italy	We are going to explore the attractions of Italy including the art, history, geography, food, and language, searching for the basic elements of the beauty of Italy.
32	M. TAKAHASHI	Study on Relieving Tension	This course will analyze the theory of <i>rakugo</i> "Relieving Tension" proposed by Shijaku through his <i>rakugo</i> . We are not going to analyze laughter in theory, but discuss it with each other after reading books about "Relieving Tension".
33	NAGASAWA	Preventing Children from Getting Involved in Cyber-Crimes	<p>Almost everyone is familiar with the concept of cyber-crimes. You probably learned about them in elementary or junior high school, as perhaps you had classes which dealt with them. In spite of many teachers' efforts, the number of cyber-crimes and other online incidents has been increasing year by year. Why is this happening?</p> <p>This course will investigate and analyze what is needed for children to protect themselves from cyber-crimes. You will also give a trial lesson on cyber-crime at an elementary or junior high school. I want you to plan a creative Internet lesson that includes movies, short plays, quizzes,</p>

			and games. You will also conduct negotiations about necessary adjustments at schools.
34	HASE	English Jokes	We are going to consider how Japanese culture and set of values are different from those of the U.K. through English jokes.
35	HARASIMA	Fire, Metal, and Human Beings	We are going to make a bar by melting silver, and beat it repeatedly, producing a teaspoon. Of course you will write a paper after that. You will need to pay about 1,500 yen (the current price) for silver metal.

Beneficial Energy Integration for Humans
— Energy supplies suitable for the future of Japan—

Keywords

energy integration, renewable energy, sustainable society

In Cooperation with:

- Takeo KIKKAWA, Ph.D., Tokyo University of Science
- Kinya SAKANISHI, Ph.D., National Institute of Advanced Industrial Science and Technology
- Hiroshi KIMURA, Ph.D., Public Outreach, Non-Profit

Summary:

Although resources and energy are indispensable for our lives, their consumption increases the burden on our environment. In recent years, environmental degradation has become a global problem, exemplified by global warming and the transportation and movement of hazardous waste.

The ability to inform the world about the development of energy resources and their uses, based on evidential knowledge and insight is essential for global leaders. After experiencing the Great East Japan Earthquake and the following Fukushima-Daiichi Nuclear Power Plant disaster, it could be said Japan has a duty to tell the world about energy integration.

There are many controversies surrounding energy problems, especially how we should generate electricity – the electricity which forms the basis of economic activities, decides our lifestyles, constitutes the basis of diplomacy, sparks technological innovation, and directly influences global environmental problems.

Activities:

- Study about different energy resources
- Do fieldwork (National Museum of Nature and Science, Yokohama-Isogo Coal-Fired Power Plant)
- Plan and hold seminars by experts

Goals:

- Gain scientific knowledge on the distinctive features of various ways to generate electricity
- Be able to suggest the best ways to supply suitable energy for Japan

Experiencing the World of Go

— Consider the world we live in, as well as the world of Go. —

Keywords

Broad perspective, logical thinking, East Asia, Japanese culture

With the cooperation of:

Toshifumi MIZUMA (The Nihon Ki-in Tokyo Senior Pope)

Summary:

Go comes from China, and it has been enjoyed in Japan for over 1,000 years. Now there are about 40 million Go players around the world. It is no longer just played in one or two countries. It has become an international game, especially in East Asia. Through playing Go, Japanese people can forge a connection with other countries' people in East Asia. Countries in East Asia have a long history of contentious relationships. If they can get along with each other via playing Go, it could lead to peace in East Asia or even the whole world.

Also, as mentioned in the title, the world of Go requires a unique view, a broad perspective, which refers to the ability to judge the situation without being misdirected by small movements around you. This same view is necessary for us to play an active part in the world.

Finally, to promote internationalization, Japanese people tend to learn English and Western cultures, but being aware of our own culture and sharing it with the world is also important. Only those who can do both will become global leaders.

Activities:

- Learn the basic rules of Go
- Investigate how to diffuse Go in the world
- Consider the comparison of Go and Shogi

Goals:

- Play Go
- Be able to teach foreigners how to play Go and enjoy it

Forming a Global Problem-Solving Network

—Talking with foreign students about global social problems via the Internet—

Keywords

values, multicultural society, ICT, discussion, problem solving

In Cooperation with:

Glocal Academy (NPO), e-Education (NPO), students and staff at The University of Dhaka (Bangladesh), and specialists at JICA (Bangladesh Computer Council)

Summary:

In today's globalized world we must try to solve problems through exchanging opinions and ideas with those who have different cultures, histories, and values. When confronting a problem that seems impossible to solve, it is necessary to discuss it with people who are different from us, to share the problems with them, and to seek the best solution together.

Ergo, it is important for the future of Japan to put its students and those from differing backgrounds and values together, in order to develop the ability to facilitate discussion and seek solutions together.

On various problems in today's society, we need to create chances to develop our skills on combating social problems as well as to broaden students' outlooks through experiences discussing "global social problems" with high school and university students in developing countries.

Activities:

- In cooperation with Japan's international NGO, which give assistance to developing countries, we worked with the University of Dhaka through a tele-seminar system and had a chance to discuss "global social problems".
- We listened to presentations by students at the University of Dhaka on their country's social problems in real time via the Internet.

Goals:

- Learn about Bengali social problems
- Listen to the Bengali presentations in English and conduct a Q&A

Japanese Archery with Foreign Exchange Students

—Transmitting Japanese values to promote international understanding—

Keywords

Japanese archery, international understanding, Japanese values, Zen spirit
"Die Ritterliche Kunst des Bogenschiessen" by Eugean Herriget

In Cooperation With:

Foreign exchange students studying at universities in Japan

Summary:

Thanks to globalization, people are paying close attention to which values are being transmitted throughout the world, particularly Western values. On the other hand, the effort to transmit Japanese values to promote international understanding is still small. Foreign students coming to Japan generally only learn about Japanese culture through events, like festivals, or food, like kaiseki-ryori (tea ceremony dishes, which is a traditional Japanese meal brought in courses).

There are many other parts to Japanese culture which go unnoticed, like Japanese archery. Japanese archery is not only a sport but also a chance to feel and understand the Zen spirit. Through studying with foreign students, we aim to rediscover Japan's own values and transmit them (in this case, mainly Japanese archery) to exhibit their meaning to the world at the grassroots level.

Activities:

Hold a Japanese archery class with foreign students, and learn about Japanese archery and its background.

Goals:

- Practice creating and encouraging international understanding
- Explain the Zen spirit through Japanese archery to foreign students
- Learn to present and transmit the meanings of our activities logically, objectively, and clearly

Minorities

— Discovering social biases towards and identifying new minorities. —

Keywords:

minority, socially vulnerable, critical thinking

In Cooperation with:

Tadayoshi AONO (a former officer at Mitsubishi Bank of Brazil)

Mafumi OYAMA (freelance writer)

Summary:

There are over seven billion people in the world. We unknowingly separate the minority from the majority. It is almost inevitable for us to think we are normal and others are not.

There are several types of definitions for minorities. For example, there are the LGBT, Japanese diaspora, "halfs" (the term in Japanese for Japanese who have one non-Japanese parent), "quarters" (the term in Japanese for Japanese who have one foreign grandparent), and many other types. But it is not always an easy matter of classification and we need to have a wider view.

As globalization gains speed, we have more and more chances to encounter different minorities. We will talk, work, and live with them. Therefore, we must try to understand their nature and feelings. Global leaders must be compassionate, positive, and able to learn from them.

This course aims to help students gain a broader perspective on minorities, identify new minorities, clarify each minority's way of thinking and living, and enable students to look at Japan's current social biases in regards to each minority.

Activities:

- Conduct behavioral analyses of minorities from multi- and counter-cultural points of view
- Discuss current social biases and critically examine them

Not Depending on, but Taking Advantage of IT

— Reconsidering our relationship with IT. —

Keywords

dependence, IT, digital age

Summary:

Today, it's hard to imagine life without IT (Information Technology). IT includes cell phones, computers, and many other materials. They enrich our lives, of course, but they can also control them.

According to a recent study, the average student uses a smart phone for over 2 hours a day. This was not the case 10 - 20 years ago. Devices have become more useful, which has led to people using them longer. It could be said that IT controls us now.

Then should we still use IT? The answer is not so simple. In this globalized world, the role of IT is growing larger and larger. Globalization has also occurred largely due to IT.

So what should we do? To become global leaders in this age, we have to be more aware of the good and bad effects of IT. We aim to reconsider our relationship with IT, and discover how we can make the best use of IT.

Activities:

- Engage in "IT Fasting" for a day, then discuss your experience with other students
- Watch a movie with futuristic technology, then discuss how IT will be a part of our future
- Talk about dependence on IT after looking at various foreigner's views toward IT.
- Talk about the way children should use IT looking at parents' opinions.

Goals:

- Learn about the problems of IT devices, such as smart phones
- Be able to transmit our own opinions via IT
- Be able to operate IT devices by ourselves

Parasports

— Learn about disabled sports aiming to get a better understanding of them—

Keywords

disabled sports, parasports, Paralympics, purpose in life, lifelong sports

In Cooperation with:

NOSiDE (a private organization)

An employee at Saitama Social Activities Center

Summary:

What impressions do you have about parasports? In fact, they originally come from sport rehabilitation and they now have a wide variety of forms, such as competitive sports represented by the Paralympics and lifelong sports intending to help maintain your health or enhance your quality of life.

What are the features of parasports? Most people know that they exist, but they don't know much about them. Disabled sports are, as with many other things, supported by society. Are there any issues concerning this? If so, we should think about the solutions.

As with all sports, parasports are also a tool for interacting with people around the world. In today's globalized world, we should be more receptive to other people's points of view and conditions. Better understanding of parasports can enable students to gain a wider view of the world and to be more compassionate towards other people.

Activities:

- Learn the features of parasports
- Discuss the social issues of parasports

Goals:

- Gain a more complete understanding of parasports
- Form your own opinions on social issues regarding parasports

Preventing Children from Getting Involved in Cyber-Crimes

— A suggestion of lessons for teaching children about cyber-crimes. —

Keywords

information ethics, cyber-crime, information technology

In Cooperation with:

Kita-Urawa Junior High School

Cybercrime Division, Saitama Prefectural Police

Summary:

Almost everyone is familiar with the concept of cyber-crimes. You probably learned about them in elementary or junior high school, as perhaps you had classes which dealt with them. In spite of many teachers' efforts, the number of cyber-crimes and other online incidents has been increasing year by year. Why is this happening?

As information technology has developed over the years, IT itself has advanced. But we have not developed along with it. Using IT is like driving a car. It's very useful, but it's also accompanied by accidents or even crime. We must know how to both prevent them and protect ourselves, especially in today's high-tech society.

Today, the Internet has become an essential part of our daily lives. In order to live in a globalized world, we must understand enough to use technology safely. Global leaders, most of all, should be required to have such a skill set, and will need to be able to impart it to younger generations.

Activities:

- Investigate and analyze what is needed for children. Plan a creative internet lesson that includes movies, short plays, quizzes, etc.
- Give a trial lesson on cyber-crime at an elementary or junior high school

Goals:

- Obtain a solid grounding about cyber-crimes
- Be able to explain and teach about them to others

What is Open-Mindedness?

— Achieving open-mindedness and acceptance through sign language—

Keywords

normalization, barrier-free society, friendly, gesture, sign language

In Cooperation with:

Saitama Hearing-loss Association

Summary:

Being normal is not a simple matter. Who is normal? What is normal? No one doubts that “normal” is a major keyword today. It’s well-known that many people choose what they should be based on what it means to be normal in their society.

In our highly globalized era, with a wide variety of people in every field of study, being normal generally means treating others as equals. It means believing that another person can do whatever I can. This notion is the basis of open-mindedness and acceptance, but it’s not that simple.

This course will consider what open-mindedness means from a global perspective, and what we can do to promote it. As the world becomes more globalized, the barriers between countries are disappearing, but what about the cultural, economic, or political barriers between people?

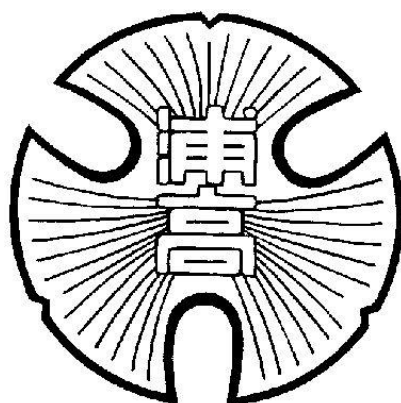
Activities:

- Learn the basics of sign language with the help of a teacher from the Saitama Hearing-loss Association
- Discuss and write a report on normalization, including what still remains to be done, and the best way to achieve a world-wide, barrier-free society.

Goals:

- Learn to use some simple sign language
- Understand what needs to be done to create a barrier-free society
- Form our own opinions on normalization and being barrier-free, and begin spreading it to the world

Saitama Prefectural Urawa High School
Annual SGH Summary Report



February 13, 2016

13:00-15:00

FUKUTAKE Learning Theater,
The University of Tokyo

Saitama Prefectural Urawa High School
Annual SGH Summary Report
February 13 (Sat.), 2016 13:00-15:00
FUKUTAKE Learning Theater, the University of Tokyo

- 12:30 Check-in
- 13:00 Opening Speech from Principal
- 13:05 Opening Ceremony
- 13:10 Brief Introduction to Urako's SGH Program
- 13:25 Advisory Group Report I
"Sharing Japanese Intrinsic Values through Japanese Archery"
- 13:35 Student's Speech
"What I learned from my experience abroad"
- 13:45 Demonstration of Debate
- Short Break
- 14:00 Advisory Group Report II
"Prevent Children from Getting Involved in Cyber-crime"
- 14:20 Advisory Group Report III
"Problems of IT Dependence We Face"
- 14:30 Advisory Group Report IV
"What is Open-mindedness?"
- 14:35 Advisory Group Report V
"Think from Para-Sports"
- 14:40 Advisory Group Report VI
"Power Problems in Japan"
- 15:00 Q; A Session (Coffee; Snacks Provided)

Brief Introduction to Urako's SGH Program

2323 Kyohei TAKAOKA

You were surprised, weren't you? How does our cheerleading club relate to the nurture of global leaders today? We'll soon reveal the fact, so please wait for just a bit longer.

I am Kyohei Takaoka. Now I'll be giving you the SGH report of Saitama Prefectural Urawa High School. First of all, I'd like to talk about the secrets of the education of Urawa High School – it should help you understand our style of global education.

Urawa High School has 120 years of history, and it has already produced a lot of global leaders.

One good example is Koichi Wakata, an astronaut. No one doubts he is a man of action with brilliant abilities for leadership and cooperation. He sent a letter to us via Caroline Kennedy, the incumbent United States Ambassador to Japan. You can see a copy of the letter in today's leaflet.

Another is Atsushi Amano, a physician. He performed a coronary artery bypass operation on of the Emperor. He's very famous, and I'm sure you know him. He is one of the leaders of coronary artery bypass grafting in the world.

Mitsuru Murai, the chairman of the J. league is also a graduate of Urawa High School. He gave a lecture for one of our Reiwa Seminars, or SGH Seminar, last year. He handled the racial discrimination affair concerning the Urawa Reds with speed and efficiency. He is quite a decisive man with a great capacity for judgment. From this, we can say he is also well-qualified to be called a global leader.

Last September, Masaru Sato gave an SGH Seminar. I believe everyone knows him. He is a former diplomat.

Next, I'd like to talk about the school events at Urawa High School. We have the welcoming marathon soon after the entrance of the new students. We run a 10-kilometer, hilly route.

In July, we have the seaside school on Yumigahama beach, Izu Peninsula. We swim two kilometers, and it takes more than 40 minutes. Of course the sea is too deep to stand in and has many strong waves.

In September we have our Koga marathon. We run all the way, more than 50 kilometers, from our school to Koga in Ibaraki. Over 80 percent of students reach the goal within the limited time of seven hours. Have you ever run for seven hours continuously?

I'd like to introduce one more event that has nothing to do with physical activities: our School Festival. Here are pictures of the gates to welcome visitors. The executive committee of school festival has a "gate unit", and members of it start preparing 10 months before the festival. They draw some blueprints, make some physical models, and do many other things to complete the work.

There are about 50 students in the executive committee of the school festival, and its budget is about more than one million yen in total. By controlling 1,000 students, we welcome 10,000 visitors. I think adults who have experienced management of projects with such large people and money are far and few between.

The important point is that every student experiences each event equally. Masaaki Horio is an announcer. Yukihide Takekawa is a singer of *Godaigo*. Katsuya Watanabe is an oboist in Deutsche Oper Berlin. Chikusa Tomita is a balliton singer who sang at Wiener Staatsoper. These graduates also ran in Koga Marathon.

Akira Furusawa succeeded in quantum teleportation when he was at the California Institute of Technology, and now he is a professor at the University of Tokyo. Yasuhiro Kato is also a professor at the University of Tokyo, and he is trying to evolve Japan's world strategy with rare earth in the sea. They are SGH lecturers, and experienced all the same programs at Urawa High School, including the school festival.

With the SGH program, our cooperation with the University of Tokyo has been strengthened, and there are more and more opportunities to interact with global leaders in person. I'd like to emphasize this as our special strength.

Now let me change subjects and talk about foreign exchange. Our sister school relationship with Whitgift School, a British public school has continued for more than 20 years. Every year one student goes to Whitgift School for a long-term study, and 20 students visit it for a short-term study of ten days. SGH has enriched our program by including project studies. The members of this year will soon be leaving Japan this March.

A part of the study theme is "How to approach global problems". We are

planning not only to visit Whitgift School and carry out field research but also to visit the WHO, the United Nations Office at Geneva, or an office of the Red Cross Society in cooperation with Ikushi Onozaki, our alumni who is a specialist on public hygiene.

Many of the students who study in Whitgift School for one year go on to universities in the U.K. The latest case is Koyo Harada. He goes to the University of Cambridge. Students studying abroad write back to us, and you can see some of them in your leaflet.

There are several other activities dealing with international exchange at Urawa High School. Eight students a year study at the summer school of Whitgift School. Six students study at the summer school of Michigan University in U.S.A.

Some students go abroad independently. One example is Ko Harada, and he is studying in Mexico on the AFS Program. Jimpachi Masuda studied in the U.S. for a short term on the AIU Program, and he will make a speech on it later. In Urawa High School, about 40 students study abroad, short or long every year.

Urawa High School is actively accepting foreign exchange students as well as sending our students abroad. Until last July for one year, Sergei Kevin from Uzbekistan was studying at Urawa High School. Of course he also participated in the Koga Marathon. You can see his message in your leaflet.

This year, Dominic Orben from Whitgift School and Jacob Pedersen from Denmark are studying at Urawa High School. Dominic even participates in the class of Japanese classics, and he has been admitted to enter the Japanese Department at Oxford University this fall.

International exchange at Urawa High School is financially supported thanks to SGH programs. Also, the main points of international exchange is giving different viewpoints to educate global leaders, and applying that to other activities of Urawa High School with a broader view. These are the key points.

So, now, I want to talk about students now playing active roles. One of the most nationally successful clubs is the English club. They won the national championship in the debate tournament of NFLJ. Last month the club was invited to Korea and participated in the competition. Next year they will participate in the world championships in the U.S. They will perform their debate later today.

The glee club got the silver award in the national contest. The *go* club got the bronze medal. The *Shogi* club also got the bronze medal. The math club has a ticket to participate in the national competition. You probably watched the All Japan High School Quiz Championship on TV. Urawa High School won the championship, didn't it?

In this way, the students are achieving considerable success in arts and culture fields. I'd like you to keep this in mind. Of course all these students experience the Koga marathon and the seaside school, and take part in the sports festival.

Our sports clubs are also achieving great success. The rugby club went on to the national tournament the year before last. This year, Junya Tozawa in the swimming club won the championship in the National Sports Festival of Japan. He is swimming now in the pool where Kosuke Kitajima swims. Wataru Muragishi in the basketball club also performed well in international games against China and Korea as a national player under 18.

What I'd like to emphasize is that such athletes also study math, Japanese classics, physics, art, and other subjects.

Ogura Hyakunin Isshu is well-known, isn't it? It is a classical Japanese anthology compiled by Fujiwara no Teika in the *Heian* Period. Every Urawa High School students learn all 100 *waka*. In Urawa High School, competitions of arts such as kanji competition and speech contest are as popular as sport competitions. The *Ogura Hyakunin Isshu* contest is also an important competition.

Urawa High School students have to study the Tale of Genji, the world's first novel. Even if a student's major is science, he still has to read all 54 stories.

The students in the science course have to write 30 physics reports in total, and we call it the initiation of science education. Even in January, the 3rd years have physics experiments, and the students have to write a report and submit it. Students try to explore physical phenomena through group work and discussions. Physics reports are the proof that Urawa High School puts weight on learning real things.

You probably know of debates on the tax system in contemporary society because it was taken up in TV introduction and in newspapers. Debates and cooking practice in home economics are scheduled also right before the university entrance examinations, too.

Please look at this. This was made by Atsushi Ikeda, one of our most recent graduates. Although it is made of wood, it feels like a spring mattress. He completed this work with Japanese traditional wood working tools all by hand. He got the runner-up prize in the 54th Japanese Craft Exhibition.

One feature of crafts production is that students don't use machines in the present age of technologies. Crafts production class is very popular, even though some of the students have to struggle to complete their works until nine o'clock every evening.

In Urawa High School, Mitsuo Masuda, a human national treasure once taught crafts production. Urawa High School has a spirit of cherishing traditions. We come together and learn based on such special spirits at Urawa High School.

As you can see at this point, Urawa High School students don't learn for a short-term gain or based on trends. They go forward based on the intrinsic nature of themselves at Urawa High School.

Our education is sometimes said to be unreasonable. It is definitely unreasonable for those who have no experience at Urawa High School, but once you have experience, you can find the reasonable features of our school, which those outside can't see.

"Experience" is another key word for you to understand Urawa High School. You can't understand the value without direct experiences of things such as the Koga marathon, physics reports, crafts production, school festival, club activities, and SGH seminars.

The efforts of SGH, which will be reported today, have a prior history of over 25 years and have been known as advisory groups. The activities of advisory groups have evolved dramatically by SGH programs. Each of Urawa High School's students choose from around 40 unique courses, explore based on their interest, manage projects, create relationships within society, and propose new values for the future world.

Urawa High School provides a place for "educating and nurturing global leaders who will positively influence the world wherever they are through innovation and compassion"

This concludes my introduction of the SGH programs at Urawa High School.

Sharing Japanese Intrinsic Values through Japanese Archery

That was the motion of Japanese archery called Shaho-Hassetsu, the Eight Stages of Shooting. Bows made in Japan are different in shape from those of foreign countries. Bows in foreign countries are shorter, while Japanese bows are very long. But the essential difference is not the shape of the bows. Also when doing Japanese archery, your mentality is just as important as your physical strength. From the Western viewpoint, it is natural to think analyzing the process of releasing the arrow is enough for you hit the target by bending the bow the same way.

Various factors, however, influence your performance. For example, your desire to hit the target makes you strain, focusing too much on one point makes you lose balance. Thus bending the bow the same way is difficult, and your mentality plays an important role in this regard.

Also, one of the features of Japanese archery is Shaho-Hassetsu. It refers to eight stages of the process of releasing an arrow. You may think these eight stages are combined into the arrow release. But it is rather a series of flow, like the joints of a bamboo.

As I have explained so far, Japanese archery is quite a unique cultural thing of Japan, which has values greatly different from the Western values. Mutual understanding of different cultures is indispensable in this global society. The spirit of Japanese archery reflects the spirit of Japanese people, and sharing the world of Japanese archery means sharing the viewpoints of Japanese people. We did two activities to share Japanese archery with the world.

The first activity was that we explained about Japanese archery to foreign exchange students both in Japanese and in English, and we practiced it together. Through this experience, we learned the difficulty of explain about Japanese archery in English, and have started to think about how we can do that well. The other activity was making a movie containing English explanations of Shaho-Hassetsu, which we performed at the beginning of the talk.

So, now, we are going to give explanations of Shaho-Hassetsu to you with our personal movie and our live performance.

Movie

The first step is called Ashibumi. This step is the motion to set your foot

placement. Look at the target and take a step toward it with your left foot. Then adjust your right foot.

The second step is called Dozukari. This step is very important when shooting. Store power in your stomach and extend the back of your legs.

This step is called Yugamae. Put your arms in front of you and make a circle as if you were holding a big tree. Then look at the target.

The next step is called Uchiokoshi. Raise your arms up slowly to an angle of 45 degrees.

This step is Daisan. Turn your left arm to the target.

This step is Hikiwake. Push outward with your left arm and draw the right arm back until the arrow rests against the edge of your mouth. At this time, be careful of keeping the arrow on the level.

The next step is called Kai. It looks like the complete form of the Hikiwake. In this step you must aim at the target with both of your eyes. The other important thing is to stretch by pushing out your chest from the center of your body line.

The next step is Hanare. Hanare is when you shoot the arrow. The arrow should be released by your spirit. Hanare is not just releasing. You don't release, it must be released. It must be a natural releasing. This is the final stage of the 8 stages of shooting, but there are still 2 more after shooting.

This first step after is called Zanshin. It is a form used after Hanare. You watch the flight of your arrow and think back to your shooting style.

The final step is called Yudaoshi. You lower both your arms to the area around your waist. You face forward, and close your opened stance from the right. Then you make the same form, from beginning to end.

This is only the beginning of our efforts. By doing things like these, we are trying to share Japanese archery with more foreign people.

What I learned from my experience abroad

3030 Jimpachi MASUDA

I have been abroad 3 times. My first experience was in Sydney, Australia. I was in the second year of junior high. My host family was Indian, vegetarian. There were no Japanese, and also no white people around the family. I only met Indians. I think they talked in Hindi, so I couldn't understand at all. I didn't have a large English vocabulary, so I only could ask my host brother what we were going to do next. After school, we went home, he cooked me a light dinner. It was salad with cream cheese, and Nacho chips. Eating them, we watched an Indian drama.

My second chance was an exchange program with Whitgift School. The staple foods of the UK are potatoes and bread. My favorites were hash browns and cinnamon rolls in the school dining. On the other hand, when my host brother came to Japan, he tried to eat many kinds of Japanese food. Rice, miso soup, gyoza, okonomiyaki... I heard that some other British exchange students could eat Japanese food a little, so he might be doing his best, I was very glad to see him eat some Japanese food with a smile. However, it seemed that he couldn't eat as much as in his home. So my mother changed the menu for him sometimes. From these experiences, I think that Japanese have flexibility in accepting foreign cultures, because we have many choices of food in daily life.

Last summer, I went to the US as my third challenge abroad through the program called AIU High School Diplomats. The schedule of last year was like this. Washington tour, homestay, New York tour, and exchange program at Princeton University. During the tour, we visited so many sights, met IMF and World Bank Japanese staff, and had discussions about various topics. For example, In 9.11 memorial, we talked about terrorism. In the pentagon, we talked about the Japanese collective defense bill.

In Princeton, we stayed in a dorm with American roommates. In the morning, we had a class about each culture. After that, we enjoyed some activities following a daily theme, like "independence day extravaganza", "Halloween", "Japanese day" and "Thanksgiving Day". On Japanese day, some students and I had a presentation about Japanese regional characteristics and SHODO performance.

Unlike Australia, I ate a lot of meats. But I ate vegetables and fruit much more than my vegetarian roommate. When I came back to Japan, I had lost a few kilograms. It was very surprising to me. I had imagined American food as

unhealthy, oily and high-calories. But I had many chances to eat vegetables, and every restaurant has a vegan menu. We could choose them to rest our stomach.

The biggest feature of the program is that ex-participant who went to the US with the same program joined to manage the whole program. With their help, I learned a lot. I have to try to see the world without bias, and recognize how I think, and look back at my actions objectively and critically. I got these points through these programs. The point is making up your mind. However we can be an adult through only studying in Japan now. But I can't believe that such a person can have a good influence on others. So I want to share my experience with someone. But I'm going to graduate next month, and I have not shared enough! That's why I am standing here.

At last, I would like to propose an idea for the next program. That is peer support by ex-participants. After the program, students should make a speech at the school assembly. I wrote a report and made a poster. However, some students didn't even notice. I think that more information sharing among students is important. With peer support before and after the program, they would be able to share their experience more easily, and learn something more deeply. Actually, these chances connect students to their next step like me, or Koh Harada, who went to Mexico with AFS for one year. Also many students go abroad in college. It is because of many teachers' understanding and effort. I want to thank them all.

I want to be involved in the field of program management in the future, but my schedule after April has not been decided yet. Two weeks after, I have the entrance exam. So I'll be back home soon, and study hard as much as I can.

Thank you for listening.

Preventing Children from Getting Involved in Cyber-Crimes

We did some activities as volunteers for protecting children from cyber-crimes. We arranged lessons on information morality and gave them at Kita-Urawa elementary school. Today we are going to tell you about what we have learned. Our presentation includes: the reasons why we started this activity, what we did in detail, a live report from the elementary school, the results of our activities, and future tasks.

First, we are going to introduce the reasons for our activity. There are more and more junior high, senior high and even elementary school students who own a smart phone. You probably can't go anywhere without seeing children using a smart phone. In response to this, teachers and police officers have begun to give lectures on information morality. Of course I remember taking one. So have we seen a decrease in cyber-crimes? What do you think?

Recently, even in the case of adults, personal information leaks have occurred through the social networking service called, Line which led to some terrible results. If an elementary school student is involved in such an accident, there will probably be even worse cases in the future. For these reasons, we thought we should give a lecture on information morality. What do you think is happening here? Actually, this student is putting sand on his desk because he thinks his class is boring. We aimed to give interesting lessons so that things like this will not happen.

Next, we are going to show you what our lessons were like. This is a picture of our lessons. As you can see, we gave a lesson in front of about one hundred elementary school students in the gymnasium. In order to keep the students interested, we not only stood and talked but also tried to make our lesson more exciting in various ways.

Our lecture went like this. First we gave a lecture, and then we did some activities. Our lecture was not just one-way, but included skits and video shows of our experiences. In the second half, we tried to let the students learn the basics of information morality by playing karuta. This is our personal karuta. It was a big success. I'd like to show you a video of us playing karuta in action. Finally at the end of our lesson, we proposed our own slogan to make our lesson leave an impression on the students.

Then we are going to connect Kita-Urawa elementary school with us on line. Let's listen to the students' voices.

Up next, we are going to report the results of our activities and future tasks. We also carried out a questionnaire survey for the elementary school students after the lesson. 93 percent of the students answered "It was very educational." to the question "How educational was it?" The rest 7 percents answered that it was educational. Another question was "How interesting was it?" This question shows how much we could make our lesson interesting. To this question many of the students answered that it was very interesting. From these results we can say that the students' information morality was enhanced through our lesson. This lesson was also a good opportunity for us to reconsider information morality. Take an example of texting on your smart phone while walking. We used do this with a light heart, but we have come to take it seriously and try to avoid such behaviors. This ultimately comes from the responsibility generated from teaching. I believe teaching is the best way to learn.

We are going to talk about the results of our activities and future tasks. First we have to improve the quality of our lesson. We have to improve the contents of our lesson so that the students can enhance their information morality with enjoyment. Next, we have to examine how much the students have enhanced their information morality, in terms of not only their attitudes but also their actions. We need to seek for the method to learn such things. Furthermore, we can diffuse our activities in other schools around Japan as well as Urawa High School, which helps information morality in Japan is enhanced. We can also spread our activities in the world. In addition to that sort of horizontal connection with other high school students, we will try to pass our activities on to our juniors, which will make vertical connection between generations.

Through this activity, we felt strongly that it is we that create our future. To change our future starts with changing things around us. To change our near affairs is a key factor of volunteering. Why don't you join volunteer activities and create our future with us? And to the students at Kita-Urawa elementary school, you are also the creators of the future. Let's keep doing volunteer activities with us to enhance our information morality for the future.

Problems of IT Dependence We Face

Hello, everyone. First, let me ask you a few questions. Have you ever seen someone using a smartphone or listening to music on the train, or do you often pull out your smartphone and check it as soon as class is over?

You would probably feel uncomfortable without your smartphone, or you probably reach to check it a lot. We describe such situations as IT dependence.

These days, thanks to dramatic advances in Information Technology, we use many IT devices in our daily life. The most typical example is the smartphone. Unlike personal computers, smartphones are useful tools which you can use anywhere and anytime.

On the other hand, we are facing problems with IT dependence, especially children. Why is this happening?

Mechanisms of dependence have much to do with it. When you use your smartphone and surf the internet, dopamines, a chemical which causes you to feel pleasure, are released in your brain. Smoking, in fact, has the same effect.

The problem is that dopamines can change your brain structure and cause you to become more interested in one thing and less interested in others. If this starts at a young age, the effect could cause incalculable damage.

So let's take a look at the situations concerning IT devices in the world now. According to a poll in the U.S., at least 63 percent of smartphone users check their smartphones hourly, and nine percent of them every few minutes. It also says, 66 percent suffer from fear of being without their phone.

Psychiatrists in the U.S. have three criteria for diagnosing dependence: whether you cannot quit on your own, if it is causing problems, and if you continue even after you know its bad influence.

In the U.S. it is reported that there are more and more accidents with texting while walking. Another report says people in South Korea use their smartphones over four hours a day, and 18 percent of teenagers are addicted to their smartphones. To deal with this, the Korean government is working on countermeasures such as cutting off online gaming at midnight for children.

Professor Kawashima at the University of Tohoku conducted an intriguing research on IT dependence with junior high school students in Sendai City. Please look at the screen. This graph shows the relation between the use of social networking sites and scores on a math test. As you see, the longer the time

spent using smartphones, the lower the scores. Even if the study hours are the same, using a smartphone has such a negative effect on their achievement.

In this way, data explicitly shows the negative effects of IT devices on learning. Also in order to analyze IT dependence objectively, we tried IT fasting firsthand, in which we didn't use IT devices for an entire day. This helped examine the IT dependence of other people as well as ourselves.

Please take another look at our slide show. This is one of the reports of IT fasting. Please pay attention to that red circle. Many of us found that IT fasting helped us learn the smartphone use of other people. Based on the research in the first term, we made a card game in the second term to solve the problems of IT dependence. By playing this card game, you can have a simulated experience of using IT devices.

In this game players are required to consider the problems of IT dependence. You can remember your own ideas more easily than things said by others, right? We'd be happy if you played this game, and understand the danger and importance of information technology.

Sadly, today we don't have enough time for further explanations. If you have any question about the card game, please feel free to come ask us later. We'll be happy to share the game with you.

Finally, the purpose of this game is not for fun. We want you to learn more about IT through this game. We included some blank cards so that players can write whatever they want, and think even more about IT. We think more improvements are needed, so we'll keep looking.

IT devices can be dangerous, but they are essential tools for our life. It is important for us to use them moderately, to sometimes try IT fasting, and look at our life objectively. We should aim not to exclude them entirely but instead learn to coexist with them. We believe our card game will help contribute to finding the solution for the problems of IT dependence.

This concludes our presentation. Thank you.

What is Open-mindedness?

I am a member of the seminar of "What is open-mindedness?", and we studied about how to build a barrier-free society. Today I want to tell you the summary of my report.

We invited an aurally-challenged lecturer to our seminar six times, taking lessons on sign language, and communicating with her via sign language. Also we visited a school for the aurally-challenged in Omiya last December, and communicated with the high school students there.

I learned three main things from that visit. First, the aurally-challenged are better at communication than I. Second, there are various levels of disabilities, so Labeling someone as the aurally-challenged, or not, is meaningless. Third, face-to-face communication is important for learning.

Aurally-challenged people use sign language as a communication tool. When using sign language, listening to someone means looking someone in the face. So they have to watch each other's eyes. On the contrary, when communicating with the sound of voice only, you can communicate with someone without looking at their face.

I think aurally challenged people are more active and considerate than non-challenged people in terms of communication attitude. In addition, they have better skills in non-verbal communication such as gestures and facial expressions. I believe everyone should learn from them, reconsider what communication is, and try to improve their own communication skills.

High school students at the school for the aurally challenged varied in their disabilities. There were those who used only sign language, those who used sign language and partial hearing, and those who were hardly challenged at all except for wearing a hearing aid.

We tend to conceptualize or label people, things like physically-challenged and non-challenged, man and woman, or Japanese and American. I found through this activity that such concepts are useless in communication. We should understand the importance of facing each person instead of labeling them with words.

The most impressive thing during my experience at the school was that the students were just the same as us. What I found through interaction with them was that they don't feel embarrassed about their aural disabilities. By talking with them I found that they are trying their best to enjoy their life, just

like everyone else.

Before meeting and talking with aurally-challenged people, I always thought about people's differences. But by interacting with them, I have come to look at the things we have in common.

I want more people to understand the following idea: Face to face communication enables you to overcome cultural barriers, find that we all have something in common, and accept differences. I believe this idea is a key part in solving various problems in our global society.

Thank you very much for listening.

Think from Para-Sports

Hello, everyone. We are the second-year students at Saitama Prefectural Urawa High School: Segami and Owada. Our presentation will be about Para-sports especially what we have learned and thought about Para-sports through talking with those who are involved in the sport in our SGH seminar. The most important thing we've learned is that we should consider people's disabilities as part of their personality and should interact with them as we would with anyone else rather than distinguish between the physically challenged or not. But in the first place, we question how the word "disability" to be used. Here we are using word physically challenged to express our ideas, So please listen to us based on this usage.

One of the guest speakers was Mr. Shimakawa. He is the head of a private organization "NOSiDE" and he is making great efforts to support and develop wheelchair rugby. No-side means that there is no line between friend and foe and players are all friends when the rugby game is over. Mr. Shimakawa and other members are doing activities based on the concept of removing the idea of the physically-challenged or non-challenged and enriching our society through this. We had a chance to learn about Mr. Shimakawa's experience through the activities.

Mr. Shimakawa says, "Wheelchair rugby and ordinary rugby are different in their appearance, rules, and balls, but they are the same in that players work hard in the sport. Take the example of one member from the Fukuoka Dandelion team. His name is Takeda and the strength of his left arm is much weaker than that of his right. To overcome this, Mr. Takeda makes it a rule to do muscle strength exercises for his left arm. In addition, he is trying to change his disadvantage into an advantage such as trying to make use of the gap of muscle strength during games. As Mr. Tanaka has tried to overcome his weak points, both the physically challenged and the non-challenged of us should reflect on our challenges and try to overcome our difficulties. There are no differences between them. We could argue that the challenged have stronger passion than the non-challenged because the challenged have overcome the despair of their disabilities and sports have become their motivation in life. We think this is similar to our passion toward club activities in our one-time only high school life.

We think we should show respect rather than compassion toward Para-sports players. "We tend to think Para-sports players are playing actively in

spite of their disabilities” says Mr. Shimakawa, “We should look at them as nothing special instead of treating them as special. This is very important.” In other words, we are required to regard them as one player, not a challenged person. For example, wheelchair basketball players shoot the ball accurately only with the movement of their upper body and the strength of their arms. Para-swimmers swim only with their one foot keeping their body in balance. We have to focus more on the greatness of the results of their efforts like these. But not all things can be evaluated in the same way as non-challenged athletes. For instance, the techniques and speed of challenged athletes can be seen as inferior to those of non-challenged athletes. The method of evaluation is what we need to change in the future.

Then, how many people know Para-sports? We think many people know wheelchair basketball, wheelchair tennis, and blind soccer, which have been adapted from popular sports so that the challenged can join. On the other hand, we think few people have heard of sports such as boccia, which are made only for the challenged. Also many of you probably don’t know the rules concerning the rankings based on one’s severity of disability. While there are only one challenged player for every 17 non-challenged, the number become even more drastic when it comes to sports center. There is one sports center used by challenged players for every 460 centers used by the non-challenged. Even if people find no conscious difference between the challenged and the non-challenged in terms of sports, there remains a big difference in terms of facilities.

As we mentioned earlier, sports can become a source of inspiration for the challenged. It is natural for players to hope that they want to be seen during the game. Also we want more challenged people to find inspiration through sports. To that end, it is necessary to raise the profile of Para-sports so that more people will watch Para-sports. We think the first step is building more Para-sports centers. In addition, we believe more centers where the challenged and the non-challenged play together will lead to more interactions with one another and more sport events, which will lead to a better world.

And so we have planned to hold a Para-sports social event by inviting the challenged to play wheelchair rugby with us. The purpose is to interact and enjoy wheelchair rugby. This will help raise the profile of Para-sports and deepen our understanding of them.

So far we have talked about sports, but let us change subjects a bit. At the

beginning of our SGH seminar, we posed the question of what sorts of people are challenging people. Some may think that challenged people are those who cannot lead an ordinary life.

Having finished the SGH seminar, we have a different answer. Are those who have limbs, eyesight, hearing ears ordinary? This is not correct. Each person has their own ordinary condition, and for the challenged, life with disabilities is ordinary. Therefore, we believe it is good to think that the challenged have their weak points called disabilities, just as the non-challenged have their weaknesses. In conclusion, by regarding disabilities as not "disabilities" but "personalities", there will be no sides of the challenged and the non-challenged, which will lead to interactions on a level playing field.

Power Problems in Japan

Hello, everyone. After one year of repeated discussions about the issue of electricity in Japan, we'd like to share our findings with you and give you our specific, realistic and positive suggestions for future energy policies.

First of all, why do we think about this problem now?

It is because energy issues are greatly concerned with the young generations like us.

The massive nuclear accident of Fukushima in 2011 has many grave consequences on policies not only in Japan but in the world over. The question is, is nuclear energy still useful and safe? Is coal a dirty source of energy? Can we depend on renewable energy?

Last summer the government showed us its energy policy for the year 2030. In 2030, our generation will be the driving force of society. So we believe that our generation has the responsibility to take energy issues more seriously, considering that Japan experienced the Fukushima disaster.

We have worked on various activities to think deeply about this issue. We invited three experts on energy problems. From their lectures, we learned a lot about renewable energy, nuclear energy and thermal power. Also, we visited advanced coal-fired power plants in Yokohama. This is one of the cleanest coal power plants in the world. Of course, throughout the year we did a lot of research on energy problems of Japan and the world, had many discussions, and wrote many papers. Now, we are going to tell you what's going on about energy, and make specific, realistic and positive proposals for future energy policies. First, we'll tell you about thermal power.

When you hear about thermal power, what do you think? Possibly, you have a bad impression of it because it is not a sustainable and environmentally-friendly with a lot of CO₂ emissions. But this negative image is not true. Now I'll tell you why coal-fired power plants will be essential for our future energy policy. Please look at this pie chart. This chart shows the percentage of each source in the global power generation. Thermal power, including coal, oil and natural gas, accounts for almost seventy percent. I mean, the biggest part of electricity comes from thermal power, especially coal. Now, coal-fired power generation plays a vital role in the world's electricity supply.

Next, let's compare power sources for thermal power generation. We have coal, oil, and natural gas. Each of these fuels has different features. Look at

this chart. Coal is the cheapest fuel of the three.

But it is not environmentally-friendly because it emits large amounts of carbon dioxide and other toxic gases. Coal is mostly used in developing countries such as China, and India. In contrast, oil and natural gas are more environmentally-friendly. But their cost is higher than coal. And the supply of oil is not stable because its supply depends on the Middle East. Advanced countries mainly use natural gas. As you can see, each country combines the use of these fuels depending on its economic situation.

What we propose today is we should use coal-fired power plants in positive ways. This may sound like a stupid idea for most of you, but We have two main reasons for this proposal. First, Japanese coal-fired power plants are the most advanced in the world, and can make a lot of electricity. Furthermore, compared with other countries such as the US and UK. AS shown in this graph, Japan is at the top of the world in the field of the coal power plant.

Second, Japanese coal-fired power plants are extremely environmentally-friendly. We visited Yokohama-ISOGO coal-fired power station, to see one of the most advanced and cleanest coal-fired plants in the world now. What we found is that almost all toxic substances are removed by the modern system. It doesn't damage the environment of nearby areas. Japanese coal-fired power plants like this are the most efficient and eco-friendly in the world.

Well, what can Japanese coal-fired plants do to contribute to lowering CO2 emissions all over the world? It's not enough to use the latest eco-friendly coal-fired plants only in Japan, because the problem of CO2 emissions is not limited only to Japan, but it's a global problem with no national boarder. So, in order to reduce the emissions at a global scale, using more Japanese coal-fired plants in other countries is in our best interest. So our specific proposal is, we should export more Japanese high-performance coal-fired power plants to the world. According to Dr. Takeo Kikkawa, Professor of Tokyo University of Science, Japan's greenhouse gas emissions per year are about 14 billion tons per year. However, if we export more Japanese coal-fired power plants to the US, China, and India, we can cut down over 15 billion tons! By exporting them abroad, Japan would be able to greatly contribute to reducing CO2 emissions in the world.

We would like to emphasize that Japan should expand Japanese high-tech coal-fired power plants to the world! This is a realistic, but positive solution to generate electricity in stable ways and to prevent global warming at

the same time.

Now I'll talk about nuclear power. I propose a realistic and positive solution to the matter of nuclear power plants in Japan. What I propose is that we will gradually decrease the number of nuclear power plants, and totally abolish them by 2050, 35 years from now. I'll explain to you how to realize this goal. First I'll tell you the reason why nuclear power plants should be reduced.

Nuclear power plants involve a big problem called "Back End Problem". What's the Back End problem? The back end problem is about difficulties with nuclear waste. As you know, in generating electricity from nuclear energy, a huge amount of radioactive waste is produced, and this waste is so dangerous not only to human beings but to the whole ecosystem that we have to dispose of it properly and safely. The problem is where to dispose this toxic material. As of now, there is no place for this in Japan. If that place were near your house, what would you think?

Of course, almost all of you would feel uneasy, and would say "Not in my back yard". That is called the NIMBY problem. NIMBY stands for "not in my back yard" and this is the very reason a disposal area cannot be found. Therefore, it's nonsense to continue to use nuclear energy, unless this problem is solved.

Secondly, let me talk about how to decrease nuclear power plants gradually. Actually, this is very simple. The number of nuclear power plants will decrease by itself. According to the new regulations, nuclear power plants are permitted to run for 40 years. The oldest plant in Japan is Takahama No.1 reactor, which was built in 1974. And the newest one is Tomari No.3 reactor, which was built in 2009. That is to say, in 2050, the number of nuclear power plants will be zero if no new ones are built. Some people might say, "Electric companies will want to extend the 40-year rule or build new plants, won't they?" However, this is almost impossible in the present situation.

According to the survey by Dr. Hiroshi Kimura, former associate professor of the University of Tokyo, the public opinion is still strongly against nuclear power plants. He also says it will take nearly 100 years to completely take care of Fukushima Daiichi. With Fukushima problems unsolved for another 100 years, would people accept a new nuclear plant? The answer would No. Therefore, even if we don't struggle to reduce them, extinction of nuclear plants is inevitable.

Considering these situations, the role of nuclear plants in the next 40 years is to just buy time to develop more stable renewable energy. In other

words, it might be true that we'll need to rely on nuclear energy for some time, but nuclear energy will eventually be replaced by green energy sources in the future. Again, in Japan by 2050 nuclear power plants will be brought to an end.

Do you know it isn't good enough just to save electricity at random when you try to reduce the total consumption in the country? You should save it when the consumption reaches the peak during the day. The difference of the consumption pattern in a day is so big that the electricity is not used efficiently. This is wasteful. In order to solve this, what we need is to cut the use of electricity around the peak time of three pm. Individual efforts in daily lives are very important. It is not so difficult for us to turn off unused lights, air conditioners or PCs around three pm, is it? With reasonable measures like this, we will certainly be able to reduce the use of electricity more effectively at the national level.

So, what should we do to cut 17% of current consumption which the government is aiming for? First of all, we should understand the energy issues in Japan, and in the world. Many people in the world know next to nothing about the electricity they use. And so, they use too much. As a result, current energy consumption at home is so bigger than before. It is said that we can reduce 2% of Japan's consumption if we pay more attention to disconnecting plugs. You can say the world is filled with wasteful habits. If we stop our current habits and do "the peak cut", reducing the 17% will be possible. I want you all to remember that in the summer after the great earthquake in 2011, we actually saved about 25% at peak times. This fact shows us we can do it. We must do it to achieve our goal.

We're going to talk about Renewable energy. Now let's start with its good points & bad points.

There are two good points. First, renewable energy such as sunlight will not dry up for years to come. Please look at this graph. Fossil fuels and uranium will dry up in 120 years. However, renewable energy won't dry up as long as the earth exists. Second, renewable energy power plants are smaller and cheaper than thermal and nuclear power plants, so building them is easier than the others.

Then, I'll tell you two bad points. First is its unstable energy output. These graphs indicate the energy output of solar power plant and wind power plant, and you can see that the energy output of the former is affected by the weather, and those of the second is affected by the force of wind. This is a very serious problem because the unstable electric power supply can cause big

interruptions. Second is its low energy density. This is the amount of electricity it can produce in a specific area. In short, watt per square meter. That of the nuclear power plant is 24.5, however that of solar power plant is only 1kw per square meter. That of geothermal is 0.9. That of wind power is from 0 to 0.1. These are the bad points.

So now, you might say "Yes I understood there are good points and bad points, but what should we do?" The answer is this. Firstly having a clear vision for renewable energy, and secondly making investments in promising companies which have the strong will and advanced technology. You find that the Japanese government actually practiced these two things in the postwar period.

After WW II, Japanese government determined to develop the domestic industries such as car industry with a strong will and support. This was exactly a clear vision. And then, it put a lot of money into these industries. So the companies like TOYOTA or HONDA could rapidly developed their technology and finally became the key industries of our country. This was exactly an effective investment. Thanks to these efforts, Japan became one of the leading industrial powers in the world. Now the question is "What's next?" So, let's move on more concrete content.

The most important decision for us to make is if we will stop renewables or promote renewables. But it is clear that we must choose the way to promote. There are two reasons. First, as you know, a depletion of fossil fuels. This graph shows the amount of fossil fuels we used in the past and we'll be able to use in the future, and we are here now. We have to accept the fact that fossil fuels are not eternal because they are made from ancient plants. Second reason is because promoting renewables is an inevitable world trend. IEA, the international energy agency, predicts that the percentage of renewables in the world energy supply will increase from 15% to about 30% by 2040. So you will realize that the promotion of renewables is an inevitable world trend.

And, I said we should invest in promising renewable-energy companies. This is because they have the strong potential and advanced technology while they don't have enough money to support their business. Today, I will introduce the most remarkable and cutting-edge technology of a Japanese company, Kawasaki heavy industries. The company has developed many technologies using hydrogen.

Machinery to produce hydrogen, Ships to transport it, Tanks to store it, and gas turbines to use it.

There is even a project to transport hydrogen made in deserts by special ship. What is important is hydrogen energy can make up for renewables' bad points. I said solar power and wind power are unstable... But this problem can be solved by storing extra energy as hydrogen. We can transform it into electricity any time we need. In addition, there are few CO₂ emissions, there are little self-discharge. Excellent. So Again, what we should do is simple. Having a clear vision and making investments in promising companies. Why don't we carry out these proposals right now?

We have worked on various activities to think deeply about this issue. We invited three experts on energy problems. From their lectures, we learned a lot about renewable energy, nuclear energy and thermal power. Also, we visited advanced coal-fired power plants in Yokohama. This is one of the cleanest coal power plants in the world. Of course, throughout the year we did a lot of research on energy problems of Japan and the world, had many discussions, and wrote many papers. Now, we are going to tell you what's going on about energy, and make specific, realistic and positive proposals for future energy policies. First, we'll tell you about thermal power.

Thank you for listening.

School Year 2015 Mid-term Report of SGH

Date & Time : September 13, 2015 (Mon.) 10:00-11:00

Place : the physics lecture room, Saitama Prefectural Urawa High School

Program

■10:00-11:00■

Reports by the group which went GB as an SGH in school year 2014

"Comparison of Japanese and British Railways and Ideas for Future Public Transportation System"

■10:10-10:50■

School year 2015 the mid-term report of advisory groups

1 "Investigation into Power Problems in Japan"

-Consider Nuclear Power Plants and Renewable Energy for Future Energy Needs-

*One representative made a presentation with PowerPoint and no manuscripts.

2 "Japanese Archery Class with Foreign Students"

*The presentation was made with a prepared movie using Japanese subtitles.

3 "Forming a Global Problem-Solving Network"

*One representative made a speech.

4 "IT Addiction"

* One representative made a presentation with PowerPoint and no manuscripts.

- The themes and contents of the presentations were mostly satisfactory.
- One of the remaining issues was the quality of the presentations.
 - Skills such as the loudness of voice, speaking speed, and the use of movies
 - The use of microphones, acoustic devices, and computers
 - The need of more rehearsal time with teachers' help
- This was a good opportunity to find the most needed areas of improvement for February 13 presentation.

Forming a Global Problem-Solving Network

2323 Shunnosuke NAITO

Good morning. How are you?

So, you have heard Mr. Arif Khan's success story. It was great, wasn't it? It was amazing that Arif studied every day for 15 hours on average. You would have been overwhelmed? Completely beaten? He was great in other ways.

There is no electricity in most of Bangladesh homes. Students can't study in their own houses. So they study out in the road under the street lights with no desks of course.

And they are not allowed to concentrate only on studying. Many families of Bangladesh are farmers. So, students must help their fathers and mothers on farms doing such work as planting, watering, harvesting, etc. without going to school.

Furthermore, people are very poor. It's often the case with them that they have no money for taking entrance exams, travelling to the University of Dhaka and paying their tuitions.

If you were in such adverse conditions, it would be natural that you give up going to University. No one would blame you. But in fact Arif studied many days for 18 hours in his preparation and entered the University of Dhaka. It's the best University of Bangladesh.

He wrote me an email, "I did nothing, except eating, bathroom and sleeping. No gossip, no family activities, no friends. Only study, study and study was my main job."

Can poverty motivate us and promote our studies?

Now I'd like to turn our eyes on Urako students. Many of Urako students' families have electricity, of course. We have our own desks, plenty of teachers and reference books. Sometimes too many.

We need not farm. No work. No cooking, no doing the laundry, no washing dishes. So, what are you doing every day? Just eating, using the bathroom and sleeping? Are you remembering to breathe?

We Urako students are in a much better condition than students in Bangladesh. We have the best environment for study. We can concentrate only

on our study enthusiastically and even can come to love our enormous amount of homework.

But is there anyone whose main job is studying here? Is there anyone who studies for 15 hours per day?

Does being rich inhibit our studies and hinder our motivation?

How can we understand this contradiction between Bangladesh and Japan? Is it that Japanese students can't surpass Bangladesh's in terms of motivation for study?

No! We can! We must. Because it's a problem of our own will.

Let me put two questions before you to solve the contradiction. The first is "for whom do we study?" Arif has studied to overcome poverty through an extraordinarily effort. He entered an excellent University and is now promised a bright future. He and his family have achieved success. So will Arif quit studying? Has he been studying only for himself or only for his family?

The second question is "for what do we study?" Arif was born in Bangladesh, but I was born in Japan. The conditions which have been given to both of us are completely different from each other. Our countries, our richness and poverty, our systems of schools, etc.

But we share values such as the right to liberty, the pursuit of happiness, freedom of thought and conscience, equality, etc. And admitting, spreading and protecting those values are is important not only in Bangladesh, but also in Japan.

First, the values I mentioned above inherently contain a liberal way of thought. If we accept those values, then we can't ignore the people who are not treated equally.

Second. Those values aren't absolutes in the sense of logic. They are relative. That's why we must also trust that the values are true or valid in all circumstances and persuade people to join us in our beliefs.

And therefore we should never quit studying. It's even our duty to protect the universal principle of mankind. Urako students should never be inferior to anybody. No, mustn't be inferior to anybody in motivation for studying.

Should Japan accept immigrants?

21R Masanori Kobayashi

1 Prologue

This paper aims to show that the acceptance of immigrants will help Japan to solve problems caused by its aging society and decrease of its working age population.

At first, let's look at the present situation of Japan's aging society, and then analyze the effect of accepting immigrants. I would also like to try and refute some negative arguments,

2 Present situations

According to the Cabinet Office, as of October 2014, Japan's population is about 127 million people. 24.1% of Japanese are older than 65 years old, and the number of working age people is 62.9 %. The aging of Japan's society is also predicted to continue growing.

The aging society and decrease of the working age population causes many problems. The national economy declines because of less domestic demand. In order to support elderly people's lives, the fewer number of workers have to pay more money placing a heavy burden on the youth of Japan. Rural districts, many of which are underpopulated even now, become uninhabited, its farmlands are abandoned, and the district's culture is lost forever.

Especially the problem of rou-rou kaigo (elder to elder nursing) is very serious. Nursing elderly people is a very taxing work even for young people, let alone for elderly people.

There are terrible cases caused by this pain. I would like to give an example. On July 11, 2013, a 79 year old man strangled his 75 year old wife. She could not walk well and was suffering from depression and was asking him to kill herself. He had been nursing her for a long time, but they both reached their limit. After he strangled her, he tried to commit suicide in Nihonbashi, which was the memorial place for the couple, but he was rescued and arrested for murder. So, if the aging of society continues growing, such terrible cases will also increase.

To change this situation, the government is trying to increase the birthrate, but of course we cannot improve this situation immediately by

increasing birthrate. However, what is Japan's attitude toward immigrants? Currently people from other countries can enter Japan, but they cannot enter Japan to settle down easily. The qualification of permanent residence is given to very few people who already live in Japan.

3 Effects

So what will happen if we accept immigrants? First of all, according to Junichi Goto, a professor of Keio University, the economic effect on Japan for the acceptance will be 8 trillion yen (more than 5 times than what the London Olympics brought to the U.K.). Japan's stagnant economy will start to recover with the acceptance.

Secondly, many declining industry will revive. Some industries in rural areas such as agriculture are dealing with the poverty of workers and their successors. If immigrants work in such industries, we can stop their decline and rural areas will be revived by the increase of its population. Look at this chart.

表 2-5 農業分野・食品製造業分野における研修生等の推移 (単位：人)

	13年	14	15	16	17
農業分野の研修生	3,516	4,645	4,280	5,980	6,606
技能実習生移行申請者	510	849	1,155	1,837	2,758
食品製造業分野の研修生	4,963	7,060	6,611	8,322	10,048
技能実習生移行申請者	2,202	2,596	3,134	4,158	4,844

資料：農林水産省、国際研修協力機構調べ。
注：研修生には、実務研修を行わない者を含む。

This chart indicates that the number of trainees from other countries is increasing. Therefore if we accept immigrants, more than a few of them will surely join in agriculture. Though I took just 2 examples, we can surely expect even more benefits from the accepting foreigners.

4 Negative opinions

As it is, many Japanese people are against accepting immigrants for some reason. However most of their arguments are groundless. I would like to refute 3 main opinions against this idea.

Firstly they argue that immigrants take the opportunities to get jobs from young Japanese people. However their arguments are unfounded. As stated above, some industries are facing serious poverty of workers because most young Japanese people are not interested in them. Immigrants will not

take all the opportunities from them.

Secondly, they argue that the number of crimes will increase. Certainly the number of crimes by foreigners has increased. However, even more rapidly, the number of foreigners coming into Japan has increased. So we cannot judge that immigrants raise the percentage of criminals. Furthermore they also insist of the danger of illegal immigrants using the example of the U.S.A., but we need not worry about it so much: Japan is an island, so they cannot enter Japan as easily.

Thirdly, they argue that there will be cultural friction and Japanese culture will be destroyed by people from other countries. That is also baseless. Japanese culture will not be destroyed. On the contrary, it will be saved by immigrants. Now some local Japanese cultures, such as matsuri and traditional manufacturing, are in danger of ceasing to exist in many rural areas. That's because those who would continue them are decreasing in number. Why can't immigrants also help them? Whoever shoulders the responsibility, the cultures themselves will still remain.

Moreover cultural friction is not all bad. It may cause some conflicts among people, but such conflicts may create and strengthen new Japanese culture. From ancient times, Japanese culture has progressed through contacts with different cultures. This new Japanese culture will attract even more and more people from around the world.

5 Conclusion

In this report, I insisted we should accept immigrants to change Japan's aging society. The acceptance will bring a huge economic effect, and will save Japanese rural areas. There are some negative opinions, but many are meaningless. I strongly believe we should accept more immigrants for the future of Japan.

6 References

Omitted

Report 2

Foreign Exchange

Another main part of our SGH program is foreign exchange. We are sending many students abroad in various ways such as participating the summer seminar at Michigan University, studying at Harvard University through the prefectural overseas program, as well as maintaining our relationship with Whitgift School, our sister school in England.

Our alumni association has recently founded the "Public Scholarship Foundation of Urawa High School's Alumni Association". It has helped pupils and graduates of our school who are planning to study abroad long term by providing them with a subsidy, which is enriching our overseas activities. Such action is encouraging the students to go abroad hand in hand with the SGH program. You can learn more by reading the manuscript of the presentation by one of our students who studied abroad (included in Report 1).

In this report, you can read the three papers which our latest short-term exchange student wrote last spring, the activity report of our English debate team, and the articles written by Tom Kilford who is our former advisor of International Interaction.

You can learn about the overall perspective of our foreign exchange in the following chapter "Summary of our Activities" and in the report "Yuhi-sen 2015-2016" which will appear shortly.

Conditions for Railway Development as Observed through the Lens of the UK's Railway Exports

H. Nakamura, Y. Otsuka, M. Sinagawa,
K. Nojima, D. Izutsu, K. Kawashima

Chapter 1: Prolog

In the 19th century, the U.K. increased their national power via the Industrial Revolution, and reigned over the world due to their productivity and the military power. The role the United Kingdom played in the modernization of the world was quite large, and it is a well-known fact that the railway was also invented in the U.K. A railway construction boom happened in the U.K. after both Stockton and Darlington Railway began operations in 1825, and it is said that a railway system was completed in almost the whole country by around 1850. The railway spread rapidly not only in the U.K., but also in the western great powers. On the other hand, a lot of railways were also constructed in Asian and African countries that were frontier places in the second half of the 19th century. Our country Japan was also one of them. Japan imported railways from the West because it is nearly impossible to make railways without help, so the U.K. was chosen. Japanese railways started using the U.K. as a model, and railway construction and technology were being handed down by the employed foreigners from generation to generation. Railways were also constructed one after another by the suzerain United Kingdom in the colonies the U.K. possessed all over the world, then.

This paper tries to find the requirements of railway development via studying which countries and areas received which exports specifically, and how each was undergoing development thanks to the UK's exports.

To do this, first, we picked a country where British railway system parts were exported to and gather the national, geographical circumstances, and also the social circumstances (Chapter 2). Second, we gathered information on how the respective railroads were developing (Chapter 3). Third, we found common points of railway development from Chapters I and II, and drew our own conclusions for requirements (Chapter 4). Finally, we extrapolated how we can prepare now, when advanced railway countries export their railways to the world from today forward (Chapter 5).

Chapter 2: Outline of Countries where the UK Exported Railroads

British railways were exported to China, Japan, and several other old

colonies. 6 different countries were chosen for further examination. They include: Uganda, India, Malaysia, China, Japan and Australia. Next, we would like to write some basic information on each country.

1 Republic of Uganda

- (a) British → Democratic Republic
- (b) Population: 34,758,809 (2013)
- (c) Ethnic groups: Baganda, Masaba, Soga, Ankole, Nyoro, Kiga, Lango, Acholi, Karamojong, Teso, Persons of Indian Origin, Abayudaya, etc
- (d) Capital: Kampala
- (e) Uganda is a circled landlocked country bordering Kenya, Tanzania, Rwanda, Congo Democratic Republic, and South Sudan.

2 Republic of India

- (a) British colony → Democratic Republic
- (b) Population: 1,210,000,000 (2011)
- (c) Ethnic groups: Indo-Aryan peoples, Dravidian, Austro-Asiatic languages, Sino-Tibetan languages, etc
- (d) Capital: New Delhi
- (e) India is located in South Asia and is part of the Indian subcontinent. India borders Sri Lanka, the Maldives, and Indonesia on the sea, and Pakistan, China, Nepal, Bhutan, Bangladesh, and Myanmar on land.

3 Malaysia

- (a) British colony → Federal constitutional monarchy nation
- (b) Population: 29,330,000 (2012)
- (c) Ethnic groups: Malay, Chinese, etc
- (d) Capital: Kuala Lumpur
- (e) The Malay Peninsula and Borneo Island are part of its territory. It borders Thailand, Indonesia and Brunei on land, and Singapore and the Philippines on the sea.

4 People's Republic of China

- (a) Qing dynasty → Democratic Republic → Socialist republic
- (b) Population: 1,341,330,000 (2012)
- (c) Ethnic groups: Han Chinese, etc

- (d) Capital: Beijing
- (e) China is located in East Asia and touches the Pacific west coast. China borders Korea, Mongolia, Russia, Kazakhstan, Kyrgyzstan, Tadjikistan, Afghanistan, Pakistan, India, Nepal, Sikkim, Bhutan, Myanmar, Laos, Vietnam, Korea, Japan, Philippines, Brunei, Malaysia, and Indonesia.

5 Japan

- (a) Constitutional monarchy → Democracy
- (b) Population: 126,530,000 (2012)
- (c) Ethnic group: Japanese
- (d) Capital: Tokyo
- (e) Japan is an island country located in East Asia and consists of 4 main islands (The four main islands are Hokkaido, Honshu, Shikoku and Kyushu), the Nansei islands and Ogasawara Islands.

6 Commonwealth of Australia

- (a) British colony → Commonwealth realm
- (b) Population: 21,293,000 (2008)
- (c) Ethnic groups: European, etc
- (d) Capital: Canberra
- (e) Australia consists of continent of Australia, Tasmania and other many small islands.

Chapter 3: Development of a railway of each country

1 Uganda

- (a) Total length: 259km
- (b) Presence of high speed railway: There is a construction project.
- (c) Standardization of gauges: all narrow-gauge

Uganda became part of Britain in 1894 due to the Herugorondo Zanzibar treaty in 1890. Before the U.K. colonized East Africa, many explorers and miners came to look for sources in the Nile and Uganda was called the "African pearl". In 1895, a committee to build a railroad for Uganda was formed and the Ugandan Railway was established. In 1896, the construction started in Mombasa. In 1901, it reached Kisumu and in 1931 reached all the way to Kampala. In 1948, control was transferred to the Eastern African Railroad, but in 1977, the Ugandan Railway was established because of the Eastern African Railroad's dissolution. In 1997,

passenger service was suspended. In 2004, a direct freight train from Mombasa to Kisumu started.

In 1910, thanks to the Ugandan Railway which extended from Mombasa on the coast of the Indian Ocean to Kisumu on the eastern coast of Lake Victoria, cotton cultivation developed rapidly and was an important export. Cultivation of coffee also spread rapidly.

2 India

- (a) Total length: 64,215km (2011)
- (b) Volume of passengers transported: 8,38billion · km (2009)
- (c) Volume of cargo transported: 5,51billion t · km (2009)
- (d) Presence of high speed railway: There is a construction project
- (e) Are a vehicles and infrastructure imports or domestic? Mainly imported from the U.K.
- (f) Electrification rate: 29.6% (2008)
- (g) Standardization of gauges: Trunk line is the standardized 1676mm.

In this section, I will discuss the creation of railways in India, changes in the type transport, and the current situation.

The first line in India was about 40km long, between Bombay and Thane. It was built in 1853, earlier than Japan's in 1872, which was also the first in Asia. At that time, India was a colony of Britain. The line was laid because Britain planned to transport of cotton, coal, and tea leaves.

At the time of their beginning, almost all lines went from the coast to the inland, because Britain had laid them for their own reasons. It was more efficient for transporting agricultural products for Britain. It also made it easier to transport products of the British industry to the inland areas of India. In India, railways continued to be laid, and India became one of the foremost "railway countries" in the world. Now, however, medium to long distance trains go between major cities, as well as the suburban trains running in major cities. They are national, convenient, and chronically crowded. India also wants to lay high-speed trains in future. As for their economy, India became wealthy in the 1990s, and is still continuing to develop. Their GDP is 113,550.7 billion Indian rupees. Some economists say India will become the third biggest economic country in the world, next to the U.S. and China, in the future.

Thus, economies require developing railways to improve. This is how we came to the conclusion that the spread of railways is a key part of a developing economy.

3 Malaysia

- (a) Total length: 1699km
- (b) Volume of passengers transported: 38,760,000 (2006)
- (c) Volume of cargo transported: 4,470,000t (2006)
- (d) On time: There are often substantial delays.
- (e) Safety: An overturn and derailment occurs approximately once a month.
- (f) Presence of high speed railway: None (Construction from Kuala Lumpur to Singapore will begin around the fiscal year 2020.)
- (g) Electrification rate: Less than 30%
- (h) Standardization of gauges: Everything is narrow-gauge

A lode of a tin was found at Malaysia Perak state in the 19th century, and the most advanced industrial city in Malaysia was built. Many Chinese emigrants gathered as laborers there, but difficulties occurred and the problems have continued. The United Kingdom made Malaysia into a colony at the end of the 19th century, and began to govern there to prevent China from seizing control. After that the United Kingdom had begun to construct a narrow-gauge railroad track in Malaysia in 1885. This is the origin of the Malaysian railroad. At first it was used for the transportation of tin, and the railroad was also used during World War II for the transportation of goods. After the war, it was useful for the transportation of resources and people. Malaysia in recent years has been fast-growing, and is known in Southeast Asia for being an outstanding, great economic nation. Ever since connections and travel between Thailand and Singapore has increased, railroads have been developing as a method of transport for travelers, but practical use of freight trains has been decreasing with the spread of cars.

4 China

- (a) Total length: 91,000km (2010)
- (b) Volume of passengers transported: 1.5billion
- (c) Volume of cargo transported: 3.3billion t (the highest in the world)
- (d) Safety: Accidents sometimes happen.
- (e) Presence of high speed railway: Yes.
- (f) Level of service: High-speed trains are high service.
- (g) Electrification rate: 46% (2010)
- (h) Standardization of gauges: All standard gauge.

The first railway in China was Woosung Road. It was built in 1876 by Jardine,

Matheson, & Company, a British firm. Gabriel James Morrison, a British engineer, led it. But several years later, Woosung Road was removed by the Qing government because they had not permitted it.

In 1881, the Tang-Xu Railway was built to carry coal. After that, most of the railways in China were built, about 21,810 kilometers, by the great powers (including the UK) until World War II was over. When the PRC was founded in 1949, railways were regarded as their own industry, and have continued to be built rapidly under the leadership of the PRC government. It is said that the length of railways in China was about 91,000 kilometers in 2010 and the second longest in the world next to the US.

The annual freight transportation volume of 2013 was about 3,970,000,000 tons and 2,917,390,000,000 ton-kilometers. The annual passenger transportation volume of 2013 was about 2,110,000,000 people and 1,059,560,000,000 passenger-kilometers. Both their freight and passengers have more long-distance users than short-distance users.

Also, a large number of extra trains run to accommodate the approximately 200,000,000 people for about 45 days in January and February during Chinese New Year. If they were to shut down for some reason, passengers would get very confused all over China. Therefore, railways are necessary for China and have helped China develop.

5 Japan

- (a) The total length: 27,754.5km
- (b) Volume of passengers transported: 21billion (2004)
- (c) Volume of cargo transported: 52,000,000t (2004)
- (d) On time: Almost always
- (e) Safety: High
- (f) Presence of high speed railway: Yes.
- (g) Are a vehicles and infrastructure imports or domestic? Almost all are domestic.
- (h) Level of service: The Shinkansen and Green Car are high service.
- (i) Electrification rate: 60.4% (2005)
- (j) Standardization of gauges: the old line is 1067mm, the Shinkansen is 1435mm, and private railways differ.

It was just after the Meiji restoration that construction of Japanese railways started.

However, it was impossible to make it without help. So Japan asked the West to support them, and the U.K. was chosen because of their technology and as the railway's country of origin. The first line was opened to passengers between Shimbashi and Yokohama in 1872. Construction was guided by a British engineer. After that, the railway system spread throughout the whole country.

Only Hokkaido's tracks were constructed with American technology. Almost all trunk lines were finished by the early Showa era and most local railways were constructed by the late Showa era. Independence from Western technology was also taking place. Simple carriages and freight cars were domestically developed, and Japan also succeeded in the domestic development of a steam locomotive in the second half of the Meiji era. Furthermore, most vehicles and facilities were made in Japan by the early Showa era.

The Japanese railways were greatly impacted by WW2 and affected by car shortages and aging, but recovered rapidly with postwar reconstruction. Electrification and smoke-free cars began in the 1950s, and high-performance electric trains and diesel cars were introduced into all parts of Japan. As a result, steam locomotives had disappeared by 1974.

Additionally, the Tōkaidō Shinkansen that opened in 1964 was the fastest high speed train in the world at that time, and had great success. The Shinkansen expanded its network into various parts of Japan after that. Its high speed, reliability, and safety were recognized at home and abroad. Today, the linear motor car, which runs at 500 kilometers per hour, has also been constructed. Japan's railways have been serviced by Japanese National Railways (JNR) since the Meiji era, except for local private railways, but JNR was in the red in the second year of the Showa era, so JNR was privatized into 7 companies of the Japan Railways (JR) group in 1987.

Japan is one of the countries with the most developed railway systems in the world. In Japan, JR's railway system spans the whole country, and there are big and small private railways everywhere. The demand for railways in urban areas is high, and Japan accounts for 40 percent of the railway share in the world. Railway technology and punctuality are the highest in the world, but on the other hand, there are still many problems. For example, the management of local railways is difficult because of the development of motorization.

Japan's transportation changed completely with the opening of its railways. A railway could carry a great deal of people or goods at once, and travel became remarkably fast. Certainly, railway weren't the only factor of Japan's financial

development, but its contribution is immeasurable.

Therefore, we can say railways are necessary and play an important role in Japan.

6 Australia

(a) Total length: 33,819km

(b) Volume of passengers transported: Mainly cars.

(c) Volume of cargo transported: Mainly trains, but just over 20%

(d) Presence of high speed railway: Construction planned.

(e) Electrification rate: 7%

(f) Standardization of gauges: Different from all prior colonies.

Although the fact that the Commonwealth of Australia was once a British colony is well known, before that it was several completely separate colonies for exiles in the 19th century. Therefore, the train services that gradually began to operate all over Australia in the middle of the 19th century adopted their own standards in each colony. Now that Australia is one nation, this difference in gauges between each colony is a big problem. That's why, in Australia, it is common for train services to only operate within each state, and they are still unable to standardize all their gauges. Also, Australia has a very extensive road network extending for a little over 9,000,000 kilometers, and Australia's vehicles per capita is the eighth largest in the world. This may be why there is a high level of reliance on automobiles for people who live in Australia, and one of the reasons why train services which do not use standardized gauges will never achieve great success.

Chapter 4: Conditions for Railway Development

We wrote about the change in railways and their current state for 6 countries in chapter 3. From this, we'll discover the conditions necessary for railway development.

First, in a colony, convenience for the suzerain state is the top priority. Of course how to lay the tracks, freight transportation, and military transportation are also priorities. So passenger transportation is not taken into consideration. Thus, it is necessary to be an independent country to properly develop passenger railways. In the same way, communist countries and military countries with too much state power also tend to control the process too much. It can be said that democracy and capitalism tend to lead to excellent railway systems. Accordingly, when railways aren't abundant in a country, the demand for

railroads will remain low. Countries that have developed railways and have a high demand for them have also achieved economic development, such as Japan.

China is a socialist country, but it has achieved economic development by opening the market. So Chinese railways are fairly developed. Railways will develop in the countries where the economy is growing. But there is also a negative effect. In a large country with a lot of territory, it instead will increase the demand for airplanes, and railway passenger services will decrease. Standardization is also a big problem. Standard differences are a huge problem for railway services like Australia's. Countries must unify their standards for their entire network.

But, this is not this case for the Shinkansen, so when it is a new line which can run independently, there should be no problem. But even if the trains are standardized throughout the entire country, there will still be differences between their trains and other countries'. This is a necessary evil of the development of railways. Thus, we can say that island countries are more capable of unification of the standard.

So, to summarize the above mentioned points:

- (a) Independent country
- (b) Democracy
- (c) Capitalism
- (d) Financial development has been achieved.
- (e) Territory isn't too large.
- (f) Standardization of the entire country's network.

Chapter 5: Summary

We have now discovered the conditions for railway development by observing 6 countries with different geographical features in this paper.

The transportation capacity a railroad has and its energy conservation are being reconsidered, worldwide, and railways are growing and changing, one after another. Countries with developed railways, such as the West and Japan, are aggressive in exporting railway cars and infrastructure. We would be honored if this study is consulted when these countries export railways all over the world in the future.

The Future of Railroads Judging From the Advantages and Disadvantages of Electrification and Non-Electrification in Japan and the United Kingdom

1. Introduction

In Japan, most of major railways are electrified, and most local railways are not electrified, presently. In the UK, it is also important to consider the method of electrifying suburban railways, such as whether or not to use a third rail. And what of the rest of the world? The purpose of this paper is to examine whether it is better to use electrification or not, for future railways, by examining the status quo. Additionally, should companies that are associated with railways invest in electric-trains or diesel-trains? We think the answers to these questions are significant for everyone.

2. The Problems of Electrification and Non-electrification

There are several advantages to electrification. For example, it can improve energy efficiency and enable faster train speeds more easily. Electrification is primarily seen in cities where the amount and frequency of use is large, because in such sections, the more electrification there is, the cheaper the cost of use will be.

(A) Japan

In Japan, the rate of electrification is about 50% at present. However, the amount is different between regions. JR Central has a rate of electrification of 75.7% (March in 2014), and the number is larger than that of any other region. However, there are some prefectures where electrification is low. For example, Kouchi Prefecture has no electrified JR sections. Tottori city in Tottori Prefecture has no electrified sections, even though it is the prefectural capital. Tokushima Prefecture also has no electrified sections yet. Moreover, they have never had an electrified section there.

These prefectures all have something in common: they have small populations, and are struggling with depopulation. These are some reasons why the rate of electrification in Japan remains around 50%.

Of course there are other reasons, too. Electrification can influence observation, and headline wires cannot be installed in pre-existing tunnels. For example, in the region around Kakioka Magnetic Observatory of Japan Meteorological Agency, DC-electrification would prevent precise observation of

terrestrial magnetism. So, the AC-electrified sections would cost too much and therefore are not electrified.

(B) The UK

In the UK, the electrification rate is only about 33% (in 2005). Given that the electrification rate of the major countries in Europe is more than 50%, it's easy to notice that railway electrification has been delayed in the UK. In the United Kingdom, diesel cars are often still used. High-speed railways have not developed, and there are many old tracks and facilities, with overhead wires that spoil beautiful scenery. This is why the electrification rate in the UK is lower compared to that in other countries in Europe.

3. Problems of Electrification and Non-electrification

Electrification has two major problems. First, its installation cost is more expensive. In order to drive an electric train, it needs various facilities such as substations and overhead wires to turn on the power. Building them requires a lot of money.

Second, the facilities cause environmental pollution along the railway line. The overhead wires and their poles may also spoil the scenery, so they are not suitable for picturesque areas. Besides, pantographs, which collect electricity from the wires, give off noise when they move at high speed, so they may also cause noise pollution.

Non-electrification has three major problems. First, diesel trains, which are a good example of non-electrification, produce nitrogen oxide (NO_x) and particulate matter (particulates). NO_x is known to cause acid rain, and it is a major cause of environmental disruption. Particulates often occur when oil is burned, and are harmful to humans.

Second, its power cost and cost of maintenance are higher than those of electric trains. The reason why the power cost is expensive is that it is fueled by light oil. The expenses add up quickly. Besides, the cost of maintenance for diesel trains is higher because their construction is more complicated. Finally, the efficiency of power transmission for a diesel train is lower than for electric trains. It's more than 90% for electric trains, while diesel trains are only about 85%. These are the main problems for using non-electrification.

4. Future perspectives in Electrification/Non-Electrification

Next, we'll consider the changes in facilities for electrified railways, implementing electrification on non-electrified railways, and then look to the future.

i) Artery lines

Once electrification forms a main artery line, it influences not only the community whose sections it goes through, but also the country as a whole. Concretely, we thought it influences financial policies because it helps control economic stagnation and inflation.

AC electromechanical systems in AT types, which is used the most in main artery lines nowadays, has removed all of the disadvantages former systems had. However, such devices cost a lot to install. We think it is necessary to consider if we can lower the costs of these devices.

ii) Suburban lines

The modernization of trams, also known as street cars or ultra-low-floor trains, and light rails has been remarkable in Japan and European countries, and its good points are becoming more attractive. If their performance and speed can be improved and technology can progress from now on, more and more people will want to use them. Besides, we might not need to use extra energy if rail tram structures are built on level land which is suitable for building trains. It might even be used to improve infrastructure in developing countries.

From the viewpoint of consumers, we could improve income on a longer-term scale. Let's look at the San-yo main line that underwent electrification in 1958.

In Kakogawa city near Himeji, because the operation interval was shortened from 1 hour to around 20 minutes, it became possible to travel in a much shorter time. Due to this, some people began commuting from Kakogawa to Osaka for better work. However, many customers in the To-ban Area began going to the Kobe-Himeji Area, and the shopping arcade in Kakogawa started to decline. On the other hand, towns like Kamigo-ri succeeded in the revitalization of their town thanks to invitation campaigns. Regardless, it became easier for consumers to go shopping in Himeji, which was once troublesome, and the local retailers made an effort to improve their services. So, it can be said that the electrification of the San-yo main line had a great impact on Kakogawa.

iii) Rural lines

In Britain, some areas still use railcars in order to preserve the view. In Japan, some lines switch from electric trains to railcars by declining the frequency of use it due to depopulation. If we use railcars, researching institutions, railway factories, and railway companies should cooperate in research and development in order to use fuels which won't be a burden the environment as much as possible and improve its consumption efficiency. We believe that the same can be said for vehicles. Thus, hybrid railcars have been appearing recently.

In fact, there aren't any railways in very remote areas, and some developing countries. If railways were built in such areas, we could expect an increase in population thanks to faster transportation, an influx of capital and goods to these remote regions, and an increase in employment.

5. Conclusion

We found that electrification (electric trains) and non-electrification (diesel trains) both have advantages and disadvantages.

Electric trains are better than diesel trains from an environmental perspective. However, the cost of installing electric trains is much higher than for railcars. Therefore, developed countries with more funding are likely to adopt electric trains.

Diesel trains have the advantage of cheaper equipment costs than electric trains, so they will likely be adopted in developing countries. In addition, developed countries should aid developing countries in laying railways because it can help contribute to their development.

Our outlook on the future is that railway technology know-how will be learned by developing countries, and that they will come to manage and develop their own railways.

Future of Railway Exports of Japan

Seen from the High-Speed Railway Exports of Hitachi LTD.

Yousuke Inoue, Wataru Hamamoto,
Daisuke Miyazaki, Kazuki Ogata,
Iori Asahina, and Masato Uemoto

1. Introduction

It is generally said that railroad cars can be used for thirty to forty years, and afterward we have to upgrade or replace them. So railroad cars will always have a certain amount of demand even if no new lines are constructed.

For railroad car manufacturers, however, it is preferable to improve their profitability by manufacturing more cars. However, there are neither signs of new railroad construction projects nor signs that the demand will increase for the time being in Japan, where the population is thought to be decreasing. So Japanese manufacturers are all seeking to expand overseas, but their share of the world's railroad car market is less than 10 percent. Their present situation does not look good.

However, in 2005, a Japanese manufacturer succeeded in exporting railroad cars to the U.K., the origin of trains. Its name is Hitachi, Ltd. The manufacturer accepted the order, defeating other world-famous manufacturers. Needless to say, its reputation grew immensely as a result.

Furthermore, the manufacturer signed a contract to deliver 497 cars for IEP and maintenance of the railroads for twenty-seven and a half years. Thanks to this success, Hitachi has firmly planted itself in the U.K.

How could the manufacturer make such a great achievement? It is all too easy to assume that Hitachi was superior to other manufacturer in price and technology. However, it is not unusual at all that these factors are called for when we sell industrial products under the market economy. Our ultimate goal is to make the future direction of export of railroad and Japan's industrial productions clear through Hitachi's success. In order to reach this goal, we are going to find practical solutions from this example, Hitachi's success, and seek a way to apply them to various other industries. First, we want to describe the present situation of railroad exports worldwide. Second, we will examine the effect of cooperation between the government and the private sectors in terms of sales activity.

2. Making Systems to Cope with Globalization

If Japanese companies which make coaches want to acquire profits overseas, those companies need to make coaches which are able to travel around the world, coaches that people in that area want, and they must sell all the systems that will allow the coaches to operate without any problems.

There was a time when Japanese companies started to try to acquire profits overseas, but the 3 companies named "Bombardier, Alstom, and Siemens", called the "BIG 3", have had a high market share since a long time ago.

At first, the company in Canada named "Bombardier" made things related to transportation, for example airplanes, railways, snowmobiles, etc. In 1974 the company started to make coaches much later than many other companies, but it made the kinds and quantities of the products increase because they were able to sell all the systems that the coaches needed in order to operate together. Companies' systems to supply electrical power to the coaches, hard carts, and the signal systems are all very diverse, and come from different companies. Alstom and Siemens were unable to sell those systems. It will give you an edge over the competition if you are able to sell all the systems your coaches need during negotiations about starting new railways and the necessary budget. However, in Japan, all the big companies make only coaches. The companies which handle the electronics include Mitsubishi Electric Corporation, Toshiba Corporation, etc. make only the electronic parts, and The Nippon Signal Co., Ltd is the main company which makes the traffic lights and facilities.

The companies in Europe generally select their coaches from a set of basic coaches that coach companies have already designed. These are called "Ready-Made". In short, the companies which make the coaches have to design them to travel everywhere, without problems. For example, first, Siemens sold well in China because the number of people who are able to ride their high-speed trains is higher, because Siemens's high-speed train called the "Siemens Velaro" is much wider than normal.

The second example is the "TRAXX". Bombardier made a locomotive powered by electricity called the "TRAXX". They have also made coaches which are powered by Diesel engines, too. However, in Japan, the companies which make the coaches make them how the railway asks them to, which is called "Order-Made". So Hitachi Ltd. Made an "A train" which is more like "Ready-made" trains. Its production capacity was able to increase by making the parts standard and making everything similar. For example, they sell coaches

named "CTRL" to England. All the systems involved are electronic, which is the same as in England, and was made in Japan with new technology applied to the existing technology. We can think that this company had an advantage because it could apply the technology it had without changing the old technology. Hitachi, Ltd went on to negotiate about buying the Italian company named Finmeccanica Sep. in order to be able to provide the signals, because Hitachi was afraid that it couldn't provide all the systems necessary for the railways. We think Hitachi has tried to gain the same amount of strength the "BIG 3" have.

3. Motivating Companies to Work Together

The Japanese companies have certain things that they can make very well and should try to export around the world, but many Japanese companies have never tried to export their products before. However, companies like JR, Hitachi, Ltd., and Kawasaki Heavy Industries, Ltd., etc. started a partnership called the "International High-speed Train Association" in April 2014 in order to compete with the "BIG 3", because the companies need to be able to cooperate well when they try to export their products.

The coaches made by Hitachi could travel without the problems, but the coaches made in England broke down when it snowed terribly in England. Hitachi, Ltd. made their high-speed trains use the same developments that Japan's Bullet Train use in Japan by treasuring "safety first". This includes a "cover to repel snow" which Japan's Bullet Train in the northeast has, and "construction to prevent intrusion of water around the trains". As a result, the coaches made in Japan can travel everywhere, which developed trust and helped the business earn new clients. Hitachi, Ltd. Also knew that Japan's Bullet Train is made of aluminum, and developed the ability used by many companies now, earlier than the other companies did. This caused an increase in the number of coaches made of aluminum. However, there would be no new technology for the railways in Japan, if the only Japanese company was Hitachi.

First, the "Tokyu Car Corporation" which was named "Japan Transport Engineering Company", has been sharing the technology with companies in America since a long time ago. This company can export their coaches to many companies in many countries which are related to the railway because this company could make coaches made of stainless steel. This company's brand name was "Sustina", and has been trying to expand their brand around the world as the best stainless steel company after it changed its old name to the "Japan

Transport Engineering Company".

Second "Kawasaki Heavy Industries Rolling Stock Company" is also famous because they exported high-speed trains to Taiwan and China, etc. by using the Japanese technology used on Japan's Bullet Trains. However, this company has spent little time monitoring the things it has exported, which helped China apply for a patent for the technology. Nevertheless, the fact it was basically Japan's Bullet Train was advertised around the world.

Third, trams with low floors, named "LRT" which stands for "Light Rail Train" and are made by "Kawasaki Heavy Industries Rolling Stock Company" have been bought by many countries and companies.

4. Government and Companies Cooperation.

Hitachi, Ltd. also decided to try to get the contract for "IEP business", which stands for "Intercity Express Program", so it could replace even more coaches more than before, which is based on matter named "Class 395". Only Hitachi, Ltd. earned the rights to negotiate about it, but the economy around Europe worsened, and many politicians in England were replaced, which made negotiations take a very long time, since the prime minister, the cabinet member who closely affiliated with them, and the embassy staff in England had the English government continue with the negotiations. The special bank named the "Japan Bank for International Cooperation", that the Japanese government put all the money into, promised to give money to the business when the money that the business had decreased, because many banks in Europe didn't put money into the business. The Japanese trade insurance company, which is an independent corporate body from the government that the Ministry of Finance made into a private enterprise, in order to form a relationship to easily buy insurance for private enterprises related to the Ministry of Finance. This system is very important for export businesses which the state economy and government in the area are deeply involved in, because this system allows the government and the private companies to discuss the matter together and helped make the "IEP business" matter a success.

5. Conclusion

We found that there are two important things in the field of production: having economic efficiency via standardization and meeting local people's conditions, and preparing to deliver all of the systems for a railway in one

package. Also, in the field of marketing, that has the potential to create ties between companies, the "All Japan posture" public-private integral was also found to be very important. With the continuing rise of Asian countries, the competitiveness of Japanese products decreases day by day, particularly in the consumer electronics field. We need to devise better ways of manufacturing products in order to beat out the export competition and add to the Japanese productions' share of the world market. For instance, in exporting infrastructures such as nuclear power plants, strength in sales wars is also necessary in order to not waste Japan's technological advantages. It is not better technology, but our attitude, that will resolve the present situation where Japan, which is known for its technological advances, is disadvantaged in exporting its products. Our hope is that various kinds of Japanese manufacturers will find the key to success when exporting products through learning lessons from Hitachi, which won a difficult sales war in the country of the origin of trains.

6. Bibliography

Omitted

Achievements of English Debate in Relation with Global Issues

Prefectural Urawa High School has been participating in High School English Debate, or HEnDA style, since 2008. We have won two 2nd places, and one 4th place, which entitled us to a spot in the National Competition. In the HEnDa style, there are restrictions to entry if the students have lived abroad or use English at home every day. As a Super Global High School, we would like to help these 'restricted' students do their best as well. This year, therefore, we participated and performed well in alternate styles of debate which have brought us new challenges and opportunities.

I. Public Forum

(1) Oita tournament

There were 29 teams that entered the Oita tournament, and among them were International Schools and also several schools which regularly participate at the HEnDA National Competition. There were also many students who have lived abroad or who used English at home every day. We were not sure if we would be able to win even once.

The topic was "On balance, Artificial Intelligence is beneficial to humanity."

Most affirmative arguments talked about the benefits from various AI-related technologies, and we further developed our argument to include AI-assisted body movement for disabled people, as well as helping with household chores for single mothers. This concept of inclusiveness was not merely a minor benefit for a few people, and it allowed us to win our hardest round, the third round against Ritsumeikan Uji High School.

Our negative arguments pointed out that AI will bring about unemployment in both blue-collared and white-collared jobs, and that overreliance will also weaken human intuition, like the navigation skills of pilots due to GPSs. This argument was strong against teams who argued for the easier, the better. On the negative side, we won three times, including the final match against Fukuoka prefectural Syuyukan High School, which earned us first place with 4 wins and no losses.

All the teams that participated had strong arguments and excellent English speakers, but our team probably had more experience, specifically the experience of losing, and so our students had a deep understanding of how to

carry on believing in their argument.

We have now been given the opportunity to participate in the 2016 NSDA debate competition in the U.S.A.

Here were our arguments, though they changed along the way.

POSITIVE/AFFIRMATIVE

Our topic today is "On balance, artificial intelligence is beneficial for human society"

Definitions = Use As Needed

AI, according to Oxford University, is the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.

Practically, AI is used for:

- | | | |
|---|----------------------|-------------------------|
| 1 | Patterns | (Pattern Recognition) |
| 2 | Planning | (Strategic Planning) |
| 3 | Diagnosis | (Diagnosis) |
| 4 | Robots and | (Robotics) |
| 5 | Looking through data | (Data mining) |

We define on balance as:

- the use of AI in many areas
- while still having full control over AI,
- and the ability to co-exist by working alongside AI.

We define human society as:

- any significant group of people,
- but particularly those in Japan.

Our main points are AI's ability to solve problems, and innovation thanks to AI.

POINT 1 : Solving Problems

Our first benefit is AI's ability to solve problems.

Example 1 Elderly people

According to Japan Times News in 2014, the number of people older than 65 rose to 31.9 million, or 25% of the population. Basic AI can do daily chores which are difficult for the elderly. According to Tech Times, iRobot's

Roomba can sweep floors for three hours on a single charge with just one click. This robot can help with cleaning, which is hard for older people. They will also have more free time to use in constructive ways to increase their quality of life.

Example 2 Women

In addition, robots like Roomba could free women to pursue jobs outside their own homes as they help do some of the cleaning or help care for their family. Single mothers would greatly benefit, and the average household income would increase across Japan.

Example 3 Hazardous Jobs

It is safer for AI to work in dangerous environments, like:

- Nuclear Power Plants,
- Mines, or
- Washing windows on tall buildings.

These jobs should definitely be taken over by robotic AI. This reduces the danger to humans working in such environments, like disease or death. These AI would also be able to work 24 hours a day, without rest. They can maintain safety at all times, and warn humans about risks ahead of time. The US has had AI products for over 30 years that reduce the burden on reactor operators during both normal and abnormal operations, according to Robert Uhrig, the head of his Nuclear Department.

Example 4 Disabled People

Computers can repeat the same exact movements, so they are more accurate and safer than even the best humans. Robotic AI connected with brain signals, already in development, will help people with disabilities to once again stand up, sit down, and eat on their own. This will also help small nurses if the patients are quite large. The AI robotics will help the patient be able to move around

Example 5 Jobless People

In addition, AI could be used in data mining to help the unemployed search for new jobs. Please don't forget AI can also be used to support the poor!

POINT 2 : Innovation

If we stop improving AI, we are throwing away a huge, innovative, and an increasingly popular area of study among today's youth. AI is pushing the boundaries of human abilities, allowing us to grow and progress into a new era of learning and understanding.

Example 1 **Fewer Accidents**

Innovation in automatic driving will result in much fewer accidents. Elon Musk, CEO of Tesla, said the evidence is "overwhelming" that autonomous cars will be safer, though he will still have to convince governments and regulatory authorities this is true. Also, flight crew error has been implicated in about half of all fatal airline accidents. The innovation of automated driving will lead to fewer accidents (and money saved).

Example 2 **Increased Globalization**

Translation through AI could allow easier travel, aiding tourism agencies, and allowing people to have a wider view of the world we live in. Already, AI translation has shown its use with Stephen Hawking, allowing him to continue to share his insights with the world.

Example 3 **Business Opportunities**

AI can also help with global trading, communication, and partnership through translation and data mining, which would lead to more business opportunities, and greater potential for economic gains.

Increased competition will also lead to better products at lower prices for buyers around the world. Small SME companies will finally have an even playing field with larger companies, because they will be able to market and sell their products with the same ease and access to information as large companies.

NEGATIVE SIDE CONSTRUCTIONS

Our topic today is "On balance, artificial intelligence is beneficial for human society"

Definitions = Use As Needed

AI, according to Oxford University, is the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between

languages.

We define human society as:

- any significantly large group of people.

Our main disadvantages are job loss and hidden dangers.

POINT 1: Loss of Jobs

Our first downside is that workers in all fields will lose jobs.

Example 1 AI will be controlled by the rich

People who can make, afford, or control AI will always be on top and they will always have a job. But almost every other job can be replaced by AI. AI will naturally begin to replace human labor since it can be made stronger, faster, more accurate, and safer. According to bigstory.org in 2013, an analyst said "at the end of this century, the jobless rate in America will be 75%" solely due to AI. This unemployment rate is too huge for America to deal with and it will have a big effect on America's economy.

CEOs will have a simple decision: pay people monthly salaries who need breaks and make mistakes, and provide their families with health care and help pay for their retirement, or hire robots that can work 24 hours a day, 7 days a week, without breaks. AI that will perfectly obey whatever you tell them to do, and never argue, get tired, sick, drunk, or arrested.

The answer is simple: They will choose AI every single time, because they are far more productive and cost-efficient in the long run. Soon, only those with enough money to buy and control AI will be able to make a profit, and everyone else will lack jobs.

We invite our opponents to think of a job that AI definitely cannot do, and to tell the judge what it is. We are convinced that they will not be able to think of one, except perhaps jobs related to religion, philosophy, art, or professional sports. Everything else can eventually be automated. Everything. That is a scary thought. How will people be able to make money?

Example 2 Blue collar jobs will be lost

Blue collar jobs will easily be taken over by robots as they continue to develop. They are faster, smarter, more durable, and stronger in every way. You won't have to worry about their health, and they can work under any conditions.

Example 3 **White collar jobs will be lost**

Not only blue, but even white-collar jobs will also be replaced with AI. According to ida.dk in 2014, in the past, law students used to help lawyers with their small cases, but now they can be replaced since AI can do the job faster, more accurately and for a lower cost. Law students will not be needed or wanted, and will lose valuable chances to gain experience. New lawyers will have difficulty finding work or excelling with less experience, thanks to AI. Then AI will simply replace all lawyers.

Also according to New York Times in 2014 and Mobile Health Global in 2015, they already have devices that can check someone's health or decide the best way to do diagnosis or treatment. This means nurses who give patients checkups won't be needed. These are just a few examples of the many high-level, technical jobs that will also be lost thanks to AI.

Example 4 **Loss of job fields**

The main problem is not a loss of some jobs, but the loss of an entire type or field of jobs to AI. Many people, including students have dedicated years of their lives to their job or profession. If all computer jobs are replaced by AI, those people will not have training for work in any field other than the ones that no longer exist, or become super-competitive. They will be forced to take a job they have no training in, but those types of jobs will also already be filled by AI. These people will essentially be poor for life, which will cause a need for a raise in taxes to support them.

Point 2: Hidden Dangers

Our second downside is that the dangers of AI are subtle and hidden, which will lead to larger and more damaging problems when there is an error.

Example 1 **Weather**

Many people think AI can function in all situations, but that's not true. What about automated cars? When it snows, the sensors on automated cars get covered, and they lose their ability to see. This means driving in snow is very dangerous. With everything looking white, visual images are far more difficult to understand, assuming the car can even see anything at all. Even when parking, snow sets off the sensors, causing the car to think it's already close to something, making any assistance impossible.

Example 2 **Humans make errors, and humans make AI**

The Pro side is quick to say AI is better, but AI will always make mistakes. Why? They can only be better at things they are already programmed for. AI cannot think for themselves. Watson can answer any question you give it, but it cannot ask one. It's not programmed to. When AI encounters something it's not programmed for, it will make mistakes. If humans make a mistake in the programming, they will also make errors. No matter how you look at it, there will always be a "human fingerprint" on AI. As long as we can anticipate everything, then AI will be fine, but we are human, and there are always many things we cannot predict.

AI used to diagnose illnesses could encounter a new strain of the flu and misdiagnose it because how can it know what it is if it's never existed before?

Example 3 **The scale of errors will be infinitely larger**

As humans, if we make a mistake, only 1 person makes the mistake – us. However, with robots, they will all be programmed the same. That 1 error will be multiplied by the number of AI robots that have been produced. If you make 1 million smart cars with an error, they will ALL make that error. The scale and damage will increase greatly when an error occurs with AI, and we may not recognize it until it's too late.

Example 4 **Many humans will become spoiled and lose their ability when needed**

If humans keep relying on AI like this, we will not be able to think as before. According to Wall Street Journal in 2010, 75% of the pilots in America said that their skill of manual flying declined after auto-navigation was introduced, even though the technology brings a lot of benefits to the company. This shows that if you rely too much on AI, your thinking process will slow down and your skill will dull as well. If you use AI a lot and don't use your brain to remember places and navigate, the part of the brain for memory – the Hippocampus – will shrink, which lead to dementia. This will cause the younger generation to have a higher probability of suffering from dementia.

Example 5 **Hackers**

Recently, wars have become even scarier because terrorist cell groups are small and difficult to recognize until it's too late. We cannot easily see the

problem, and it becomes difficult to stop or catch these “invisible threats.” Hackers are much the same – able to attack from anywhere, unseen, and to strike and cause huge security problems. Data can be stolen or programs could be changed. How can we prevent these kinds of attacks when the internet connects everyone in the world to everything else if you know what you’re doing?

(2) Korean tournament

Prefectural Urawa, Ritsumeikan Uji, and Okayama Joto represented Japan in the NSDA Korean tournament. In the preliminary round, we were matched against 3 Korean teams and 2 Japanese teams. We won three times, but lost twice to the top Korean team, and we earned a spot in the show-case match against the top Korean team on the final day of the tournament. We were awarded 2nd place.

The topic was: “On balance, intergovernmental emission trading is beneficial”. It was a theoretical and multi-dimensional topic. The arguments of the top Korean team were strong, and they had wide-ranged vocabulary and splendid debate skills. We now know what to aim for and we will do our best to catch up with them.

Here were our arguments:

Pro side

After the Kyoto Protocol, international effort has been made in order to meet carbon emission goals. The most effective framework has been the EU’s carbon emission trade system (ETS). It has been effective because

- 1) Its flexibility makes it the best financial option for companies.
- 2) The ETS can definitely reduce the amount of emissions, thanks to its caps.
- 3) It improves international cooperation and accountability.

We believe we should join the ETS in order to take full advantage of it.

We have two reasons.

Reason 1: Sustainable Development increases Regional Cooperation.

Reason 2: Sustainable Development will support Research and Development.

Please allow me explain the process and importance of Reason 1, and my partner to explain the process and importance of Reason 2.

(124 words)

Reason 1: Sustainable Development increases Regional Cooperation.

Status quo

Even after the Kyoto protocol, some countries have not cooperated to reduce carbon emissions. This is a global problem, so if this situation continues, the greenhouse effect will worsen for everyone and climate change will seriously impact our future. (ex. South Korea's average temperature has already risen degrees more than the rest of the world because of its greenhouse gases.)

Effect

By introducing intergovernmental emissions trading, the amount of emissions from each country will be more visible, providing accountability and the ability to cooperate in order to protect our futures.

Importance

Developing countries such as Laos, Nepal, or Butane can further their country's development by selling extra emissions quotas. Emerging nations such as India, China, or Vietnam, can become more involved, without slowing down their economies, by buying extra emissions quotas. Finally, developed countries such as the U.S.A., South Korea, and Japan can lead regional cooperation for Sustainable Development through balancing and reducing their emissions quotas, and buying and selling as necessary.

If Asia joins and follows the EU's effort, we can set a model for South America and Africa as they continue to develop, helping them easily incorporate into the ETS.

(203 words)

Reason 2: Sustainable Development will support Research and Development.

Status quo

Businesses are selfish and greedy, always seeking to improve profits and avoiding change – it's expensive. They also seek to protect and improve their public image. These are the real ethics of business. Additionally, Research & Development (R&D) is expensive and can take years to produce anything, so it is always small-scale and receives very little money.

Effect

The EU's emissions trading system can leverage what is best for all parties, turning business ethics into a positive via R&D, since R&D donations count toward a company's emissions reductions. In turn, better R&D will benefit everyone, worldwide.

Importance

Companies will surely donate more. They will kill 4 birds with one stone:

- 1) Companies can resist change by funding R&D instead of actually decreasing quotas at first
- 2) The company's public image will improve for donating to R&D
- 3) Companies can save money, since funding R&D is less expensive than the fees for not meeting quotas
- 4) More R&D funding will allow larger-scale efforts, which will result in more and better inventions for reducing emissions, which will increase company profits and also be more sustainable. Companies can then sell their inventions worldwide, increasing their profits even more. Take the Lithium Ion battery, for example. Thanks to Sony's R&D, we now have longer-lasting, better batteries, worldwide.

We simply need to let the market take control, and then let it do what it does best. We just need to place companies inside the right framework, inside the ETS, so their selfishness can become a positive influence for the world.

(265 words)

Con side

Our topic today is "On balance, intergovernmental emissions trading is beneficial"

Definitions = Use As Needed

Emissions trading, according to business dictionary.com, is a tradable-permit system in which a greenhouse gases emitter can buy/sell permission to emit a certain amount of emissions to/from other emitters. This is different from an emissions tax.

To make it easy, we define this topic as "is the emissions trading system (ETS) beneficial or not."

Our main disadvantages are:

1. Not Solving the Main Problem
2. Corruption and Inequality.

(85 words)

POINT1: Not Solving the Main Problem

Our first disadvantage is that this solution does not really solve the main problem, which is reducing greenhouse gas emissions to zero.

Example 1 Outsourcing

Outsourcing is when a developed country has another country, often a developing country, make something and then imports it from the developing country. This actually makes the problem worse. First of all, it appears that the emissions have decreased for the developed country, but the emissions have not decreased at all when you look at the world's emissions. In fact, they might have increased.

This process benefits the importer, because they will not have to worry about the greenhouse gases which will be emitted for production. This importer will essentially have a much higher cap because they are having other countries produce their goods, and the cap and the ETS only looks at the producing country. This does not solving the main problem of reducing greenhouse gas emissions to zero.

Example 2 Reforestation is not Actually a Reduction in Emissions

A company who cannot stay under their cap has an option of planting more trees in order to virtually reduce their emissions. However, again, this process does not help solve the underlying problem. Planting more trees does not actually reduce the greenhouse gas emissions, it's only a virtual reduction, and since it's allowed, many companies and countries will just plant trees to emit more, because they can make more profit by planting trees to emit more so they can produce more.

(251 words)

POINT2: Corruption and Inequality

Our second disadvantage is that the ETS promotes corruption and inequality, making it harmful and unable to accomplish its goals.

Example 1 Outsourcing

Again, outsourcing becomes a huge problem for the same reasons we mentioned earlier. Rich countries take advantage of poor countries, making the rich richer, and polluting the poor countries in exchange for a small profit for their country. Also, rich countries could charge more for extra permits so that only other rich countries can reasonably afford them. Also, rich countries could simply outsource to a country which doesn't take part in the ETS, allowing them to produce however much they want for essentially no penalty.

Example 2 Bribes and Deceit

Bribes and deceit are another issue that can affect the ETS in many areas. Officials that set the cap for each country's emissions could be bribed, inspectors could be bribed, emissions data could be falsified, countries could falsify reports, companies could inflate their base outputs to gain more permits, and the list goes on and on. With so many new checks being put in place, and most things being self-regulated, it would be very easy to lie about something or bribe an official. This, in fact, has already happened. For example,

(209 words)

(3) Winter Cup in Chiba

The Winter Cup Tournament has a 10-year history, and this year both the HEnDA and Public Forum competition styles were held. We entered both, and we did quite well at the HEnDA style as well, but since this report is about our new challenges, we will focus on the Public Forum competition. In the Public Forum competition, 36 teams from 14 schools entered participated, and among them were some of the top debaters in the Kanto area, including some international schools.

Our topic was "In the face of current crisis, a government should prioritize humanitarian needs over national interests." It was a current, on-going social issue, so there were many news articles on websites and in magazines to read. We thoroughly researched the topic, and debated well.

We finished the preliminary rounds with 4 wins and no losses, and went on to win the final match as well. This victory has given us confidence in proceeding to the NSDA U.S.A. tournament next year.

Here is our Constructive Speech script with our arguments:

First Speaker Con.

Observation of Status Quo

Our observation is that the current crisis is getting worse because of too much emphasis on humanitarian need, rather than a lack of it. Therefore, we support stronger governmental control on the issue. Please let us explain why we think our concerns are more important.

Contention 1: Border Control Problems

If more refugees come into the EU, countries will tighten their borders to stop them.

Right now, some countries are already trying to intensify their border control to stop refugees from coming in. For example Hungary, Denmark, Sweden is closing their borders by ignoring the Schengen deal. These moves will cause the Schengen deal to fall apart even more.

We have to focus on the border control outside the EU because total mobility will drop if Schengen deal collapses. This will damage total economic activity of Europe and surrounding countries, because imports and exports, cooperation between companies in different countries, daily commuters, and tourism will be affected. According to Reuters in 2016, if Schengen treaty have to be reconsidered, it will lead to a decline in trade of 10-20%, which is equivalent to a loss of 13.6 trillion yen.

In addition, Over-emphasis on humanitarian needs will put pressure on the border control to be less strict, leading to simpler procedures (for example: not requiring a birth certificate) This will allow more terrorists to come into EU. In order to prevent this, good border control between the EU and the rest of the world is required.

Therefore we should focus on border control.

Contention 2: Cost of refugees.

We all care about the refugees; however, the level of care needed to meet the demand for the increasing number of refugees makes it impossible to realistically help them. According to the U.N. in 2015, there are about 11.6 million total Syrian refugees, with 7.6 million still waiting to leave.

To help these refugees, food, water, shelter, and medical care should be supplied instantly, On top of that, long-term support is needed for job training and education. First, let's look at the cost of education, because it's a key factor

for long-term integration. According to Mainichi newspaper in 2015, Germany will have to spend 430 billion yen on 460 thousand refugees to teach them German so they can enter the work place. This money is expected to rise as more refugees are accepted.

In fact the cost is so high that in Denmark, the government has, essentially, begun asking wealthy refugees to use their own money to help other refugees. More and more governments will have to do the same, because governments cannot keep giving within their limited budgets. They have to consider the humanitarian needs of their own citizens as well.

Statistics show the cost of 1 refugee is about 1.7 million yen, meaning it will cost 19.7 trillion yen for them all, which is the same as 10% of the German National budget each year, to help the 11.6 million refugees. That number is also expected to rise if humanitarian needs are further prioritized.

To sum up, We are not saying that we shouldn't help refugees, but asking the opponents and judges to consider that over-emphasis on humanitarian needs will set the matters off balance, doing more harm than good, due to problems with border control and the lack of funds. Realistic measurement of the cost will allow every government to continue helping the refugees, as well as trying to help them integrate into their new environment to ensure their humanitarian rights.

First Speaker For

Observation of Status Quo

Our observation is that current crisis is increasing due to the lack of consideration for humanitarian needs. In the face of the current crisis, governments from near and remote should cooperate to solve the main problem, rather than thinking solely about its own people.

Prioritize means, according to the Oxford Dictionary, to "Designate or treat something as more important than other things,

Contention 1 Emergency Aid

Even if it's not legal, many Syrians are desperate to get to the EU. They often use dangerous, illegal ways to enter the EU. According to UNHCR, the UN refugee department, in 2015, there are still 11.6 million Syrian refugees waiting to leave Syria. This is the largest number of refugees since World War 2. But so far, only 200 have been offered resettlement. According to CNN in 2016, already,

over 3,771 refugees have died trying to cross the Mediterranean Sea in rubber rafts overflowing with refugees.

Refugees desperately need food, water, shelter, and a place they can live in peace. These are basic human rights. But there are not enough funds, because most refugees come with nothing, and caring for them means providing medical care, education, work, housing, and food. In fact, in 2015, the World Food Program's financial shortage caused them to cut aid for Syrian refugees in half, only allowing them to provide 50 yen a day for food.

If every EU country split the remaining refugees proportionally, their populations would only increase by 2%. And with that sacrifice, the EU could help all the refugees.

With just a little international governmental cooperation, 11.6 million refugees' lives could be saved or greatly improved. Legally entering a country is much better as well, since refugees can receive healthcare, which will also save more lives.

According to Medicine Without Borders,

Contention 2: Stronger Economy

According to (), Germany's population will shrink by 9 million within 45 years. The ratio of non-working members to working members is currently 40 to 100, and without refugees or migrants, it will rise to 78 to 100 by 2050 because of the aging society and small number of children. According to (), 85% of German companies want ().

Refugees are those who led an ordinary life, just like us, but were forced to leave their country because of reasons like war. So once their basic needs are met, they can definitely contribute to society. According to BB News in 2015, 78% of Syrians have a high level of education. According to the Wall Street Journal in 2016, once refugees start working, the EU's GDP will rise by 0.25% by 2020. According to Reuters in 2015, HSBC estimates that taking in more refugees could result in a profit of 39.1 trillion yen by 2025. Initial costs will be paid off, and in the long run, as our data clearly shows, refugees will contribute to the economy.

Therefore, we believe humanitarian needs should be prioritized over national interests in the face of the current crises, because the former strengthen the latter in the long run. Thank you.

II. Impromptu Debate

(1) Tokyo tournament

The second type of debate that we started was Impromptu Debate. Unlike the other styles, this one does not let participants know the topic beforehand. Each round has a new topic, and after the topic is announced, only 15 minutes of preparation time is given.

Ms. Nakagawa, the organizer of the debate association, came to our school with some college students and ran a workshop, after she did the same with several other high schools in the Tokyo area. All such schools interested in the debate got together in a tournament style, mainly to enjoy debating together at Tokyo Metropolitan Nishi High School.

The topics they gave us on that day varied from the “boy meets girl” type of topics to social issues. Perhaps we had a slight advantage already knowing about the world Peace Keeping Operation, because it was the previous HEnDA debate topic which marked the final topic of the day. We walked out with splendid result as follows.

Team A: Roma Gorman and Keita Shirabe – 2nd place

Team B: Yuto Haba and Takuto Miyamae – 3rd place

Team C: Kohei Okamura, Hikaru Negishi, and Jacob Pedersen – 1st place

Exhibition debater: Yuto Haba

Best debater awards: Kohei Okamura and Roma Gorman

(2) Osaka tournament

In Osaka, the topics required wider background knowledge, such as about newspapers being exempted from the compensation tax increase. Some schools said they learned Impromptu English Debate in their English classes, and the debaters from such schools seemed to be more comfortable and confident in their debating.

We thought it was a great idea to implement debate into our regular English classes, and after talking to all the English teachers, they agreed! Next year, we will do our best at even more debates and hopefully be able to participate in even more championships!

III. ALT's Comments

Allow me to focus my comments on the Public Forum Oita Tournament.

My job was to grasp the differences between HEnDA and Public Forum

debate. The main difference is that HEnDA only allows 2 impacts (reasons) for support, while Public Forum has no limit. So during our only practice matches, I paid careful attention to opponents' arguments' structures, as well as how judges perceived them. Many arguments were broad, with multiple impacts with varied focuses. Probability of occurrence was foregone to increase their impacts' values, because "more was better". Students struggled to understand how to effectively debate using multiple impacts, and judges struggled to understand the arguments' flows.

So, I proposed that we rethink our structure and make it easier to understand. Impacts would be treated just like evidence in the HEnDA format, and all our impacts would be tied together via a common theme. This would help judges follow our reasoning and logic. It also forced our opponents to focus their arguments, increasing actual debate, and allowing us to restrict and predict those attacks, prepare defenses, and reduce overall necessary preparation to a manageable level. We needed to take what we already had learned from HEnDA, and transform it to fit into Public Forum style so we could leverage our strengths, instead of trying to start from scratch.

It was also fortunate that I had taken classes on AI in college. When our students asked difficult questions, I had answers and could give them confidently and clearly. This, in turn, gave our students confidence to challenge and defeat opponents who thought the same as they once had. One of the most important things when speaking English is confidence. I believe I was able to provide students with confidence by equipping them with both a structure for debate they could feel familiar with, as well as sufficient knowledge about the topic. This confidence helped them appear to show a deeper understanding of the topic than their opponents, which can win close matches. In debate, it's not just about what you say, but also how you present it.

I'm extremely proud of our students, because we must always remember that at the end of the day, they are ones debating. They earn those wins. Our job is to support them and provide them with the ability to earn that win – if they want it. This year, I'm proud to say our boys wanted it, and I was able to play a small part in helping them earn it.

Tom's Tales

2015/04/27 First Impressions

Dear Students,

First of all, for those of you who have not met me yet, my name is Tom Kilford. I am a 22 year old Modern Languages (Spanish and German) graduate from London and will be teaching here until the end of June. I will mostly be working with Scott teaching the first grade but, if you are lucky, I may also go to other classes. My British English might sound slightly strange at first but please come and talk to me, I do not bite! Please ask me any questions you have about England, Whitgift School or just questions about me.

Although I have travelled to many countries and visited Asia before, this is my first time in Japan. Japan really is completely different to any other country I have ever been to, but this is what makes it so amazing. Even after just a few days spent in Saitama and Tokyo I had my first impressions of the country. Delicious food, crowded but clean streets, big cartoon characters everywhere, extremely polite people, a love for crazy toilets – these were some of the first things I noticed. The first Japanese toilet I saw automatically opened as I entered the room... this does not happen in the UK so I was very shocked! I told my family back in England and they also were amazed. Our toilets are so boring!

After a few days spent exploring Tokyo I headed for Urawa to meet the fellow teachers and introduce myself. Mrs. Ogawa has been looking after me since day one and made sure to help me get to Urako – I am very bad with directions! Everyone was extremely friendly and polite, making me feel very welcome from the first day. I spoke with the Principal and Vice Principal and was given a tour of the school. Urako is nearly as big as my school in England, but very different. For example, I can't believe you play rugby and football on sand pitches. It must hurt very much if you ever fall over.

So, what do I think about the students here at Urako? Are they polite? Are they friendly? Are they hard working? Do they occasionally sleep in class? The answer to every question is yes!! I look forward to getting to know you all a bit better

over the coming months, however if you sleep in my class, your head may just make friends with my book!

Good luck with me!

Tom

2015/05/11 New Places and Experiences

Dear students,

A couple of weeks ago I had two friends from England come to visit me. Squeezing all three of us into my very small share house room was a bit of a problem but we managed to do it - my bedroom was one giant futon for nearly two weeks! My friends told me they came to Japan to see me, but I think they just wanted to use me as a tour guide! I planned many activities for their trip, but my favourite was a long weekend spent in Kyoto.

I have been in Japan over a month now and am getting used to the lively life of Tokyo, however I heard many good things about Kyoto and was keen to visit myself. I spoke with Scott, did some research online and planned the trip. We were very lucky as the weather was perfect throughout the whole weekend. We got on the Shinkansen at Tokyo station and had a perfect view of Mount Fuji on the way to Kyoto! The Shinkansen was a bit expensive but a great experience nonetheless.

I did not know much about Kyoto before visiting, but it is now one of my favourite cities in the world. I have never seen such a beautiful city with so much to offer. I loved everything except the monkey park in Arashiyama. One of the monkeys looked evil and I thought he wanted to kill me!! My favourite temple in Kyoto was probably the Silver Temple (Ginkakuchi). It is not as grand as the Golden Temple (Kinkakuchi) but the garden is beautiful and there are far less tourists like me! At some temples Japanese people even asked to take photos with me and my friends because we were Westerners. I felt famous!

The style and layout of Kyoto make it very different to Tokyo/Saitama and it really is an interesting place to visit. We also went to Osaka for one night, which was great. I tried okonomiyaki for the first time and really enjoyed it. I normally have chocolate on my pancakes, not fish and vegetables! It was definitely a new experience. Osaka is much more like London – very modern with bright lights and full of people.

The second trip of the week was to Hakone. My friends wanted to go to an onsen before going back to England. My friends loved the onsen so much that they stayed in there too long – I think they nearly cooked themselves!

Travelling is a great way of learning new things and meeting new people. It helps you appreciate your own country and also see things from other peoples' perspective. No two places are the same. If you ever get to travel around Japan, or even abroad, please do. Maybe one day some of you will come to the UK and we can go out for some fish and chips!

Tom

2015/05/25 New Sights, New Sports

Dear Students,

Since last week I have had quite an adventure. As some of you might have seen, I attempted to play soft ball last Friday, which I'm sure was very funny to watch. I was able to hit the ball quite well, but, as we don't have baseball or softball in England, I had no idea when to stop running. It was still good fun, even if I couldn't completely understand! I apologise to my team mates for my mistakes – I am English!

Mrs. Ogawa kindly offered to take me on a trip to Nikko on the weekend to show me some of the famous temples and natural landmarks. Before this we went to a great Izakaya in Urawa – Japanese food is delicious and I love everything except natto! I was very inquisitive (curious) throughout the trip and asked about one million questions about the temples and the Shogun in Japan, so I'm sure Mrs.

Ogawa was glad when we got home!!

On Tuesday this week I turned 23 (still young!) and spent my birthday at the sumo wrestling in Tokyo. I was amazed by the experience and am now considering becoming a sumo myself... Only joking! I went to the tournament with other foreigners and cheered for my favourite sumos. I could not believe that one weighed 207KG – he was enormous. That’s three of me!! What do they eat!? The event was very exciting and the Grand Champion was overthrown (he lost) at the end. Everyone cheered and started throwing their cushions towards the centre of the stage.

So I have now experienced baseball, softball and sumo. Next week – judo... At this rate I might even become Japanese!

I know that some of the students are thinking about applying to study at Whitgift, so next week I will talk a bit about the school, what makes it so special and why I decided to go there. It’s a great school so please apply!

Tom

2015/06/04 Whitgift School

Dear Students,

When I was 10 years old I was faced with a very difficult decision – I was due to leave my primary (elementary) school and had to choose where to spend the next 8 years of my life. I was accepted into two private secondary schools (high schools); Trinity and Whitgift. Both schools were founded by the Archbishop of Canterbury John Whitgift in the 17th Century. Trinity is a very good school and closer to my home, but there was really only one choice; I knew where I wanted to go! So in September 2002 I became a 10 year old Whitgift student with a backpack bigger than my body. I was scared but very excited.

I chose to go to Whitgift for a number of reasons. The school itself is very impressive. It is a very big school with both modern and traditional aspects, the

facilities are amazing and there are even some strange animals walking around! Whilst I was at the school they built a brand new multi million sports hall with a state of the art gym and swimming pool, they have also since built a boarding house for students, where Urako students will live. Like at Urako, there are many clubs for students to join. Whether you like sports, drama or music, there is something for you. I played rugby and hockey at Whitgift and had a great time.

One of the main reasons I chose to go to Whitgift was the languages department. Whitgift is an excellent school for languages, offering French, German, Spanish, Italian, Japanese and Chinese as subjects. I was fascinated by Japanese and knew I wanted to study it – it is thanks to Whitgift that I am here now! I studied German, Spanish and Japanese and later went on to study German and Spanish at university. Since then I have lived in 5 countries, including Japan.

Going to Whitgift was one of the best decisions of my life. I have many unforgettable memories and great friends thanks to my time there. I really recommend studying at Whitgift School and would be happy to answer any questions you have about the school or my time there. Just come and find me!

Tom

2015/06/17 Victory

Dear Students,

This week I am writing about the success of you Urako students and will be concentrating on the recent efforts of two students in particular. One thing I noticed straight away when arriving in Japan was the fantastic work ethic of the students. I admire not only how hard you work at school but also how you commit yourselves to your clubs nearly every day of the week. It doesn't matter whether you are in the soccer team, attend the photography club, or if you are preparing for a school festival, you all give it your best. This is maybe why some of you are so tired in my classes! Some of the sports festival events were crazy but still impressive and I enjoyed the effort you all put in.

This exceptional level of hard work does not go unrewarded. Two second year students Roma Gorman and Yuto Haba recently entered the NFL (National Forensic League) English Debate competition. The topic of the debate was artificial intelligence (AI). Mrs. Ogawa and I met up with the boys to discuss their ideas on the topic and I was very impressed. They did their research, practiced with Scott and Mrs. Ogawa, and attended the competition last weekend. This debate on artificial intelligence (robots) was not easy but the two boys prepared very well and their efforts paid off. After 4 successive wins the boys were crowned victors! 28 teams from various schools took place in the competition in Oita, and it was the Urako pair who got the most points.

Both Roma and Yuto will now travel to the United States next year to participate in a further competition in Salt Lake City. Fantastic news! Please congratulate the boys if you see them at school. They may even bring back some souvenirs! Best of luck boys, I'm sure you will do great.

Tom

2015/06/29 Challenges

Dear Students,

I'm afraid I tried to post this last week but must have pressed the wrong button as it did not go online! Now you have two posts to read :)

Last week I talked about the success of Urako students. This week I want to talk about some of the challenges Urako students have faced and will face in the future.

The first boy I would like to talk about is Jun Takeuchi. Jun has been chosen as the next Urako student to study at Whitgift School (my school in England). Jun has chosen to study the IB (International Baccalaureate) and will spend 2 years studying 6 subjects in England. Moving to a foreign country on your own can be difficult and quite scary but I know Jun will be fine and have a great time. He will live in the new boarding house at Whitgift School and hopefully play football –

but only if his shoulder is ok! Whitgift is a great school and he will return speaking beautiful British English!

The second student moving abroad is Jinpachi Masuda, who is taking part in the AIU program this summer. He will be spending 3 weeks travelling to various campuses on the East Coast of America, attending various lectures and classes. He will even visit the Security of Defense, the Metropolitan Museum of Art, the UN and IMF, among other sites. Other students from Urako and Saitama will also travel to the United States at a later date.

A student travelling to Japan is Dominic Oben. Some of you may have met Dominic during the exchange program with Whitgift. Dominic will be spending the next year studying at Urako. Please help him settle in and make sure he learns how to speak perfect Japanese!

The last student I want to mention is Sergey Khvan. Sergey has done incredibly well during his time in Japan and is a true linguist. The amount he has learnt in his short time here is outstanding. Sergey is now looking to study in England or America and is preparing his applications for university. I know that he will be successful wherever he goes... but he will have more fun in England! Good luck Sergey.

There are plenty of other Urako students heading to Whitgift and Michigan University for summer courses and I'm sure they will all have a great time. I wish all of you the best of luck. Enjoy yourselves!

Tom

Report 3

Reiwa Seminars

Many of our educational activities have been strengthened in terms of educating global leaders thanks to the SGH program.

Reiwa Seminars have been held by inviting five or six members a year out of our 30,000 graduates, aiming to provide the students with opportunities to have a broader perspective and deeper insight. After the designation as an SGH, these seminars have been one of the biggest and strongest programs of our SGH program.

In this report, you can learn that our school has a long history of nurturing global leaders with great success, and that we are supported by these global leaders so current students can get interested in social issues, gain a good education, have international viewpoints, and prepare for becoming future global leader.

Reiwa Seminar

Title: A Vocalist who sings Abroad

Lecturer: Chikusa TOMITA (a 19th graduate, a baritone singer)

Date: May 26, 2014

Summary of the lecture

The first Reiwa Seminar of fiscal 2014 was held on May 26. The lecturer was Chikusa Tomita, a baritone singer living in Vienna.

He started with a solo of a Canzone "Non Ti Scordar Di Me" (Don't Forget Me). The students were overwhelmed by and wholly engrossed in listening to the powerful singing voice of the baritone singer.

First, he talked about his Urawa High School' days. He said he didn't intend to become a musician at that time. He chose craft skills for the art subject, and wanted to be taught by Mr. Masuda, a Living National Treasure. He bought a guitar. He sang and played folk songs. He loved Peter, Paul and Mary, and would often listen to their songs. He went to the concert in Sinjuku Welfare Pension Hall and overwhelmed by first-hand experience of hearing the powerful singing voice, which inspired him to sing like them. Accordingly, he went to a teacher of classic vocalization, and began to learn about it. As he kept practicing there, he came to want to become a musician. Then he started to aim at music universities. That was when he was on the third-year student. But there was one problem. The problem was that he had to play the piano with prepared programs in the entrance examinations for colleges of music. Even the easiest piece was a sonata by Beethoven. Not having taken any piano lessons, he arranged a plan to learn the piano for two years from when he was a third-year student.

He studied at a college of music and graduated with excellent grades. He was selected as the player for the Emperor and the Empress at the Imperial Palace. Although he had decided to become a teacher after graduation, he studied in Vienna for a year with his mother's permission. The fact that he had been interested in German Lied and studying Germany at college helped him a lot. He said to the students in his lecture that nothing is more important than language skills when you study abroad, and you have to acquire English skills at least.

He went to Germany on May, and unexpectedly passed the examination of University of Music and Performing Arts, Vienna. He said to his mother that he had passed the exam and he couldn't go home for a while. Then she disowned

him. He became unable to get living expenses from her and had to do a part-time job to continue studying music.

After graduation, he started to work as a singer at theaters. There are 120 theaters in Germany. Musicians who work at theaters are public servants and are treated well. The country secures enough budgets for the arts. That's because European people are more aware of protecting their own traditions. The main role of colleges of music is to cultivate professionals who work at theaters, which is different from Japan.

Second, he talked about vocalization. He said it is no good way to mimic famous singers. Vocalization differs person to person, and your voice is one and only voice in the world. He has pursued the way to make 100-percent use of the pitch extent, volume, and ring of his voice, which he was born with.

Thankfully he taught method of diaphragmatic breathing and other things to students. Since many of glee-club members participated, they had a chance to sing in front of him and got some guidance and advice from him firsthand.

He said to the members of the glee club, "I want you to cherish the ring matching your voice. You don't sing a song only for competitions. The results of competitions depend more or less on the tastes of judges. You should aim for your own goals."

He strongly said that he wanted Japanese young people to produce music which matches Japanese cultural climate. Arias by Mozart or Beethoven are composed in harmony with singers around them. Therefore these songs don't correspond to Japanese climate. In Europe, the music traditions originate from its own climate. On the other hand, Japanese music traditions were brought from Europe after Meiji Era. Even then, you don't have to sing like Europeans. Japan has its own great values. He said we Japanese shouldn't break the Japanese values by mimicking Europeans.

Last, he showed us the townscape of Vienna, where he lives in. He sang a song at a theater in the Schönbrunn Palace of Habsburg monarch for the first time in Vienna. He got an audition at the Vienna State Opera and became a research student there, where he worked with Karajan and Bernstein. He said to the students, "I'll be happy if you visit Vienna some day."

After questions and answers, everyone sang the school song. We felt how attractive going abroad is and how fantastic singing is in the two-hour lecture.

Title: Brain Surgery and Brain Chemistry

Lecturer: Hiroyuki KAMIGUCHI (a 35th graduate, the Senior Team Leader of Riken Brain Science Institute)

Date: June 25, 2014

Summary of the lecture

The second Reiwa Seminar of fiscal 2014 was held on June 25. The lecturer was Hiroyuki Kamiguchi, the Senior Team Leader of Riken Brain Science Institute. More than 50 students participated

First, he talked about brain surgery. Subarachnoid hemorrhage is caused by cerebral aneurysm rupture. One treatment is to clip ruptured vessel, but you have to go through the crevice in order not to damage the brain. Then he talked about brain tumors. Although meningioma is removable with surgery, glioma is unable to be removed with surgery. That is because meningioma arising from the meninges, while glioma is made inside the brain. As you can see from this, we cannot reach out to the important area of the brain. Brain surgery is surgical treatment to vessels or membranes of the brain. It is impossible to reconstruct the important areas or the brain itself.

The attraction of neurosurgery is that the target is the brain, the nature of human beings. There are various medical conditions and special aspects of surgery. Function reconstruction of the central nervous system is difficult, but there is a future possibility, which attracts us.

You may think that we can reconstruct neurons with stem cells (ES cells, iPS cells). Nevertheless, it's useless to replenish cells when it comes to the brain. Once a nerve circuit is broken, you cannot reconstruct it by replenishing cells. Even if nerve circuit is broken, an axon starts to grow, which is however blocked by injured area. Why does this happen? To learn why this happens, we have to investigate how the growth cone of an axon, which is located at the tip of an axon, goes forward.

The growth cone goes forward just as a caterpillar band go around. The axon goes forward and grows just like the way an amoeba moves.

There is a phenomenon called dystrophic endball: a neuron circuit which is damaged and broken, becoming unable to grow straight and ending up curving in the shape of a pole. What makes this happen? That is because glial scars arise in the injured area, which make growth cones unable to go over the concentration gradient of chondroitin sulfate proteoglycan. A growth cone,

which moves like a caterpillar band, becomes unable to move as its clutch, as it were, is fastened. By conducting experiments of injecting various chemical agents into a growth cone with its clutch fastened, it has finally become able to go over the concentration gradient. This is the result of the chemical agent's affecting paxillin, a clutch molecule so that it phosphorylates. Phosphoric acid paxillin enables an axon to extend.

An axon has not only to go over the injured area but also to be induced appropriately. Inducement of axons' extension relies on the concentration gradient of NGF (nerve growth factor). The fact that the concentration gradient of NGF curls the movements of a growth cone indicates that the condition inside the growth cone is asymmetrical. The situation is that IP₃, which conveys the information of NGF, acts inside the growth cone, making the condition of calcium ion asymmetrical. Uneven distribution of the IP₃'s action makes it possible to steer the growth cone.

Second, he talked about basic medicine and clinical medicine. Basic medicine is "the creation for the future" and clinical medicine is "the service activity at present". No matter which path you choose, it's important to proceed in the path that interests you.

Study on basic medicine requires "curiosity", "originality", and "logicality". Originality is produced by "unique ideas", "technological development", and "integration of different fields". For instance, one example of technological development is to invent a device to detect substances which were undetectable in the past. Research on such device can easily be original. Integration of different fields is to integrate the expertise of each field in the interdisciplinary field of various academic fields, and the integration makes it possible to invent new things. Getting unique ideas is the most difficult of the three. It is to make a new discovery in the fields in which people around the world are interested by overthrowing the conventional wisdom

Today many people become a clinician. In the past five-ten out of 100 research students went on to basic medicine. There are less and less researchers on basic medicine because many of graduates from universities have to work as clinical training physicians, going on to clinicians accordingly. The current clinical medicine relies on basic medicine. There are no problems in particular for now, but we cannot be sure whether clinical medicine will be able to rely on basic medicine. Basic medicine is an important field in terms of developing clinical medicine.

Last, we did question-and-answer session. When asked what his motivation for research was, he answered that it was challenge to the unknown. He said, "I want to discover things known to nobody by myself. Combination of new discoveries will lead to the treatment of intractable diseases.

Title: Listen to Your Heart

Lecturer: Mitsuru MURAI (a 30th graduate, the chairperson of J. League)

Date: September 29, 2014

Summary of the lecture

The third Reiwa Seminar of fiscal 2014 was held on September 29. The lecturer was Mitsuru Murai, the chairperson of J. League. More than 60 students participated.

1. Urawa High School Days and Falling in Love with a Girl

He was born in Kawagoe, and belonged to the basketball club at junior high school. He become interested in playing soccer under the influence of "Akakichi no Eleven" and wanted to play soccer in Urawa High School. He joined the soccer club as a goalkeeper though he couldn't do soccer-ball juggling even ten times. Although he became a regular player in the second year, he was judged as misconduct when he touched the ball outside the penalty area in a game,

At that time there was a bus stop of Urawa Akenohoshi Girls' Senior High School in the west side of Kita-Urawa Station, and in the course of looking at the high school's girls going to school, he came across the soul mate. The girl he was staring at for one year has turned out to be his current wife. His school grade was 403rd in 405 students in those days.

2. Adventurous Days in Waseda University

Since he had been planning to enter a national university, he had difficulty getting used to the life in Waseda. It was the aftermath of the Cultural Revolution and he was also influenced by the NHK special TV program "Silk Road", so he decided to travel across China, which is about 6,000-kilometer long. He did various things such as visiting the companies where graduates of Waseda were working and making presentations there, eventually gathering millions of yen. He was overwhelmed by the ability of the true elite at Peking University including Japanese proficiency. The farewell greeting was "Let's meet at the Great Hall of the People". From the experiences in China, he found that he

could earn a lot of money by doing things ordinary people did. He decided to do unparalleled things. He didn't buy the compendium of laws even though he enrolled in the faculty of law.

3. Difficult Time in Recruit

He entered the company; in the meantime, Recruit scandal occurred. The image of the company became worse and it was in the aftermath of the economic bubble burst. These factors put the company in financial crisis. He tried to turn around the company as a human resource officer. In spite of the situation that the company was not trusted at all, financially bad, and losing its main business (magazine media), it didn't go bankrupt. You can attribute this to the human resources. In 1995, when it was said that print media would disappear ten years later, he tried to have a connection with companies that stood for the Internet even it was abroad and he let his workers get on-the-job training there. If you have ambitions, ideas, and gathered mates in earnest, your company won't go bankrupt. "To have your own opinion or not" is an important question. He hired those who had their own opinions.

4. Challenging Career in J. League

He was involved in the reemployment of retired J. League player. Because of this connection, he became an outside executive director of J. League in 2008. Meanwhile, he was asked to become the chairperson by the then chairperson, My Ohigashi. Since he was getting excited, he agreed on the spot. He has learned in his life that those who are serious about their life get excited when making an important decision. When you are excited, you should choose the one that makes you more nervous. That way you can grow enormously.

Right after he became the chairperson, the JAPANESE ONLY affair occurred. He learned the affair on March 9 and four days later, he announced that the next game is forced to be behind closed doors. He was able to decide on the spot because he had the principle of J. League. J. League is based on three fair actions (on the pitch, socially, and financially) and open-mindedness (we accept anything such as men and women of all ages, the challenged, and foreigners.)

Currently he is launching various efforts such as three promises with the manager of each team, digital tracking, maintenance of football stadiums, arranging the nurturing system, expansion to other Asian countries.

Although maintaining football stadiums seems an inordinate desire, he is active enough to visit the mayor, the governor and other key persons to talk

about the vitalization of the town. You must not give up from the beginning and should take action. When you nurture players, communication skills are necessary as well as soccer skills. Players have to watch your fellow players carefully, communicate with them, and fight in a game, building a consensus among them. For that, they have much to learn outside the pitch in their daily lives.

I think money in Asia is often taken to Europe in the world-wide perspective. There are about 400 Class S coaches, who can become a coach of teams in the J. League or the national team. I want to educate younger players in Asia and introduce them to the J. League by using Class S coaches. My dream is to make the movements of fund in Asia more active.

Title: Who is in Great Demand?

Lecturer: Minoru NAKAZATO (a 26th graduate, a professor at the University of Tokyo, the chairman of the Gov.'s tax system study council)

Date: October 27, 2014

Summary of the Lecture

The fourth Reiwa Seminar of fiscal 2014 was held on October 27. The lecturer was Minoru Nakazato, the chairman of the Gov.'s tax system study council. More than 80 students participated.

First, he talked about the history of study. At universities in the Medieval Europe, departments of "laws", "medicine", and "theology" were places to train specialists. Also, currently law and medicine are practical learning, and those who have studied them is likely to work as a specialist. In the medieval period, the department of philosophy was a place to train teachers. Those who studied philosophy became a private teacher of the nobility. Currently if you studied philosophy, the most eminent occupation you get is a professor at universities. It is difficult for you to make your living by doing your own business with philosophy. In the same way, you can enjoy exploring into physics or math, but it is hard for you to make them your profession.

When considering your job, you have to consider whether you can earn your living, whether you like it or not, and whether you can contribute to the society. It is not easy to find a job that satisfies all these factors. So you should prepare carefully from your earlier years in order to find one.

Although it is good for you to follow your heart and try to become a

mathematician, it's necessary to have viewpoints of whether you can make money and whether you can contribute to the society. Unemployed PhD holders of science are in a harsh condition. Even some of PhD holders can't get a job. In the course of arts, there are quite a few cases that 40-year PhD holders can't find a job. Even an excellent person is forced to earn money and give up on their goals.

You should also know the fun of working in the society. Mr. Kimura, the chairman of Mitsubishi Estate is quite a successful person in the alumnus of Urawa High School students. Mitsubishi Estate has the entire land of Otemachi. He can do exciting things as a job. He can lead a thrilling life by using his skills. Working as an official and working for a company are both interesting.

Affluence means you have various paths to choose. If you study in the course of arts, you can choose from many kinds of jobs. In particular, studying laws help you get various kinds of jobs. You have many choices other than the University of Tokyo. For example, Hitotsubashi University, Keio University, Waseda University, Chuo University, and many other universities have their own advantages. There are paths for low-achievers as well as paths for high-achievers, if you are eager to find one. To play an active role in the society, you have to choose an appropriate path. I want you to choose carefully and live successfully.

He also talked about the significance of studying abroad. Of course his English was improved, but English is simply a tool. He said he had broadened his perspectives by studying abroad. Before studying abroad, he was always thinking his ranking in school and which university to choose. He's got many other important viewpoints..

He studied at Harvard Law School and was invited to UCLA one year later. He became a visiting scholar in his early 30s. It was a great experience for him to gain confidence.

He said to the students, "You should study abroad whenever you can. Skills in reading and writing are more important than skills in speaking and listening. Ability to read and write is required, especially when you study abroad. That's because you have to read enormous amount of text."

Last, he talked on who is in great demand in the society. First and foremost, it's important to have a wide variety of knowledge. Studying science at Urawa High School helped him a lot. When he studied economics at the university, knowledge of math and science was useful for him. So it is important to study something even if it seems useless for now. That way you can enrich

your culture.

Body strength is also important. He remembers running in the Koga Marathon vividly. What you can depend on in a harsh condition is your old memories. Katsu Kaishu got over the difficult time at the end of the Edo period when he was in danger of being killed. The reason for this is that he had a memory of being loved by his father as a child. In this case his father's love gave him the hope for the future. In Mr. Nakazato's case, the memory of running in the Koga Marathon has supported him.

He spent three years at Urawa High School doing various things and achieving mastery of them. He is proud of such alma mater. It's not the pride in being good at studying. Some students do only necessary things for the exam. He thinks pursuing efficiency is not good, and such students are likely to ruin themselves.

In question and answer session, students asked him questions about their future. When asked about how to develop a network of contacts, he advised the students to have contact with affable people. Amiable, credible men are of course likely to be successful. He continued answering to students' questions one hour after the seminar.

Title: Seeking after the Dark Mater in Space

Lecturer: Shingo KAZAMA (a 56th graduate, a research scientist at the High Energy Accelerator Organization)

Date: December 26, 2014

Summary of the Lecture

The fifth Reiwa Seminar of fiscal 2014 was held on November 26. The lecturer was Shingo Kazama, a researcher at the High Energy Accelerator Organization. More than 60 students participated.

What is space composed of? Water is separated into oxygen and hydrogen. They can be separated into nucleuses and electrons. A nucleus is composed of neutrons and protons. They are also made of quarks. In this way, a substance is made of various elementary particles.

These particles need to be connected. "Forces" are also produced by the interactions of elementary particles. For example, photons are particles that carry electromagnetic force. Gluons are the strong force between quarks, acting as glue that produces neutrons and protons. Weak bosons are the weak force

acting on the reaction of nucleus, changing the type of particles. Graviton is a particle that transmits the gravity, which is yet to be discovered.

Elementary particles composing a substance and elementary particles as media of their forces form the basis of "Standard Model" in theoretical particle physics. When Higgs boson was discovered in 2012, which has become popular thanks to the Nobel Prize, he also examined the particle as a researcher around the clock, checking whether it was genuine in every way possible

Space is composed of 72 percent of dark energy, 23 percent of dark matter, and 5 percent of ordinary matter. "Dark" means being imperceptible with light. Thus humans know only five percent of the space.

Why do you understand things we cannot see? This is because of indirect evidence. We can take "cluster of galaxies" for example. We cannot explain the mass that maintain it only with the visible mass. Therefore we can presume invisible mass. "Revolving speed of galaxies" is a similar example. The big difference between the prediction and the observation implies the existence of dark matter. Also we cannot explain the large-scale structure of space without dark matter. We can suppose that the gravity of dark matter has produced stars, formed the galaxies, and created human beings.

His goal is to shed light on dark matter, which we know indirectly. How should we search dark matter? One method is to measure mutual reaction of dark matter and ordinary matter. We are measuring it from "Kamiokande", which was built deep under the ground to prevent the influence of cosmic ray, or observing it in space in order to receive signals, which are decreased in the atmosphere. Another method is to produce dark material by ourselves. It is probably feasible with a particle accelerator. An accelerator is a machine to accelerate and make particles collide one another, examining how they are damaged. LHC, the biggest accelerator in the world, is 27 kilometers around, almost as long as the Yamanote line. It can accelerate the speed of protons to 99,999997 percent of the speed of light. The size of its detector is 22 meters × 44 meters. It has about 1 readout channels. It is hard to control such a big machine accurately.

Making protons collide one another produces dark material. We have data of over two quadrillion collisions in the LHC so far. We have to look for information of dark material from the data. This is the origin of big data analysis. There sometimes appear unbalanced phenomena, which are against the conservation law of energy. These cases are the evidence that dark material,

which has weak reaction with the detector, has been produced. We are seeking for such cases in big data.

At the beginning of experiments in JHC, it was believed that they would soon identify dark matter. However, we haven't even understood part of its existence. Dark matter is perhaps something that everyone has never thought of. Thus anyone has a chance to find it. Prestigious professors, novice researchers, and students are all standing at the same start line. This is an interesting point. He is always considering how to make the discovery. He is often asked how elementary particle physics contribute to our society. Adventurers climb the mountain because a mountain is there.

This idea holds true for my case. Pure curiosity is the motive of my research work.

He thinks he was not an outstanding student in his school days. He got interested in physics thanks to a teacher when he met while he was studying at a preparatory school. Physics is based on calculus. Newtonian Equation of motion, the law of conservation of momentum, and the principle of conservation of mechanical energy are equivalent, but he came to distinguish principles from mathematically obvious facts, which made his understanding clear. That was his starting point for learning physics.

It is important to study hard during your undergraduate years to become a researcher. Finding a friend to study with is a key factor when you are an undergraduate. If you go on to the graduate school, it is important to study under leading researchers of a field. The University of Tokyo is a absolutely wonderful place. When he was an undergraduate, he tried hard to find a friend to study with. In the University of Tokyo, there were many hard workers.

Doing research requires hard work, especially patience rather than talent. While distinguished talent is needed to be a theorist, such talent isn't needed to be a researcher. Researchers need to have good communication skills because they have lots of opportunities to make presentations both domestically and internationally.

He has a desire to know the basic structure of the world. He wants to find something any theorists haven't even come up with. He is seeking for dark matter as a physicist. He wants the students to find what interests them. He wants them to start something they want to do, not being limited by studying at school. This will help you consider what you really want do in your life.

Summary of Activities

This chapter includes materials which explain our SGH program. "Super Global High School Program" is a briefing summary of our SGH program, which is posted on our school website. "Super Global High School News vol.3" is an article in which a student interviewed the principal about our SGH program. It clearly shows what our principal thinks about our SGH program.

"School Year Reports and Plans of SGH (International Exchange)" includes reports and plans on our foreign exchange programs. "The Schedule of Integrated Study for Year 2" contains material of a staff meeting, which may help you understand how we are sharing information and promoting our SGH program. "New Ideas for Advisory Groups as a SGH" is more material from a staff meeting, which shows how the activities of advisory groups have been changing in our SGH program. "Minutes from the 5th SGH Committee Meeting" is an excerpt from the minutes of a meeting of the Research and Development Board of SGH, which shows how our SGH committee members at school are promoting our SGH program. It will help you get a better idea of how the teachers are discussing and arranging projects at school.

"Notes from the Management and Guidance Committee" is the minutes from meetings of the Management and Guidance Committee, which show the advice from the committee and how we have reacted to them.

"Overview of Conceptual Plans of Super Global High Schools for the 2014 School Year" is a document every super global high school in Japan wrote, under the order from the Ministry of Education, Culture, Sports, Science and Technology.

Super Global High School Program

Program Goal:

Educating and nurturing global leaders who will positively influence the world wherever they are through innovation and compassion.

Program Explanation:

We believe successful leaders in today's global environment must be both strong and compassionate. Globalization has led to intense competition, requiring strength of mind, body, and ethics from our children. This has also led to a general increase in income disparity. In order to combat said disparity, our global leaders will be expected to work efficiently and compassionately.

There is a proverb that says if you try to chase 2 hares at the same time, you will catch neither due to your divided attention; however, we believe with the right strategy you can. Our students find inspiration in our school's slogan: "Run after at least three hares". If you want to realize your goal, you must aim even further than your intended mark. Thus, aiming for three hares will, one day, result in catching two. Urawa High School students study hard and support one another, growing beyond their preconceived limits. Together they believe they can reach even further. Our goal is for them to become the world's first-choice candidates in whatever field they pursue.

Innovation will be the lifeline for the future of Japan and the world. When Steve Jobs said, "Think different", he was not telling us to seek different answers or settle for less when things become difficult, but to pursue worthwhile answers by finding new routes to them.

In today's world, where big changes are happening every day, people can only survive by creating new, inventive products and business models with no preexisting frameworks. However, as before, future leaders should be nurtured to unite humankind and reduce those differences which encourage unfair treatment through creating new concepts which transcend traditional concepts of freedom and equality.

Defining a Super Global High School:

What does becoming a Super Global High School mean? What does it look like? We are defining a “Super Global High School” as a school which not only offers students the basic opportunities all schools do, but also additional chances to test, mature, and refine their leadership skills in both local and global contexts through various opportunities. To achieve this, Urawa High School has two areas of concentration for its SGH Program:

1. International Exchange

Urawa High School has a rich track record of international exchange. For example, we have a sister school relationship with Whitgift School in the UK and send over 20 students every school year on short term exchange trips.

There are many other opportunities for Urawa High School students to study abroad, such as the Michigan Math and Science Scholars summer enrichment programs, the MIT program, and Harvard program. Through our SGH program, we aim to send more and more students to foreign countries and broaden our educational activities for the development of global leaders.

2. Research in Advisory Groups

Urawa High School has a tradition of outstanding attainment thanks to our Period for Integrated Studies, or Advisory Groups. These groups give our students the freedom to explore anything they desire and then hand in a paper with their formulated answer.

Our SGH program uses this research time specifically to cultivate global leaders. This is accomplished through asking students to focus their papers on one of 3 primary categories: how it relates to the enrichment of society, how it produces a sustainable global environment, or how it reflects the universal values of humanity.

Hello, everyone. This is the third issue of "Super Global High school News", which is the public relations magazine of the 2nd-grade advisory group "SGH PR Unit". We hope you can read this and learn more about Urawa High School's efforts.

We were fortunate enough to interview Mr. Sugiyama, the principal of our school the other day. In this article, you can learn what he thinks Urawa High School hopes to achieve as an SGH: future activities, motives of application, and so on.

Date of Interview: March 13, 2015

Q1. Why did you apply for SGH?

A. I have three reasons.

First, we aim to equip Urawa High School students to become global leaders. Students should always try to overcome the difficulties they face. With this in mind I want our students, who are expected to play an important role in the world, to strengthen themselves by nurturing more global views and interacting with various kinds of people.

Second, we want to share our approach to education with the world. There are 56 high schools designated as SGHs in Japan, and we want to share our approach with these other schools. Also, the designation as an SGH has increased the number of visitors to our school. I believe transmitting the approach of our school's all-around education to others will have a positive effect on the future direction of education in Japan.

Third, I think being an SGH will augment the education of our school. If you already think that your education is satisfactory, there is little room for improvement. From now on, by receiving feedback from other SGH schools, we will be able to enhance the education of Urawa High School.

Q2. Please describe the goals of SGH.

A. The research and development project of Urawa High School is "Educating and nurturing global leaders who will positively influence the world wherever

they are through innovation and compassion”.

The typical example is our class period for Integrated Studies or Advisory Groups in year two. Every student joins this project, which leads to more advanced study. In addition, we are going to invite more specialists with money from a grant and even more students will be exposed to the real deal as compared to this year, when there are few such cases.

Another example is our exchanges with Whitgift School and the University of Michigan. Although only selected students join these programs for now, by using a grant, more students will be able to participate, which will definitely be a precious experience for students. Additionally, our alumni association has established the “Scholarship Fund for the Public Benefit”. I hope this is beneficial to the people involved.

We are also cooperating with the University of Tokyo, the Boeing Company in the U.S., and many other organizations around the world.

Q3. How are Urawa High School students expected to change with the designation as an SGH?

A. I want the students to use every single chance to step outside of school, such as going abroad, whether for a short time or for a long time, with great ambition and wider views.

Through the inspiration and motivation they get from various people, including professionals, the students are able to develop the toughness and compassion they have been cultivating at Urawa High School into excellence as a global leader.

Our school has to evolve into being a globally recognized high school. I hope students will become individuals who contribute to the prosperity and peace not only in Japan, but also in the world, which is facing many serious problems.

Thank you very much for making time in your busy schedule!

School Year 2014-2015 Reports and Plans of SGH (International Exchange)

1. Sister School Developments
 - (1) Results of the principal's visit
 - Strengthened the relationship with Whitgift School
 - Possible plans for cooperation with the University of London and the University of Cambridge
 - (2) Plans for an assistant teacher (school year 2014) and international exchange advisor (school year 2015)
 - Whitgift School helped in selecting candidates to become an advisor
School Year 2015, April - July, Tom Kilford
 - (3) Two year study abroad program, one student each, includes one year after graduating from Urawa High School
School Year 2013 - 2015
School Year 2014 - 2016
School Year 2015 - 2017
 - (4) Short-term programs as an SGH
School Year 2014 (spring 2015), first group as an SGH (seven students)
Study theme: "Comparison of Railways in the U.K. and Japan, and Public Transportation of the Future"
 1. Hitachi Exports High Speed Railway, Example of Japan's Strength in Technology
 2. U.K. Exports Its Railway
 3. Train Electrification in Development of British railway system
School Year 2015 (spring 2016) second group with SGH (about twenty students)
Study theme: "Contributions of Japanese in the International Organization: WHO"
(We met with Mr. Onozaki, an alumnus of Urawa High School last November.)

- (5) Summer Seminar
New project with Whitgift School for School Year 2015 (have sent 8 year one students)
- (6) Acceptance of short term foreign students
School Year 2014: 20 students; Saitama Television made DVD
2. Summer Seminar in the U.S.
School Year 2014: Sent 3 students to the summer school at the University of Michigan.
School Year 2015: Will send 6 year two students.
3. AFS Intercultural Programs
One student came from Uzbekistan (Sept. 2013 - July 2014)
One student went to San Luis Portosi, Mexico (August, 2014—)
4. Improvement of English Proficiency
 - Parliamentary English debate (Exchange Program of metropolitan schools in "English Expression" class)
 - Academic debate (advisory groups, club activities)
 - Writing a thesis in English (advisory groups, SGH short-term dispatch training)
 - English presentations (The Boeing Higher Education Program, SGH short-term dispatch training)
 - Movies made in English during "English Expression" class

School Year 2015-2016 Reports and Plans of SGH (International Exchange)

1. Expanding projects with our sister school
 - (1) New advisor of International Interaction (April 7 — June 31)
New advisor of International Interaction: Tom Kilford
Duty: Assistance of English education and teaching foreign students, articles on the school website
 - (2) New Whitgift Summer Program
July 19 — August 2: Four year two students participated
July 26 — August 9: Four year two students participated
Activities: Students participated in the Whitgift Summer School. They lived in a dormitory with students from Asia or Europe, learning English and interacting with them.
 - (3) New reports from Short-term program (students of the Railway Club and Photography Club)
September 12 and 13: Exhibition and Presentation at School Festival
 - (4) New reports from Short-term program
School year 2013 – 2015 Student Mitsuharu Harada, is at Cambridge University (IB score 44/45)
School year 2014 – 2016 Student Yuki Hayashi, who received second place in NFLJ National Tournament, and proceeded to the American tournament
School year 2015 – 2017 Student Jun Takeuchi, currently at Whitgift
School year 2016 – 2018 screening process occurs in November

2. Foreign students at Urawa High School
 - (1) AFS Program September, 2014 – July, 2015 (Uzbekistan)
 - (2) Rotary Program September, 2015 – July, 2016 (Denmark)
 - (3) Sister School Exchange October, 2015 – June, 2016 (Whitgift, UK)

3. Expanding short-term programs (Plan)
 - Spring, 2016: students on the SGH project will study and visit the WHO in Switzerland after their home stay in the UK
 - Summer, 2016: The Summer Program at the University of Michigan and Whitgift School
 - Spring, 2017: Urawa High School athletic club will go to the UK

- (language program in cooperation with Blue Dolphins)
- Summer, 2017: Summer Program, SGH project in Singapore (will continue based on outcome)
 - Spring, 2018: SGH project in the U.K.
 - Summer, 2018: Summer Program (if outcome successful will go to Singapore every year or every other year)
 - Spring, 2019: Urawa High School culture club, on SGH project in U.K.
 - Summer, 2019: Summer Program in Singapore
4. Expanding Summer Program at the University of Michigan (MMSS)
 - (from four to six members)
 - July 6 – July 17: year three students participated
 - July 19 – July 31: year three students participated
 - Contents: Students participated in the program held the University of Michigan; students took part in seminars.
 5. Continuing The Boeing Higher Education Program
 - August 20 Participants: three year three, four year two, and three year one students
 - Lecturer: Shinji Suzuki, professor of Department of Aeronautics and Astronautics, The University of Tokyo, School of Engineering
 - Activities: Students talked with the researchers at The Boeing Company via satellite Internet link and had Q&A session.
 6. Workshops for budding global leaders (twice a year)
 - April 7 Participants: Six year two students, eight year one students
 - Lecturer: Blue Dolphins (NGO founded by a graduate of the University of Cambridge)
 - Contents: Practice talking about future dreams in interview format.
 7. Relevant activities in English
 - Participated in NFLJ Pre – Tournament of English Debate (result: champion). Will participate in a Parliamentary English Debate Tournament.
 - Use Jigsaw learning in class to help students learn actively.

School Year 2015 The Schedule of Integrated Study for Year 2

1 Three main activities

(1) Career Guidance

Through active consideration on one's future course and proper selection of subjects based on one's future hopes and interests, students aim to achieve their own goals with enriching learning activities

(2) Studying

Students first grasp their studying situation and then go on to find better studying habits through efforts such as personal interviews

(3) Research Paper for Advisory Groups

Students set a theme based on their future hope and interest and write a paper based on their research.

2 Research Paper in Advisory Groups

(1) Summary

Students further explore their field of interest in year one and engage in integrated studies that goes beyond the subjects they learn in class through writing a paper based on their future hopes and interests.

(2) Contents and method

- Students join an Advisory Group and write a paper under the guidance of the leader (a teacher)
- We divide the school year into a first-half and second-half as a general rule and students belong to two groups in a year.
- The leader in each group decides the theme and length of the paper, but students have to find and write about their own area of investigation instead of only writing a report.
- We gather excellent papers and share them in a collection.

3 Annual Implementation Plan (Proposed)

The first term

4/15(Wed)	Guidance
4/22(Wed)	Registration for Advisory Groups
5/ 7(Thu)	Advisory Groups 1
5/13(Wed)	The 1 st briefing for choosing subjects (assembly)
5/22(Fri)	Advisory Groups 2
5/27(Wed)	The 1 st briefing for choosing subjects (classroom)
6/ 3(Wed)	Advisory Groups 3
6/10(Wed)	Preliminary study for the lecture on human rights
6/17(Wed)	Advisory Groups 4
6/24(Wed)	Advisory Groups 5
7/ 8(Wed)	Advisory Groups 6
9/ 9(Wed)	Advisory Groups 7, submission of papers
9/12(Sat)	School Festival
9/30(Wed)	The 2 nd briefing for choosing subjects (classroom)
10/ 7(Wed)	Advisory Groups 8, Presentation and Evaluation

The second term

10/14(Wed)	Registration
10/28(Wed)	Advisory Groups 1
11/ 4(Wed)	Advisory Groups 2
11/18(Wed)	Advisory Groups 3
11/25(Wed)	Advisory Groups 4
12/ 2(Wed)	Advisory Groups 5
12/15(Tue)	Advisory Groups 6
1/13(Tue)	Advisory Groups 7, submission of papers
1/20(Wed)	Trial of National Center Test for University Admissions
1/27(Wed)	Advisory Groups 8, Presentation • Evaluation
2/ 3(Wed)	Advisory Groups distribution of collection of papers
2/10(Wed)	Screening students for the next overseas summer seminar
2/13(Sat)	Fiscal 2015 SGH Summary Report
2/16(Wed)	the second meeting of the Management and Guidance Committee

School year 2015 New Ideas for Advisory Groups as a SGH

1. Presenting the titles of advisory groups to the public

SGH is required to share the activities to the public. Thus we are presenting the activities including the titles on the school web page.

2. The contents of Advisory Groups

SGH of Urawa High School deals with the three items below as the contents of project studies. We hope you consider these when thinking of the contents of courses.

- (a) Enrichment of Society
- (b) Sustaining a global environment
- (c) Universal values of humanity

3. Report of Research

- Making a collection of excellent papers
- Holding a advisory group conference (at or outside of school)
- Putting the results of the groups on the school web page (PDF file, moving picture data file)

4. Project Types (improving on existing projects)

In the previous advisory groups, students acted mainly at school. From now on, we are going to plan and promote projects such as volunteering, in which students go to local communities and conduct some research on how to solve

local problems. The example cases are as follows:

- Volunteer to teach swimming during the Summer Vacation
- Japanese archery class for foreign students and other countries of the world

5. Core courses

We promote some studies as core courses, which are project studies most suitable to embody the aim of SGH. Only core courses are held throughout the year with two or more teachers. Example cases are as follows:

- Enrichment of Society: Cross-cultural understanding by creating opportunities with the community at large
- Sustaining a global environment: Exploration of energy integration
- Universal values of humanity: How to prevent Cyber-crimes: be a volunteer to help other in the community know more about what they can do.

6. Miscellaneous

If you invite a lecturer to the school, we can provide a small stipend. (ex. 15,000 yen for a university professor) Please inform us if needed. Also feel free to propose any new project ideas.

Minutes from the 5th SGH Committee meeting

members : Suzuki, Yamazaki, Ogawa, Aoki, Utsugi, Nagasawa, Higashi,
Morizumi, Nishimura, Matsumoto, Nozaki, Sasaki, Harada, Saito

- Please try to explain CORE5 in a way that can be easily imagined by teachers and give model examples. In that way, teachers can come up with ideas based on those models.
- Teachers should be able to come up with a theme based on what their club or committee is doing.
- For year two students, they can use the events they experience such as student council committees, clubs, human rights education seminars, teaching elementary school students, and their school trip to Kyoto as starting points for themes.
- Telling year one students about the details of those themes is a bit premature. We propose that teachers have a common understanding and inform students after March. →*We will head forward in this manner.*
- Perhaps you could show the year one students what the railway fan club and the photograph club did during their trip to Whitgift and how that ties into SGH. →*We will consider our schedule and see if that is feasible or not.*
- Perhaps you should reconsider how students are asked to join the advisory groups. Some teachers have a prepared theme, and some students join advisory groups based on their club or student council committee.
- In advisory groups, teachers can deal with subjects that cannot be taught in regular classes; students can meet teachers they normally would not be able to. With different levels of difficulty varying from course to course, each course has its own appeal and teachers value this type of diversity and flexibility.
- Without sufficient explanation, teachers may be at a loss when trying to choose a theme for their course within the new categories. For example, you can use this year's courses and put them into the new three parts (a, b, c), and give some examples of the rewritten titles. →*We will show how current courses fit into the new categories.*
- Teachers who are now teaching year one students need to have a detailed explanation of what is expected of them for next year's advisory groups. With that framework, they will be able to discuss and propose their ideas

for a smooth transition of next year's advisory groups.

- If I were in charge, it would be overwhelmed. For example, just getting in touch with a university to set up a program would be rather time consuming. If there were any drastic changes in how things are done now, the teacher in charge of integrated studies would become overburdened. We all understand the current situation where teachers already have to recruit and select students, as well as reserve rooms. →*We strive to work within the current framework.*
- We are still unsure how to translate the current report written in Japanese into English.
- We understand how cooperating with the University of Tokyo and the University of Oxford helps English teachers; however, linking regular year three classes with those institutions could further aid teachers.
- By focusing on only two of the CORE ideas, you could assign just two teachers, allow them more time in their teaching schedules and then allow them to further work on the CORE ideals.
- Before going all English, why not first try using the CORE curriculum in English only? →*In terms of using English, we will limit ourselves with the CORE curriculum.*

School Year 2014
Notes from the Management and Guidance Committee

Mr. Arai

- Should organize according to abilities and evaluate appropriately?
- We selected a few important abilities and grouped them accordingly.
- How do we link different subjects together?
- Our school did not change its curriculum to conform with the SGH program, but we try to foster presentation skills in our IT classes and in year two we have special small group sessions for students to study areas which interest them; for year three students, we encourage them to take English writing courses for writing essays.
- Why not share your unique educational activities over the Internet?
- We have had group discussions with students from Bangladesh introduced to us from JICA via a Skype link. Likewise, we have made similar Internet discussions with students at Oxford University.

Mr. Egashira

- What are you doing to improve English proficiency?
- We do not make students take a certain test as an SGH, but we think writing reports and making presentations in English fosters students' English proficiency. We have also participated in the All Japan High School English Tournament.
As was recommended in the "Forum for Better English Education", we think it is natural to begin the new course of study ahead of time.
- What plans do you have to further experiences of studying abroad?
- We are thinking of effective ways of giving students at school assemblies such experiences through presentation of students who have gone abroad, and photo exhibitions at our school festival.
- How is ICT being advanced?
- In 2014, we arranged teacher's training. We plan to actively explore other possible usages of ICT.

Mr. Nakamoto

- How are you reducing the risk of studying abroad?
- We are looking into various ways to reduce risk by screening students, providing guidance and making sure that they get the best health insurance.
- What are the origins of the three pillars of student centered study projects?
- We have extracted some of the themes used in the integrated study projects from what we have learned over the years. Rather than students focusing narrowly on one subject, they are encouraged to explore global problems in a more holistic manner.
- Do overseas alumni help in your efforts?
- With alumni who are still students, there is the problem of coping with both alumnus's own study and our projects. With alumni that the school has supported after graduation, we plan to reach out to them for their support. With alumni already working in society, we plan to send a group of students to Switzerland to visit Mr. Onozaki who is working at WHO during our exchange with our sister school in the UK.

Mr. Negishi

- You should be encouraging students to challenge themselves more.
- For next year's interdisciplinary studies, students will take the lead by asking experts in the field to help them with their projects. This may lead to difficulties, but will be valuable experiences for our students.
- You need more active learning activities.
- For next year's projects, we hope to have more outside involvement, actively encourage presentations that take place outside of the school, and make our projects more accessible to those outside of the school.
- You need more programs that have global views.
- We plan to propose projects that include local problems such as locally grown, locally consumed foods, child rearing, and use of local human resources, and then think of these problems on a global scale.
- You need to look not only at western countries but at more Asian ones.
- The project in cooperation with JICA is about Bangladesh. In addition, we plan to cooperate with China and South Korea in the group called "Go and the Global Society", a survey of how the game Go is played and seen in Asia. There are also many Asian students in PEAK, at the University of Tokyo, which cooperates with Urawa High School.

In addition to these efforts, Mr. Onozaki at WHO, who is coordinating our visit in Switzerland, specializes in the hygiene of South-Eastern Asia. This will be part of what the students will study about before leaving on their trip next year.

We are also in contact with Mr. Yano who is working in Singapore and plan to have projects involved with him.

- You need to make Urawa High School more super-global.
- Since our alumni established a scholarship program, we have sent an increasing number of students abroad and this is consistent with our efforts for more global education. We plan to continue in our effort to provide more opportunities to make our school as global as possible.

Mr. Yahaba

- Please tell me the situation of accepting foreign students.
- Currently one student from Uzbekistan is studying at Urawa High School. As one of the projects as an SGH, we have invited one alumna of Whitgift School (our sister school) as an international exchange adviser.
- I want Urawa High School to actively accept foreign students and have them play an active role in making the school more international.
- Urawa High School wants to accept more foreign students. Foreign students thus far have gotten along well with their host families. We plan to continue short-term acceptance of foreign students and by doing so, this will help in our efforts of providing more interaction with students from different countries.

School Year 2014 SGH Management and Guidance Committee Report Second Meeting

February 4, 2015 10:00 - 12:00

Meeting room of Reiwa hall at Urawa High School

Facilitator: Hironobu Suzuki, assistant principal

Note-taker: Masayoshi Yamazaki , assistant principal

1 Opening

2 Greetings

- Naoyoshi Takada (manager at the Prefectural office of Education's high school education division)
- Takeshi Sugiyama (principal)

3 Explanation of today's procedure

4 Agenda

(1) Report on the efforts of school year 2014 and the plans for school year 2015

(i) On the integrated study (Ryota Nozaki, head of SGH committee) Document 1

- At the beginning of the school year, we arranged our advisory groups as in the past. In the second half of the year, we started to coordinate projects with the University of Tokyo.
- Issues concerning university students sparing enough time.
Document 4
- We plan to arrange 40 courses of advisory groups for school year 2015. We will categorize them into three main themes: a: Enrichment of Society, b: Sustaining a global environment, c: Universal values of humanity, and then subsets under each main theme.
- In project-type advisory-groups, students go to local areas, discover modern problems, and conduct research on how to solve them.
- CORE (two or three research projects) project studies that embody the main aims of SGH.
- Enrichment of Society: Energy Integration with Benefits for Humans.
- Sustaining a global environment: Highways for Bicycles in Saitama, to

make Saitama a "Bicycle Heaven".

- Universal values of humanity: Ways to Foster more Community Interaction through Festivals.
 - Japanese students need to interact more with foreign students at PEAK, from the University of Tokyo. We need to express the positive points of Japan and Urawa High School. We need to do this through the contents of our club activities.
 - Reports on Research: We plan to invite university professors so that they can listen to our students' presentations in English at an auditorium off school grounds. We then plan to have their presentations available as videos on the school web.
- (ii) Report on the international exchange (Sonoko Ogawa, Research and Development Committee)

Document 3

- Some members of the committee said that our target countries lean toward Western countries, but I am proud that Urawa high School has had the same sister school for over 20 years. This year, the principal himself visited the school, which has strengthened our relationship.
- We are now in talks to have an exchange with the University of London and the University of Cambridge.
- Up until now, we have only visited the sister school and interacted with her students, but after being designated as a Super Global High School, we have developed new projects, which are more educationally-effective. (Students have already finished writing three long research papers)
- We plan to add Asian countries to our list within the next five years.
- With respect to fostering English proficiency, students are working hard on parliamentary English debates and academic debates.

(2) Additional Reports, Q&A

- (i) Report on guidance and advice from Mr. Yahaba by Mochida (Secretariat)
- (ii) Supplementary explanation by Mr. Nakamoto (the chairperson)
- It is important to train how to write a paper based on the contents and arguments of books without inserting your own ideas. I hope you all do this. Even graduate students tend to jump to conclusion and present

weak arguments in their papers. Research on previous studies is so important that students in the West are trained to do this.

(iii) Questions from the Management and Guidance Committee

Mr. Egashira:

Q1. You now have the possibility of coordinating activities with the University of London and the University of Cambridge. Who was responsible for this?

A1. Naoya Okamoto. He gave a lecture of Global Human Resources on July 4 and then asked a friend to help him out.

Mr. Nakamoto:

Q2. Is the CORE project "Ways to interact with local community through festivals" really feasible?

A2. It is a chance for Urawa High School students to interact with the local community. We want students to be thankful for the support of the community and the research ways to give back in a meaningful way.

Mr. Arai:

Q3. Which campus do you cooperate with when dealing with the University of Tokyo, Komaba, which arranges Social Cooperation Lectures, or Hongo ?

A3. We are asking professors who have graduated from Urawa High School.

(iv) Advice by the Management and Guidance Committee

Mr. Arai:

- Teaching deepens your learning; How about arranging chances for students who studied abroad to go to junior high schools and teach English to students there?
- How about including sessions concerning ESD, or economics?
- What kind of skills do you expect for students to gain in the process of active learning? How we evaluate the experience is also important.
- The principal said in today's greeting that you are approaching the activities of SGH as realistically as possible. Please remember to recognize the strengths of Urawa High School.

Mr. Nakamoto:

- It is necessary to set specific goals for CORE Research.
- Are students of PEAK at the University of Tokyo short-term exchange students?

Mr. Egashira

- I agree with Mr. Arai. It is important to clarify the goals.
- By setting an evaluation system based on a rubric, feedback from students can be used more effectively. The process is just as important as the outcomes and this will motivate students.
- How many students will participate in the Boeing Higher Education Program? →20 students.

Mr. Yazima (the vice chairperson):

- You said professors at the University of Tokyo have difficulty arranging schedules for seminars. How about considering cooperation with Saitama University through Mr. Nakamoto? I hear the president of Saitama University is an alumnus of Urawa High School.
- How about considering cooperation with local projects that Saitama Prefecture is proposing?
- Saitama is a sister prefecture of the state of Mexico. There may be an opportunity for more students to study there.
- It is important to consider the risks of sending students abroad systematically. You need to cooperate with the prefectural board of education.
- It is important to actively follow up with students who have studied abroad. You should not only arrange a briefing session but also consider how to make use of such their experiences for other students.

(v) Answers from Urawa High School

- Students already teach English at junior high school in advisory groups.
- It is important to clarify the skills students can gain from CORE and other research like syllabuses of universities.
- We admit not using a rubric is our weak point, so we are going to consider its implementation.
- We hope to cooperate with Saitama Prefecture in connection with students from Mexico.

(vi) Questions from Urawa High School

- Are the things we've done with our sister school seen as SGH projects?
- How much should we report as SGH projects? We have implemented advisory groups for years. We have many well-written papers from the advisory groups with us. We attribute their excellence to the work done in regular Japanese classes.

(vii) Advice by the Members of the Committee

- Various viewpoints of what to do have been discussed and it is now up to Urawa High School to decide what with that advice.
- Urawa High School was designated as an SGH because of worthy efforts achieved thus far. You are required to show that this school is a model for nurturing global leaders and will need to explain that to the rest of the community.
- Other schools will want to imitate Urawa High School when they see what you are doing. You should show what has been done at Urawa High School and what makes it strong. You have to work on ways to present those strengths.
- It is important to evaluate the process as much as the achievement in each subject.

5 Closing

**School Year 2015 First Meeting
of Management and Guidance Committee**

September 13, 2015

The music room, Saitama Prefectural Urawa High School

List of the members of SGH Management and Guidance Committee

Name	Affiliation	Official title
Kenichi ARAI	Benesse Educational Research and Development Institute	Chairman
Yasuzi EGASHIRA	CRS Supervisory Department, Intel Cooperation	Manager
Shinichi NAKAMOTO	International Department, Saitama University	Head Professor
Yoko KOIKE	Division of International Exchange and Cooperation, Saitama Prefecture	Manager
Takashi YAHABA	International Exchange Center • Faculty of Foreign Languages, Dokkyo University	Chief Professor

Mr. Arai

- The mid-term report was interesting. The reasons theme selection and self-evaluation are important.
- It is important to look back on the process for the presentation and problem solving as well as to consider how and what you thought processes were used. These considerations will lead to the definition and evaluation of qualities required to be a global leader.
- I want all of Urawa High School students to understand the importance of the process for creating presentations before they graduate.
- How have the abilities of students improved? What are the criteria for evaluation?

Mr. Egashira

- I was left with impression that the students chose global related topics. I think, however, that they didn't fully explain how they were going to tackle their selected topics.
- The ideal language in which you make a presentation is English. I find the

students not used to speaking English in public.

- It is good for students to have opportunities to use English in their daily life. I want the school curriculum to give such opportunities to them.
- I hope students will have more opportunities of international exchange. They can also interact with workers at our company.

Mr. Yahaba

- I think highly of the integration of arts and sciences.
- It is good that students look not only at foreign problems but also at their own country.
- I advise students to make more presentations in either English or Japanese. They should practice relating their ideas in public settings.
- Although only a few of the students go abroad, you should think more about how to make use of the students' special experiences for the benefit of the whole student body.

Ms. Koike

- I felt the presentations in English were weaker than in Japanese.
- If you ask some questions to the audience in a presentation such as "Japanese Archery Class", interactive communication will ensue.
- Why don't you put students who are good at Japanese and students who are good at English into one group, and let them conduct research?

Mr. Nakamoto

- The contents of the presentations were good. I was impressed that they were conducted by high school student. I would advise students to practice their presentations with more awareness of the audience.
- A presentation is a process of communication. It is not a one-way street and the audience is not the enemy. You should think that presentations are active and two-way interactions rather than presentations which have only presenters and evaluators. This idea will lead you to the next step of one's research.
- Students should remember that there are various people in the audience when they make their presentations at meeting such as these.

**Overview of conceptual plans of Super Global High Schools
for the 2014 School Year**

Designation Period: 2014-2019

1. School: Saitama Prefectural Urawa High School

2. Location: Saitama Prefecture

3. Targeted Discipline: ordinary course

4. Number of Targeted Students

First-year	Second-year	Third-year	Fourth-year	Total
406	365	367		1138

5. School Scale: 1138 students in the ordinary course

6. Project:

Educating and nurturing global leaders who will positively influence the world wherever they are through innovation and compassion

7. Outline of the Project

By examining global problems facing today's world comprehensively, we will develop curriculums to educate and nurture global leaders who have a wide range of knowledge and deep insight with well-balanced strength of mind, body, and ethics. We are trying to nurture human resources who will create new, inventive values by strengthening and enriching the cooperation with universities, institutions, the sister school, etc, which we have been linked with.

8. Contents of the project

8.1. Overall summary

8.1.1. Purpose / Goal

We are going to develop curriculums to nurture global leaders who have well-balanced strength of mind, body, and ethics and will positively influence the world wherever they are. We will cultivate “the skills to sympathize”, “challenging spirit”, and “creativity” required to take a leadership in global fields.

8.1.2. Analysis on the Currents Situation and Theory on Research and Development

Our students have gained qualities to lead the next generation by working hard on studying, school events, and club activities together under one of our school mottoes “Sho-bun, Sho-bu”. To further nurture global leaders, we have to set project studies aiming to solve global problems and increase opportunities for students to go out to domestic or overseas universities. By doing so, we are able to cultivate human resources who have a wide range and high level of knowledge, can understand divergent people, and will create new values.

8.1.3. Diffusion of the Achievements

- Diffusion via school homepage (including its English page)
- Diffusion through public relations of universities or overseas sister schools with which our school is in cooperation.
- Diffusion through the media
- Diffusion through networks of Society for Metropolitan High-Level High Schools (Hibiya, Nishi, Prefectural Chiba, Shonan, Urawa)
- Diffusion through briefing session of achievements

8.2. Project Studies

8.2.1. Contents of Project Studies

We are going to study on social issues in the world concerning (a) "Enrichment of Society", (b) "Sustaining a Global Environment", and (c) "Universal Values of Humanity" through concrete themes such as "Global Warming", "Natural / Alternative Energy", "Urban Design in the Future", "Energy Security", "Diplomatic Security", "North-South Divide", "Festivals of International Peace", "Exploration into the Universal Value in Classics and Design of Future Societies", and "Democracy and Justice".

8.2.2. Implementation and Evaluation

(1) We are going to conduct project studies in small groups like university seminars, write papers, make a collection of excellent papers, give a presentation, get guidance and advice from professors at universities cooperating with our school, and use peer support from alumnus enrolled at domestic or overseas universities. We will also create new values and develop methods to solve problems through collaboration with specialists at international institutions.

Implementation in detail

- Project study using peer support by the alumnus enrolled at the laboratory with the same research theme as ours under the entire cooperation of the University of Tokyo (a), (b), (c)
- Study making use of tutoring by Cambridge students through ICT (a), (b)
- Study on urban engineering and environmental engineering by participating in the education program of Boeing Company in

- cooperation with the University of Tokyo (a), (b)
- Study on development education in cooperation with the chairman of JICA (Akihiko Tanaka, an alumnus of our school) and workers at our school who are dispatched as Japan Overseas Cooperation Volunteers (a), (b)
 - Exploration into the universal values of humanity through the study of “classics” the Aspen Institute Japan (a), (b)
- (2) Intellectual exploration with activities, constructions, and interactive dialogues through collaborative learning during classes of each subject as well as research and development of problem-solving programs, both of which are in cooperation with the University of Tokyo (c)
- (3) Research and development of intellectual exploration programs based on the educational idea of the International Baccalaureate through human exchanges with Whitgift School, the overseas sister school (a), (b), (c)
- (4) Fieldwork on project studies and short-term dispatch to Whitgift School with its study and training (a), (b), (c)
- (5) We are going to participate in the Summer Seminar of the University of Michigan; we will appreciate various values and create new values by exchanging opinions with overseas students through attending lectures relating to our project studies, conducting fieldwork, joining discussions, and making presentations. (a), (b), (c)

8.2.3. Necessary Special Case of Curriculums

We do not need any special cases.

8.3. Others

8.3.1. Contents, Implementation, Evaluation of Research and Development other than Project Studies

- We are going to educate and nurture humans with well-balanced strength of mind, body, and ethics who will challenge difficulties through group actions such as daily classes, events, club activities . We will also their skills in reasoning, expression, problem-solving.
- We are going to provide opportunities such as lecture meetings by the alumni who is playing an active role either in Japan or overseas to learn from “familiar models of career paths”
- We are going to cultivate broad perspective, high aspirations, and dreams through lecture meetings, questioning, exchange with global leaders who are playing active roles in the world.
- We are going to inspect and evaluate the consciousness changes of the students through questionnaires and other ways .

8.3.2. Necessary Special Case of Curriculum other than the implementation of project studies

We do not need any special cases.

8.3.3. Environmental Maintenance and the Implementation for Cultivating Global Leaders

- Enrichment of long-term dispatch to Whitgift School, the public school in the U.K., which is our sister with human exchange conducive to the reinforcement of our relationship.
- We are going to nourish the students’ culture with broad perspectives by

letting them experience various values in sports, cultures, arts and other areas through short-term dispatch to Whitgift School of each club. In addition, we accept about 20 students of Whitgift School in autumn every other year, providing the students with opportunities to experience various values.

- Maintenance and improvement of IT devices such as tablet computers in order to develop academic skills for the 21st century.
- We will participate in “National Competition in Scientific Skills” and tried to go on to “Science Olympiad”
- We will participate in the “Debate Contest for high School Students held by Saitama Senior High School English Education & Research Association.
- We will participate in “Student Presentation on International Issues” held by Saitama City.

9. Other Special Reports

Our alumni association has founded “Public Scholarship Foundation of Urawa High School’s Alumni Association”. It has launched an unparalleled plan to help pupils and graduates of our school who are planning to study abroad for a long term by giving them subsidy that has no repayment obligation.