



# SQUARE K



PROFESSIONAL EDITION, FEBRUARY 2018

## THE PLIGHT OF STUDENTS IN WARTIME OKINAWA

**H**ave you ever compared a teenager's life in World War II with yours? Ochanomizu University Senior High School students visited "Himeyuri Peace Memorial Museum" in Okinawa and learned how Himeyuri students lived in the time of WWII.

"Himeyuri Students," a group of 240 schoolgirls and their teachers, were mobilized as nurse assistants during the Battle of Okinawa in 1945. In this battle, the Japanese army and all Okinawa residents fought against the U.S. army on the Okinawa mainland at the end of the Pacific War. The Japanese Administration left Okinawa as a sacrifice to delay the American invasion of the Japanese mainland. On March 23, 1945, Himeyuri students were assigned to army hospitals in the southern part of Okinawa, after being educated as nurses by the army for four months. In late May that year, they went south and began to work for other army hospitals in Itokazu Abuchiragama.

"Gama" means cave in Okinawa, and many gama were used by the residents and soldiers as shelters and bases during the Battle of Okinawa. Itokazu Abuchiragama was one



Himeyuri Peace Memorial Museum

Photo credit: Sayaka Hiraga

of the largest gama in Okinawa. About 600 injured soldiers were accommodated there. Himeyuri students worked hard in the hopeless war situation. However, the Japanese army in Okinawa including the hospital was dissolved by the commander of the Japanese army in Okinawa on July 18 that year. Himeyuri students were left in dangerous battlefields. Some girls survived by surrendering, while other girls committed mass suicide in order not to be taken as prisoners. In the end, 136 of the 240 girls died in the Battle of Okinawa.

During the war, the Himeyuri students stayed in air-raid shelters for more than a month. One girl who participated in the student

corps named Hisa said, "The living conditions at the time were worse than one can imagine." In the shelter, the smell of pus, which the dead and wounded bodies gave off, filled the room, and the sound of water trickling constantly echoed.

"Our environment was severe, but the water shortage troubled us the most," said Yoshiko, a member of the Himeyuri students corps. It was the students' job to draw and carry water from the water fountain outside. The way there was dangerous, but what scared them the most was that it was surrounded by dead bodies lying on top of one another, the water itself was red with blood, and the place smelled of nothing but blood.

At first, the students had doubts about the environment they were in and how injured soldiers were treated. They were forced into tough battles by the Japanese government. For example, they were told to mix potassium cyanide in the milk for the critically ill patients to drink, as these patients would encumber the Himeyuri and other soldiers when they had to move to another shelter.

But as time passed, they became accustomed to their circumstances and environment. The Himeyuri coped with the situation dispassionately when the U.S. army sprayed carbon dioxide into the shelter, or when the air raid shelter became overcrowded with people escaping from the U.S. army. Kiyoshi, one of the members of the army, wrote in a note, "Himeyuri girls were our moral support."

More than 70 years have passed since WWII, and the memory of the war is fading. The "Himeyuri Peace Memorial Museum" reminds us of the importance of the peace people have today.

*By Ariko Kato, Saki Koike, Riko Shima, Sayaka Hiraga, Ryoko Yamaguchi and Yuyu Yamanaka*

## NOTICE TO READERS

This newspaper was created by third-year students in the Kiku class at Ochanomizu University Senior High School. The school is situated in the middle of Bunkyo Ward, which is well known as an education hub. There are currently more than 20 high schools and plenty of publishers in this area. It is also famous as a place where many of Japan's greatest novelists and poets got their inspiration to write, such as Natsume Soseki and Higuchi Ichiyo.

Our school was designated as a Super Global High School (SGH) in 2014. We have worked on various projects ever since in order to learn how to contribute to global peace and welfare as global citizens. For instance, last year we conducted a study on selected topics in groups, namely "Economic Development and Environment," "Life, Healthcare and Sanitation," "International Cooperation and Gender," "International Relations and Solutions," "Information

Technology and Creativity," "Non-verbal Communication" and "Globalization of Music."

This is our final SGH project to compile the research we have carried out so far. We launched this paper to convey the major issues from the point of view of Japanese high school students. We hope that our work opens up a discussion for the readers.

*By Sayaka Nohara*

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**Publisher:** Ochanomizu University Senior High School

**Project Supervisor:** Takayuki Tsukui

**Project Coordinator:** Junji Sakurai(GEIC)

**Editor:** Yuka Tashiro

**Assistant Editors:** Kanami Takemura, Asahi Kawashima

**Contributing Editors:** Ayano Usukura and Yumiko Mori (J-Proze Co., Ltd.)

**Staff Writers:** Yuka Tashiro, Kanami Takemura, Asahi Kawashima, Sayaka Nohara, Mayuko Tanaka, Misaki Izumi

Contact: 2-1-1 Ootsuka, Bunkyo Ward, Tokyo, Japan 〒112-8610

**URL:** <http://www.fz.ocha.ac.jp/fk/>

**Quiz Challenge: Answer the questions written at the top of the pages 3, 4**

**Curious Inventions Now Part of Our Lives**

Three different people, who will be introduced below, invented Cup Noodles, air bags and special yarn, respectively. Revolutionary inventions always have a story and a dream.

Today, instant noodles are popular among people around the world. A certain Japanese invented it. His name is Momofuku Ando.

In the 1950s, Japan suffered a food shortage. Ando was a businessman from Taiwan. He tried to promote noodles as a menu for school lunch because of their high nutrition. This was the beginning of the invention of instant noodles.

He found ways to keep the quality of dried noodles and to put them in the best position in a cup. He sold it with cups to foreigners who did not know “donburi”, or big cups for noodles. He wished his invention would spread around the world and his dream came true.

Finally, today, anyone can eat Cup Noodles easily. However, this is owed to the splendor of Japanese techniques.

The same is also true for air bags. These

days, almost all the cars are equipped with air bags. They are needed to save passengers’ lives. While they are known all over the world, the inventor of them is not well known. The inventor is a Japanese man named Yasuzaburo Kobori.

He had been working on research into air bags since 1964. His idea of air bags was not accepted by the government owing to the use of gunpowder. At last, he obtained 14 patents around the world. Unfortunately, he suffered from poverty and committed a double suicide. He died without his patent being put into practical use. However, his invention still saves many people’s lives today.

The last topic is a special yarn called mohair. Mohair yarn is made in Niigata, Japan. In 2009, the former first lady Michelle Obama wore a mohair cardigan at the inauguration of the president.

Sato Senni, a traditional yarn factory, employs a special technique for making the material. The company’s corporate performance took a downturn for a while. It can create



Photo credit: Sato Senni

Special yarn

extrafine mohair yarn. One gram of Angola goat hair turns into 44 meters of the yarn. The factory currently focuses on developing this yarn in order to make it the only such factory in the world. The head of the company said that it was good to put emphasis on strong points. People should keep this in mind.

Clearly, the efforts that people made to achieve their aims are still supporting lives today.

*By Yumi Kitano, Saori Kido and Nanako Kimura*

**Liven up Your Lunch with Udon Noodle**

Most Japanese students take obento, or packed lunch, to school. Generally, there are certain kinds of dishes and rice (Photo 1). Some students are satisfied with it, whereas others have complaints. A survey was conducted to explore “the ideal packed lunch.”

According to the survey, which targeted 103 Ochanomizu University Senior High School students, 37% of students are not satisfied with their lunch (Graph 1). The main complaints are a fixed menu and a lack of tastiness because the dishes are cold (Graph 2).

Based on this result, which shows that students want an unexpected cold and tasty menu, we found the perfect box lunch. It is

“cold udon noodles,” which is traditional Japanese thin wheat-flour noodles (Photo 2). Of course, cold udon noodles are cold from the beginning, so there is no need to worry about them getting cold. In addition, we can enjoy variations by changing the toppings. Students can get rid of their dissatisfaction by taking and eating this wonderful lunch!

Japanese packed lunches can be wonderful by putting some thought into them. Why don’t you take cold udon noodles to school?

*By Satomi Kawarai, Amiri, Takasu, Yuki Kageyama and Yuka Itani*



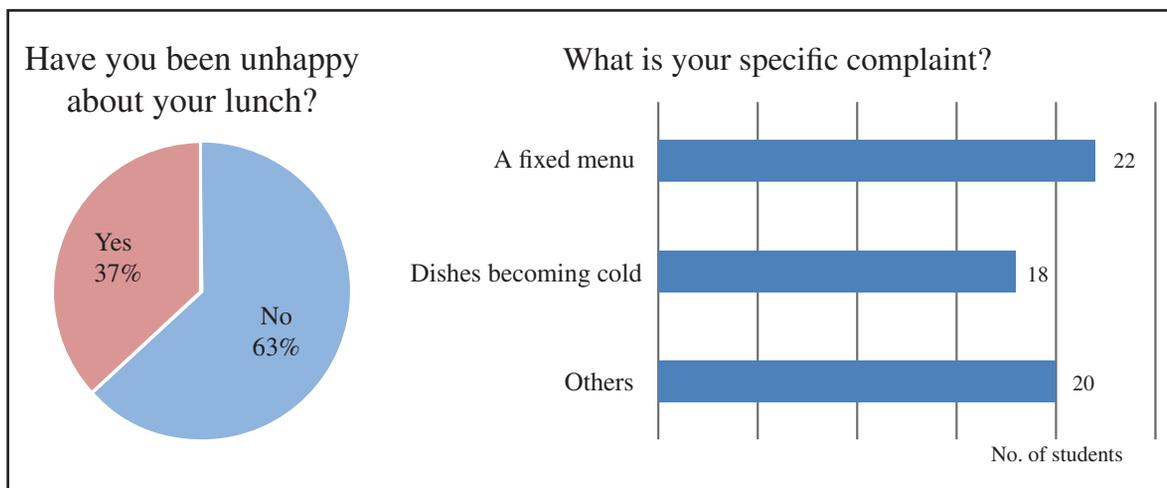
Photo credit: Yuki Kageyama

A typical packed lunch (Photo 1)



Photo credit: Satomi Kawarai

The ideal packed lunch (Photo 2)



Result of research (Graph 1 and 2)

Credit: Yuki Kageyama

## Q1. What belongs to you but other people use it more than you?

### A More Subtle Approach to Foreign Aid

Plan International Japan says that many girls in 65 developing countries and Eastern European countries are not able to receive secondary education today. Because of this, there is a great economic loss every year.

Can you imagine how much this loss is? It is ten trillion yen. The reasons for such a loss are said to be the respective countries' thoughts or customs. For example, girls in some countries are obliged to do housework while boys are studying at school. Girls in some countries have to get married in their teens when they should be studying at school. In addition, girls in some countries are at a high risk of catching HIV or AIDS because they don't have any knowledge or information about these diseases.

To improve such situations, support from developed countries is essential. The graph is the result of a questionnaire aimed at Ochanomizu University Senior High School students from the 1st to 3rd grade. A total of 120 students provided answers. According to the questionnaire collected at Ochanomizu University Senior High School, most students said they would like to support girls in such countries. In addition, most of them answered that they would like to provide support by donations.

However, providing them with financial support is not enough because it does not change people's fundamental ways of thinking. To support them effectively, you need to understand their conditions and to engage locally. Through these activities, they would

realize the importance of reducing inequality, which would promote actions to solve the problems.

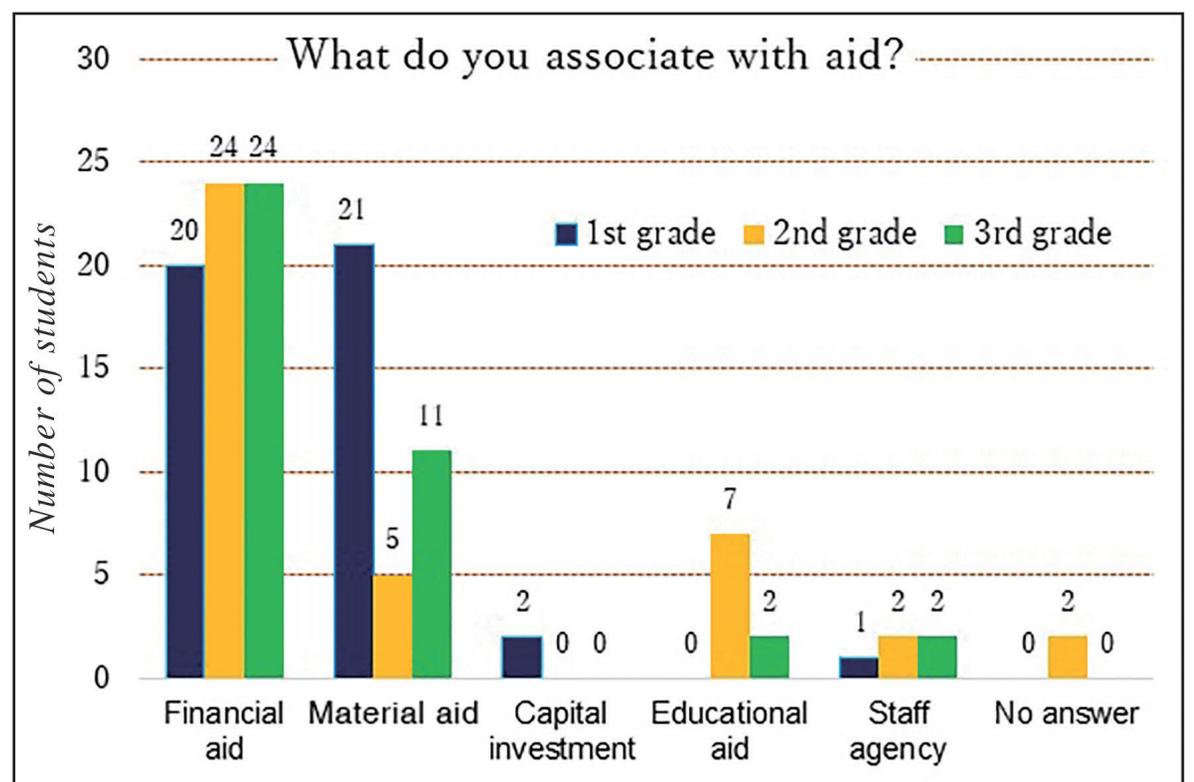
As the results of the questionnaire show, many students think building schools in places facing problems is effective. However, building on its own is not sufficient, as mentioned above.

For instance, in Sudan, a serious problem is that the early marriage rate is high because the residents have a low level of awareness of the risks of early marriage. Plan International Japan went to a site and organized a girls' education club at schools to change the way of thinking.

This enabled local people to act independently when they are without support.

Most people think of support as financial aid; however, it is necessary to know other approaches. An effective way to promote various kinds of aid is to change your mind as a supporter.

*By Saki Uchima, Nozomi Uchida, Michika Hihara, Ayako Mizuno, Yuka Yamada and Momoka Mizumura*



## Changing the Image of Developing Countries

“What kind of image do you have of developing countries?” In response to this question at Ochanomizu University Senior High School, about 80% of students answered that they have negative images, such as unsanitary, undeveloped medical care and shoestring facilities. However, the truth is a little different in terms of obstetrics and gynecology.

Do you know about the unique project of introducing a stamp card into a maternity health-record book? This is one of the projects aimed at reducing the death rate of babies. In Ghana, a handbook for pregnant women was originally separate from a handbook for the health of babies. However, the mothers didn't understand its content. Then, in order to get pregnant women to know the importance of medical examinations, Japan International

Cooperation Agency (JICA), an organization that provides support to developing countries, made a stamp card and gave a stamp every time pregnant women visited a hospital. In addition, JICA integrated a handbook for pregnant women with a handbook for the health of babies and a stamp card. Thanks to these projects, the medical examination rate in Ghana increased from 8% to 50%.

In Sudan, from 2011 to 2014, Maternal and Child Health Empowerment Project Phase was conducted. The high infant mortality rate in Sudan is caused by few pregnant women receiving maternal and child health services. That is why this project set a goal of improving the ability of midwives in order to create an environment where inhabitants can receive diagnosis easily. About 41% of midwives in villages received training for childbirth. As a

result, the number of births in three hospitals increased by 51% and many women can receive safe and sanitary maternal and child health services.

After reading this article, what is your impression of Ghana and Sudan? In general, students, especially in developed countries, have a bad image of developing countries because they often study them in comparison with developed countries. However, developing countries are making progress every day and the death rate of babies is decreasing year by year, at least in Ghana and Sudan. As a result, you may find that your impression of developing countries changes gradually into a good one.

*By Saho Nishimura, Nanako Miyamoto, Chinatsu Ishikawa, Yurika Kuroyanagi, Yurina Yonekawa, Maki Doi and Arisa Abe*

## Q2. Take off my skin – I won't cry, but you will! What am I?

# Small Creatures May Have Big Impact on World



Euglena ramen (Yamate Ramen, Tokyo)



Galleria Mellon Ella eating a plastic bag

Credit: Cambridge University Research Team

Today, we human beings face many global issues, but scientists have found two small creatures that could possibly help us.

First, researchers at Cambridge University discovered plastic-eating caterpillars in April 2017. The caterpillar is of a moth called *Galleria Mellon Ella*, known for eating beeswax. This astonishing fact was discovered by Federica Bertocchini, a British amateur beekeeper, when she was removing the parasitic pests from honeycombs in her hives. The worms were temporarily kept in a plastic shopping bag and the bag was found to be full of holes. The experiment showed that this “wax worm” could make holes in a plastic bag in 40 minutes. “This discovery could be an important tool for helping to get rid of the polyethylene plastic waste accumulated in landfill sites and oceans,” said Dr. Paolo Bombelli, a biochemist at University

Cambridge and one of the researchers of the study. Though it takes about 100 to 400 years to break down, about 80 million tons of plastic polyethylene is produced in the world every year. If its chemical process could be identified, this would lead to a solution to managing plastic waste in the environment. (Reference: Cambridge University Research Team)

The second creature is “euglena,” which is a genus of green freshwater flagellates often found in stagnant waters and classified as algae. It is a common creature in Japan, but rare as a microbe in that it has both animal and plant characteristics. It thus has great potential. Ochanomizu University Senior High School students interviewed Euglena Corporation from the University of Tokyo, which conducts various research studies on solving energy and food problems through the use of euglena. Euglena’s oil formation is suited for jet fuel for airplanes and is also

a good source of clean energy. Fifty-nine nutrients in euglena provide a rich source of nutrition for a well-balanced diet. Euglena Corporation thus supplies poverty-stricken areas of developing countries such as Bangladesh with its cookies and supplements. In Japan, it has been popular in various health foods, such as juice, snacks, ramen and so on. Euglena Corporation is expanding its work to create a sustainable future using euglena.

The company believes that it won’t be long before we live on its power.

Scientists expect these creatures to be beneficial in solving environmental problems in the future.

*By Rina Kurihara, Kana Negishi and Akiko Yamabe*

### Answers to quiz

**A1.** Your name

**A2.** Onion

**Reference:**

Rarejob English Lab. 2017/07/03  
(<https://www.rarejob.com/englishlab/column/20170703/>)

## IR Bill Opens Path to Casinos in Japan

The House of Representatives approved a Draft bill for Integrated Resort Promotion (IR bill) on December 15, 2016. The IR bill is intended to legalize gambling. Although this would seem to secure tourism resources and stimulate Japan’s economy, some are anxious about the spread of gambling addiction and Japan becoming a hotbed of illicit activity. Opinions thus varied on this bill. Let’s take a closer look at the process.

In consideration of the security and peace throughout the country, Section 185 of the Criminal Code bans gambling establishments like casinos. However, more

than 120 countries in the world have already legitimated gambling. This fact encouraged members of the Diet to form a league in 2002, though many negative opinions remained. It was not until 2013 that they submitted a bill and regarded addressing this problem as important toward legalizing casinos.

The government’s plan is to build casinos in such places as Osaka and Kanagawa, which are expected to attract many foreigners during the 2020 Tokyo Olympics. In addition, they are taking measures to prevent people from being too addicted to gambling. CLSA, a brokerage firm, estimates that Japan could gain 4 trillion

yen if twelve casinos are introduced in Japan. According to a public opinion poll conducted by the Nikkei, 27 percent of residents approved of the plan and 59 percent of them did not.

A casino itself doesn’t necessarily have a bad influence on society. There are many benefits in terms of the economy. The Japanese are not very familiar with casinos, so it seems that they should acquire specific information and form their own opinions.

*By Aimi Ishizuna, Mika Okajima, Mia Narishige, Chika Mochizuki and Yuna Homma*