



NGK TIMES

STUDENT EDITION, January 2023

What is JK?



Do you know the term “gender terminology” has become a problem in recent years?

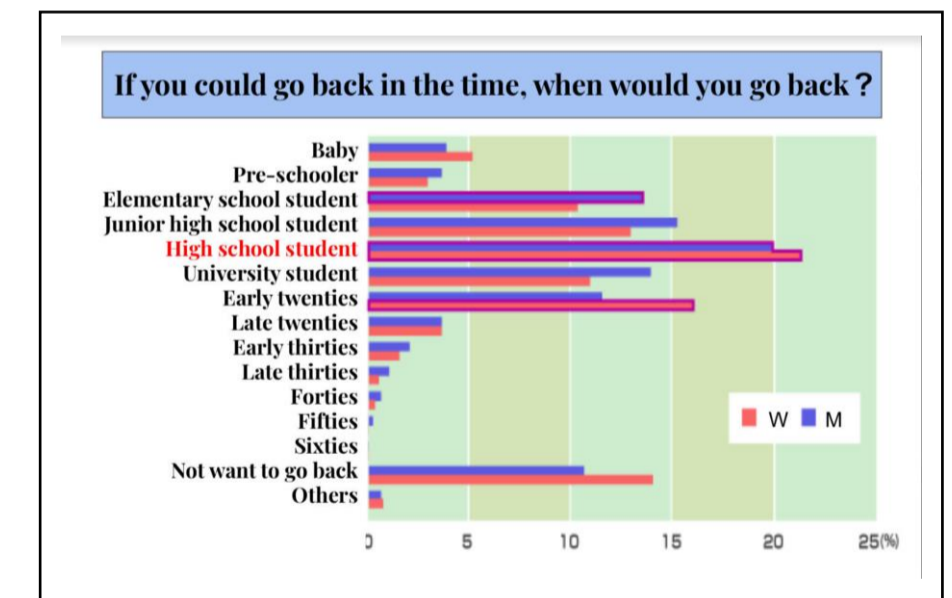
The word “JK” is familiar to the younger generation. What do you think it means? It means “high school girls” in Japanese. Some people say it is a gender term too and this word should be eliminated. But if the term “JK” was going to become a problem, why not get rid of it and why don’t we call them high school students? There is a possibility that the term “JK” plays a much larger role in society.

To come to the point, the term “JK” is not something that should be easily lost. One of the reasons for this idea is that the term “JK” symbolizes “Dream Island”, the three years of high school. The period of high school girls that “JK” refers to has a valuable status in society.

For reference, Asahi Group Holdings, conducted a survey of 4,156 people and asked, “If you could go back in time, when would you want to go back? The results showed that about 20% of the

respondents ranked their high school years in first place. The reason for this is that they would like to go back to their glorious days. They want to wear school uniforms, participate in events such as school festivals and sports festivals, and so on. In addition, there are chances that they can make other choices about their future, such as taking the university entrance exams and finding jobs. In other words, there is a major turning point in our life. This is a special period in one's life, filled with things that can be experienced only during these three years, just before becoming an adult. The high school years are truly a “Dream Island” for people. The word that symbolizes this is “JK”.

However, there is no doubt that the term “JK” is a gender-differentiating term. The name that symbolizes Dream island must evolve to meet the needs of the times. It needs to have a special feeling because it symbolizes “Dream Island”. It also needs to be an abbreviation



(credit)Photo by

that is familiar to young people, and the fact that the term “JK” has become so widespread in society today is probably due in large part to the fact that it was an abbreviation.

Therefore, I would like to propose a new abbreviation that symbolizes “Dream Island”, including all high school students: “DIC” means children living on Dream Island.

Such gender-neutral words are what is required of us in this era in order to create more equality in the future. The word “DIC” can make our society a better place to live in for all people.

By Ririna Kusunoki

Grade physical condition management

In recent years, the importance of physical condition management has increased due to the spread of new coronavirus infections. Every day our school students have to check their health before going to school. In spite of these efforts, there are people who get sick frequently and people who rarely get sick in our school. What are the differences between those people? There was the possibility that health management might have something to do with academic ability. This prospect was investigated via a survey of the students of NGK.

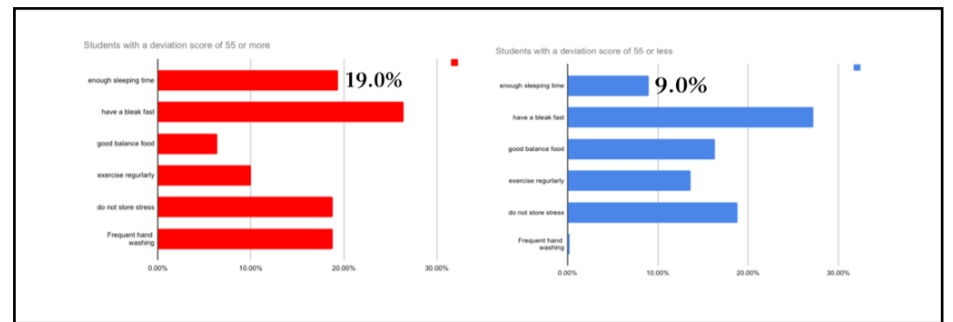
The first questionnaire investigated the relationship between physical condition management ability and academic ability. A deviation value of 55 was investigated as a borderline. Among those with a deviation value of 55 or more, 85% answered that they were in good physical condition. On the other hand, 77% of those with a deviation value of 55 or less answered that they were in good

physical condition. **These are the same responses – is this correct?*

Among those with a deviation value of 55 or more, 85% answered that they were in good physical condition. On the other hand, 77% of those with a deviation value of 55 or less answered that they were not in good physical condition.

Among those with a deviation value of 55 or more, 85% answered that they were not in good physical condition. On the other hand, 77% of those with a deviation value of 55 or less answered that they were in good physical condition.

The second questionnaire was given to the students of NGK. They were asked about their current physical condition and what they were doing to manage their physical condition. As a result of the questionnaire, 79% of the students answered that they were in good physical condition, and 21% answered that they were not in good physical condition. The most important thing for both groups was to have



breakfast; around a quarter of respondents from each group noted this. The difference in awareness of what they were doing for their health was the next most notable trend. In the group who responded that they were in good physical condition, getting enough sleep for themselves was the second most important variable. On the other hand, in the group who answered that they were not feeling well, the result was that they were not as aware of getting enough sleep for themselves, and it was not considered very important.

The results of the two surveys revealed that students with high academic ability tended to manage their health better; suggesting that if you want to

improve your grades, staying in good physical condition is just as important as studying. Additionally, the results demonstrated the difference in awareness of the importance of sleep between those who are able to manage their physical condition and those who are not. In order to be effective at managing one's physical condition, it is important to ensure you get a healthy amount of sleep every night. Overall, the surveys clearly support the idea that health management is a very important skill for those who live in the corona era to raise their academic ability and live a healthier life in this modern age.

By Kokomi Tanaka

Amount of radiation in Nishokashiwa

On March 11, 2011, Japan experienced its strongest earthquake, the Tohoku Earthquake. The earthquake and the following tsunamis caused significant damage and destruction, especially in Fukushima where it caused three meltdowns and hydrogen explosions at the Fukushima 1st nuclear power station.

One of the most dangerous problems to result from this accident was radioactive pollution which are still causing many negative side-effects to this day.

For a while, Kashiwa, where our school is located, was known as a "Hotspot", meaning an area where high radiation was observed. It is about 220 km from the Fukushima 1st nuclear power station to Kashiwa in Chiba. People living in Kashiwa were deeply concerned about their safety and potential harm caused by nuclear fallout from the accident. For instance, some people thought it may have caused them to develop cancer.

Following the accident in 2011, high radiation levels were observed. The amount of the radiation dose in 2011 was about $0.60\mu\text{Sv}$ per day. According to the Japanese Environmental Ministry, the lowest level of radiation which could affect human bodies is about $0.1\mu\text{Sv}$ per day. This level of radiation exposure can cause temporary infertility.

Over 10 years after the accident, many people visit Kashiwa proving that people no longer have any concerns about the radiation which was emitted from the Fukushima 1st nuclear power station. However, some people are still anxious about the influence of the radiation, resulting in the data of radiation levels being collected at 2 points around Nishogakusha Kashiwa High School in August 2022. Also, the data at these points was compared with three other cities around Kashiwa.

◆ At school

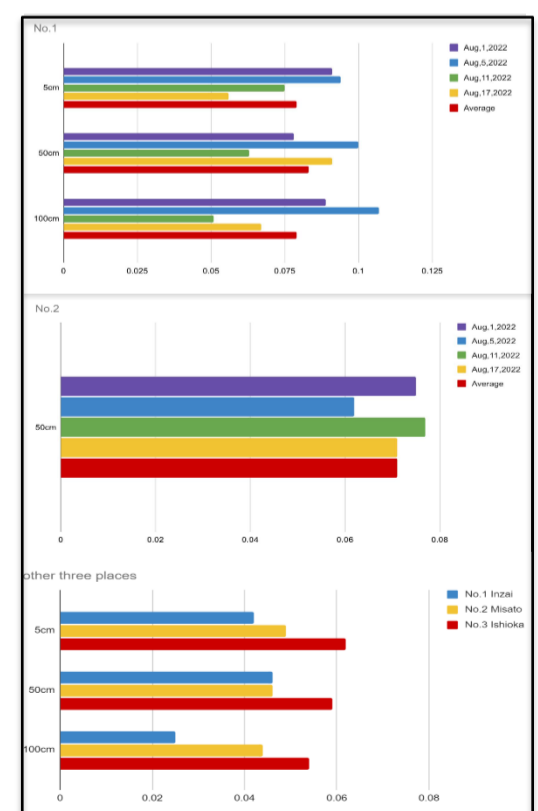
- No.1: soccer ground (back)
- No.2: a classroom

◆ Other three cities around Kashiwa

- No.1: Inzai city in Chiba
 - No.2: Misato city in Saitama
 - No.3: Ishioka city in Ibaraki
- ※Unit is μSv .

The data shown in the graphs show that the levels of radiation are safer than in 2011 following the accident. In fact, the level of radiation has dropped to one tenth of the levels recorded over 10 years ago, showing us that

Nishogakusha is no longer threatened by elevated radiation levels and is perfectly safe.



By Yuki Muto

Where will PET bottle go?



Japan has World's highest uptake of PET bottle collection and recycling, at 93% and 85.8% respectively. This is the World's highest standard.

In the school buildings of Nisho, there are several collection boxes for PET bottles and all students throw away their empty plastic bottles responsibly. Abandoned plastic bottles are rarely seen in normal trash boxes, so it is clear that the collection rate of plastic bottles in Nisho is high as well.

Materials that are recycled in Japan are remanufactured into new products. In Kashiwa, they are carried to the Recycling Plaza where they are stored, separated, and eventually changed into something different. For example,

recycled plastic will become part of stationery, glasses frames, and fiber used to make ties.

In addition to remanufacturing, "bottle-to-bottle" recycling takes places where bottles are remade as new bottles which allows them to be semi-permanently recycled. Recently, the method has expanded to make better use of resources than others.

Both methods of recycling are important because they can reduce the consumption of oil resources and the emission of carbon dioxide when compared to using new oil-derived raw materials. However, this creates the problems of a higher cost and quicker deterioration of the recycled product.

During the late 20th century, the use of Plastic bottles significantly increased mainly as a result of their convenience. But now, plastic bottles are being seen negatively, particularly because they require oil to be made, and increasingly as a result of environmental problems caused by littering such as plastic in the oceans. In fact, plastic bottles that account for 40% of all garbage



thrown into the sea.

As a result of the environmental problems caused by plastic bottles, beverage manufacturers are now promoting cooperation with local governments and distribution companies to make PET bottles "containers that promote resource recycling" rather than "evil". For example, companies such as Itoen, Kirin, Coca-Cola and Asahi have switched to what is called label-less packaging, reducing the overall amount of plastic used for manufacturing. Additionally, many supermarkets such as Yaoko and Ito-Yokado have recycling stations and point schemes to encourage customers to recycle. These companies are now striving to reduce plastic

consumption and support recycling. People should dispose of plastic bottles in designated places to promote material recycling. Plastic bottles are a vital way for companies to provide and consumers to have access to drinks. Through recycling, plastic bottles are a resource that can be used many times when they are disposed of correctly. In order to continue the benefits of PET bottles, which are safe, easy to use, and available at low cost, people must ensure they put their used PET bottles in the correct collection boxes.

By Ayumi Miyata

Can you eat insects?

In recent years, entomophagy, to eat insects has become more prominent around the world. In the United States, fried grasshoppers ("batta" in Japanese) have been added to the menu at Seattle Mariners games, and their popularity has led to restrictions on sales. In Europe, protein made from edible insects in powder form is popular among health-conscious people. What are the reasons for the current interest in entomophagy?

Entomophagy was first raised as a serious prospect in 2013, when the FAO published a report recommending the use of insects as food and livestock feed as a possible solution for food production problems. If population growth continues at its current rate, the world population is expected to exceed 9 billion by 2030. The problem then becomes food shortages, mainly protein shortages.

Many insects are said to contain as much protein as meat. For example, 100 grams of beef contains 26 grams of protein, compared to 25 grams for edible crickets and 28 grams for grasshoppers.



So if there is a serious food shortage in the world in the future, will insect-based diets be a viable alternative? The scale of the problem is huge, but a small study has been carried out at Nisho Kashiwa to investigate the possibility of following an insect-based diet. The large amount of insect life found around the school grounds became the basis for the study – could someone acquire enough protein for a healthy diet through insects alone?

Four students and a teacher had to try to catch as many insects as possible in the school grounds over a period of 30 minutes. As a result, they caught two dragonflies, one cricket, one locust, and an large amount of grasshoppers. Those taking part in the study

would have been able to supplement their diet with insects. The investigation also investigated whether insect foods are actually readily available in Japan and found that they are surprisingly easy to purchase. As previously mentioned in this article, protein derived from insects in powder form are popular in Europe, but in Japan, cricket rice crackers made from powdered crickets are sold in supermarkets, and even a famous Japanese grocery store, Muji, has cricket chocolate in addition to cricket rice crackers in its stores. Some cricket crackers we purchased from the supermarket and the members of the bug catching group along with some other teachers tried the insect-based products, commenting

"You can tell unless you are told" and "They are delicious."

However, some people refused to eat the crackers, as a direct result of the products being made with cricket, saying, "I don't like insects..." or "I don't like eating insects..." Many people still cannot accept the idea that insects can be eaten, which is a problem when considering insect-based diets as a long-term solution to food availability. There was, however, an opinion that "appearance is important, and if it doesn't look like an insect, people won't know unless they are told, so I think everyone can eat it" so there is the potential for solving this problem if people can be convinced to eat insect-based products on the basis they do not look like insects.

Entomophagy is a highly nutritious and environmentally friendly food which really has the ability to solve many potential food shortage problems. Hopefully more people will realize this and take up an insect-based diet in the future.

By Ayami Kashimada

Our Underground

The Jomon period had a hunter-gatherer lifestyle before the Yayoi period; however, the Yayoi period was different from the Jomon period. Between 1,700-2,300 years ago, agricultural culture took root in Japan, and it is believed that the ancestors of the modern Japanese started growing rice. In other areas of the world, agricultural cultures developed, allowing urban civilizations like

the Indus to flourish.

Nisho Kashiwa high school has discovered many historical artifacts that are thought to be from the Yayoi period, which suggests the possibility of a Yayoi settlement in the area.

Several items believed to be used by people in the Yayoi period have been discovered. Photograph 1, a stone tool (called "Maseisekki" in Japanese) is

understood to have been used as a hammer or a tool for digging with by people who lived during the Yayoi period (Photograph 2). Photographs 3 and 4 are "Kokuyouseki": carved obsidian stones which were likely used as arrowheads or knives. These were used until iron production came to Japan. Photograph 5 is a piece of earthenware (called "Doki" in Japanese). "Doki" was likely used for cooking and preserving foods. A unique feature of the Yayoi period's "Doki" is a pattern that looks like a rope was pressed into the surface. This is clearly the result of human crafting techniques. The shells (in Photograph 6) were discovered behind the gym, which suggests that the sea may have been nearby.

Map 1 is recent, while Map 2 shows the area during the Yayoi period approximately 1700-2300 years ago. In the Yayoi period, Kashiwa city was very close to the sea. Teganuma, a lake near Kashiwa city, is also near Nisho

Kashiwa High School. However, the sea is no longer close. Based on the old map, it seems that people in the Yayoi period were fishing and eating from the sea nearby. This hypothesis is supported by the discovery of the discarded shells (Photograph 6). In common with many settlements during the Yayoi period, Nisho Kashiwa High School is located on high ground, which was considered to be a very desirable location for people then. The consensus amongst historians and archeologists nowadays is that there was probably a large Yayoi period village in the same location as modern day Nisho Kashiwa High School. It is amazing to think there may be an ancient village under the school grounds. Perhaps one day we can unearth the history and learn more about the lives of our ancestors.

by Aoi Kiguchi



Circulating : For Our Future

There are three types of recycling. One of them is thermal recycling, which accounts for the largest share of the three. The energy recovered by thermal recycling is used for local power generation and heated pools. However, overseas thermal recycling is not considered recycling. Recycling is the process of processing waste and reusing it as raw material for products. The world thinks it strange to call the conversion of plastics into thermal energy "recycling."

Thermal recycling itself is good for the environment, but the high rate of thermal recycling in Japan means that we burn many things and that we throw away a large amount of garbage. Why do Japanese people throw away so much garbage?

In Japan, there is a word "Mottainai." It means that what is still useful is wasted. It is a word unique to Japan, and there is no word for mottainai in foreign dictionaries. Although Japan has

an image of taking good care of things, Japanese people actually throw away many wasteful things. For example, convenience stores generate enormous amount of garbage. There are more than 50,000 convenience stores in Japan and 10 to 15kg of food is thrown away every day. This equates to 20-30 tons per year.

Also, leftover food is the serious problem too. In Japan, it is said that 5.22 million tons of food that is still eatable is wasted. This is equivalent to 1.2 times the amount of global food aid for the world's hungry (about 4.2 million tons per year in 2020). Also, when converting food loss per person, "about one cup of food (about 113g)" is thrown away every day.

Overbuying is also a problem for Japanese. In Japan, cheap but good-quality goods are easy to buy. 100 yen shops are particularly cheap, so many people end up buying things they don't really need. How do you think countries with high recycling rates care for and

recycle things?

The answer is "circulating."

In Germany, where the recycling rate is high, there is a box called a public bookshelf that anyone can freely put in. We can also keep the book as is. The point is that it has a higher degree of freedom than a library and is open to everyone. There is also a collection box for old clothes and clothes, which you can get freely. In this way, It's wonderful that we can reduce waste by passing things we no longer need to other people.

In France, it is said that you can fit within 5 tops and 5 bottoms each. They buy slightly expensive clothes and choose clothes that are hard to break. By doing so, you can reduce the amount of clothes you buy and throw away.

In countries with high recycling rates, recycling earns points, which can be redeemed for money.

From 2015 to today, the word "minimalist" is in vogue. A minimalist is a person who practices a lifestyle of living with

the minimum necessary items for food, clothing and shelter. The style was sent from overseas around 2010. In Japan, the storage and organization techniques practiced by popular bloggers and minimalists who are attracting attention on SNS have become a hot topic, and have been nominated for the 2015 Buzzword Contest. Minimalism imagines a life without too many things, but the original concept is to "select the things you really need and live a rich life with only those things."

Of course, it is important for Japanese people to recycle garbage. But the most important thing is to stop buying what are not really needed and to circulate things. It is important to buy only what you need and circulate the garbage that we normally throw away. Treating things with care and refusing unnecessary things is a way to reduce waste.

By Kokoro Murakami

NGK TIMES

Published by a group of 7 students of Nishogakusha Kashiwa Senior High School, a private high school in Kashiwa city, in cooperation with the not-for-profit Global Education Information Center(GEIC).

Publisher : Nishogakusha Kashiwa Senior High School

Project Supervisors : Sunao Mori, Kimihiko Musha, Weston Stephen Nicholas, and Hironobu Aoki / **Editor**: Aoi Kiguchi

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