

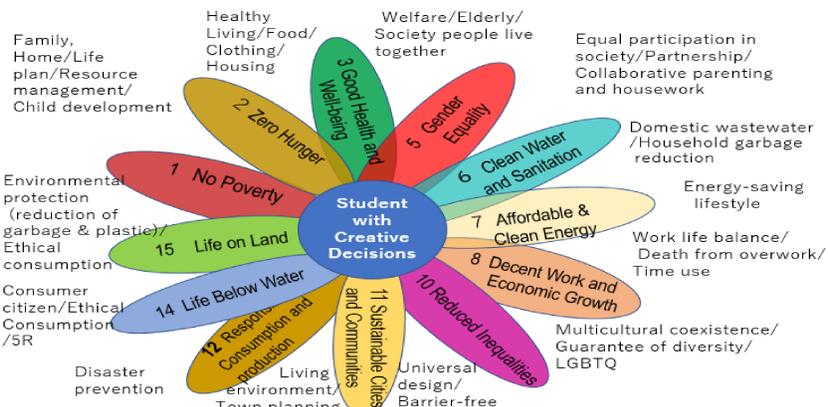
Japanese Home Economics Education and SDGs

The Japan Association of Home Economics Education (<https://www.jahee.jp/en-welcome/>)
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Educational Background and Objective of the Study

- ◆ Home Economics education in Japan is a compulsory subject taught from elementary through high school. Its learning contents a comprehensive view of life, which deeply related to the United Nations' 17 Sustainable Development Goals (SDGs). It stresses that children should connect issues in front of them with the idea of the 'sustainable society,' look them as their own issues, and think about how they can solve problems to create a better society they wish to live in.
- ◆ The purpose of this presentation is to clarify, through analysis of examples at elementary, junior high, and high school classes, how Japanese Home Economics plays an important role to achieve the SDGs.



How Home Economics learning contents relate to the SDGs

Source: Arai, N. et al (eds.) 2021. SDGs and Home Economics Curriculum Design. Kyoikutosho. p.15

Relevance of SDGs for Home Economics

Home Economics Curricula	SDGs																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
A Family Life and family			✓	✓	✓			✓		✓	✓						✓
B Food, cooking, clothing, and housing life												✓	✓		✓		
C Daily consumption and the environment	✓								✓			✓	✓		✓		✓

(Source:)*Imoto, R. (2020). What is the SDGs? What is the Relationship Between Home Economics Education and the SDGs?, Journal of the Japan association of Home Economics Education, 62 (4), 276-281.
 (Note:)*Course of Study of Home economics revised in 2017 for primary school & junior high school, and 2018 for high school.
 *Home Economics Curricula cover A, B, C from primary school to high school.

- ◆ In Japan, Home Economics is a compulsory subject from primary school to junior high & high school, covering a very broad range of topics.
- ◆ The table shows that the content of Home Economics curricula is very close to the SDGs in terms of contents. As such, Japan Association of Home Economics (2020-2021) argues that Home Economics education as a discipline shares certain objectives and contents with SDGs/ESD.
- ◆ At all school levels, Japanese Home Economics encourages students to identify with societal concerns and to successfully negotiate the challenges of living in a diverse, global society.

SDGs Practiced in Elementary School Home Economics

Asahikawa Elementary School attached Hokkaido University of Education practiced by Ms. Reina AKIYAMA

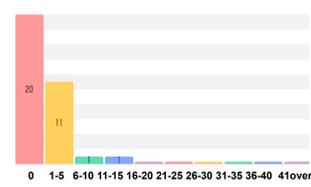
- Unit rational**
 Japan introduced mandatory charges for plastic bags, which used to be free of charge, in retail stores in July 2020. In the Home Economics class, it is important to have the students understand the nature of the problem and why they are making the bags to realize how they can contribute to the solution of global environmental problems by using the reusable bags they have made.
- Unit Goal**
 Let's make our own reusable bags to solve environmental problems!
- Learning Objectives**
1. Understand the background to the mandatory charge for plastic shopping bags in daily life from the perspective of the SDGs.
 2. Plan to make a reusable bag as one of the ways to reduce plastic wastes.
 3. Design a reusable bag considering the amount of space to put things in, taking things out, and the best materials to use.
 4. Explore environmentally friendly clothing, realizing the perspective that enriching one's own life leads not only to one's family life, but also to society and on a global level.



Student Activities (Total 12h)

1. The problem is identified (0.5h)
 Teacher and students explore why plastic bags are no longer free, learn about the usage rates for plastic versus reusable bags.
2. Design a reusable bag (1.5h)
 [Research activities at home.]
- Survey on consumer shopping behavior and using plastic bags (3weeks).
- Interview your own family on what they think about reusable bags.
- Measure the size of the items you put in your own reusable bag.
3. Make a reusable bag (9h)

Number of times plastic bags used in 3 weeks



Number of times usable bags used in 3 weeks



Conclusions

1. The students considered the social issues related to shopping bags based on the results of the survey on the use of plastic and reusable bags in each household.
2. The students made their own bags, considering the purpose of using them and environmental issues.
3. The students actually used their own bags and identified ways to further improve them.

SDGs Practiced in Junior High School Home Economics

Theme : "Measuring" is the First Step toward the Realization of Proactive, Interactive and Authentic Learning

1. Implementing school: FUJI Girls' School Teacher's name: Ms. Hideyo NARA
2. Learning period: April-June 2021, 10 hours in total
3. Learning area: "Food, cooking, clothing, and housing life"
 "Daily consumption and the environment"

Learning Objectives

- Cultivate the basis for establishing an environmentally conscious lifestyle with awareness as a leader of a society with consumer citizenship.
- Specifically, through discovering problems within the school, taking measurements using various measuring instruments, and understanding and solving the actual situation, students solve their own and society's problems. (Project-Based Learning)



Project-Based Learning

Finding problems in the school

1. Eco-Cooking
 - 1. Food waste (garbage problem/food loss)
 - 2. Waste of heating
 - 3. Waste of electricity
2. Comparison of window insulation effectiveness
 - Room temperature, Temperature between double-pane windows, humidity
 - Heat comparison when illuminating different types of glass, e.g. single and insulated glass
3. Measuring the illuminance of the classroom
 - 1. Weighing scales
 - 2. Thermo-hygrometer
 - 3. Radiation thermometers
 - 4. Illuminance meter
 - 5. Watt-hour meters

Measuring Instruments

1. Weighing scales
 2. Thermo-hygrometer
 3. Radiation thermometers
 4. Illuminance meter
 5. Watt-hour meters

Date: November 21
 Left/Right: With lighting, Without curtains
 Unit: lux

teaching table

I heard that the monthly electricity bill at the school is 500,000 yen. I was very surprised. When I see the situation where people close the curtains and turn on the lights even though the sun is shining, I felt "Mottainai!"

There are various types of glass, and I thought this experience made me feel much closer to environmental issues. I felt that each of us can reduce CO₂ emissions by making small efforts in our daily lives.

Reflection and Evaluation

1. Students who were able to see energy-saving behavior as their own concern through various kinds of measurements were voluntarily working on energy conservation at home and at school. Motivated students continued to measure new items, participated in contests, and won prizes.
2. We believe that measuring and recording can be positioned as basic skills for Home Economics.
3. SDGs present visions and issues that the world should address. On the other hand, many of them seem distant from the realities of life for Japanese junior high school students.
4. In order to cultivate problem-solving skills, not just knowledge acquisition, Home Economics teachers should collaborate with outside organizations and promote research on teaching materials appropriate for junior high school students.

SDGs Practiced in High School Home Economics

Theme : Creating Universal Design Products with Disabled Persons in the Community

1. Implementing school: Hokkaido Makubetsu High School
 Teacher's name: Ms. Hiromi Yamamoto
2. Learning period: November-December 2018, 13 hours in total
3. Learning area: "Life of the elderly and welfare" "Inclusive society and welfare" "Clothing" "Housing and living"
4. This learning is related to the following SDGs



Learning Contents

Lesson Items	Learning Contents and Goals	How they learn
1. What is Universal Design ?	Understand the seven principles of UD and barrier-free, while looking at real universal design products.	Photographs of universal design products like spoons and chairs.
2. Think about what disability is through a simulated experience	In pairs, put on a blindfold and walk around the school, thinking about their experiences (necessity of barrier-free building, role of helper, importance of communication, etc.)	Photograph of students walking with blindfolds.
3. Listening to guests with disabilities ①	Understand illnesses, sequelae, difficulties in life, and relationships with others.	Photograph of a student speaking to a group.
4. Listening to guests with disabilities ②	Recognizing that it is important to get rid of assumptions about universal design, to know the feelings of the parties concerned, and to change the way of thinking.	Photograph of students in a discussion.
5. Design UD products (Nail clippers, shirts)	Design products that meets the needs of the parties, and something that students themselves want to wear and use	Photograph of designed products like nail clippers and shirts.
6. Presentation	Show the products, wear the shirts and explain about them. Receive comments from the guests.	Photograph of students presenting their work.

Reflection and Evaluation

1. By meeting with the person concerned, students could think of their problems as their own; and the issues for the persons concerned became more clearer.
2. Students were able to notice their prejudices by meeting the people who try to solve the problems for the person with disabilities by manufacturing products in the community.
3. By focusing on the issues of the people concerned in the community, students could see their lives from a broad perspective and think about problem-solving and contribution from the perspective of the persons concerned.

Advanced Learning in the Community

Groups in students, investigate the ease of walking and barriers to wheelchairs on snowy roads, thinking about universal design for winter roads.

Perspectives of Home Economics Relates to SDGs

