

EDU-Port Symposium FY2022 : Changes in Student Learning in the Post-COVID Era

Outcomes and Challenges of the Lesson Studies in Health Education and Health Checkup Activities in Laos and Nepal (Laos and Nepal)

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Venue: Zenkokutoshikaikan Building 2F



Japan Consortium for Global School Health Research



TOMOKAWA Sachi, Associate Professor
Faculty of Education, Shinshu University

Introduction of Japanese-style Education Using a Public-Private Collaborative Platform (EDU-Port Japan Project):
Research on Japanese-style Education Overseas for Public Health and ICT Education

Verification research on the challenges and possibilities for development of **Japanese-style school health** that contributes to the SDGs



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OSAKA UNIVERSITY



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Teikyo University

➤ Project overview and update

Aim:

Empirically examine the possibilities and challenges of how Japanese-style school health can contribute to the achievement of the SDGs and the response to COVID-19.

Major activities:

1	Examine the achievements and challenges of Japan's support of school health activities in developing countries (document gathering and oral survey)
2	Grasp the current conditions of school health education, response to COVID-19, and ESD (document gathering and oral survey)
3	Propose models to promote school health and ESD in developing countries and Japan (verification research) Development of health education materials & lesson study, health checkups in Laos, Nepal, and Japan
4	Share knowledge and feed it back to society and academy in Japan (bilaterally sharing knowledge, publishing journals, and building networks)

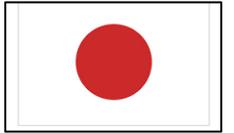
- Changes in student learning due to COVID-19, identified on-site
- Opinions concerning learning in the post-COVID era
- Future outlook, expectations for EDU-Port Japan, etc.

● Achievements

Proposal to promote school health (support) and ESD in developing countries and Japan

In Laos, Nepal, and Japan, we have examined the possibilities of:

Japanese-style school health education ✕ **cooperation and collaboration between teacher-training schools and their affiliated institutions** ✕ **ESD by taking health issues as our entry point.**



● What is “Japanese-style school health education”?

- Structured education (introduction, development, conclusion) for proactive, interactive, and authentic learning
- The aim is to improve teaching skills using the lesson study approach

● What is “cooperation and collaboration between teacher-training schools and their affiliated institutions”?

It means enhancement of teacher-training schools’ education and research functions.

- Class development (teaching model development) and teacher-training through collaboration between teacher-training schools and their affiliated institutions

● What is “ESD by taking health issues as our entry point”?

- Teaching on health issues that are familiar to children and those of high priority



➤ Empirical examination process

1. Development of teaching materials by researchers and experienced teachers in Japan, Laos, and Nepal

- i. Japanese researchers formulate teaching plans to develop core trainers.
- ii. The instructor conducts a mock-up lesson in front of teachers with experience of teaching school health in Japan, who provide advice on teaching from the perspective of “proactive, interactive, and authentic learning.”
- iii. Teaching materials are revised and the methods to assess the teaching intervention effects developed through trilateral discussion with a view to the following.
 - a. Each country’s current status of theme-based teaching practices and facilities and their challenges
 - b. Consideration of the circumstances surrounding teaching plans that are unique to each country
 - c. The abilities that students should acquire at teacher training school (KAP)

Step1
2021-2022
(online)

2. Teacher training for teachers of teacher-training schools

Assessment based on a questionnaire survey before/after training and lesson appraisal through discussion between a core trainer and the instructor.

Step2
2022-2023
(in Laos and Nepal)

2. Teacher-training for junior and senior high school teachers

3. Practice at teacher-training schools

Assessment based on a questionnaire survey before/after training and lesson appraisal through discussion between a core trainer and the instructor.

Step3
2022-2023
(in Laos, Nepal, and Japan)

3. Practice at elementary and junior/senior high schools affiliated with a university

➤ ESD x Japanese-style school health education: Structure of developed teaching materials (teacher training)

Preliminary survey using a questionnaire

Introduction of ESD/relationship between ESD and themes/ability to acquire skills

Background and aim of lesson plans/points of assessment

➤ Introduction (ordinary experiences): Broach topics familiar to learners; provide learners with clear learning tasks making them wonder why, build assumptions, and take problems as their own.

➤ Development (scientific approach): Learners learn proactively, interactively, and authentically (renewing their thinking through collaborative activities), looking closely at their own tasks.

➤ Conclusion (behavioral changes): Share authentic learning experiences; set specific action steps achievable at school and home.

Find out what is good about students' teaching plans and what is desired.

Discuss the need for theme-based teaching and points to note in teaching.

Post-survey using a questionnaire

Demonstration
lesson

Note: Elementary and
junior high schools
conduct this part only.

➤ Developed teaching materials

Category	Theme	Teaching method	Major activities
COVID-19	Discrimination	Use of news and articles	<ul style="list-style-type: none"> • Discuss cases of discrimination around us. • Read and discuss the notes written by individuals who have experienced discrimination.
	Mental health management	Stress appraisal using a balloon, determine the top three recommended methods for stress reduction	<ul style="list-style-type: none"> • Share personal tips on how to manage mental health. • Share information obtained from research and study. • Choose the best three methods recommended by individuals.
	Vaccination (immunization)	Role-play about the immune system	<ul style="list-style-type: none"> • Role play about physical changes due to vaccination
Comprehensive sexuality education	Menstruation teaching	Group work (case study)	<ul style="list-style-type: none"> • Men and women jointly discuss support to be extended to women in menstruation.
Lifestyle-related diseases	Double burden of malnutrition	Calculation of (BMI/ideal body weight calculation), graph/chart reading	<ul style="list-style-type: none"> • Introduction of the effects of undernutrition/overnutrition on health. • Measurement of height and weight, BMI calculation
Handwashing practice	Planning of awareness activities	Issue analysis and planning of awareness activities by group work (analysis and ranking of issues)	<ul style="list-style-type: none"> • Introduction of Nudge Theory • Issue analysis, planning of awareness activities

➤ Assessment

	Skills and abilities to acquire through learning (elementary and junior/senior high school students)	Skills and abilities to acquire as a teacher (Teachers of junior/senior high schools and students of teacher-training institutions)
Knowledge	Knowledge on lesson content	Knowledge of considerations in teaching
Attitude/aspirations/ interest	Attitude toward a given theme	Attitude toward, aspirations for, and interest in teaching a given theme in class
Practice	Theme-based learning practice skills	Theme-related support for students
Self-confidence	Self-confidence in theme-based practice	Self-confidence in teaching a given theme

Learnings to be achieved through Japanese-style education

Proactive learning	Did you proactively participate in class?
Interactive learning	Did you engage in communication with your teacher and other students?
Authentic learning	Did you discover in yourself any new way of thinking or other findings through dialogue with your teacher and other students?

Seven competencies and attitudes to be emphasized in ESD

1. Ability to think critically
2. Ability to plan with anticipation of a future scenario
3. Ability to think in multidimensional and integrative ways
4. Ability to communicate
5. Ability to cooperate with others
6. Attitude to respect relations and connections
7. Attitude to participate proactively

➤ Teaching materials developed to promote handwashing practice

Aim		Develop the ability to build specific education plans to promote handwashing practices with reference to handwashing campaigns in Japan and other countries.
Teaching structure	Introduction	Importance of handwashing practice as a measure against COVID-19
		Introduction of Nudge Theory and its practice examples
	Development	Formulation of action plans on handwashing practice through group work
	Conclusion	Presentation on action plans
Seven competencies and attitudes to be emphasized in ESD		<ol style="list-style-type: none"> 1. Ability to think critically 2. Ability to plan with anticipation of a future scenario 3. Ability to think in multidimensional and integrative ways 4. Ability to communicate 5. Ability to cooperate with others 6. Attitude to respect relations and connections 7. Attitude to participate proactively
		Source: https://www.mext.go.jp/unesco/004/1339970.htm

➤ Development of teaching materials through collaboration between Japan, Laos, and Nepal

Through discussion on the development of teaching materials, we have learned that access to water resources is different between urban areas and rural areas in Laos and Nepal.

➔ Considering the water and sanitation facilities in these countries, some examples of practices for promoting handwashing in water-scarce areas have been added.

Other examples of practices for promoting handwashing at school

What can we do if there is little water for handwashing at school?

- Making the “Tippy-tap”

Tippy-Tap is a device for washing hands under running water, using products available locally.



- Using a **Kettle** for washing hands
- Having a campaign to **bring water** for handwashing **from home**



Author: INOUT Kawada



New ways of handwashing with less water, using the Tippy-tap, a kettle, etc. are introduced.

➤ Effects and challenges of teacher-training in Laos

(n=50)	Before training		After training		P-value
	Ave.	SD	Ave.	SD	
1. Knowledge of handwashing practice (7-score scale)	3.6	1.3	4.6	1.2	<0.001
2. Knowledge of considerations in teaching the importance of handwashing practice (17-score scale)	4.3	2.9	4.5	3.2	0.819
3. Aspirations for and interest in teaching the importance of handwashing practice (45-score scale)	34.7	4.9	37.4	5.0	<0.001
4. Attitude toward teaching the importance of handwashing practice (40-score scale)	37.7	4.0	38.6	2.2	0.17
5. Awareness of the necessity of teaching the importance of handwashing practice (24-score scale)	20.5	2.6	21.9	1.8	<0.001
6. Self-confidence in teaching the importance of handwashing practice (24-score scale)	18.7	3.5	21.0	2.4	<0.001

Findings:

1. Scores have apparently improved in the following four aspects: 1. Knowledge of handwashing practice, 3. Aspirations for and interest in teaching, 5. Necessity of teaching, and 6. Self-confidence in teaching.

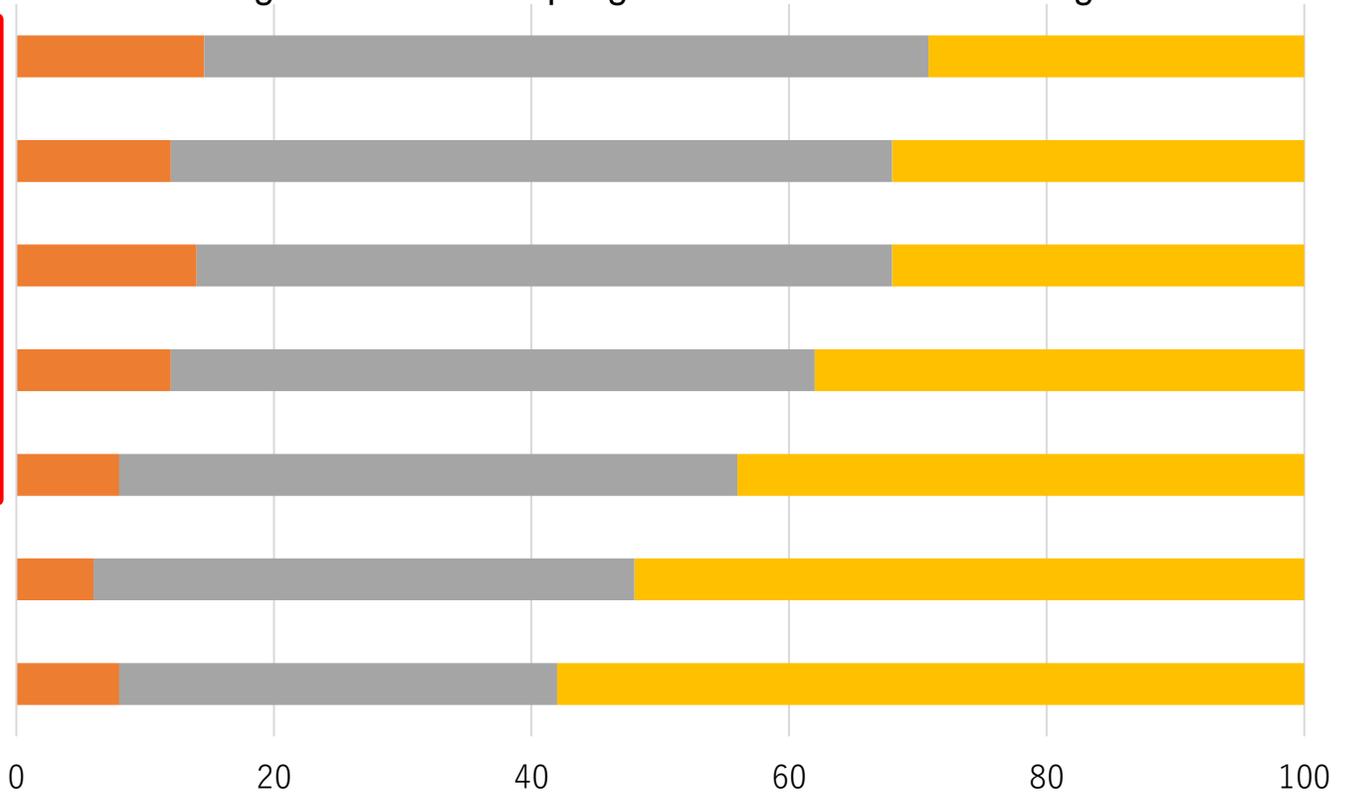
2. “Knowledge of considerations in teaching the importance of handwashing practice” has not been adequately acquired.

➤ Self-evaluation of the acquisition of abilities and attitudes emphasized in ESD

■ I didn't learn anything at all. ■ I've learned a few things. ■ I've almost got it. ■ We were able to get it.

- 1. Ability to think critically
- 2. Ability to plan with anticipation of a future scenario
- 3. Ability to think in multidimensional and integrative ways
- 4. Ability to communicate
- 5. Ability to cooperate with others

- 6. Attitude to respect relations and connections
- 7. Attitude to participate proactively



Seven competencies and attitudes to be emphasized in ESD

Capabilities/attitudes assumed during development < capabilities/attitudes not assumed

➤ Findings from teacher-training on handwashing in Laos

Nudge Theory and some examples based on the theory are introduced.

● No considerations of Nudge Theory were identified in the students' education plans.

-> Further understanding of Nudge theory is required.

By painting footsteps and arrows, students started to wash their hands by guiding them from the toilet to the handwashing facility.



Dreibelbis R et al. (2016)

It's important to think **why** people change their behavior and **how** you can change people's behavior!

● The education plans did not match the results of analysis of the issues to be addressed. The content was just a list of desires and hopes.

→ Analysis of issues - understanding of solutions and prioritization are required. Appropriate comments by the teacher on the presentations are also necessary.

Today's Activity:
Let's think of a plan for students to wash their hands with soap.

How to proceed with the planning

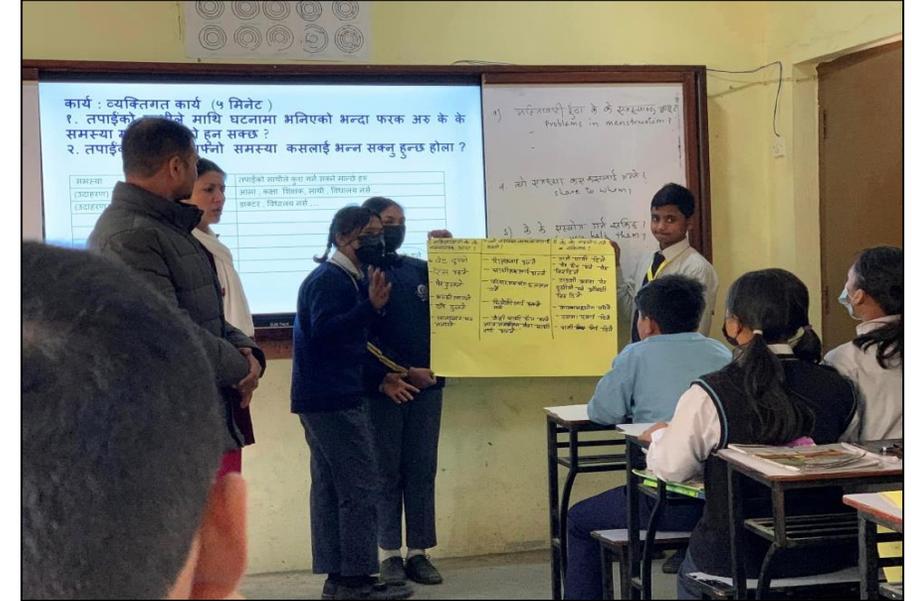
WHO	Think <u>who</u> is the target of your plan.
WHY	Think <u>why</u> they do not wash their hands.
WHAT/ HOW	<ul style="list-style-type: none"> Based on "why" (causes of the behavior), let's think "what" can make the target person wash their hands with soap. Let's think about "what" and how to implement it.
WHERE	Let's think about where to implement the plan.

How can we get people to wash their hands??



Education plans were made by each work group.

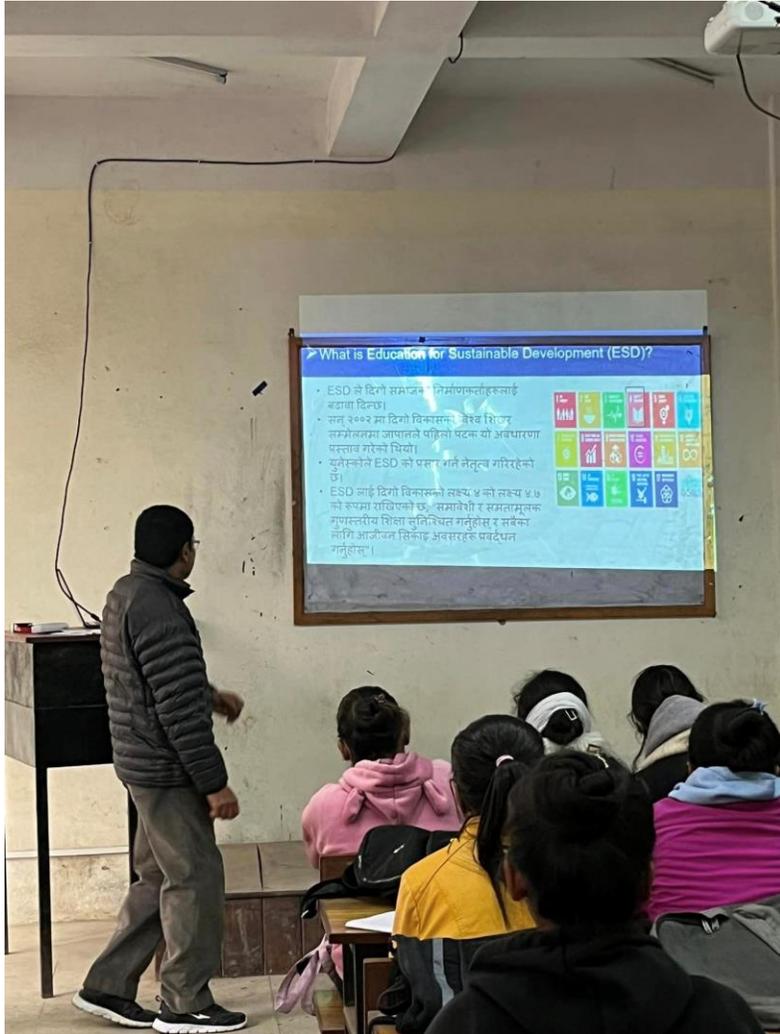
➤ Educational activities in Nepal and Laos: Teaching menstruation to first-year junior high school students



Women's physical and mental stress during menstruation and how to support them are discussed by mixed groups of boys and girls.

- Boys and girls worked together better than anticipated.
- There were feasible support and infeasible support identified. -> Prioritization is required.
- Activity instructions, group organization, and time management issues

➤ Educational activities in Nepal and Laos: Introducing ESD at a teacher training school



● The introduction of ESD took more than 30 minutes (was supposed to take 3 to 5 minutes)

-> Appropriate time allocation is required.

☆☆☆ In Laos, the deputy dean of a school introduced ESD at a gathering for the Faculty of Education, using new slides in addition to the existing ones.

➤ ESD × Japanese-style school health education: Challenges and achievement

By comparing practices in Japan, Laos, and Nepal,...

Challenges	Achievement
Reduce overall explanation time, appropriately allocating time for each activity; give more explanation of slides. →Standardization to ensure the quality of instruction	Manifestation of bottlenecks in the classroom(Insufficient preparation, lack of understanding of content(careful selection of content to be taught)
Propose measures based on the analysis of the current situation; prioritize content.	ESD, best suited to strengthen the capacities countries seek!→ Positive about ESD promotion
Explain the meaning and aim of lesson study	The view of teaching and education in each country is highlighted (cultural background also influences)
Improve the skills to facilitate group work and presentation. (Measures to be taken when the speaker is limited)	An opportunity to think about what the essential teaching skills and roles of teachers are

➤ Changes in student-learning due to COVID-19, identified on-site

Laos: An oral survey was conducted targeting principals of approx. 30 elementary and junior/senior high schools in Vientiane, Luang Prabang, Dongkhamxang, and Ban Keun.

	Positive impacts	Negative impacts
Schools	<ul style="list-style-type: none"> • Drastic improvements in the online learning environment • Enhanced management by school management committees and principals; increased educational gap (online teaching, increase in gas expenses, homework assignment, etc.) ◆ Increased interest in and demand for measures against COVID-19 ◆ Reaffirmation of the importance of children's health ◆ Soap, masks, and thermometers are provided by local governments. 	<ul style="list-style-type: none"> • Schools are used as accommodation for COVID-19 patients (Many teachers are infected in urban areas). • Grave impact on school management (No tuition fees collected for 2022) • School health activities are temporarily suspended except for measures against COVID-19.
Teachers	<ul style="list-style-type: none"> • More teachers in rural areas have side business. 	<ul style="list-style-type: none"> • The number of classes increased due to staggered attendance • Increase in burden due to guidance on the selection of subjects and response to online teaching • Teachers living self-sufficiently are financially less affected; cash revenue has significantly decreased particularly in sightseeing areas.
Children	<ul style="list-style-type: none"> • Mentally healthy. No obesity, bullying, etc. are observed. • Elementary school students are more willing to study than before. 	<ul style="list-style-type: none"> • Increase in dropouts due to economic difficulties particularly at junior/senior high schools in sightseeing areas • Increase in educational inequity, affecting the rate of advancement to junior/senior high schools particularly in local areas • Sharp drop in enrollment to universities

Impacts of the Ukraine crisis on economy -> Increase in gas expenses and other prices

➤ Changes in student-learning due to COVID-19, identified on-site

Nepal: An oral survey was conducted targeting approx. 20 central and local government officers.

	Positive impacts	Negative impacts
Schools	<ul style="list-style-type: none"> • Drastic improvement in online teaching and the internet environment • The National Teacher Training Center (NCED) has developed more than 3,000 online learning programs, which are available on Radio, TV, YouTube, and other media. • Higher priority is given to handwashing and basic sanitation; the governments are considering the adoption of vaccination. • New textbooks to be released describe more about COVID-19 infections. 	<ul style="list-style-type: none"> • School health activities have been suspended except for measures against COVID-19; it will continue to be difficult to distribute deworming medicine, iron supplements, women's sanitary products, etc. • Schools are used as accommodation for COVID-19 patients; consequently, parents do not allow their children to attend school to avoid infection. • It has become difficult to manage the free distribution of women's sanitary products while school is closed. • Peer learning opportunities cannot be provided.
Teachers		<ul style="list-style-type: none"> • Private school teachers are at the risk of losing their jobs, which also affects their mental health.
Children	<ul style="list-style-type: none"> • Children's hygiene practices have improved; more children wash their hands with soap. 	<ul style="list-style-type: none"> • Children are addicted to the internet and smartphones. • Children are feeling more isolated and stressed; their physical activities have declined; and their communication with others has significantly decreased. • Loss of interest in school and learning, decline in academic abilities (particularly in reading and writing)

➤ Educational activities in Japan: Teaching mental health and menstruation at an affiliated school



A computer is provided to each student to learn school health.

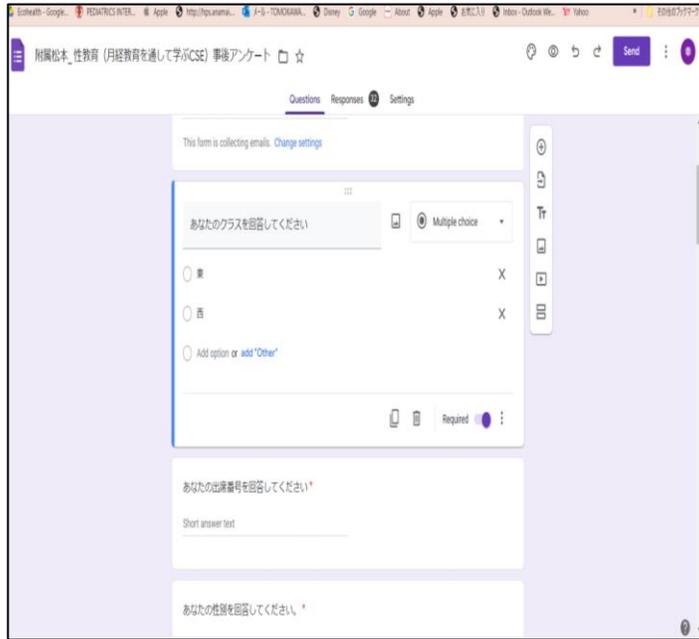
	A	B	C	D	E	F
1		XX is in menstruation. What can we do for her? Please describe your group's support ideas below.				
2	1班	そっとしておいてあげるか、話しかける。保健室に連れて行く				
3	2班	そっとする。・静かにする・体調を気にする・保健室に行くか聞く				
4	3班	そっとしておく。はげます。うるさくしないで。人目を避けてトイレに行ったのだから、生理が恥ずかしいのかもしれないから、生理には触れないようにしてそっと声をかける。				
5	4班	いつも通りに接してあげる。静かにしてあげる。体育授業のときに優しい言葉をかけてあげる。温かいものをあげる。体調を気遣ってあげる。距離感を感じさせない程度に、関わらない。				
6	5班	そっとしておくか、さりげなく気を使う。				

Group work using the Google Spreadsheet

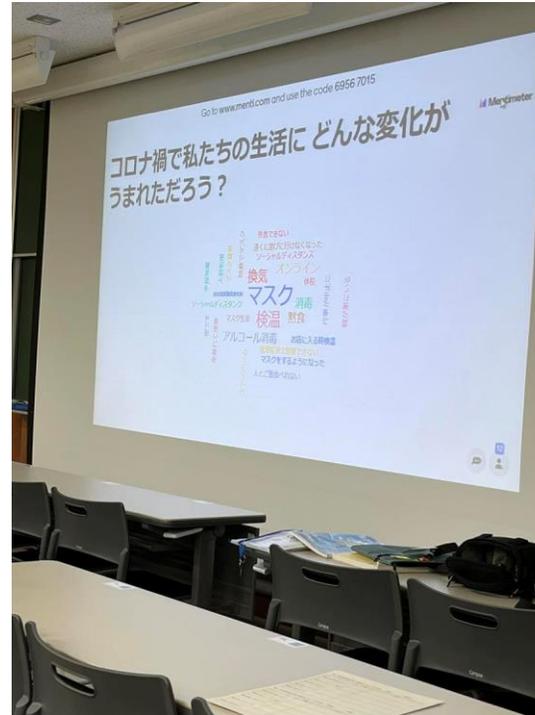


Parents attending a school health meeting

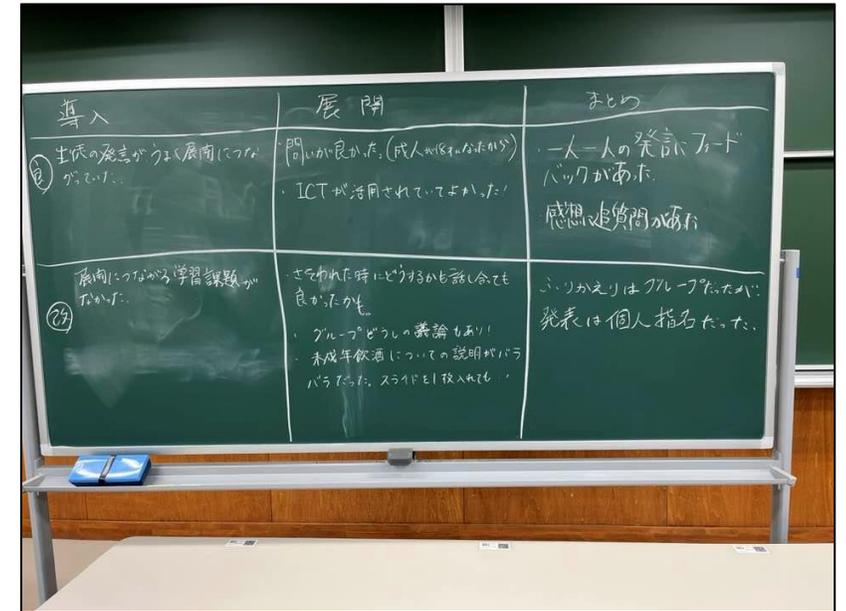
➤ Educational activities in Japan: Teaching at a teacher-training school



Teaching evaluation using a Google Form: survey on teaching practices and school needs



ICT-based school health lesson using the Mentimeter



Mock class and reflection to improve the ability to teach school health

➤ Major Research Achievements in 2021-2022, Internationalization of Japan, and Proximity to Japan in Target Countries

- Research Achievements: A total of 8 research reports, at the Japan Society of School Health Sciences, International Society of Health and Medical Sciences, Nagano Society of Physical Education, and others.
- Practice in Japan and reporting at the meetings: Nagano Prefecture Education Research Meeting, teacher certification course, Shinshu University graduate school, undergraduate classes, attached elementary schools, elementary schools in Nagano City
- Study tours in Laos by university students: 1 month in September 2022 (6 students), 17 days from December to January 2022 (8 students) Total 14 students

In total, over 40 schools experienced health checkup activities, exercise instruction (jump rope), and health education.
Japanese teachers: more than 20 Laotian teachers: more than 500 Laotian teacher training institute students: more than 200
Children measured: 11,000 in total



Teaching about the significance of health checkups in school



Developing a class-based health checkup system

➤ Future outlook/expectations for EDU-Port Japan

	Laos	Nepal
School	Request to support online-based school health monitoring & supervision and data management (DX x school administration x school health)	Re-recognition of the importance of school health Request for support to strengthen practice and research (ESD x health education -> qualitative improvement of education)
Teacher		Support for the improvement of teaching techniques using ICT (Health Education x ICT)
Children	Request for educational support for children's obesity and thinness, mental health, etc. (health screening activities x healthy food x health equipment, ex weight scale)	
Researcher	Enhancement of research capabilities related to empirical & action research → <u>Academic: Dissemination through academic papers, strengthening of researchers' networks, Public: use of media and SNS</u> <u>Observation of classroom research (training in Japan)</u> <u>*Contribute to rethinking and improving education in Japan!</u> <u>Inquiry-based learning x International cooperation (health & environment)</u>	

Thank you so much for
your attention