

2024 EDU-Port Japan

**The Process of
Nationwide Rollout of
School Health Room System and
Implementation of
School Health Checkup
Data Management in Cambodia**

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2021 EDU-Port Research Project and related projects

“Development project for hygiene education and school health room system in Cambodia by Kagawa University”

Cambodia		Ministry of Education, Youth and Sports			University of Health Science
Japan	Tokushima University	Japan International Cooperation Agency (JICA)	Ministry of Education, Culture, Science and Technology in Japan	Ministry of Health, Labour and Welfare in Japan	
2016					
2017		Visiting as JICA volunteer			
2018		JICA Grassroots Technical Cooperation Project: “Building a School Health Room System in Cambodia”			
2019	Crowdfunding	School health room system, school health text, toilet & hand-washing area	2018-19 EDU-Port Japan Supported Project: “Development of Japanese style pre-service training model for nursing teachers based on school health system in Cambodia”	National Center for Global Health and Medicine, Bureau of International Health Cooperation, Japan. / “School health examination model project”	
2020				School health check, Online training	MOU:Memorandum of Understanding (dental, medicine, nursing)
2021		National Policy of School Health in Cambodia			
2022			2021-22 EDU-Port Japan Research Project: “Development project for hygiene education and school health room system in Cambodia by Kagawa University”		
2023			Data management		





香川大学
Kagawa University

2017-20 JICA Grassroots Technical Cooperation Project “Building a School Health Room System in Cambodia”



- A citizen participation project under the Minutes of Meeting
- Training in Japan for 20 local school teachers and 5 administrative officers
- Seminars in Cambodia by Japanese experts
- University faculty members assigned to government tasks
- Follow-up by local Japanese and local staff
- 4 trips to Cambodia by the Vice President of Kagawa University
- A meeting with the Minister of Education of Cambodia, and visits to Japan by the Secretary of State of MoEYS and administrative officers in Cambodia



Output 1: School health textbook approved by Cambodia’s Ministry of Health/ Ministry of Education, Youth and Sport



Trial lesson using bacterial culture teaching materials



Trial lesson using original school health textbook

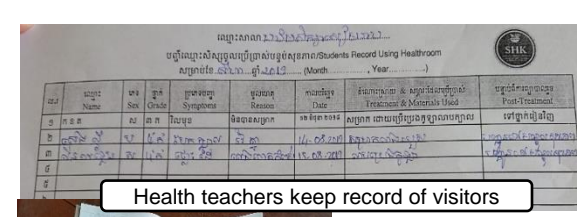


Originally developed school health textbook (For teachers and children / Khmer version, English version)



Director of School Health Department, Ministry of Education Youth and Sport attends text working meeting

Output 2: Health teachers, visit records, first aid kit management



Health teachers keep record of visitors



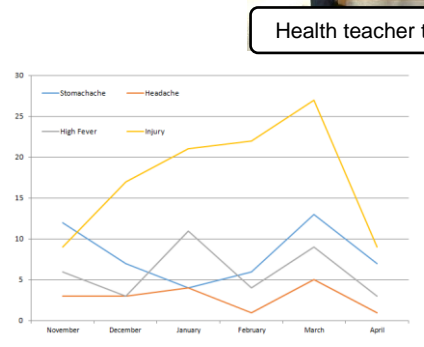
Health teacher tends to children



Health teacher treats injury



Analysis of visiting children's symptoms



Management of first-aid kits



Output 3: Construction of model hand-washing areas and toilets utilizing crowdfunding funds



Universal model toilet



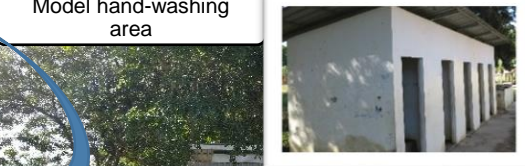
Set up in 32 elementary schools in Kandal Stung District



Model hand-washing area



Heat-shielding container-type toilet with improved ventilation equipped with hand-washing area



Model toilet for girls



School health training in Japan to promote cooperation between Cambodia's
Ministry of Health and Ministry of Education, Youth and Sport



Visit to attached elementary school health room



Deputy Director of School and Health Department, Ministry of Education, Youth and Sport of Cambodia, and Deputy Director of Preventive Medicine Department, Ministry of Health, visit the Director of the Faculty of Medicine



Attached elementary school lunch inspection



How to use hand-washing learning materials: Skill lab inspection

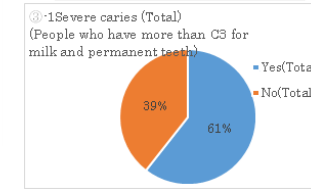
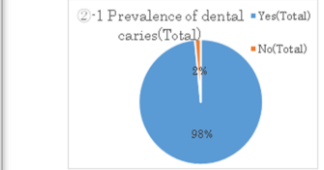


Visit to hand-washing area of attached elementary school



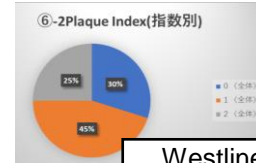
Public health lecture

Dental and Internal Medicine Health Examination Model Project with cooperation among Ministry of Health, Ministry of Education, Youth and Sport, National University of Health Sciences (Faculty of Medicine, Faculty of Dentistry, Department of Nursing), Kandal Province Medical Bureau, Education Bureau, Kandal Stueng District Elementary School, and private Westline School

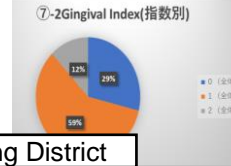
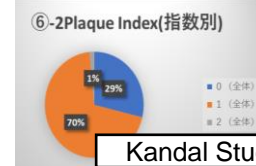


Cavities 98%
Serious cavities 61%
Treated teeth 5%

Dental plaque index 2:
WS 25%, KS 1%
Gingival index 2:
WS 23%, KS 12%



Westline School



Kandal Stueng District

Evaluation List of School Health Training in Japan (Japanese)

Q1: Training Evaluation Items Overall Evaluation Score Average (3.5/4.0)

Training Date	Training Content	
2nd Day Feb. 19 (Tue)	(1) Attached T Junior High School Inspection Training	1 - 2 - 3 - 4
	(2) Attached T Elementary School Inspection Training	
	(3) Attached T Elementary School Lunch Room Visit	
	(4) Training for Teacher Training Course	
3rd Day Feb. 20 (Wed)	(5) Attached School for Children with Special Needs Inspection Training	
	(6) Health Committee Visit Training	
	(7) Attached S Elementary School Inspection Training	
	(8) Attached S Junior High School Inspection Training	
4th Day Feb. 21 (Thu)	(9) Information exchange, facilities visit with nursing teacher and manager	
	(10) T City Health Center Visit	
	(11) T City Environmental Services Center Visit	
	(12) International Infectious Diseases Prevention Measures Lecture	
	(13) Skill Lab Visit	
	(14) Hand-washing Practical Training, AED	
	(15) Curriculum Briefing, Nursing Education Practical Training Briefing License System Briefing	
5th Day Feb. 22 (Fri)	(16) Role of Nursing Teachers in Education Committee Lecture	
	(17) Health Management Center Visit	
	(18) Hospital Visit (Pediatric Ward, Hospital School, Clean Room, Emergency Ward, etc.)	
6th Day Feb. 23 (Sat)	(19) Dental Surgery Conditions in Japan and Cambodia (Lecture and Exchange of Opinions)	
	(20) Department of Nursing Summary	
	(21) Tokushima University Professor O	

Open-ended questions
Q2: Will you be able to put your training experience at Kagawa University into use in Cambodia?
It is a good experience. To promote a school health teacher course at teacher training schools, we will gradually start with steps that are within reach. (We will include health subjects in the curriculum at teacher training schools.) We will advocate MoEYs leaders to recruit health room teachers. We can use the good aspects of Kagawa University in the context of Cambodia.
Q3: Given the current situation of the school health system in Japan, what needs to be done in Cambodia?
Organizational management and a school health system that creates basic sanitation, sanitary facilities, and health committees in schools while including them in teamwork are good for children's behavior and practices. The ministry is currently moving ahead with creating health education textbooks for children and they will be completed soon.
Q4: Are you satisfied with this training program?
It is a very good program. We will learn from this training and promote a school health program in our country.



Lectures for UHS doctors, school nurses, etc.



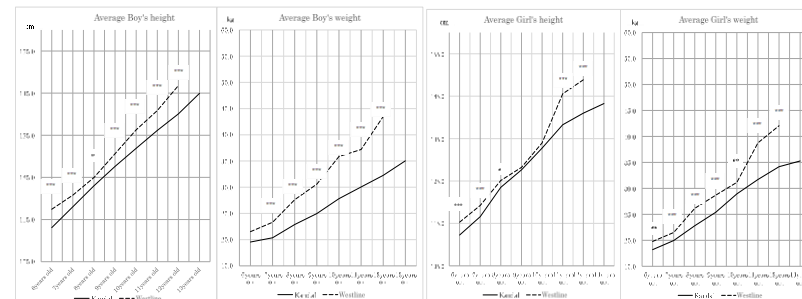
Medical examination at a private school in the capital



Doctor's medical examination



Exchange of opinions after activities



Significant difference of height and weight between 600 private elementary school students in Phnom Penh and 4,000 public elementary school students in suburbs

Body Mass Index

		Phnom Penh		Kandal Province			
Boys	n	m(Body Mass Index)	SD	n	m(Body Mass Index)	SD	Significance level(BMI)
6years old	31	15.5	1.5	256	14.8	2.1	*
7years old	108	15.9	2.8	304	14.6	2.1	***
8years old	95	17.4	3.8	240	15.0	2.5	***
9years old	83	17.7	3.2	293	15.2	2.5	***
10years old	96	19.1	4.2	318	15.9	2.5	***
11years old	102	18.4	3.9	303	16.0	2.6	***
12years old	75	19.9	4.4	217	16.4	2.9	***
13years old	90			2021			
total	590			90			
		Girls					
6years old	50	15.1	2.2	315	14.4	1.9	*
7years old	127	15.1	2.0	311	14.5	2.4	**
8years old	102	16.6	3.0	198	14.9	2.1	***
9years old	92	17.4	3.6	314	15.4	2.4	***
10years old	100	17.2	3.3	344	16	2.6	**
11years old	76	18.1	3.4	318	16.3	2.7	***
12years old	64	18.8	3.8	164	16.9	3.8	**
13years old	-	-	-	53	-	-	-
total	611			2017			

Significant difference of average BMI in each grade of 600 private elementary school students in Phnom Penh and 4,000 public elementary school students in suburbs

1. Ministry of Education, Youth and Sports

1) With the cooperation of UHS nursing teachers, measured the physique of children at model schools designated by MoEYS (May-July 2022)

2) Implement government data transfer (August-September 2022)

2. University of Health Science, Department of Nursing

1) Physical measurement training (Video and online meetings)

2) With the cooperation of MoEYS, measured the physique of children at model schools

2021 National Policy on School Health

5.5 Improve Safe, Inclusive, Comfortable and Friendly Learning Environment

- Promote the improvement of learning environment in all educational Institutions;
- Create a supportive environment for learners and educational personnel to promote behavioral change towards good health, well-being and comfort;
- Promote inspection and prevention of imports, displays or advertisements, and use of products that affect the health of learners and educational personnel;
- Promote technical solid waste management and separation in educational Institutions;
- Encourage the competition movement on “Clean School” through, for example, planting trees and building toilets;
- Prevent the use of tobacco and alcohol products in the workplace and on campuses of educational Institutions;
- Promote the installation of emergency equipment or warning signs and signs of dangers or other risks on school campuses and in community-based education services;
- Promote the installation of traffic signs as well as education on and dissemination of traffic laws to prevent traffic accidents;
- Promote education on and dissemination of information to prevent the traffic and distribution of illicit drugs in educational Institutions; and
- Promote the establishment of designated rooms or multi-purpose locations in schools for regular education and counseling on the impact of drug abuse, human trafficking and traffic accidents, for students from lower secondary to higher education levels.





EDU-Port Research Project “Development project for hygiene education and school health room system in Cambodia by Kagawa University”



JICA Shikoku Center & Cambodia office

Ministry of Education, Youth and Sport & Ministry of Health



Ministry of Health



Kagawa Prefecture

Prefectural Board of Education

Health and Physical Education Division

2017-20 JICA School Health Model Project
2019-20 NCGM School Health Check Project



NCGM



KAGAWA UNIVERSITY

Policy support

Cooperation
School medical examination survey
Medical examination data
Government centralized management system



Kagawa University

International Office

Faculty of Medicine school

International office, General Affairs Section



School health academic area
Training of advanced education researchers

MOU

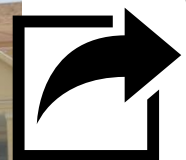
National Health Science University

School of Medicine
Faculty of Medical Technology

School Health Data Management System in Cambodia -Trial phase image-



Fixed parameters
Province ID 1-25
District ID
School ID



Variable parameters
Measurement date

Personal parameters
Personal ID



Province



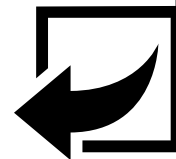
District/County



Schools
(urban areas)



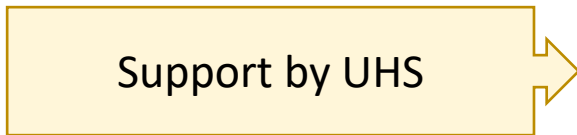
Schools
(suburbs)



Schools
(suburbs)



Schools
(regional cities)



Health examination of model schools

Measurement data

- Sex
- Birthday
- Height
- Weight
- Upper arm thickening width
- Waist circumference



Schools
(regional cities)



Calculated output data

- Measurement date
- Individual data
- Age, Gender, Average weight (a)
- Classification of obesity ($100 \times (\text{weight} - \text{average weight by age and gender}) / \text{average weight by age and gender}$)



Schools (countryside)

Ministry of
Education, Youth
and Sports

Medical Examination Data Entry System

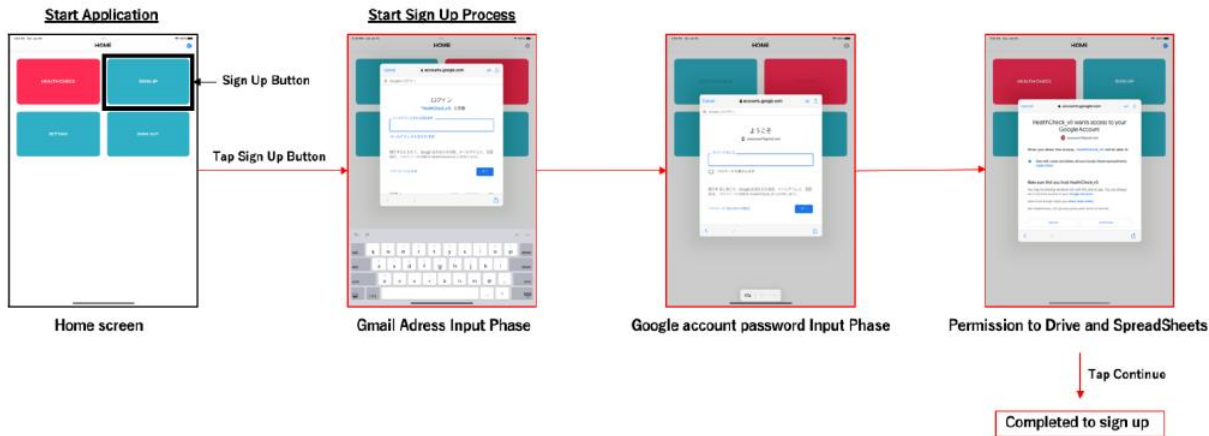
↓ Tablet user interface for the data entry system

↓ Data system structure

➤ Procedure

① Start the App → Sign up for your Google account

For details, please refer to "Sign Up for a Google Account" on page 28.



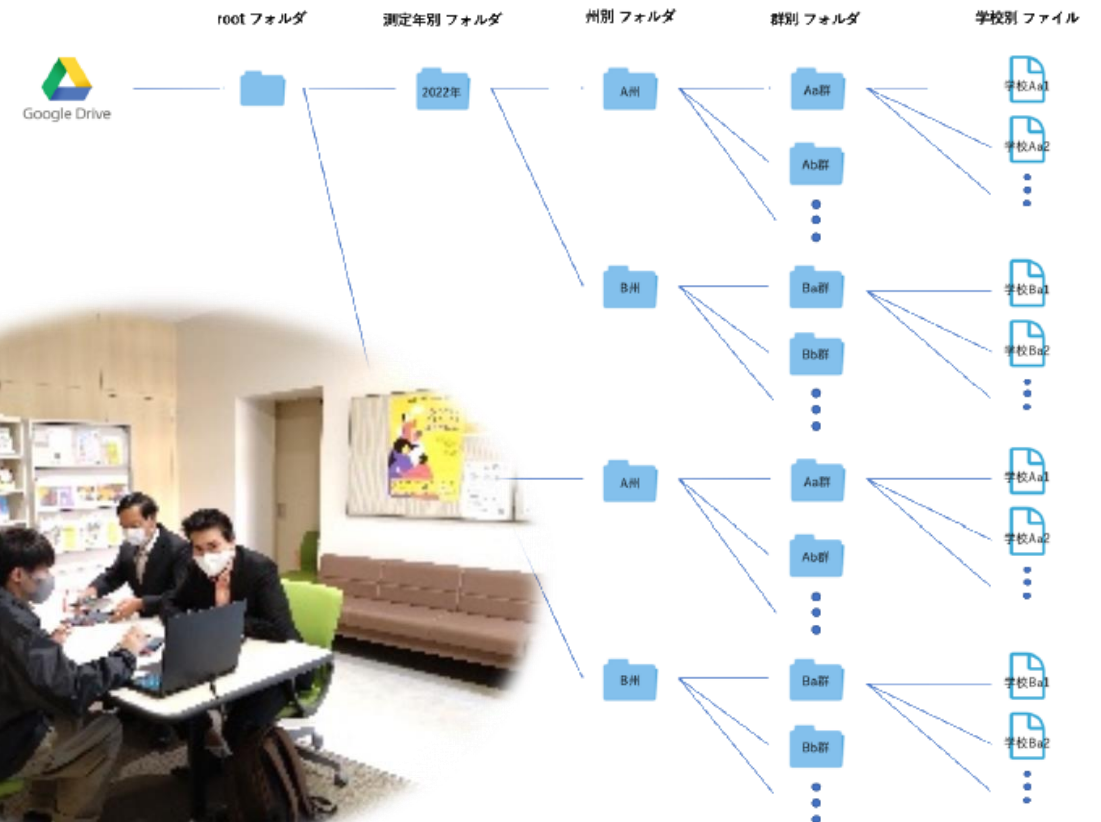
② Move to Setting screen → Read Setting Data file

For details, please refer to "Setting up directory information on Google Drive" on page 32.



● Directory structure (view of recorded data)

In the Drive, a directory structure by measurement year, state, county, and school is formed as shown in the figure below. The files are divided by school, and the health information of children is recorded for each school. For example, the file of School Aa1 in Aa County, State A in 2022 can be viewed by accessing MyDrive >>2022 folder>>State A folder>>Aa County folder>>SchoolAa1 on Drive.



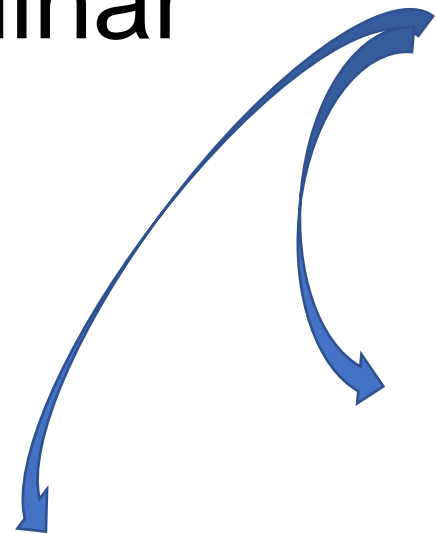


Online seminar, Training in Cambodia, and Training in Japan



FY2021 Online seminar

Government: Data entry system
Nursing university faculty members:
School health checkup procedures





↑ Children lining up for health checkups, local nursing teachers taking body measurements, school teachers keeping records



↑ Japanese teachers giving guidance



↑ Children lining up for health checkups

Local training

↑ Measurement records

Item	Weight (kg)	Height (cm)	Temp (°C)	Pulse (b/min)	BP (mmHg)	SpO2 (%)	Remarks
1	45.50	1.41	37.2	72	110/70	98	
2	45.75	1.42	37.1	73	110/70	98	
3	45.10	1.40	37.0	73	110/70	98	
4	50.99	1.52	37.0	74	115/75	98	
5	42.00	1.35	37.0	70	110/65	98	
6	45.00	1.40	37.0	70	110/65	98	
7	45.00	1.40	37.0	70	110/65	98	
8	45.00	1.40	37.0	70	110/65	98	
9	45.00	1.40	37.0	70	110/65	98	
10	45.00	1.40	37.0	70	110/65	98	
11	45.00	1.40	37.0	70	110/65	98	
12	45.00	1.40	37.0	70	110/65	98	
13	45.00	1.40	37.0	70	110/65	98	
14	45.00	1.40	37.0	70	110/65	98	
15	45.00	1.40	37.0	70	110/65	98	
16	45.00	1.40	37.0	70	110/65	98	
17	45.00	1.40	37.0	70	110/65	98	
18	45.00	1.40	37.0	70	110/65	98	
19	45.00	1.40	37.0	70	110/65	98	
20	45.00	1.40	37.0	70	110/65	98	
21	45.00	1.40	37.0	70	110/65	98	
22	45.00	1.40	37.0	70	110/65	98	
23	45.00	1.40	37.0	70	110/65	98	
24	45.00	1.40	37.0	70	110/65	98	
25	45.00	1.40	37.0	70	110/65	98	
26	45.00	1.40	37.0	70	110/65	98	
27	45.00	1.40	37.0	70	110/65	98	
28	45.00	1.40	37.0	70	110/65	98	
29	45.00	1.40	37.0	70	110/65	98	
30	45.00	1.40	37.0	70	110/65	98	
31	45.00	1.40	37.0	70	110/65	98	
32	45.00	1.40	37.0	70	110/65	98	
33	45.00	1.40	37.0	70	110/65	98	
34	45.00	1.40	37.0	70	110/65	98	
35	45.00	1.40	37.0	70	110/65	98	
36	45.00	1.40	37.0	70	110/65	98	
37	45.00	1.40	37.0	70	110/65	98	
38	45.00	1.40	37.0	70	110/65	98	
39	45.00	1.40	37.0	70	110/65	98	
40	45.00	1.40	37.0	70	110/65	98	
41	45.00	1.40	37.0	70	110/65	98	
42	45.00	1.40	37.0	70	110/65	98	
43	45.00	1.40	37.0	70	110/65	98	
44	45.00	1.40	37.0	70	110/65	98	
45	45.00	1.40	37.0	70	110/65	98	
46	45.00	1.40	37.0	70	110/65	98	
47	45.00	1.40	37.0	70	110/65	98	
48	45.00	1.40	37.0	70	110/65	98	
49	45.00	1.40	37.0	70	110/65	98	
50	45.00	1.40	37.0	70	110/65	98	



↑ Data entry into the system



↑ Checking of the entered data

Training in Japan



←↑ Training at MEXT



↑ An opinion exchange session at JICA



↑ Training at an elementary school in Tokyo



↑ The visitors looking around the school's health room



Cabinet order to establish school health rooms throughout Cambodia in September 2021

Gradually opening school health rooms from kindergarten to university
using the Japanese model



The Cambodian government's autonomous activities

Under a Cambodian government ministerial notice, school health rooms and body measurement procedures have been introduced by members of the School Health Department of the Ministry of Education, Youth and Sports.



Health room bed



Health room teacher treating an injury



Measuring weight



Measuring height (1)



Measuring height (2)



Preparing a first aid kit (ice pack)



Learning how to transport an injured person



BLS training

Data management and analysis by the chief and staff members of the School Health Department



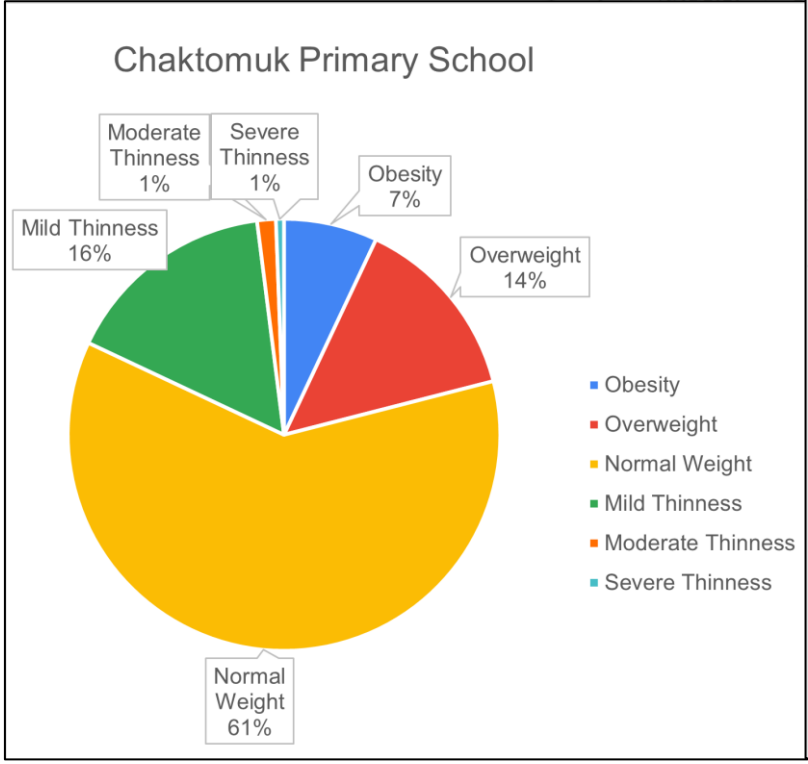
↑↓ Government officials visited the school for guidance.



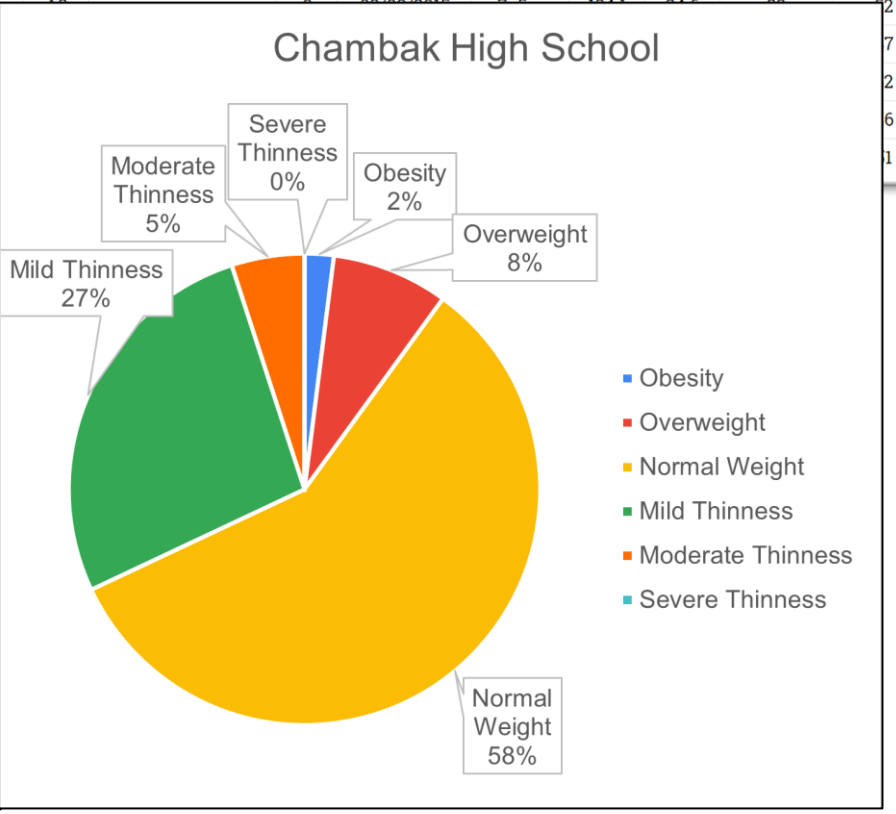
ព្រះរាជាណាចក្រកម្ពុជា
Kingdom of Cambodia
ជាតិ សាសនា ព្រះមហាក្សត្រ
Nation Religion King

ឈ្មោះសាលា : សាលាបឋមសិក្សាចតុមុខ
Name of School : Chaktomuk Primary School

ល.រ No	កាលបរិច្ឆេទ (dd/mm/yyyy)	ថ្នាក់ទី Grade	បន្ទប់ Class	ឈ្មោះជាភាសាខ្មែរ Name	ភេទ Sex (0=M)	ថ្ងៃខែឆ្នាំកំណើត (dd/mm/yyyy)	អាយុ Age	កម្ពស់ Height (cm)	ទម្ងន់ Weight (kg)	ទំហំដើមដៃ Upper arm thickening	ទំហំចង្កេះ Waist circumference	គណនា BMI
1	19/02/2023	2	A2		1	25/10/2015	7y3m	114.3	18.1	14	49	13.85
2	19/02/2023	2	A2		0	26/01/2012	11y0m	132.0	26.5	18	59	15.21
3	19/02/2023	2	A2		0	31/08/2014	8y5m	136.0	25	18	58	13.52
4	19/02/2023	2	A2		0	17/09/2015	7y5m	123.1	25.8	24	57	17.03
5	19/02/2023	2	A2		0	22/02/2015	7y5m	121.1	21.6	20	52	15.97
6	19/02/2023	2	A2		0	22/02/2015	7y5m	121.1	21.6	20	52	15.97
7	19/02/2023	2	A2		0	22/02/2015	7y5m	121.1	21.6	20	52	15.97
7	19/02/2023	2	A2		0	22/02/2015	7y5m	121.1	21.6	20	52	15.97
2	19/02/2023	2	A2		0	22/02/2015	7y5m	121.1	21.6	20	52	15.97
6	19/02/2023	2	A2		0	22/02/2015	7y5m	121.1	21.6	20	52	15.97
1	19/02/2023	2	A2		0	22/02/2015	7y5m	121.1	21.6	20	52	15.97



↑ The results of health checkups at an urban model elementary school



↑ The results of health checkups at a local high school

Summary

- Factors and secrets for successful results

The key factor for success was to respect the Cambodian government's **policy intention**, and the secrets lied in forming **a bond** with the help of pro-Japanese key persons of the Cambodian government (**such as former international students in Japan**) and building **a human relationship of trust** with project partners.

- Suggestions for international cooperation in education

Developing countries' governments seem disappointed that support projects by supporting countries tend to be suspended or discontinued when the subsidy period comes to an end. Support projects must have clear **long-term goals (validity of policy)** and **project outcomes (evaluation items)**.

- EDU-Port is expected to:

promote educational support as part of **peace diplomacy**; reflect the need for **government involvement** in export adjustments; include **organizations and members with various roles**; and contribute to the development of global human resources in Japan based on **educators' experiences**.