

No.12040/36/2013-FTC (Trg.)
Government of India
Ministry of Personnel, Personnel Grievances and Pensions
Department of Personnel and Training
[Training Division]

Block-4, Old JNU Campus
New Mehrauli Road, New Delhi-67
Dated 24th June, 2013

TRAINING CIRCULAR

Subject: Group Training Course on 'Improving Teaching Methods for Science and Mathematics in Primary Education (B) to be held in Japan under the Technical Cooperation Programme of the Government of Japan.

The undersigned is directed to state that the Japan International Cooperation Agency (JICA) has invited applications for the above mentioned training programme to be held in Japan from October 02, 2013 to November 16, 2013 under the Technical Cooperation of the Government of Japan.

2. The programme aims to formulate lesson plans which stimulate students' learning motivations, and thus contribute to improve the quality of Mathematics and Science Education in the respective countries.

3. The program is offered to Mathematics & Science Section at the Ministry of Education, Mathematics & Science section at the Board of Education, Mathematics & Science section at Primary School. The nominee for this course should either be an Educational Administrator responsible for improving school education or be a Senior Teacher of Primary School or be a Teacher at Teacher Training Institutions; have more than five years of teaching experience in Science and Mathematics in Primary School; be a Graduate of University or Equivalent; be fluent in spoken and written English; be in good health (both physically and mentally), not be a part of military service.

4. In addition, the following information in respect of the nominated officers may please be mentioned while furnishing the nomination:-

- a) Whether attended any foreign training programme in the past? If so, the duration/detail thereof;
- b) Whether cleared from vigilance angle;
- c) Age;
- d) Whether working in North East State/J&K;
- e) A brief in 50-100 words justifying the nomination.

5. The course covers the cost of a round-trip air ticket between international airport designated by JICA and Japan; travel insurance from the time of arrival in Japan to departure from Japan; allowances for (accommodation, living expenses, outfit and shipping); expenses for JICA study tours and free medical care for participants who may fall ill after reaching Japan (costs relating to pre-existing illness, pregnancy, or dental treatment are not included).

6. It is therefore requested that the nomination of suitable candidates may please be forwarded (**in duplicate**) in JICA's prescribed form (available in **persmin.nic.in**→**DOPT**→**Training Wing**→**Circular**→**JICA**) to this Department duly authenticated by the HOD of the concerned department in accordance with the eligibility criteria.

...2/-

7. The applications should reach this Department through the Administrative Ministry/State Government not later than **July 19, 2013**. Nominations received after the prescribed date will not be considered. The details of the programme may be drawn from Ministry of Personnel, Public Grievances and Pensions' website (persmin.nic.in).

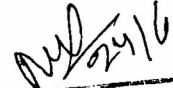

(N.K. Wadhwa)

Under Secretary to the Government of India
Tele.No.011-26165682

Copy to:

- a) The Secretary, Department of School Education & Literacy, Shastri Bhawan, Dr. Rajendra Prasad Road, New Delhi, 110001,
- b) All State Governments/Union Territories(with request to circulate the same amongst their related Departments/Organizations),
- c) NIC with request to post the circular along with the JICA's circular on this Department's website.

o/c


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ISSUED



TRAINING AND DIALOGUE PROGRAMS

GENERAL INFORMATION ON

IMPROVING TEACHING METHODS FOR SCIENCE AND MATHEMATICS IN PRIMARY EDUCATION (B)

集团研修「初等理数科教授法 (B)」

JFY 2013

<Type: Trainers Training / 類型: 人材育成普及型>

NO. J13-00754/ ID. 1380141

From September 2013 to February 2014

Phases in Japan: From October 2, 2013 to November 16, 2013

This information pertains to one of the Training and Dialogue Programs of the Japan International Cooperation Agency (JICA), which shall be implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both Governments.

I. Concept

Background

JICA has been assisting the developing countries in the field of “Science and Mathematics Education” since 1994, and the volume of assistance is rapidly increasing, reflecting the expansion of the needs in those countries as well as the high reputation of Japanese primary education in this field.

From a global point of view, it is commonly recognized that the improvement of science and mathematics education is one of the key factors for those countries’ development. The fundamental lack of human resources in this field is regarded as a serious constraint of those countries economic and industrial development. Considering the situation above, enhancement of the science and mathematics as a primary education is strongly required in many developing countries.

In fact, JICA has been implementing technical cooperation projects in this field in various countries. In parallel, training programs in Japan have been providing opportunities to cope with the common needs of those countries, which makes possible to learn Japanese experiences for the participants in effective and comprehensive manner.

This program principally aims at enhancing participants to learn how to improve the quality of science and mathematics classes in primary education in their belonging schools / organization and responsible regions.

For what?

Participants will learn knowledge and skills to formulate lesson plans which stimulate students’ learning motivations, and thus contribute to improve the quality of mathematics and science education in their countries.

For whom?

This program is offered to Mathematics & Science section at the Ministry of Education, Mathematics & Science section at the Board of Education, Mathematics & Science section at primary school.

How?

Participants shall have opportunities in Japan to identify approaches and strategies to construct lesson plans about mathematics and science through lectures, practices and observations. Participants shall also propose “Action Plan” by making the best use of the knowledge and ideas acquired and discussed in Japan, describing what he / she is expected to do after going back to respective home countries.

II. Description

1. Title (J-No.): Improving Teaching Methods for Science and Mathematics in Primary Education (B) (J13-00754)

2. Period of program

Duration of whole program:	September 2013 to February 2014
Preliminary Phase: (in a participant's home country)	September 2013 to October 2013
Core Phase in Japan:	October 2 to November 16, 2013
Finalization Phase: (in a participant's home country)	November 2013 to February 2014

3. Target Regions or Countries

Cook Islands, Ethiopia, Fiji, India, Marshall Islands, Myanmar, Niue, Palau, Papua New Guinea, Solomon Islands, Tuvalu and Vanuatu

4. Eligible / Target Organization

This program is designed for Mathematics & Science section in Ministry of Education, Mathematics & Science section in the board of Education, and / or Mathematics & Science section in primary school.

5. Total Number of Participants

Twelve (12) participants

6. Language to be used in this program

English

7. Program Objective

Teachers in primary school will improve their skill to create science and mathematics lesson and lesson plans to stimulate students' learning motivation.

8. Overall Goal

Improved teaching methods for Science and Mathematics to stimulate students' learning motivation shall be actually practiced in the participants' organization.

9. Expected Module Output and Contents:

This program consists of the following components. Details on each component are given below:

(1) Preliminary Phase in a participant's home country
 (September 2013 to October 2013)
Participating organizations make required preparation for the Program in the respective country.

Modules	Activities
Analyze respective country /areas/schools/organizations problems in science and mathematics education	Preparation and Submission of Inception Report

(2) Core Phase in Japan
 (October 2 to November 16, 2013)
Participants dispatched by the organizations attend the Program implemented in Japan.

Modules	Subjects/Agendas
1) To be able to indicate the points to be improved teacher's training system for participants country through deeply understanding of educational system and teachers' surroundings in Japan	Lectures of Japanese education system, role of Course of Study, system for lesson improvement
2) To be able to indicate concept of the applicable Action plan in participant's country through observing primary education sites, which help participants to understand a role of school and the community	Lectures and Observations regarding the curriculum and the training know-how of the university education and in-service training.
3) To be able to embody a lesson plan which promote student-centered lessons through observing and deep understanding mathematics class in Japan	Lectures and Observations of the system of school management, relationship with the education board, Parent-Teacher Association and so on.
4) To be able to improve the class through two weeks actual training in the attached primary school, practicing trial lesson and lesson review meeting	Understand the practical methods to improve lessons in science and mathematics such as lesson study, teaching material study and trial lesson through exercises and workshops
5) To prepare Action Plan with skills and knowledge acquired in the training course, which shows how to diffuse methods for better class into participants' organization	Country report presentation, Action plan preparation/presentation

<p>(3) Finalization Phase in a participant's home country (November 2013 to February 2014) <i>Participating organizations produce final outputs by making use of results brought back by participants. This phase marks the end of the Program.</i></p>	
Modules	Activities
Final Report (in three months after completion of the program in Japan)	Report and Submission of "Final Report" describing the progress of implementing "Action Plan" (by February 28, 2014).

NOTE:

JICA Hokkaido (Sapporo) might suspend the acceptance of candidates for the coming years from those organizations which does not seriously share participants' action plan, nor without reporting to JICA within the mentioned period.

10. Follow-up Cooperation by JICA

In this program, JICA might extend follow-up support to participating organizations that intend to develop the result of the project further. Please note that the support shall be extended selectively based on proposals from the participating organizations.

III. Conditions and Procedures for Application

1. Expectations for the Participating Organizations:

- (1) This program is designed primarily for organizations that intend to address specific issues or problems identified in their operation. Participating organizations are expected to use the project for those specific purposes.
- (2) This program is enriched with contents and facilitation schemes specially developed in collaboration with relevant prominent organizations in Japan. These special features enable the project to meet specific requirements of applying organizations and effectively facilitate them toward solutions for the issues and problems.
- (3) As this program is designed to facilitate organizations to come up with concrete solutions for their issues, participating organizations are expected to make due preparation before dispatching their participants to Japan by carrying out the activities of the Preliminary Phase described in section II -9.
- (4) Participating organizations are also expected to make the best use of the results achieved by their participants in Japan by carrying out the activities of the Finalization Phase described in section II -9.

2. Nominee Qualifications:

Applying Organizations are expected to select nominees who meet the following qualifications.

(1) Essential Qualifications

- 1) Applicants should fulfill at least one of the following three requirements:
 - Educational administrators responsible for improving school education
 - Senior teachers of primary schools
 - Teachers at teacher training institutions
- 2) Experience in the relevant field: have more than five (5) years of teaching experience in Science and Mathematics in primary school
- 3) Educational Background: be a graduate of university or equivalent educational background
- 4) Language: ideally have a good command of spoken and written English
- 5) Must not be serving any form of military service.
- 6) Health: must be in good health, both physically and mentally, to participate in the Program in Japan.

(2) Recommendable Qualifications

Age: be under forty-five (45) years of age

3. Required Documents for Application

- (1) **Application Form:** The Application Form is attached to this General Information.

(2) Inception Report: to be submitted with the application form. Fill in the form (ANNEX) of this General Information, and submit it along with the Application Form.

***Pregnancy**

Pregnant participants are strictly requested to attach the following documents in order to minimize the risk for their health.

- ① letter of the participant's consent to bear economic and physical risks
- ② letter of consent from the participant's supervisor
- ③ doctor's letter with agreement of her training participation.

Please ask National Staffs in JICA office for the details.

4. Procedure for Application and Selection

(1) Submitting the Application Documents

Closing date for application to the JICA Center in JAPAN: **July 29, 2013**

Note: Please confirm the closing date set by the respective country's JICA office or Embassy of Japan of your country to meet the final date in Japan.

(2) Selection

After receiving the document(s) through due administrative procedures in the respective government, the respective country's JICA office (or Japanese Embassy) shall conduct screenings, and send the documents to the JICA Center in charge in Japan, which organizes this project. Selection shall be made by the JICA Center in consultation with the organizations concerned in Japan based on submitted documents according to qualifications.

The organization with intention to utilize the opportunity of this program will be highly valued in the selection.

(3) Notice of Acceptance

Notification of results shall be made by the respective country's JICA office (or Embassy of Japan) to the respective Government by **not later than August 30, 2013.**

5. Conditions for Attendance

- (1) to observe the schedule of the program,
- (2) not to change the program subjects or extend the period of stay in Japan,
- (3) not to bring any members of their family,
- (4) to return to their home countries at the end of the program in Japan according to the travel schedule designated by JICA,
- (5) to refrain from engaging in political activities, or any form of employment for profit or gain,
- (6) to observe Japanese laws and ordinances. If there is any violation of said laws and ordinances participants may be required to return part or all of the training

expenditure depending on the severity of said violation,

- (7) to observe the rules and regulations of their place of accommodation and not to change the accommodation designated by JICA, and
- (8) to participate the whole program including a preparatory phase prior to the program in Japan. Applying organizations, after receiving notice of acceptance for their nominees, are expected to carry out the actions described in section II -9.

IV. Administrative Arrangements

1. Organizer

(1) Name: JICA Hokkaido (Sapporo)

(2) Contact : jicahkic@jica.go.jp
sictp1-tech@jica.go.jp

2. Implementing Partner

(1) Name: Hokkaido University of Education

(2) URL: <http://www.hokkyodai.ac.jp/>

3. Travel to Japan

(1) Air Ticket

The cost of a round-trip ticket between an international airport designated by JICA and Japan will be borne by JICA.

(2) Travel Insurance

Term of Insurance: From arrival to departure in Japan. The traveling time outside Japan shall not be covered.

4. Accommodation in Japan

JICA will arrange the following accommodations for the participants in Japan:

JICA Hokkaido International Center (JICA Hokkaido, Sapporo)

Address: Minami 4-25 Hondori 16-chome, Shiroishi-ku, Sapporo,
Hokkaido 003-8668, Japan

TEL: 81-11-866-8393 FAX: 81-11-866-8382

(where "81" is the country code for Japan, and "11" is the local area code)

If there is no vacancy at JICA Hokkaido, JICA will arrange alternative accommodations for the participants.

5. Expenses

The following expenses will be provided for the participants by JICA:

(1) Allowances for accommodation, living expenses, outfit, and shipping.

(2) Expenses for study tours (basically in the form of train tickets).

(3) Free medical care for participants who become ill after arriving in Japan (costs related to pre-existing illness, pregnancy, or dental treatment are not included).

(4) Expenses for program implementation, including materials.

For more details, please see p. 9-16 of the brochure for participants titled "KENSU-IN GUIDE BOOK," which will be given to the selected participants

before (or at the time of) the pre-departure orientation.

6. Pre-departure Orientation

A pre-departure orientation will be held at the respective country's JICA office (or Japanese Embassy), to provide participants with details on travel to Japan, conditions of the program, and other matters.

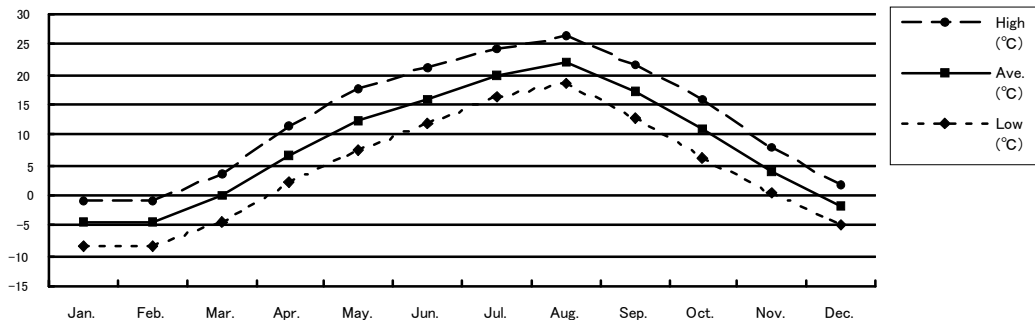
V. Other Information

1. Japanese language program will be offered to participants in JICA Hokkaido (Sapporo), to facilitate their daily life.

2. Certificate

Participants who have successfully completed the program will be awarded a certificate by JICA.

3. Climate in Sapporo



	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
High (°C)	-1	-0.8	3.4	11.4	17.8	21	24.2	26.3	21.7	15.9	7.8	1.7
Ave. (°C)	-4.4	-4.4	-0.2	6.5	12.2	16	19.8	22.1	17.1	11	4.1	-1.6
Low (°C)	-8.4	-8.5	-4.2	2.1	7.3	11.9	16.4	18.7	12.8	6.3	0.4	-5
Snow(cm)	58	83	64	2							5	28

Typical Seasonal Wear: (October - November) Long-sleeves, Thick Jacket, Sweater, Coat, Gloves.

4. Recreation

Participants can use an indoor swimming pool, gymnasium, and tennis courts located next to JICA Hokkaido. The charges are paid by JICA.

5. Equipment in JICA Hokkaido (Sapporo)

JICA Hokkaido has the following equipment for the participants.

<Private Room> Bed, Prefabricated Bath, Desk, Refrigerator, Hot pot, Bookshelf, Air Conditioning, In-room Safe, TV sets (CNN, NHK(BS), DVD/VHS Video Player)

***ATTENTION:** There are no slippers or towels. Soap, shampoo & conditioner, toothpaste & toothbrush, razor, detergent, sewing kit and CD-R can be purchased at the front desk.

<Audio-Visual equipment for training>

Video recorder, Overhead projector, Slide Projector, Multimedia Projector (available to use Microsoft Power Point)

6. School Visit

JICA encourages participants to interact with the local community, and in this context, JICA will arrange a visit to a local school during their stay in Japan. If the participant wishes to bring items to show to Japanese pupils, here are some suggestions:

Textbooks (primary school), traditional toys and games, national costumes, musical instruments, typical crafts using local materials, traditional cooking/eating utensils, pictures showing daily life, small national flag, local newspaper (Bringing these items is not a requirement).

7. Inside Shoes

In the training course, participants visit a primary school for practice and it is natural to put on inside shoes in school in Japan. Please make sure to bring your second shoes as inside shoes.

VI. ANNEX:

J13-00754

Improving Teaching Methods for Science and Mathematics in Primary Education (B)

(JFY 2013)

Inception Report

Participants are requested to prepare an inception report on the following issues and submit it with application form to JICA by **July 29, 2013**. The report should be typewritten in English on A4 size paper (21 cm x 29.5 cm) in single spacing at maximum of 10 pages.

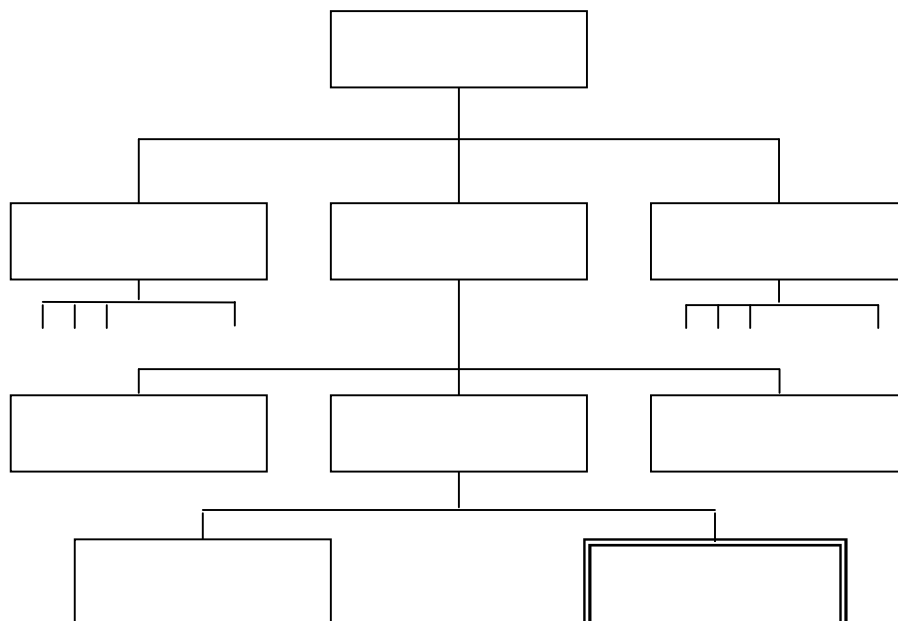
This Report shall be used for selection of participants.

1. Basic Information

Name	
Organization	
Position	
Country	

2. Outline of the participant's Organization

(example)



3. Explain your job experiences (from the present job)

Period	Organization	Position
From to		
Outline of duties: (include Grade and Subject which you teach)		

Period	Organization	Position
From to		
Outline of duties: (include Grade and Subject which you teach)		

Period	Organization	Position
From to		
Outline of duties: (include Grade and Subject which you teach)		

4. Analyze difficulties and give the reasons in terms of mathematics education in your country/area

(1) Technical aspects

No	Difficulties	Reasons
1		<ul style="list-style-type: none"> • • • • •
2		<ul style="list-style-type: none"> • • • • •
3		<ul style="list-style-type: none"> • • • • •

(2) Organizational aspects


No	Difficulties	Reasons
1		<ul style="list-style-type: none"> • • • • •
2		<ul style="list-style-type: none"> • • • • •
3		<ul style="list-style-type: none"> • • • • •

5. Analyze matters that should be improved in your organization and give the reasons in order to change the mathematics & science education in a better way

No	Matters should be improved	Reasons
1		<ul style="list-style-type: none">••••••
2		<ul style="list-style-type: none">••••••
3		<ul style="list-style-type: none">••••••

6. Explain your expectation from this training program

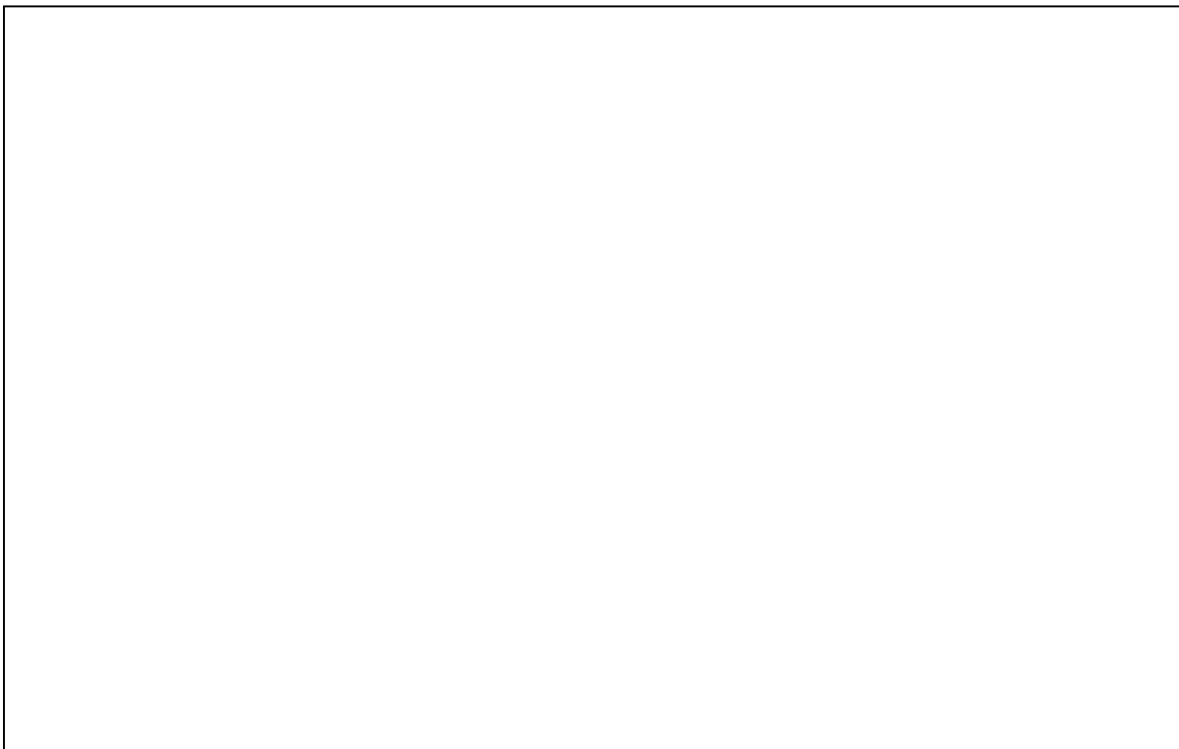
7. Explain your future plans to apply expected results of the training program after returning to your country



Question for mathematics teacher.

8. How do you teach the following question at primary school?

“If 72 pieces of paper were distributed to three (3) persons equally, how many pieces of paper are allocated for each?”

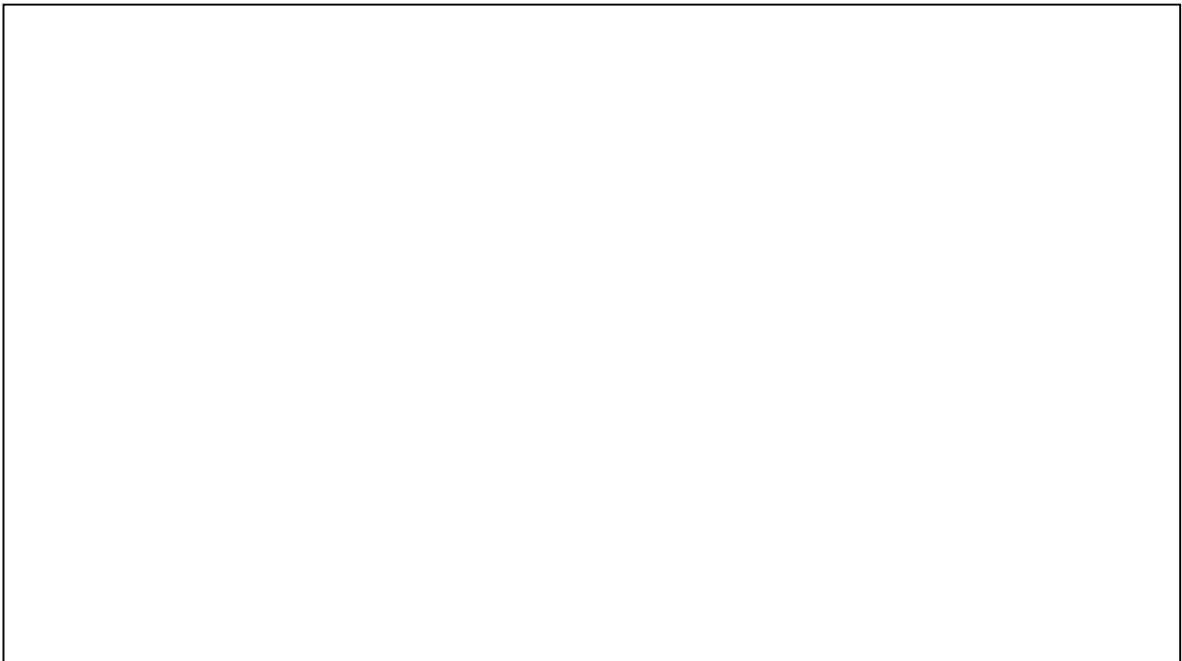


Question for science teacher

**(1)How do you teach entomology at primary school?
How to teach the formation of insect's body**



(2)Please describe one example of science experiment which has been implemented in your class, including experiment name, purpose, and points to remember



For Your Reference

JICA and Capacity Development

The key concept underpinning JICA operations since its establishment in 1974 has been the conviction that “capacity development” is central to the socioeconomic development of any country, regardless of the specific operational scheme one may be undertaking, i.e. expert assignments, development projects, development study projects, training programs, JOCV programs, etc.

Within this wide range of programs, Training Programs have long occupied an important place in JICA operations. Conducted in Japan, they provide partner countries with opportunities to acquire practical knowledge accumulated in Japanese society. Participants dispatched by partner countries might find useful knowledge and re-create their own knowledge for enhancement of their own capacity or that of the organization and society to which they belong.

About 460 pre-organized programs cover a wide range of professional fields, ranging from education, health, infrastructure, energy, trade and finance, to agriculture, rural development, gender mainstreaming, and environmental protection. A variety of programs and are being customized to address the specific needs of different target organizations, such as policy-making organizations, service provision organizations, as well as research and academic institutions. Some programs are organized to target a certain group of countries with similar developmental challenges.

Japanese Development Experience

Japan was the first non-Western country to successfully modernize its society and industrialize its economy. At the core of this process, which started more than 140 years ago, was the “*adopt and adapt*” concept by which a wide range of appropriate skills and knowledge have been imported from developed countries; these skills and knowledge have been adapted and/or improved using local skills, knowledge and initiatives. They finally became internalized in Japanese society to suit its local needs and conditions.

From engineering technology to production management methods, most of the know-how that has enabled Japan to become what it is today has emanated from this “*adoption and adaptation*” process, which, of course, has been accompanied by countless failures and errors behind the success stories. We presume that such experiences, both successful and unsuccessful, will be useful to our partners who are trying to address the challenges currently faced by developing countries.

However, it is rather challenging to share with our partners this whole body of Japan’s developmental experience. This difficulty has to do, in part, with the challenge of explaining a body of “tacit knowledge,” a type of knowledge that cannot fully be expressed in words or numbers. Adding to this difficulty are the social and cultural systems of Japan that vastly differ from those of other Western industrialized countries, and hence still remain unfamiliar to many partner countries. Simply stated, coming to Japan might be one way of overcoming such a cultural gap.

JICA, therefore, would like to invite as many leaders of partner countries as possible to come and visit us, to mingle with the Japanese people, and witness the advantages as well as the disadvantages of Japanese systems, so that integration of their findings might help them reach their developmental objectives.



CORRESPONDENCE

For enquiries and further information, please contact the JICA office or the Embassy of Japan. Further, address correspondence to:

JICA Hokkaido International Center (JICA Hokkaido, Sapporo)

Address: Minami 4-25, Hondori 16-chome, Shiroishi-ku , Sapporo,
Hokkaido, 003-8668, Japan

TEL: +81-11-866-8393 FAX: +81-11-866-8382