

The science and technology guidance for girl students in Japan

INWES Japan (Japan Women's Engineer Forum, NPO-The Women Professional Engineers Society of Japan)

Guidance for female high school students on science and technology (STEM) fields.

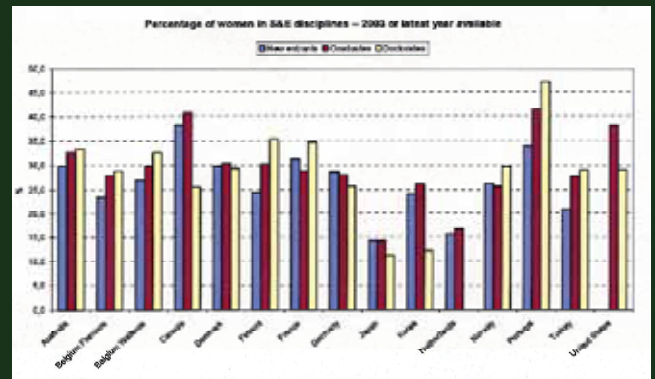
Because, we still have not many female researchers in science and technology (STEM : science, technology, engineering, and math) fields in Japan. It is an important mission for us to let female students to recognize how interest STEM fields are, and encourage them to take courses in STEM.

Goals.

- Develop the interest in STEM for female junior and high-school students.
- Encourage female high school students to go to STEM universities, colleges and graduate schools.

We, INWES-J, held seminars at senior high schools in Japan, to explain the jobs in STEM filed showing role models of the female professionals in STEM. We also had sessions of face to face advisement on the courses to be taken for job in STEM fields according to their interests and ability.

Courses to be taken for Professional Engineers and Scientists -Let's dig up your interest and ability-



STEM Career Development Activities (from 2006 to 2010) STEM: Science, Technology, Engineering, and Math

DVD and a Symposium

- Developed DVD, titled "Let's go to STEM world ! You can do anything !" (Apr.2006)

For career models, introduced eight distinguished women and their work and private. They are in the following fields: Chemistry and cosmetics, Engineering works and construction, Bio and Environment, Gene counselor, Water and environment, Chemistry technical strategy, Opportunity and work technical training, and Computer researcher.

- Symposium "Let's go to STEM world ! You can do anything !"

200 girl attendees from junior/high school students. DVD and introduction sessions by the women engineers in real world. Demonstrations of small laboratory experiments, and engineering tools etc. by women engineers/scientists in the booths were a nice time.

Participation in University Fairs

Talk to high school students about the university courses, career of STEM and joy of STEM.

- ◇ Jul. 2006, Tokyo, Fukuoka
- ◇ Aug. 2006, Hiroshima, Osaka
- ◇ Sep. 2006 Shizuoka

Lecture in High School

DVD session. STEM career and social positions of women engineers/scientists: Dr.A.Tsugawa
Options of universities and employments : Ryo Kimura.

- ◇ Shinagawa Girls High School (Jun.2006), 300 attendees.
- ◇ Fujieda Higashi High School (Dec.2007), 250 attendees.
- ◇ Tsuchiura Niko High School (Sep.2009), 280 attendees.
- ◇ Hitachi Kita High School (Jul. 2010), 250 attendees.

Participation in "Science Summer School", for high school students.

DVD session. Panel sessions of status-quo of women engineer careers, and options of universities and employments.
◇ Aug.2009, and 2010 in Saitama

Participation in "Science Summer School" ;Event of science at Tokyo Academic Park

DVD session. Panel sessions of status-quo of women engineer careers, and options of universities and employments. Q/As
◇ Nov.2009, and 2010 in Tokyo



Letters from Students

...I have had an image that most of players in STEM career are men, but now I understand a lot of women is also very active, from the DVD stories...

...I have learned women are very active in STEM career, and I felt it great...

...Until now, I had no idea to go into STEM career because it seems very hard. But I start to think that it could be enjoyable, from DVD and teachers stories...

...I understand I can choose rich road maps if I go into STEM career...

...I learned that there are diverse domains in the STEM career and there are many choices to achieve my objectives...

...I have had an somewhat rigid image in STEM career. But from DVD stories, I saw many women work vividly and consistently through work and childrearing, I felt it is great...

If you are interested in making things

Subject	Possible future career
Engineering	
Architectonics	Architectural firm, Construction consultant, Real-estate developer, Government agency (Urban planning division)
Civil engineering	Government agency (Urban planning division), Local overnment, General construction contractor, Construction consultant, lectricity firm, Telecommunications company, Railway company
Infotech	Computer company, Software development company, Consulting firm, Self-owned business
Electronics, Electrotechnology	Electronic manufacturer, Electricity firm, Computer manufacturer, Office equipment manufacturer, Chemical machinery manufacturer, Aircraft equipment manufacturer, Consulting firm, Electricity firm, Government agency
Management engineering	manufacturer, Bank, Hospital, Insurance company, Retail company, Consulting firm
Machine engineering	Manufacturer, Machinery manufacturer, Shipping company, Electronic manufacturer, Textile company, Steel company, Engineering & consulting firm, Government agency
Aerospace engineering	Aircraft equipment manufacturer, Air transport company, Car manufacturer, Machinery manufacturer, Airline company, IT company, Space development institute

If you are interested in living creatures

Subject	Possible future career
Biology	
Biochemistry	Pharmaceutical industry, Chemical industry, Food industry, University, Research institute, Government agency such as Ministry of Health, Labour and Welfare and Ministry of Agriculture, Forestry and Fisheries
Biology	Teacher, University, Government agency such as Ministry of Health, Labour and Welfare, and Ministry of Agriculture, Forestry and Fisheries, Private company
Cytology, Molecular biology	University research institute, Biotechnology industry, Pharmaceutical industry
Bionomics	Government agency such as Ministry of Agriculture, Forestry and Fisheries, Research institute
Genetics	Hospital, Government research institutes and/oriversity research institutes that research plants and animals
Microbiology	Government research institutes, Chemical industry, Food industry, Water treatment plant, Water treatment ompany
Physiology	Research Institutes that belong to government, university and NPO etc.

We express our sincere gratitude to people around the world for the warm messages and support after the unprecedented disaster that hit Japan on the 11th March. (INWES -Japan)