

# Forum

Skills Evaluation System Promotion Program  
SESPP

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## Current events of the program

SESPP for the current year focuses on institutional activities between government agencies, industrial communities and Japan Vocational Ability Development Association (JAVADA) because they are essential to the development and expansion of skills evaluation systems in Asian countries.

- In Indonesia, ASTRA held its first skills competition (machine inspection) with 86 contestants in August last year. The competition was cosponsored by the National Body for Professional Certification (BNSP: Badan Nasional Sertifikasi Profesi) and JAVADA and supported by Japanese companies. The participants who achieved good results were considered to have passed the practical examinations of the National Trade Skill Tests.
- In Thailand, the Department of Skill Development (DSD) and JAVADA ran a four-day session of a Seminar to review skill standard and practical work assignments of Commercial Wiring that 40 people attended from vocational schools in the provinces and from the electric utility industry. They proposed level 2 & 3 skills standards, and tried and verified the assignments of the level 1 practical work.



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- In the Philippines, a skills competition on welding and finishing is to be held in January this year by the Technical Education and Skills Development Authority (TESDA), GBFI Technical Training Center, metal processing industry community, and JAVADA. Two Japanese demonstrators are scheduled to attend the competition.

### Skills Competition and Abilympics— For the first time held at the same time

Last October, national tournaments of these two contests took place at the same time in Yamaguchi prefecture. An enthusiastic crowd of 86,000 spectators visited the sites and thoroughly enjoyed the two events. At the opening ceremony, groups of contestants representing their prefectures marched into the grounds one after another with their prefectural flags held high. They heralded the 2007 World Skills Competition in Shizuoka.

For more information, visit:

<http://www.mhlw.go.jp/houdou/2005/10/h1031-1.html>

<http://www.pref.yamaguchi.lg.jp/gyosei/ginou/index.htm>



## Workshop on Skills Evaluation Method

- (1) First workshop (held from Saturday, July 23 to Wednesday, August 3)

Participants attended a five-day session composed of lectures at the Overseas Vocational Training Association (OVTA) and practical training at the Advanced Polytechnic Center. After this, they went to see the National Trade Skill Tests in Yamanashi prefecture and Senbokuya, a metal stamping company in Kanagawa prefecture.

At the farewell dinner, songs from their own countries were sung one after another. They all vowed to work for future friendship and development.

The first and second workshops were held for the trades of CNC turning and milling, and metal pressing.

Attendees: Indonesia (five participants), the Philippines (five participants), the Philippines (five participants) and Vietnam (five participants)



### *Comment from Ma. Isabel G. Gamurot (Philippines' Participant)*

The Workshop on "Skills Evaluation Method FY 2005 on CNC Lathe (Turning)/Milling and Metal Press" sponsored and conducted by Japan Vocational Ability Development Association (JAVADA) under the auspices of the Ministry of Health, Labor and Welfare (MHLW) of the Government of Japan, was held from July 23 to August 3, 2005, at OVTA, Chiba City, Japan. The opportunity allowed us to gain a deeper understanding and application of knowledge, skills and attitudes in the development of competency standards, assessments and in the conduct of skills evaluation and certification activities from among participating countries (Philippines, Indonesia, and Vietnam) with shared experiences from Japan.

The on-site studies in the Advanced Polytechnic Center, Yamanashi Personnel Development Center and Senbokuya Corporation provided us with the great opportunity to widen our insights on how these institutions maintain high quality in their operations as well as in the conduct of skills evaluation activities along Japan's National Trade Skills Testing and Certification (NTSTC) program.

With the continued support of JAVADA and collaborative efforts from among ASEAN member-countries we can share with our countrymen what we have learned towards quality and global competitiveness of our middle-level workers imbued with world class competence and positive work values not only in Metals and Engineering Sector but across all the sectors of the industry in the region.

In behalf of the participants, we would like to extend our heartfelt gratitude and sincerest thanks to JAVADA and its partners for this laudable undertaking. More power and success! Domo Arigato Gozaimasu!



- (2) Second workshop (held from Saturday, October 22 to Wednesday, November 2)



The trainees, as with those at the first workshop, attended lectures and practical training, and then went to see Skills Competition and Abilympics in Yamaguchi. Blessed with good weather, they enjoyed the best season in Japan.

[Attendees: China (five participants), Malaysia (five participants), Thailand (five participants) and Sri Lanka (two participants)]

(3) Third Workshop (held from Tuesday, December 13 to Friday, December 16 in Thailand) for commercial wiring.

The third workshop took place in Suphanburi, Thailand, a province 100 kilometers north of Bangkok, the capital of the country. It was the first training seminar for skills evaluation methods held outside Japan.

The workshop was attended by about 40 trainees from DSD, provincial training centers, and the electrical services industry.

The seminar was held in Thailand mainly thanks to a former trainee from that country who had attended the Workshop on Skills Evaluation Methods for Commercial Wiring Workers (third workshop in FY2004), conducted in Nagoya in March 2005 in cooperation with Toenec Corporation. The former trainee brought what he had learned there back to his homeland, and tried to introduce the knowledge acquired to its skills evaluation system. The ex-trainee requested that a workshop be held in Thailand so that as many Thais as possible could attend it and would be able to work to promote and establish a system of trade skill tests for commercial wiring workers. His wish was granted with the completion of the seminar.



In a lecture, Dr. Hironobu Nakano, professor of the Department of Electrical Systems Engineering of the Polytechnic University, explained the system of qualifications for electrical engineering and introduced some recent cases of accidents in electrical work. (left)

Mr. Nakajima, a lecturer from Toenec, conducted demonstrations (left below) for groups of trainees who studied and considered assignments for trade skill tests. (below)



Participants try out the assignments for the trade skill tests. (below)



After the trial, their products were graded.



This four-day seminar achieved solid progress towards the revision of the existing trade skill tests for commercial wiring.





## Skill Evaluators Training

As of December 31, 50 trainees had completed training courses at 12 partner companies, and two were under training at one. (Number of trainees by country as of December 31)

### *“Our Skill Evaluators Training” A report from Sunrise Industry Co., Ltd.*

Since December 2003, we have been accepting trainees from Dalian Sunchirin Auto Parts, our subsidiary that was established in April 2002, from which 17 employees have been admitted so far. For this training course (from August 17 to October 21), we took care of three trainees.

Our company and this subsidiary produce pipe fittings for car air conditioners. We provide skill evaluators with training mainly for major processes involved in manufacturing the products. In particular, they are expected to learn about aluminum tube cutting, working with plastics, and welding.

The training course this time was conducted for skills evaluation of three types of jobs: brazing; end forming; and final inspection. It was carried out based on the curriculum below:

	Completed			Under training		
	Male	Female	Total	Male	Female	Total
Indonesia	6	1	7	0	0	0
Thailand	10	2	12	0	0	0
China	9	12	21	1	1	2
Philippines	6	0	6	0	0	0
Malaysia	2	1	3	0	0	0
Vietnam	1	0	1	0	0	0
	<b>50</b>			<b>2</b>		

	Subjects
1	Outline of the skills evaluation system in Japan
2	ISO 9001 quality control system and its requirements
3	Engineering drawing and basics of measurement
4	How to use measuring instruments and basics of measurement methods
5	Basics of judgment criteria
6	Basics of skills
7	Basics of training and evaluation methods
8	Making assignments for skills evaluation
9	Conducting an examination using the assignments
10	Interview with a trainer to assess the examination
11	Wrap-up of the entire training

Evaluation criteria, the major theme of this training course, require evaluators to judge first whether a worker has processed a product in accordance with the "operation standards" and "quality specifications" and then whether the process has been completed in the standard time. They then check by eye the appearance of the product that the trainee has finished, next assess whether it has been manufactured according to the exact size specified in the design drawing, and finally make a comprehensive evaluation. The training course, therefore, includes subjects selected to help participants learn how to read drawings and use measuring instruments with which they can gauge products.

We believe the evaluators should not only master how to improve the skills of workers, but also play a role in their home country in helping each worker to understand how to improve product quality itself, make production processes more efficient, and enhance productivity.

In March 2005, Dalian Sunchirin Auto Parts held a skills evaluation trial. Evaluators of the trial, who we accepted for training last year, judged Saturday the examinees strictly. Their strict judgment criteria showed how much they had learned at the skill evaluators training course in Japan. For example, they understood well that one of the minimum standards for evaluation is whether a worker complies with the "rules" for the tasks. The quality of the products, however, is lower than that of goods manufactured by Japanese companies. Evaluators that understand judgment and evaluation criteria in Japan can play an important role in reducing the number defective parts and preventing them from being shipped. We hope they will fully make the most of the abilities they have gained for evaluation.

## Training at Sunrise Industry Co., Ltd. by Han Yi-Tao

I stayed in Japan for training for two months. The days seem to have flown by. Before visiting Japan as a trainee, I watched a competition at the Dalian factory in early March 2005. Judging from it, I thought it was enough only to learn the processing speed and the quality of the products.

However, I was surprised to find out Japanese factories have apparently adopted much stricter evaluation systems, quality standards, and work procedures than those in Dalian for producing goods. As an evaluator of the skills of the final inspection workers, I was especially astonished at the numerous items to check the finished products. Limits have been clearly defined for scratches, which are found through the appearance inspection, depending on their size and location. We have no such definitions in Dalian. I felt sure that the development of Japanese technologies has been driven by such detailed evaluation.

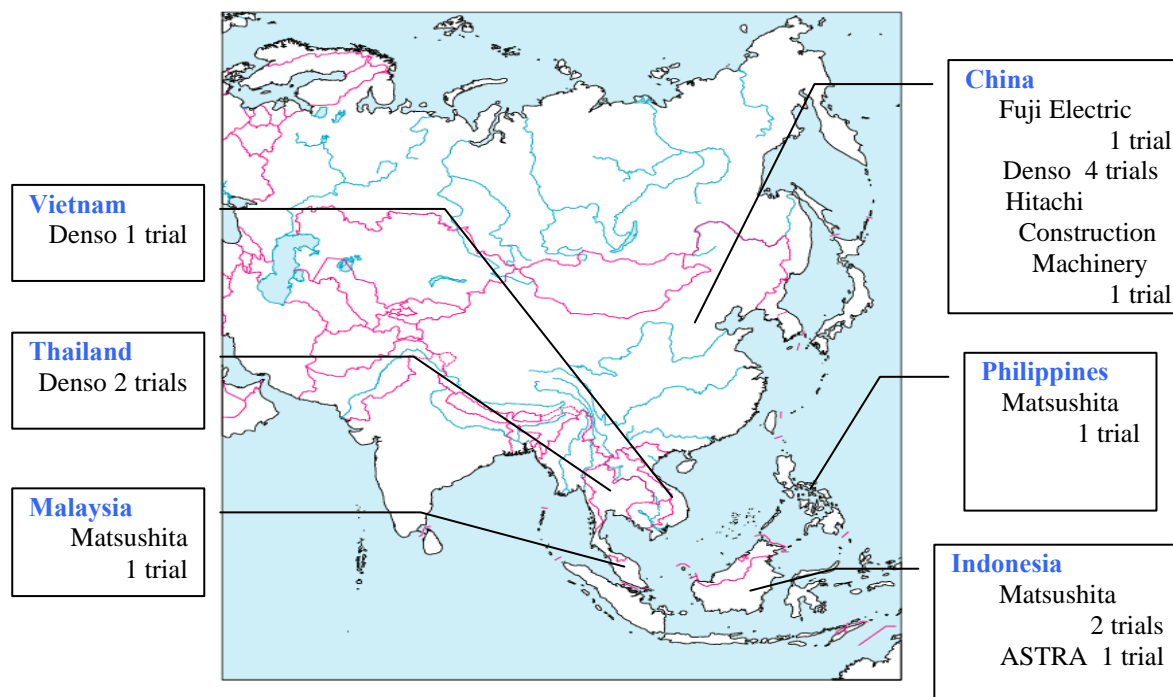
I wish I could have stayed longer in Japan to learn more.

Finally, I would like to thank all those who gave me such a great opportunity.

JAVADA staff visit trainees at least once during their period of training. They are each time full of admiration to see how hard the trainees are working.

### Skills Evaluation Trials

As of December 31, 14 trials had been conducted in six countries.



Other 17 trials are scheduled to take place in these six countries by the end of March.

## *Case Report of the Skills Evaluation Trials*

### *—Achievements of the Skills Evaluation Trials and the Future Challenges*

by Mr. Toshio Tsuruta, Monozukuri (Manufacturing) Training Center, Matsushita Electric Industrial Co., Ltd.

Selected countries: Malaysia, Indonesia and the Philippines

- For: (1) Skills Competition for a "better quality" of skills for 9 jobs  
 (2) Trade Skill Tests for "larger numbers" of technicians for 10 jobs

In principle, examinees try assignments at the same level as those for national or company examinations in Japan. Only for applicants for third grade technicians in Southeast Asian countries are tasks for a unique level prepared.

- By: Matsushita Group: local subsidiaries and Human Resources Development Company (Japan)
- (1) Skills Competition: Local Steering Committee, Local Manufacturing Techniques Committee, and HRDC
- (2) Trade Skill Tests: Local Steering Committee, Secretariat for Trade Skill Tests in Southeast Asia, and HRDC
- \* Local Steering Committee: Composed of local staff;
  - \* Local Manufacturing Techniques Committee: Composed of Japanese staff on loan to local subsidiaries;
  - \* Secretariat for Trade Skill Tests in Southeast Asia: Regional Training Center, Panasonic Singapore

For trade skill tests in particular, it is crucial to preserve and maintain the qualifying standards. The responsibility is assumed by the Secretariat for Trade Skill Tests in Southeast Asia and HRDC (its Secretariat for In-house Trade Skill Tests). The trend in the number of participants of Skills Evaluation Trials from Matsushita is shown on the right.

### *Reviews and challenges*

Manufacturing overseas has been under the supervision of factories in Japan, which control the whole production process as mother plants. In some business fields, however, factories in foreign countries are now functioning in almost the same way as those in Japan.

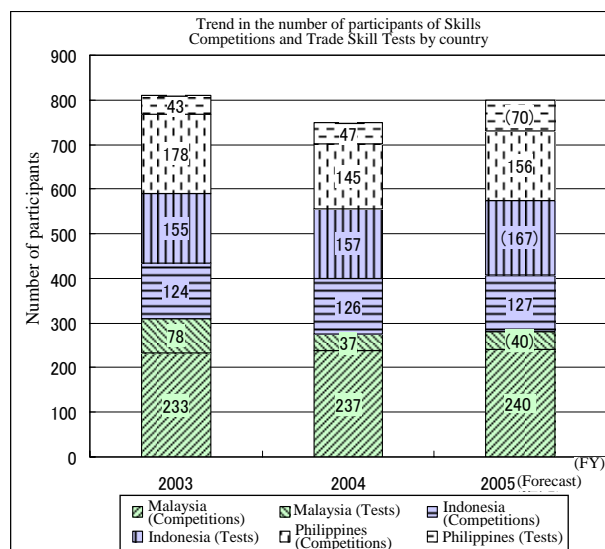
Normally, under the standard production system of Matsushita, the axis of commercialization, from product development to trial production, is under the supervision of departments in Japan while overseas factories are responsible for supply chain management (SCM), from the procurement of materials through manufacturing to shipment). They are expected, therefore, to manufacture products of a quality that is as good as those made in Japan.

Currently, the skills required on the manufacturing floor are changing. Greater importance is being placed on management ability and information technology (IT). On the other hand, many people tend to regard conventional skills as less significant. This tendency is especially noticeable outside Japan, and it is one of the obstacles to fostering technicians. In reality, however, no goods can be manufactured in a factory without engineers and technicians who not only work to make the products, but also know a great deal about facilities and controlling.

The Japanese electronics industry became dominant in the global market mainly because Japan had a higher level of manufacturing techniques for production processes, as well as expertise in electronics. Japan produced goods that the rest of the world has admired for their high quality and reasonable prices. Japanese manufacturing was based on dies, molds and other facilities that supported high productivity and the engineers and technicians that built them.

However, the global market has greatly changed. As the demands of the clients are diversifying, more flexible, resilient manufacturing is being required in order to respond to their requests. This is changing the methods of manufacturing, and factories overseas are required to manufacture goods that are more difficult to imitate, and obtain the skills and techniques that support such manufacturing.

The Skills Evaluation System Promotion Program is developing an environment in which "education, by the local people, for the local people, and of the local people" can be provided and they themselves certify the skills needed to evaluate the achievements of this education. What we need to do next, we believe, is to offer a package of education and certification and establish a system under which these can be developed through mutual reinforcement. We also believe that we should maintain a system that can produce excellent engineers and technicians, who are the major force behind making countries more competitive.



In Japan, JAVADA is taking the initiative in developing a system involving the united efforts of public agencies and private organizations. We hope similar systems will be established in foreign countries so that we can work in collaboration with governments there. Consistent activities to foster technicians cannot be maintained by the public sector alone since, once the president of a local subsidiary changes, attitudes towards education can easily shift. Human resources, in particular, can never be developed without efforts designed from a long-term perspective. The next challenge is, therefore, to establish schemes and systems where local technicians can be trained in their home countries from a national-level and long-term perspective in a sustained manner.

***Our Efforts in the Philippines***  
**by Mr. Shigeo Yonekura, Monozukuri (Manufacturing) Training Center,  
Matsushita Electric Industrial Co., Ltd.**

In September we held a Skills Competition for Matsushita Group companies in the Philippines, in which 156 contestants participated in 11 events. The Competition is evolving year by year. Workers that had attended Skill Evaluators Training in Japan played a central role in training contestants before the Competition, making preparations for it, and evaluating and grading the products of the entrants. With their hard work for and contribution to the Competition, the contest was completed safely and successfully. Now they are discussing what they should do to make the Competition more useful and significant. We hope their further active role in the future.



Participants in the "machine inspection" contest: Ms. Remedios V. Hernandez (right end), committee member and chief machine inspector, completed Skill Evaluators Training in 2004.



***THE 1st SKILL COMPETITION OF ASTRA MANUFACTURING POLYTECHNIC***  
**August 9 to 10, 2005**

**by Mr. Rony Sudamawan Theryo**

ASTRA Manufacturing Polytechnic is an educational institution in Jakarta, Indonesia. With JAVADA's support, ASTRA and BNSP (Badan Nasional Sertifikasi Profesi) co-hosted "The 1st Skill Competition" for posturing the globalization, especially the world activity to motivate the interest and appreciate the young generation to choose and learn skills that still has the industries and society, especially the field of metal and engineering competencies.

Of 86 students who participated in the Skill Competition, twelve students were selected through Pre-Selection including written test and practical test. They have had been trained for certain period of time before attending final competition. We divided the process of skill competition into 2 steps because of the limitation of equipment and of course to reduce cost.



The prior consultation with JAVADA



Students taking written test before practical test



During the training, all the twelve participants are taught the correct method how to use measuring instruments, the assessment system and the technical execution of skill competition.

Their attitudes are also important factor to judge in the process of the skill competition. In the process of training the trainer and the assessor work together as a team to prepare all of the students to challenge the event of the skill competition.



Training before Skill Competition

The 1st Skill Competition of ASTRA Manufacturing Polytechnic contested one trade only that is Machine Inspection Level 3 according to the standard of JAVADA. The practical test consists of 3 kinds of measuring:

1. Direct measuring of measurements
2. Indirect measuring of measurements
3. Estimating surface roughness quality.



Scene of the Skill Competition

The participants enthusiastically competed each other to achieve the best Prize of the reward presented by ASTRA Manufacture Polytechnic and Certificate of Merit from JAVADA

Six prize winners out of 12 finalists were selected. The nominators of the Skill Competition were judged by the team of assessors and invigilated by JAVADA, Mr. Takada. The winners of the Skill Competition was very happy and proud of themselves with Mr. Yakub Liman, the director of ASTRA Manufacturing Polytechnic (right end) and Mr. Mitsunobu Kawakami, the director of JAVADA (left end).



The prize winners at the Skill Competition

The Skill Competition was closed by a speech of Mr. Mitsunobu Kawakami, director of JAVADA. He expected that this event of Skill Competition should be continued and possibly to participate in World Skill Competition in the future.

We sincerely appreciate JAVADA, BNSP, PT. EBARA Indonesia, Mitsutoyo Indonesia and all sponsors for their support which led the Skill Competition to a great success.

**We would like to have your comments, opinions, and suggestions for future topics. Please contact us.**

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