

J-Skills News



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The Skills Evaluation System Promotion Program (SESPP) implements seminars and Skills Evaluation Trials (SETs), conducted by Japanese experts, in Vietnam, Cambodia, and Indonesia, in order to transfer Japan's skills evaluation know-how to these countries.

JTB Corporation has been entrusted the project, and has established the SESPP Secretariat at the Kasumigaseki Division.

J-Skills News, published three times a year, covers issues such as approaches taken by businesses, in order to promote utilization of Japanese standards-based skills evaluation.

□ Training Report

Due to the spread of COVID-19, for this fiscal year also, we are implementing remote training sessions through online connections between Japanese experts and on-site participants. This issue provides reports on Power Distribution and Control Panel Assembly in Cambodia, Turning Level 3 national occupational skills assessment and Grade 2 Mechanical Inspection in Vietnam.

■ Grade 2 Skills Assessor Training (SAT) for Power Distribution and Control Panel Assembly in Cambodia

Grade 3 training for Power Distribution and Control Panel Assembly had been implemented in Cambodia up to FY2018, and this resulted in the certification of five assessors.

For this fiscal year, remote Grade 2 SAT was implemented from October 18 (Mon) to 22 (Fri), 2021, through connections between the Industrial Technical Institute (ITI) and Japan, with the aim of further improving the level of Power Distribution and Control Panel Assembly.

Mr. Yukio Hagiuda (Toshiba Infrastructure Equipment Technology Corporation*), who was in charge of Grade 3, provided his services as lecturer for these sessions.

There were eight participants, all of whom were Grade 3 completed participants.

Following the "SESPP Project Explanation", the training included Grade 2 "Practical Test Question Explanation", "Work Manual Explanation", "Practical Test Implementation Procedure Explanation", "Practical Skills Scoring Standards Explanation", "Practical Skills Scoring Procedure Explanation", "Scoring Method Explanation", and an "Assessor Check-sheet Explanation", and after preparing completed Grade 2 practical test questions on both Japan and ITI sides, sessions commenced with detailed explanations of the differences between Grade 2 and Grade 3.

The lecturer, Mr. Hagiuda, gave a favourable review, stating, "While three years have passed since training was last implemented, with the added advantage that all participants were completed participants of Grade 3 SAT, I feel that the content of the training sessions was well understood, even via the remote environment".

*Indicated affiliation is as of the time of lecture implementation



Lecture given by the Japan-side lecturer



On-site training



On-site training

■ Turning Level 3 national occupational skills assessment in Vietnam (equivalent to Japanese skills assessment Grade 2)

With the support of SESPP and other projects, Turning Works has been implemented as a national occupational skills assessment in Vietnam since 2018.

For the first time, support has been provided from the perspective of national occupational skills assessment as the main theme, with the objective of ascertaining the actual state of national occupational skills assessment in Vietnam in the preparation, implementation, and scoring stages, and the kinds of test questions (theoretical/practical) and scoring procedures that have been adopted.

These training sessions were implemented from November 22 (Mon) - 26 (Fri), 2021, at the Hanoi Industrial Vocational College (HIVC). The schedule consisted of preparations on the first day, followed by national occupational skills assessments over a three-day period from the second day, with a general meeting, summarization of materials, and creation of reports conducted on the final day.

There were three assessors and nine examinees, of which four achieved a pass grade.

Mr. Fumio Inagawa (Technical Advisor, SESPP Secretariat) put forward the following reviews.

- 1 Regarding assessors
- I was impressed by the appropriate application of testing methods learned through SESPP training programs.
- I highly rate the implementation of the scoring, which showed an understanding of the double-checking method and its importance.
- 2 Regarding practical test questions and working times
- I was informed that the Turning Level 3 practical test questions were created by adjusting Japanese Grade 2 questions to reflect actual conditions in Vietnam.
- Standard working time was set at three hours, with cut-off time set at three and a half hours, and considering the difficulty of the questions, this was a suitable working time. Eight of the nine examinees completed work before the cut-off time, and four achieved the pass grade, which can be taken as proof that working time provided in relation to the level of the test questions is suitable.
- 3 Regarding test pass rate
- The pass rate for Japan's Grade 2 skills assessment is 25-35%, and many companies, etc. rate this favourably for its value as a qualification. Looking at the test results this time, the pass rate for the theoretical test was 100%, which leads me to think that the questions may have been too easy. This indicates a need to analyse test results and review test questions.
- Meanwhile, a 44% practical test pass rate shows results to be within a suitable range for initial test results.
- Qualifications for which pass rates are unusually high are considered to have no value, and as companies, etc. also attribute little value to such qualifications, this does not to lead to increased numbers of examinees. The pass rates for Japan's skills assessments are roughly; Special Grade: 15-25%, Grade 1: 20-30%, Grade 2: 25-35%, and Grade 3: 50-65%. This maintains the value of the qualifications, and is highly rated by companies, etc. I would also like to see continual efforts in Vietnam to review test questions in order to maintain suitable pass rates by analysing feedback information from assessment centers and test results.
- *Furthermore, the above views were given as an expert's impressions/comments at the general meeting comprised of the supervisor team, the assessor team, and the technical support staff. The chairman of the general meeting accepted the comments and indicated that they would be reported to the DVET as the opinions of a Japanese expert.



Lecture given by the Japan-side lecturer



Skills assessment in Vietnam (Theoretical test)



Skills assessment in Vietnam (Practical test)

■ Grade 2 Mechanical Inspection Skills Assessor Training (SAT) in Vietnam

SATs for Grade 2 Mechanical Inspection were implemented at the Hanoi Industrial Vocational College (HIVC) for the first time, from January 10 (Mon) - 14 (Fri), 2022.

Grade 2 Mechanical Inspection, a job-trade that demands knowledge and skills related to precision measurement, is a highly popular job-trade, and many employees from manufacturing related Japanese companies sit these exams.

"Working tests for production, etc.", while the last two days provided training on implementation methods for "Working tests for practical test planning, etc.", and sixteen participants, including one online participant, attended these sessions.

Mr. Fumio Inagawa (Technical Advisor, SESPP Secretariat) put forward the following reviews.

- ① Regarding the accuracy of measuring instruments
- Regarding measuring instruments used in Work-1, I noticed that accuracy was poor and some sections were unusable.
 - For production, participants were instructed to keep parallelism for sections measured by height gauge to below 0.01mm, and for sections measured by cylinder gauge to remain within ± 0.2 mm of the ring gauge used.
 - I explained that since the aim of mechanical inspection work is to assess precision measurement skills, it is important to proceed with work with due consideration given to aspects such as the accuracy of instruments used, instrumental error, room temperature management, etc. and urged participants to reform their understanding of precision measurement work.
- 2 Regarding verification of measurement work conducted during online training
- Measurements by height gauge and measurements of base tangent length by gear tooth micrometer are not implemented in Grade 3 Mechanical Inspection. Participants first implement this work in Grade 2.
- In the online training, it was difficult to confirm in detail whether participants were conducting the work in the correct manner.
- Consequently, I felt that, when commencing the Skills Evaluation Trials (SETs), there is a need to confirm the working methods they actually use on-site before proceeding.
- 3 Regarding participants' problem-solving abilities
- Questions for working tests for practical test planning, etc. (50 points), are solved using Pythagorean Theorem and trigonometric functions related formulae, and require problem-solving abilities in geometry and mathematics.

 Two of the participants achieved a score of over 45 points, which indicated to me that they were of a high level.

Some of the participants achieved a score of over 45 points, which indicated to me that they were of a high level. Some of the participants opted to use tangent formulae and quadratic equations to solve the problems, instead of methods indicated in the solutions table (solving method involving the creation of right-angle triangles and the application of trigonometric functions), and their problem-solving was excellent. I shared with all the participants, the importance of scoring that takes creative problem-solving like this into consideration.

Furthermore, participants responded with opinions such as, "The content of the program is very well constructed", "Instead of taking multiple years to achieve assessor certification, I would like to be able to receive training continuously over one year", and "I would like to receive training in Japan", etc.



Lecture given by the Japan-side lecturer



On-site training



On-site training

■ Implementation status of skills assessment in Japan in FY2020

In FY2020, 716,000 examinees took the tests, of which 299,000 achieved passes and were awarded the title of "Skilled Worker". The cumulative total of persons who have achieved passes since the tests were established has reached 7,637,348. Tests in the previous fiscal year were cancelled due to the impact of COVID-19, and both the number of test applicants and the number of persons achieving pass grades decreased by just under 18% compared to the previous fiscal year.

Looking at FY2020 by grade shows that Grade 2 attracted the most examinees. When looking at numbers by jobtrades, the job-trade that attracted the most examinees was Financial Planning, followed by Mechanical Maintenance, Scaffolding, Mechanical Inspection, and Machining.

Implementation status by grade

v implementation of Branch					
Grade (Skills and knowledge required to pass skills assessment)	Number of test applicants (year-on-year comparison)	Number of successful examinees (year-on-year comparison)	Pass rate (Previous year)		
Special Grade (Skills/knowledge required by managers or supervisors)	4,534 (-7.5%)				
Grade 1 (Skills/knowledge required by senior level skilled workers)	61,087 (-36.5%)	14,664 (-50.7%)			
Grade 2 (Skills/knowledge required by mid-level skilled workers)	272,778 (-17.0%)	=			
Grade 3 (Skills/knowledge required by junior-level skilled workers)	225,948 (-19.2%)	-			
Non-classified Grade (Job-trades not classified by grade, with skills/knowledge equivalent to Grade 1)	1,095 (-61.1%)				
Total	565,442	215,181	-		

^{*} In addition to the above, there are assessments for technical intern trainees (Basic Grade, Grade 3, and Grade 2). There were 150,758 examinees in FY2020, with 84, 378 passes.

◆ Job-trades with many test examination applicants (Totals for all grades)

Job-trade	Number of test applicants	Year-on-year comparison	Number of successful examinees	Year-on-year comparison
Financial Planning	435,424	-8.3%	152,115	+6.5%
Mechanical Maintenance	25,744	-33.5%	8,551	-46.0%
Scaffolding	16,408	-10.0%	10,172	-14.5%
Mechanical Inspection	15,216	-21.8%	8,540	-27.1%
Machining	15,079	-43.3%	8,413	-47.9%

(Reference) Ministry of Health, Labour and Welfare press release material https://www.mhlw.go.jp/stf/newpage 19883.html

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