



## Global Weighing Industry Newsletter Edition 4 (1/2021)

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### Experts-designed measurement classes for elementary school children in Japan

Tokyo Metropolitan Government Inspection Institute of Weights and Measures (TMII), Tokyo Metrology Association, Tokyo Certified Measurers Association, Japanese Cooperative Union for Glass Measuring Instruments Industry and Measuring Instruments Consultants Association have collaborated closely delivering classes on measurement for elementary school students in Tokyo.

The classes started in 2005 in order to raise awareness for measurement.

The classroom activities designed and developed by experts include crafting a thermometer, crafting a wooden balance scale, and checking the weights of objects.

Schools can choose one of the above activities for their extracurricular classes. Volunteer experts from the associations and TMII usually start with small talk to break the ice on measurement in daily life followed by an explanation in more detail such as SI Units. After that, students build a



simple thermometer or a wooden balance scale, assisted by experts. Wooden balance scales were used daily in the Edo Period in Japan. Students enjoy weighing objects around them with their hand-made scales and are surprised how those scales are accurate when comparing the weights with those by digital scales. Checking-weights-of-objects activity aims to help students understand the concepts of commodity quantification system and quantity tolerance by weighing sample objects with digital scales in groups and compare actual amount with indicated amount. Wooden scale crafts kits are handmade by volunteer experts.

In 2005, when the activities began, about 1,400 students participated in cooperation with more than 200 volunteers from the associations and TMII. Since then, volunteer experts have visited around 15 schools every year and interacted with 600-900 students except for 2020 in which activities were cancelled due to the spread of the Corona Virus.

Members of the three associations exchange opinions and share information in order to improve the activity at the end of the year. The main topic of 2020 must be how they can carry out the activity with careful attention to the virus.

According to experts, they feel the classroom activity is worthwhile when children show a positive reaction and feedback. It is sure that this kind of activity gives a great opportunity for children to understand that we are surrounded by measurement and how measurement has an impact on our lives.