REPORT ON the Training on Outcome-based Engineering Education

The training on Outcome-based Engineering Education was held on **June 11th, 2021** virtually on Zoom. The training was hosted by NPU-FEIAP "Belt and Road" Engineering Education Training Center (NFTC) and supported by CAST, China Association of Science and Technology. The moderator and speaker is Academician Professor. Ir. Dr. Chuah Hean Teik, Chairman of FEIAP Standing Committee on Engineering Education. A total of 298 participants from China, Myanmar, Malaysia, Singapore, the Philippines, Cambodia, Pakistan, Kenya, Nigeria, Rwanda and Mauritius, etc., attended the training.

Objectives of the training:

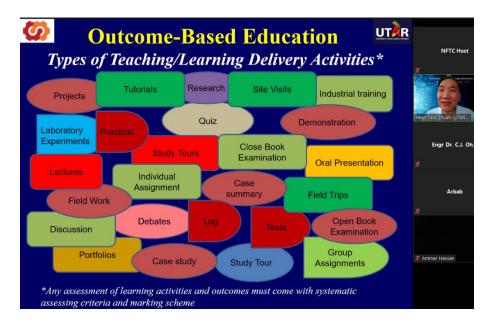
The objectives of the training are:

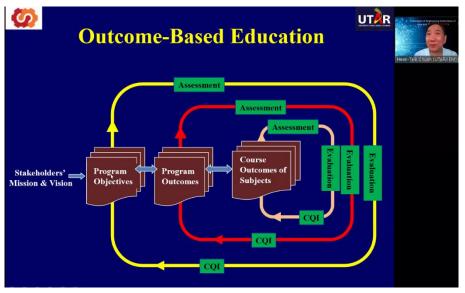
1) to help participants understand what Outcome-based Education (OBE) is and its basic concepts;

2) to introduce Bloom's Learning Taxonomy, Assessment and Evaluation Methods, and Continual Quality Improvement Process to Participants.

Professor Chuah Hean Teik first made detailed explanations of the basic concepts of Outcome-based Education in Engineering Programmes: Programme Education Objectives (PEO), Programme Outcomes (PO), Course Outcomes (CO) and Performance Indicators. He explicitly introduced the differences among those concepts and the applications with examples. Prof. Chuah then gave a training on the assessment and evaluation methods and the different assessment tools for different outcomes. The next training contents are the assessment process and the continual quality improvement. Prof. Chuah mentioned some current issues for educators and explained possible solutions. In the last part, Prof. Chuah moderated the Q&A session where participants asked questions about the elaboration of certain concepts and the applications of the mentioned methods.







Visions and Objectives

NPU-FEIAP B&R Engineering Education Training Center (NFTC)

<u>Visions</u>

- 1. To have a unified and inclusive Engineering Education Standards which promotes mutual recognition of the Engineering Education Programs (Engineer, Engineering Technologist and Technician programs) among Economies in the B&R Initiative region and FEIAP member economies.
- 2. To facilitate and to promote mobility of the Engineers, Engineering Technologists and Technicians among the economies in B&R Initiative region and FEIAP member economies.
- 3. To provide continuous professional development to increase the number of competent

Engineers, Engineering Technologists and Technicians who will help the economies to develop into developed nations

- 4. To promote understanding of civilization in B&R Initiative region and FEIAP member economies via cultivation of cultural intelligence in engineering education.
- 5. To promote students exchange programs among universities in the B&R Initiative region and FEIAP member economies.

Objectives

- 1. The NFTC is set up in NPU, Xian, China.
- 2. To conduct Engineering Education Accreditation Training (EEAT) based on established FEIAP Engineering Education Guidelines, FIEAP Engineering Technologist and Technician Education Guidelines
- 3. The Engineering Education Accreditation Training (EEAT) will cover training of Assessors, Academics and Accreditation Agencies of the economies in the B&R Initiative region and FEIAP member economies.
- 4. To facilitate and promote of mutual recognition of Engineering Education Programs among the Universities in the B&R Initiative region and FEIAP member econmies, which is keystone for the mobility of Engineering Personnel (e.g. Engineers, Engineering Technologists and Engineering Technicians).
- To facilitate and promote students exchange program among the Universities in the B&R Initiative region and FEIAP member economies.
- 6. To facilitate and promote the mobility of engineering personnel (e.g. Engineer, Engineering Technologist and Technician) who has fulfilled the FEIAP Engineering Education Standards in the economies of the B&R Initiative region and FEIAP member economies.
- 7. To conduct Professional Development courses for Infrastructure Development and Maintenance for the Engineers, Engineering Technologists and Technicians.
- To facilitate and promote the networking of the engineering personnel (e.g. Engineer, Engineering Technologist and Technician and Academics) to share knowledge, experiences, business

opportunities and friendship for closer ties among the engineering fraternity in the economies of the B&R Initiative region and FEIAP member economies.

9. To improve and keep up to development of the world on the Engineering Education and Training to benefit the economies of the B&R Initiative region and FEIAP member economies.

10. To be a platform for exchange of academics and engineering students in B&R and FEIAP member economies.