EDISI 2023

Buletin FKA

Pengajian Kejuruteraan Awam Universiti Teknologi MARA Cawangan Pulau Pinang



HALF DAY ON OPEN-ENDED LABORATORY COURSE

Ts Dr Zuhaida Mohd Zaki

Date: 20 September 2023 Venue: Online Organised by: IEM Training Academy Sdn. Bhd. Speaker: Ts Dr Zuhaida Mohd Zaki, PM Ir Dr Liew Chia Pao, Ir Dr Siti Hawa Hamzah

The half-day session on open-ended laboratory activities proved to be an insightful and engaging experience for all participants. Here's a summary of the key highlights and takeaways:

Introduction to Open-Ended Laboratory:

The session commenced with an introduction to the concept of open-ended laboratory activities. Participants gained a clear understanding of how these activities promote critical thinking, problem-solving skills, and creativity among students. The traditional method of teaching laboratory courses is through guided assignments. This is also referred to as the prescriptive method. However, in the context of outcome-based learning environments, this method is no longer adequate. It could not provide a platform for students to explore their simulations and design their experimental works. The purpose of this course is to provide instructors/lecturers/tutors with knowledge on the OEL approach in T&L. By the end of the workshop, they should be able to design and conduct OEL activities as well as assessments to fulfill the requirements of the EAC accreditation.



The brochure of the online course

Examples and Case Studies: Various example of courses that apply OEL were presented to illustrate the implementation of open-ended laboratory tasks across different engineering disciplines. These examples ranged from simple experiments to complex projects, showcasing the versatility and applicability of the approach.

Hands-On Activities: Participants had the opportunity to engage in hands-on activities designed to simulate open-ended laboratory scenarios. These activities encouraged collaboration, experimentation, and innovative thinking, allowing participants to experience firsthand the benefits of this approach. Best Practices and Strategies: Throughout the session, best practices and effective strategies for designing and implementing open-ended laboratory activities were discussed. Emphasis was placed on creating clear objectives, providing adequate resources and support, and fostering a supportive learning environment.

Challenges and Solutions: The session also addressed common challenges associated with open-ended laboratory activities, such as time constraints, resource limitations, and assessment difficulties. Participants shared their experiences and brainstormed potential solutions to overcome these challenges.

Networking and Collaboration: The half-day session provided a valuable opportunity for networking and collaboration among educators and professionals from diverse backgrounds. Participants exchanged ideas, shared experiences, and forged connections that will continue to enrich their teaching practices. Conclusion: Overall, the half-day session on open-ended laboratory activities was a resounding success, inspiring participants to embrace innovative approaches to teaching and learning. By incorporating open-ended tasks into their curricula, educators can empower students to become lifelong learners and creative problem solvers.

We extend our sincere thanks to all participants for their active engagement and contributions to the session. We look forward to continuing the dialogue and exploration of open-ended laboratory approaches in future initiatives.