Research

UMPSA lecturer invents I-GCPM Modular to help students deepen project management and professional certification exams

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GAMBANG, 18 September 2023 - Researcher and senior lecturer, Faculty of Industrial Management (FPI), Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA), Associate Professor Dr. Lee Chia Kuang, 38, conducted a research titled ‘A New Interactive Global Certified Project Management (I-GCPM) Modular’.

I-GCPM Modular is a new interactive project management teaching modular concept that combines DEMATEL Digraph, Risk Simulator and modular training provided through an online platform.

According to Associate Professor Dr. Lee Chia Kuang, it aims to help students immerse themselves in project management and professional certification exams such as the Certified Associate in Project Management (CAPM®).

“I-GCPM has been successfully used, tested and validated in the teaching of 136 students towards CAPM® certification.

“Until 2023, all students have successfully become members of the Certified Project Management Institute (PMI), and 48 of them are CAPM® accredited certificate holders,” he said.

He started this research in 2019 and the complete modular concept was completed in 2021.

He said the innovated modular was used in the PMBOK® 6th Edition Training 1.0 Programme: Towards CAPM® Certification on 1 October 2020 under the Ministry of Higher Education Graduate Employability Grant worth RM84,600.00.

“While PMBOK® 6th Edition Training 2.0: Towards CAPM® Certification was conducted on 14 January 2021 under the PENJANA KPT-PACE programme worth RM60,000.00 and PMBOK® 6th Edition Training 3.0: Towards CAPM® Certification on 1 July 2023 under the PENJANA KPT-PACE programme worth RM75,000.00.

“This idea began when the market demand for digital project management increased since 2019 and online teaching became a requirement under the Movement Control Order (MCO) in 2020.

“Innovating efforts have been made on modules and teaching methods so that students can understand and master project management effectively online,” he said.

He further explained that this research began on his own initiative and from the support of the MTUN Commercialisation Fund as well as the implementation of the modular training concept through the Ministry of Higher Education Graduate Employability grant and the PENJANA KPT-PACE

programme.

“I would like to express my high appreciation to Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) and the Ministry of Higher Education for providing an opportunity to test its effectiveness through the Ministry of Higher Education Graduate Employability Grant and the PENJANA KPT-PACE Programme,” he said, who graduated with a Doctorate of Philosophy (Civil Engineering) from the University of Auckland, New Zealand.

According to him, I-GCPM works in 3 main phases, namely Phase 1 involving guidance to students and theoretical teaching on all 13 project management courses through online training.

“All topics are adapted from the Project Management Book of Knowledge (PMBOK®) and simplified to make it more accessible and understandable for students.

“Phase 2 involves guidance to students through Risk Simulator and DEMATEL Digraph, as well as the teaching of the concept of simulation, interpretation and quantitative project handling.

“Students will learn quantitative decision-making techniques,” he said.

He added that Phase 3 involves mentoring students through 150 tutoring questions with guided example answers.

“The difficulty level of the designed questions is divided into three, namely easy, medium and difficult.

“The research outcomes also aim to enable instructors to teach better, standardise the teaching approach of project management more effectively and help students towards accredited certification in the field of project management,” he said.

This initiative can also help developing countries like Malaysia in developing their human capital faster.

He hoped that the function and use of the modules could be extended to the project-based industry for the benefit of project management practitioners and professionals.

“This innovation is a continuation of my other innovations such as E-GCPM Modular, DEMATEL Digraph and can be used together to increase the effectiveness and mastery of students in project management,” he explained.

Earlier, he also won a gold medal at ITEX 2019, a gold medal and Outstanding Innovation Award at the MTE Sustainable Development Goals (SDG) International Innovations Awards (25-29 October 2021) and a gold medal at the Malaysia Technology Expo (MTE) 2023 (16-18 March 2023).

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