

PERCEPTION ON THE SUPPORT FOR ROBOT-BASED TEACHING AND LEARNING INNOVATION: A CASE STUDY OF VOCATIONAL COLLEGE STUDENTS

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ABSTRACT

This research presents the results of study on the perception of vocational students using purposive sampling with 420 samples on the support of teaching and learning innovation with robot-assisted instruction among administrators of vocational education college. The data were collected using Likert Rating Scale questionnaires, Descriptive Statistics and Multiple Regression Analysis (MRA). The study results revealed that the level of opinion on Fostering Robotics Knowledge/Skills (FRKS) and Innovative Outcomes in Robot-Based Teaching (IORBT) was entirely at the “high” level. In addition, the details of indicators in each aspect also revealed that the FRKS issues were (4) Sufficient Resource (SRES) and the IORBT indicators were: (2) Socio-technical systems design (TECH&DESIGN) at the “middle” level. This indicates that there is still a gap in development that must be implemented to reach the “Very High” level according to the management policy for vocational educational institutions of the government sector. The multiple regression test of each FRKS aspect to IORBT found in six statistically significant factors; (1) Organizational responsibilities and structure (ORS), (2) support of supervisor/ department head (SDHS), (3) awareness of organization to result creating (AORC), (4) reward and recognition (R&R), (5) sufficient resource (SRES), and (6) freedom of work (FRWO). The actions must be accelerated to align with the business context agreeing with government policies to develop a workforce that is ready for FRKS to meet the needs of the changing labor market.

Keywords: Support Awareness, Teaching and Learning Innovation, Robot-Based Teaching, Vocational College

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