

INFLUENCE LIVELINESS ABILITIES AND REASONING ADAPTIVE LEARNING OF STUDENTS IN LEARNING STRATEGIC APPROACH WITH INTELLIGENT CONTROL SYSTEM OF LEARNING METAPHORICAL THINKING

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ABSTRACT

This study aimed to describe and analyze the influence of activity of learning, adaptive reasoning ability and metaphorical thinking learning of the strategic competence of learning subjects Intelligent Control System (ICS). This type of research is *expost facto*. This study population was all student VI level study program (Prodi) Technical Education (Diknik) Mechatronics. Samples are all study program Mechatronics students who took a course ICS. Data collection technique used observation, questionnaires and tests. The research instruments include the observation sheets, questionnaires Likert scale, and strategic competence tests ICS. Data analysis techniques to answer the problem formulation using correlation and multiple regression analysis. The results of research are: (1) There was significant liveliness effect of learning on strategic competence ICS study subjects with metaphorical thinking approach to learning with $R = 0,6647$ or 66,47%; (2) There was significant the influence of adaptive reasoning to strategic competence SKC study subjects with metaphorical thinking approach to learning with $R = 0,5806$ atau 58,1%; (3) There was significant the influence of metaphorical thinking learning on strategic competence ICS study subjects with $R = 0,3769$ or 37,7%; (4) There was significant the influence of liveliness effect of learning, adaptive reasoning ability, and metaphorical thinking learning together on strategic competence ICS study subjects with $F 54,77$ and regression equation $y = -78.734 + 2.332 X_1 + 0.664 X_2 + 0.409 X_3 + e$.

Kata Kunci: *approach metaphorical thinking, active learning, adaptive reasoning, and strategic competencies, Intelligent Control Systems*