World Academy of Science, Engineering and Technology International Journal of Educational and Pedagogical Sciences Vol:17, No:07, 2023

Efficacy of Self-Assessment Metacognitive Strategy on Academic Performance Among Upper Basic Students in Ankpa, Kogi State, Nigeria

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Abstract: This study investigated the Efficacy of Self-Assessment Metacognitive Strategy on Academic performance in Energy Concepts among Upper Basic Science Students in Ankpa, Kogi State, Nigeria. The research design adopted for the study was a Quasi-experimental control group design which employed a pretest, posttest of the experimental and control groups. The population of the study consisted of one hundred and twenty-four (124) JSSII Students; sixty-five (65) for the experimental group and (59) for the control group. The instrument used for the study was the Energy Concept Performance Test (ECPT), with a reliability coefficient of 0.80. Two research questions were answered using descriptive statistics of mean and standard deviation, while two hypotheses were tested using a t-test at $P \le 0.05$ level of significance. The findings of the study revealed that the use of the Self-Assessment Metacognitive Strategy has a positive effect on students' performance in energy concepts among upper Basic Science Students leading to high academic performance; also, there is no significant difference in the mean Academic Performance scores between Male and Female students taught Energy Concept using Self-Assessment Metacognitive Strategy. Based on the research findings, recommendations were made, which include that Secondary school teachers should be encouraged the use Self-Assessment Metacognitive strategy so as to make the learning process attractive, interactive and enriching to the learners.

Keywords: metacognition, self-assessment, performance, efficacy

Conference Title: ICEDAS 2023: International Conference on Education, Digitalization and Sustainability

Conference Location: Toronto, Canada Conference Dates: July 10-11, 2023