****

FROM ACCESS TO ACHIEVEMENT: EVALUATING THE EFFECTIVENESS OF PROJECT CODE JUMP IN ENHANCING JAVA PROGRAMMING SKILLS AND ENGAGEMENT OF GRADE 12 TVL-ICT STUDENTS

JOSE RAY REDEEMIR M. CALANOG
Teacher V
Lemery Senior High School

ABSTRACT

This action research investigated the effectiveness of Project CODE JUMP (Creating Opportunities for Distance Education in Java NCIII Using Mobile Platform) in enhancing the learning engagement, accessibility, usefulness, comprehension, programming skills, and self-efficacy of Grade 12 TVL-ICT students in Java programming. Building on the original Project CODE JUMP, the study sought to address identified gaps such as limited offline accessibility, insufficient feedback mechanisms, and the need for more advanced and contextualized programming tasks. Using surveys, interviews, and classroom observations, data were collected and analyzed to determine the impact of the intervention. Results revealed that students strongly agreed on the platform's ability to foster motivation, enjoyment, and competence, while moderate ratings highlighted areas requiring refinement, particularly in persistence, efficiency, and real-world application. The proposed innovation, Project CODE JUMP 2.0 (Coding-Oriented Digital Engagement for Java Understanding, Mastery and Persistence) , integrates expanded coding simulations, offline modules, enhanced feedback systems, gamification, and advanced Java topics to ensure inclusivity and deeper mastery. Dissemination activities include presentations to stakeholders, faculty workshops, student

****

****

****

forums, and publication of findings. The study concludes that Project CODE JUMP 2.0 is a plausible and transformative intervention that aligns with DepEd's learner-centered policies and global goals for equitable digital education, ensuring sustainability and responsiveness to learners' needs.

Keywords: *Project CODE JUMP 2.0, Java programming, mobile learning, self-efficacy, engagement, accessibility, ICT education, action research*