

# The Influence of Instructors' Technological Pedagogical and Content Knowledge (TPaCK) on the Self-Regulated Learning-Online (SRL-O) of the Students

**Joseline M. Santos**

PhD, Bulacan State University, Bulacan, Philippines

## **Abstract:**

This study investigates the impact of instructors' Technological Pedagogical and Content Knowledge (TPACK) on students' Self-Regulated Learning-Online (SRL-O) in a state university in Bulacan, Philippines. Employing a quantitative-correlational research design, the study aims to provide evidence-based recommendations for enhancing online education. The participants included 299 instructors and 381 students from six campuses, selected through random sampling. Data were collected using validated survey instruments tailored for TPACK and SRL-O. Results revealed a significant and positive correlation between instructors' TPACK and students' SRL-O, with regression analysis showing that TPACK accounts for 90.2% of the variance in SRL-O. This underscores the critical role of instructors' ability to integrate technology, pedagogy, and content in fostering students' self-regulation in online learning. Key findings highlight that while instructors generally possess a moderate understanding of TPACK, areas such as Technological Content Knowledge (TCK) and Technological Pedagogical Content Knowledge (TPCK) require further enhancement. For students, dimensions of SRL-O, including task strategies, effort regulation, and planning, were positively rated, but challenges remain in intrinsic motivation and managing negative emotions. The study concludes that strengthening instructors' TPACK through targeted training programs can significantly boost students' self-regulatory capacities. Simultaneously, initiatives to support students' emotional well-being and motivation are crucial for optimizing online learning outcomes. These findings provide actionable insights for developing professional development initiatives and student support programs, ensuring an effective and adaptive online learning ecosystem.

## **Keywords:**

Technology pedagogy, content, knowledge, self-regulated, online learning.