

## THE IMPACT OF PEER INSTRUCTION ON STUDENTS' CONCEPTUAL UNDERSTANDING IN MECHANICS IN CENTRAL REGION OF GHANA

Victor Antwi<sup>1</sup>, Kolawole Raheem<sup>2</sup> & Kennedy Aboagye<sup>3</sup>

<sup>1</sup>Department of Physics Education, University of Education, Winneba

<sup>2,3</sup>Centre for School and Community Science and Technology Studies (SACOST), UEW

### ABSTRACT

In this study, two science classes from two senior high schools in the Central Region of Ghana were selected and put into two groups (Control and Experimental). Students from experimental group were introduced to peer instruction and students from the control group were introduced to the same topics by the use of the traditional lecture method. Students in these two groups were made to answer standardised tests of Force Concept Inventory (FCI) and Mechanics Baseline Test (MBT) to assess students' improvement. The results did indicate that students from the experimental group have better conceptual understanding in Mechanics than the students from the control group. It was found that the peer instruction have a significant impact on students' scores in both FCI and MBT than traditional lecture method. These could suggest that peer instruction could effectively improve students' conceptual understanding and quantitative problem solving skills in teaching Mechanics in the senior high school.

**Keywords:** Peer Instruction, conceptual understanding, Traditional lecture, Ghana.