ABSTRACT

The Role of Critical Thinking in Cultivating Conceptual Understanding Among Form 4 Physics Students in Trinidad

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This action research study sought to highlight the relevance of critical thinking in developing conceptual understanding of physics among a class of Form 4 highly motivated students at an all boys’ secondary school in Port of Spain, Trinidad. The students were administered a pre-test and post-test using instruments to measure critical thinking and scores on a unit test. Critical thinking skills were infused into 11 lessons and data were collected through interviews, observations, and document analysis. Results of the data analysis showed changes in students’ conceptual understanding. However, although the students thought that placing emphasis on thinking was good, there appeared to be other forces in the educational system impacting the smooth teaching of critical thinking. One such force was the process of taking notes and rote solving of past papers.

Keywords: Secondary school students; Action research; Concept formation; Physics education; Critical thinking; Trinidad and Tobago.