ABSTRACT

Assessing (i) the Relationship between Students' Science Background Knowledge and their Performance in an Introductory Level Chemistry Course and (ii) the Impact of Peer-Led Team Learning on Academic and Transferable Skills of Undergraduate Chemistry Students

Imron Roy Miller

This study describes the implementation and evaluation of the impact of a Peer-Led Team Learning (PLTL) programme on examination performance and transferable skills of undergraduate chemistry students at a university in Jamaica over a period of six years. Specifically, using a combination of qualitative and quantitative research methods, the study assessed the impact of the PLTL on the examination performance of participating students in two introductory level Chemistry courses as well as its impact on the transferable skills of participants and peer leaders. The study also examined the relationship between students' science backgrounds and their examination performances in one of the two introductory level Chemistry courses.

The analysis science entry level scores showed that there was a significant and moderate correlation between students' science background and their performance on the final examination of the first semester introductory level university chemistry course. These findings further suggest that students' science background may be a useful tool to identify students at risk for poor performance in the first year chemistry course.

Analysis of the final examination marks for all students in two introductory level chemistry courses revealed that PLTL students significantly out-performed their non-PLTL counterparts on three performance measures. PLTL participants and peer leaders suggested that the model enhanced their learning and various transferable skills.

Keywords: Peer-Led Team Learning; Transferable skills; Imron Roy Miller