ABSTRACT

Developing Critical Thinkers in Introductory Chemistry: The Science Writing and Workshop Technique (SWWT) Experience

Norda Simone Stephenson

Students‟ unsatisfactory performance in chemistry at the introductory chemistry level has engendered much concern over the years in Jamaica. The Science Writing and Workshop Technique (SWWT), an innovative laboratory and workshop initiative, was implemented to address this concern.

A mixed method approach, utilizing a concurrent transformative QUAN + QUAL strategy, was used to understand the impact of the implementation of the SWWT on students‟ performance and critical thinking skills. The study also focused on documenting the laboratory experiences of introductory chemistry students.

The results indicated that while students are challenged in their efforts to think critically, the SWWT experience shows efficacy in improving participating students‟ critical thinking skills and their academic performance over their traditional counterparts. The results suggest that efforts at improving critical thinking need to be deliberate and explicit.

Keywords: Norda Simone Stephenson; critical thinking; introductory chemistry; Science Writing Heuristic; Jamaica