ABSTRACT

Learning Chemistry: An Exploration of the Experiences of a Class in a Girls' Secondary School

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This study focused on the experiences of students and their teacher in a Form 3 chemistry class in a girls’ secondary school in Trinidad & Tobago over a one-year period. It was a qualitative case study and the experiences of the participants comprised the case. The sample included only those persons who were willing to provide data through the data collection methods utilised which were interviews, observations and document analysis. This data was then subjected to thematic analysis.

The findings revealed that on entering Form 3 some of the students had little understanding of the concept of chemistry while others’ pre-conceived notions seemed to have had a bearing on their attitude to chemistry. It also appeared that students’ attitude and their experiences were closely related. Further, students’ attitudes and experiences looked as if they were influenced, on the one hand, by the nature of the relationship they had with their teacher and on the other, by their own goals and aspirations.

The students’ views of chemistry in this study ranged from statements such as “interesting” and “enjoyable” to “difficult” and “boring.” The teacher largely engaged in traditional, teacher-centred pedagogies. However, more recent teaching practices which have apparently enjoyed greater success in the chemistry classroom, as gleaned from the literature, have incorporated a constructivist/humanistic approach. The implication is that chemistry teachers may need to equip themselves with tools that will enable them to function more effectively in a constructivist/humanistic environment in order to provide more meaningful experiences of school chemistry for their students.

Keywords: Hazel Elizabeth Haynes; learning chemistry; attitude; pedagogy