THE UNIVERSITY OF THE WEST INDIES
FACULTY OF HUMANITIES AND EDUCATION
SCHOOL OF EDUCATION
ST. AUGUSTINE

TEACHER EDUCATION UNIT

IN-SERVICE POSTGRADUATE IN EDUCATION PROGRAMME

~~2005 – 2006~~

YEAR: 2005-2006

Curriculum Study

TOPIC: What is the performance and views of a group of male form four chemistry students when models and analogies are used to improve understanding of electrochemistry?

SUBMITTED BY:
(Name & ID#)

Jacinta Kanhai – Maharaj [redacted]

TUTOR: **Dr. S. Herbert**

This Paper is submitted in partial fulfillment of the requirements for the Postgraduate Diploma in Education Programme, School of Education, The University of the West Indies, St. Augustine, Republic of Trinidad and Tobago.

DATE: ~~2006/04/26~~

ABSTRACT

This is a school-based action research study. This one- shot post- test sought to investigate whether use of models and analogies could improve performance of twenty-five of male fourth form students when taught a unit on electrolysis. It also sought to determine these students' views on the use of models and analogies in understanding electrochemistry.

The study lasted six weeks and consisted of eight lessons on electrochemistry using a multiple of models and analogies. Two instruments were used to collect data; a thirty-item multiple choice test, and a fourteen- item Opinionaire using a Likert scale. Data was statistically analyzed to determine mean, standard deviation, range and frequency.

Results of the test revealed that 88% of sample attained scores above 50 %, whilst 12% had scores between 43%-47%. There was a low spread of scores (standard deviation=3.71) about the mean of 20.04 which was also the most frequent score.

Most students shared the same positive view (standard deviation=0.70) about the use of models and analogies in improving their understanding of electrochemistry.

This study concludes that generally students held an overall positive view on the use of models and analogies, but, their good performance in the post test cannot be attributed to this intervention since no comparison could be made to either a control group or pre-test.