

**THE EFFECT OF STUDENT CENTERED LEARNING
INCLUDING CRITERION BASED ASSESSMENT
ON THE PERFORMANCE OF STUDENTS**

A PROJECT REPORT PRESENTED BY

Y.M.C.D. Yaparathne

to the Board of Study in Science Education of the

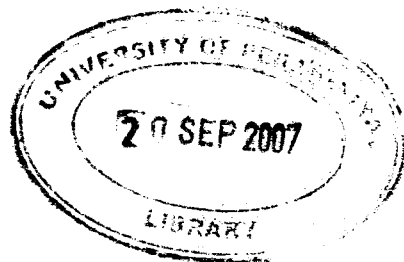
POSTGRADUATE INSTITUTE OF SCIENCE

*in partial fulfillment of the requirement
for the award of the degree of*

MASTER OF SCIENCE IN SCIENCE EDUCATION

of the

**UNIVERSITY OF PERADENIYA
SRI LANKA**



2006

600725

ABSTRACT**THE EFFECT OF STUDENT CENTERED LEARNING
INCLUDING CRITERION BASED ASSESSMENT
ON THE PERFORMANCE OF STUDENTS****Y.M.C.D.Yaparathne**

Post graduate Institute of Science

University of Peradeniya

Sri Lanka

Assessment of learning outcomes is an integral and essential component of quality improvement of education. It provides students with opportunities to ask scientific questions, investigate into the nature of scientific phenomena and construct theoretical and practical knowledge.

In 1997, the education reforms introduced the School Based Assessment (SBA) program to the school system as a part of the teaching learning process. Techniques of classroom assessment were developed and teachers were trained to carry out such assessment procedures more effectively so that the pupils can achieve the expected competency levels. With its implementation, teachers encountered many problems and thus they consider it as an extra burden for them.

This study was carried out to determine whether the student centered learning including criterion based assessment would lead the students to a higher performance level by using different varieties of assessment tools rather than the basic assessment methods.

Also, different types of performance checklists with certain criteria were introduced to assess skills and attitudes of students.

A questionnaire based survey was carried out in 13 schools comprising 30 Biology teachers, expecting answers to identify the implementation of the SBA program in schools. Two samples of students of the year 13 classes of two mixed schools were taken as the study population. A question paper was given for both groups to ascertain the background knowledge of students as a pre test.

One sample was taught by the usual conventional method and the other sample was taught using prepared lesson plans with criterion based assessment plans by their subject teachers. A post test paper was used to examine the achievement of both groups of students. The concept of hypothesis testing was used to determine whether the student centered learning including criterion based assessment lead the students to a higher performance level or not.

To compare the achievement of students of the two groups the paired t-test was used as the test statistic.

Statistical data obtained from this study revealed that there was a significant difference between the two methodologies used and it emphasized that the student centered learning including criterion based assessments immensely affect the students' achievement level.

Teachers should plan the lessons and the assessment plans with a view to creating a student centered learning environment and assess them regularly according to criteria and provide necessary feedback which in turn may support the students to develop their competencies as expected.