

UNIVERSITI TEKNOLOGI MARA

**SCIENCE TEACHERS'
KNOWLEDGE OF SCHOOL-BASED
ASSESSMENT**

MAJORIE ANAK AWANG

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requirement for the degree of

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AUTHOR' DECLARATION

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This dissertation has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

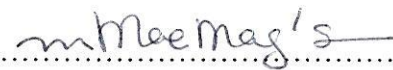
Name of Student : Majorie anak Awang

Students I.D. No : 2012296894

Programme : Master of Education (Educational Management and Leadership)

Faculty : Education

Dissertation title : Science Teachers' Knowledge of School-Based Assessment

Signature of Student : 

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TABLE OF CONTENTS

	Page
AUTHOR'S DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	x
LIST OF FIGURES	xii
LIST OF ABBREVIATION/NOMENCLATURE	xiii
CHAPTER ONE : INTRODUCTION	
1.1 Background of the Study	1
1.2 SBA as Transformation in Malaysian Educational Assessment	2
1.3 Problem Statement	3
1.4 Research Objectives	4
1.5 Research Questions	5
1.6 Significance of the Study	5
1.7 Limitation and Delimitation of the Study	6
1.8 Definition of Terms	7
1.8.1 Assessment	7
1.8.2 Teachers' Knowledge of assessment	7
1.8.3 School-based Assessment (SBA)	7
1.8.4 Science teachers	7
1.8.5 Novice teachers	8
1.8.6 Experienced teachers	8
1.8.7 Science Classrooms	8
1.9 Chapter Summary	8

ABSTRACT

In 2011, school-based assessment (SBA, hereafter) was introduced into Malaysian public schools to enhance the assessment system. As key players in the teaching and learning process, teachers are required to equip themselves with good knowledge and understanding of assessment including SBA. Therefore, this study investigated the Science teachers' knowledge and understanding of assessment and the implementation of SBA in Malaysian Secondary Science classrooms. It also investigated the benefits of SBA and the challenges faced by teachers. The study involved a total of 66 lower secondary science teachers teaching at 6 secondary schools located in the district of Sri Aman in Sarawak. Data was collected using a questionnaire and semi-structured interviews with 6 teachers. The results obtained indicated that teachers possessed sufficient and a moderate level of knowledge and understanding of SBA in terms of definition and terminology of SBA and the implementation of SBA at the planning administering and scoring stage of assessment. However, teachers possessed limited knowledge with regards to general rules of assessment. Inferential statistics conducted using the independent-samples t-test further showed that Science teachers' overall knowledge and understanding of SBA is not influenced by gender, school locality or experience. Nevertheless, there was a significant difference in the knowledge and understanding of SBA in terms of definition, terminology and general rules of SBA between novice and experienced teachers. The experienced teachers also have a significantly better and higher level of knowledge on scoring and reporting SBA scores. Teachers also highlighted that SBA has actually helped them to improve on the student's learning and the teacher's competencies. Nevertheless the teachers stressed that SBA increased teacher's workload and they felt that time constraint was one of their major concerns. Taking into consideration these findings, and aligning them with the initiatives of the National Educational Blueprint, (NEB), teachers must be provided with sufficient training in general assessment. They must also be provided continuous professional development (CPD) so that they can be better informed and motivated to see the many benefits of SBA. Such a move could see a more effective implementation of SBA.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In 2011, National Educational Assessment System (NEAS) was introduced as part of the educational transformation plan in national education to accomplish noble aspirations of the National Philosophy of Education. NEAS enhances various angles of expressive learning through assessments of students' profiles, achievements, developments and involvements. The various modes of assessments such as School-based Assessment (SBA, hereafter) which comprises of four components and the centralized public examination can be viewed as steps to reduce over reliance on public examination for certification.

“School-based assessment first has to win the hearts and minds of students, teachers and community.” This was stressed by Professor Kennedy in his presentation entitled “High Stakes School-based Assessment and Cultural Values: Beyond Issues of Validity” at Cambridge Horizons seminar held at Subang Jaya, Malaysia in June 2013.

There is no denying that teachers play an important role as they are the heart of any educational systems. According to HKCDC Report (2001), teachers in Hong Kong were encouraged to view assessment not only as examinations and tests, but also as a fragment of a learning process that can provide feedbacks to students. With a focus on assessment for learning, teachers need to be able to provide continuous feedback to students to help them improve in their learning. This is often viewed as burden and heavy task for teachers shifting from summative to formative assessment.

Adopting formative SBA alongside public examinations has engaged new accountabilities and responsibilities on teachers who now have to undertake the dual role of assessor and teacher (Donnelly et al. 1993; Yip & Cheung, 2005 ; Yung, 2001)

In Malaysia, public school classrooms witnessed the introduction and implementation of SBA in 2011. This without doubt, put a critical demand on teachers. Therefore, this study was aimed to examine Science teachers' knowledge of