

**AUTOMATED COMPETENCE-BASED CURRICULUM RESULTS  
PROCESSING SYSTEM**

**CASE STUDY: PETTA COMMUNITY SECONDARY SCHOOL**

By

SANYA MOSES

BU/UP/2019/1589

Department of Computer Studies, Faculty of Science and Education.

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Busitema University.

Supervisor

MR. OBOTH ANDREW OKOTH  
Department of Computer Studies

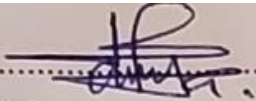
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## DECLARATION

I hereby declare that this report is my original work. It is being submitted in partial fulfilment of a Bachelors degree of science with Education at Busitema University, and has not been submitted before at any University or higher institution of learning for any academic award.

### STUDENT

SANYA MOSES

Signature: .....  .....

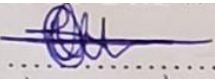
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## APPROVAL

This is to certify that the research report titled “AUTOMATED COMPETENCE-BASED CURRICULUM RESULTS PROCESSING SYSTEM” presented by SANYA MOSES, Reg No BU/UP/2019/1589 is an original work.

### SUPERVISOR

Mr. OBOTH ANDREW OKOTH

Signature:  .....  
Date: 11 Feb 23 .....

Department of Computer studies  
Busitema University.

## **DEDICATION**

I dedicate this research report to my beloved parents Mr. Bwire Humphreys Omukwe and Nasirumbi Eveline, and to the Almighty God for having blessed me throughout my studies.

I also dedicate this research work to my beloved supervisor Mr. Oboth Andrew Okoth for his unforgettable guidance throughout the research study. Sincerely it was pleasure working under his supervision and I extend my heartfelt appreciation to his support to me.

I also extend sincere appreciation to all my colleagues for your time and cooperation that ultimately resulted into this remarkable and greater achievement.

Finally, I thank my lecturers of Busitema University for mentoring me. Indeed, they did wonderful job to make me knowledgeable, skilled and confident to face the world of reality.

Thank you

God bless you all.

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## **LIST OF ACCRONYMS**

<b>CBC</b>	Competence-Based-Curriculum
<b>NCDC</b>	National Curriculum Development Centre
<b>MoES</b>	Ministry of Education and Sports
<b>AoI</b>	Activity Of Integration
<b>MLA</b>	Minor Learning Activity
<b>IS</b>	Information System
<b>RAD</b>	Rapid Application Development
<b>DFD</b>	Data Flow Diagram
<b>ERD</b>	Entity Relationship Diagram
<b>DBMS</b>	Database Managemnet System
<b>HTML</b>	Hyper Text Markup Language
<b>CSS</b>	Cascading Style Sheets
<b>PHP</b>	Hypertext Preprocessor
<b>SQL</b>	Structured Query Language
<b>MySQL</b>	My Structured Query Language
<b>XAMPP</b>	Cross-Platform Apache server, MySQL, PHP, Perl Programming language.

## **ABSTRACT**

This report is a representation of the Automated competence-based curriculum results processing system with the case study of Petta community secondary school. The major aim of the project was to develop an automated competence-based curriculum results processing system which the school can use to carry out the results processing and management and produce report cards in the new competence-based lower secondary curriculum.

The study population were the students and the staff of Petta community secondary school. The Sampling techniques used were Simple random and purposive sampling and data was collected through interviews, observation, focused group discussion and document review.

Rapid Application Development (RAD) approach was used in developing the system.

The data models used were the context diagram, Data Flow Diagram, and Entity Relationship Diagram (ERD)

The system was developed using PHP for server-side scripting, HTML for designing data entry forms, other tools included CSS, JavaScript, Bootstrap, and MySQL for building the database management system.

The system was tested and validated to ensure that it efficiently and effectively meets the results processing needs of the school.

Conclusively, the developed system is an efficient and effective tool which schools can use for results processing and management in the new competence-based curriculum.

# CHAPTER ONE

## 1.0 Introduction

According to Walvoord (1998), Grading and results processing provides students with feedback on their own learning, clarifying for them what they understand, what they don't understand, and where they can improve. Results processing is crucial in carrying out assessment and evaluation of learners' performances so as to arrive at important educational decisions in an institution.

A number of problems associated with student academic record management include improper course registration, late release of students' results, inaccuracy due to manual and tedious calculations and retrieval difficulties/inefficiency according to Eludire (2011).

In a move to improve secondary education in Uganda, the National Curriculum Development Center (NCDC) rolled out a new curriculum for lower secondary in 2020. This new curriculum required that every activity done in class or outside class whether in groups or individually be rewarded and the marks stored for later use in computation of the learners' grades at the end of the term.

In the press statement on the implementation of the abridged curriculum for primary and secondary levels of education released on 15<sup>th</sup> February, 2022, the permanent secretary, MoES said that the assessment records for each end of topic exercises or Activities of Integration would be used as the basis for developing the end of term and end of year report cards which was intended to develop learners' confidence about learning without worrying about the burden of exams.

To successfully do this job, there was need for an efficient and reliable Information System to deal with the records of marks.

An information system (IS) is a collection of components (people and computers) that work together to Provide information to help in the operation and management of an Organization (Nickerson 1998). An information system (IS) is also sometimes used in more restricted senses to refer to only the software used to run a computerized database.

Many secondary schools including Petta Community secondary school in Tororo district were facing challenges in processing results of the learners basing on the criteria used in the new competence-based curriculum and were looking around for the solution.

## 1.1 Background

PETTA COMMUNITY secondary school is a government founded secondary school located in Petta Ayoga Village, Petta Sub-County, Tororo district in Uganda, offering secondary school

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